

*Analyzing 18th Century Lifeways of
Anza Expedition Members in
Northwestern Sinaloa & Southwestern Sonora Mexico*



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Final Report
March 31, 2011
School of Anthropology
Bureau of Applied Research in Anthropology
University of Arizona



Analyzing 18th Century Pathways of Anza Expedition Members in
Northwestern Sinaloa & Southwestern Sonora Mexico

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Henry Farmer Dobyys Ph.D. 1925 -2009



Henry Farmer Dobyys died quietly at the age of 84 on June 21, 2009 at his second home in Edmond, Oklahoma. He also seasonally resided in Tucson, Arizona. Dobyys was born July 3, 1925 in Tucson, Arizona to Susie Kell (Comstock) and Henry F. Dobyys. His father, born in 1891, was a distinguished Captain in U.S. Army Company D. Hank lived in Tucson until at about the age of three when his father took a position with a newspaper in Casa Grande, Arizona. His mother became a widow at a young age, so growing up in the Depression Era was financially tough. Susie was an excellent cook and would cater and make Sunday dinners that people would pay to come and eat. She also grew lovely flowers that she would sell for wedding and funerals. As a young boy Henry would hunt when possible - he said they ate a lot of Arizona rabbit. He attended Casa Grande Union High School where he graduated in 1942.

After High School Hank served in the Army during World War II and suffered from rheumatic fever that damaged his heart. When he returned from the war he entered the University of Arizona where he majored in Anthropology. He was elected to Phi Kappa Phi and Phi Beta Kappa and graduated with a B.A. degree with High Distinction in 1949.

After returning from the war, he was admitted as a graduate student at the University of Arizona. There he continued to conduct research on American Indian issues. He was selected to be an instructor with the Cornell University's Arizona-based Field Laboratory in Applied Anthropology from 1949 to 1952 (see *First Look at Strangers* 1959). His M.A. thesis was a massive 702 page long analysis of Pai ceramics entitled Prehistoric Indian occupation within the eastern area of the Yuman complex: a study in applied archaeology.

Like his earlier works (by now he had academic publications) the thesis was focused on American Indian issues especially those of special interest to the tribe itself – in this case it was used in the Hualapai Indian Claims Commission hearings to argue for their land aboriginal claims.

He entered Cornell University in 1953 as a graduate student supported by the Olmstead Fellowship. Dobyms received in 1957 a National Science Foundation dissertation research



grant which enabled him to return to the regional festival of St. Francis Xavier at Magdalena, Sonora, Mexico, which he had first observed in early October of 1949. That grant also enabled Dobyms to study the festival committee system at Wa:kvillage on the San Xavier Indian Reservation

a dozen miles south of Tucson. Dobyms utilized data about these religious festivals in his Cornell University doctoral dissertation entitled *A Religious Festival*, a portion of which was later discussed in a chapter entitled "Do It Yourself Religion" in the book *Pilgrimage in Latin America* (1991). The PhD degree was completed in 1960 at Cornell University in the Department of Sociology and Anthropology.

Professor Dobyms joined the Cornell Peru Project as its Research Coordinator in 1960, after receiving his Ph.D. from Cornell. In 1962, he returned to campus to participate in training Peace Corps volunteers to work in Peru. The Peace Corps also contracted with Cornell to have the CPP advise Peace Corps officials in Lima and to evaluate their impact on the communities. He was the Coordinator of the Comparative Studies of Cultural Change program and the Associate Director of the Cornell Peru Project from 1963-1966. In 1966 he became the Director of the project following the death of Allan R. Holmberg, the previous director. Cornell University Library's Division of Rare and Manuscript Collections holds his papers from the 1960s.

Professor Dobyms taught and conducted research at various academic institutions in his career including Arizona State Museum, Cornell University, the University of Florida at Gainesville, the University of Kentucky, Prescott College, the University of Wisconsin Parkside, the University of Oklahoma, and the University of Arizona. He was a NEH research fellow at the Newberry Library in Chicago and a lifetime member of the Arizona Historical Society. His many students attest to the quality of his teaching and his willingness to share ideas and time. His devotion to his student's development was only exceeded by his commitment to research accuracy and quality.



Professor Dobyms was an anthropologist who maintained active research interests in cultural anthropology, ethnohistory, and archaeology and published extensively on American Indians and Hispanic Peoples in Latin and North America. He is most famous for groundbreaking historical demographic research, importantly published as a seminal article "Estimating Aboriginal American Population: An Appraisal of Techniques with a New Hemispheric Estimates" in 1966 in *Current Anthropology* and as a series of books including *Their Number Become Thinned* in 1983, which greatly increased the estimates of the number of American Indian people living in the New World before 1492. Populations estimates are debated because they are closely related to social complexity and the legal rights of Native Americans to hold national territories as established under European conquest law in the 15th Century, thus his findings called into question the legality of the taking of the New World by Europeans.

In recent years, Professor Dobyms worked as a senior researcher at the Bureau of Applied Research in Anthropology, at the University of Arizona. His work on the Old Spanish Trail study, funded by the Trails Division of the National Park Service, yielded a totally original assessment of the location of the 1829 Armijo Expedition Route – which was the first Spanish trip between Santa Fe, New Mexico and Los Angeles, California. Dobyms subsequently contributed to another NPS-funded study of the culture and values of the people from northern Mexico who settled San Francisco Bay in 1776 under the direction of Juan Batista de Anza. These most recent studies built on a lifelong interest in Southwestern

studies highlighted by his many books on the region: *Papagos in the Cotton Fields* in 1950, *The Ghost Dance of 1889 Among the Pai Indians of Northwestern Arizona* in 1967, *Waubesa Yuma's people: the comparative socio-political structure of the Pai Indians of Arizona* in 1970, *The Papago People* in 1972, *Spanish Colonial Tucson* in 1976, *Indians of the Southwest: a critical bibliography* in 1980, and *From Fire to Flood: Historic Human Destruction of Sonoran Desert Riverine Oases* in 1981, and *The Pima-Maricopa* in 1989. .

Some of his professional recognitions are the first Malinowski Award from Society for Applied Anthropology, 1951, for the article "Blunders with Bolsas"; National Science Foundation fellow, 1956-57; Social Science Research Council fellow, 1959; co-winner of Anisfield-Wolf award of *Saturday Review*, 1968, for "The American Indian Today"; and the Stoner Award, Arizona Archaeological and Historical Society, 1990.

Henry Dobyns was married three times: Zippora Pottenger (1948), Cara Richards (1958), and Mary Faith Patterson (1968). Four children were born in the first marriage and one in the second. He is survived by Cara, Mary Faith, and all five of his children: Rique Pottenger, Bill Pottenger, Maritha Pottenger, Mark Pottenger, and York Dobyns. He is missed by many others.



TABLE OF CONTENTS

Table of Contents	i
List of Figures.....	vi
List of Maps.....	ix
List of Tables.....	x
Preface	xi
Prefacio.....	xxi
Acknowledgements	xxxii

CHAPTER ONE INTRODUCTION

Introduction	1
1.1 Background on the Juan Bautista de Anza Study.....	2
1.2 Chronology	3
1.3 Major Findings	4
1.4 Report Structure.....	7

CHAPTER TWO METHODOLOGY

Introduction	9
2.1 Historic Reconstruction.....	9
2.2 Dr. Dobyns' Research Methodology.....	10
2.3 The BARA Research Methodology.....	11
2.4 Study Communities	12
2.5 Summary of Interviews	14
2.6 Chronology	15
2.7 Research Team Qualifications.....	16

CHAPTER THREE INSTITUTIONAL COMPLEX SONORA

Introduction	21
3.1 The Viceroyalty of New Spain—A Governmental Institutional Overview of Provincial Sinaloa and Sonora on the Northwestern Frontier: Military Posts.....	21
3.1.1 Royal Military Posts.....	23
3.1.2 Summation.....	28
3.2 The Viceroyalty of New Spain- A Governmental Institutional Overview of Provincial Sinaloa and Sonora on the Northwestern Frontier: Royal Roman Catholic Missions to Native Americans	29
3.2.1 Ethnic Diversity.....	30
3.2.2 Priestly Economic Power	34
3.2.3 Jesuit Institutional Structure	36

3.2.4 Sketch of Sonoran Mission Geography	39
3.2.5 Spatial Relationship and Hydrology	39
3.3 The Viceroyalty of New Spain: A Nongovernmental Institutional Overview of Provincial Sinaloa and Sonora on the Northwestern Frontier	69
3.3.1 Mine Camps	69
3.3.2 Seaports	75
3.3.3 Institutional Differentiation	77
3.4 A Different Frontier	80
3.4.1 The Yaqui	81
3.4.2 Ópata Imitators	82
3.4.3 Comcáac Resisters	83

CHAPTER FOUR CULTURAL ELEMENTS OF ANZA COLONIST

Introduction	85
4.1 The Area of Origin of the Founders of San Francisco	85
4.1.1 Riverine Oases	87
4.1.2 Water Quality and Management	89
4.1.3 Laundry	90
4.1.4 Sonoran Desert	91
4.1.5 Fuel Wood	94
4.1.6 Herbalist	95
4.1.7 Functional Folklore and St. John	98
4.1.8 Avian Exuberance	100
4.2 The General Configuration of Sonoran Culture, 1763-1775	102
4.2.1 Crucial Components of Conquest	102
4.2.2 Rural Agrarian Milieu	103
4.2.3 Patria Chica	103
4.2.4 The Image of Limited Good	104
4.2.5 Molino or Metate	105
4.2.6 Adobe	106
4.2.7 Illumination	108
4.2.8 Furnishings	109
4.2.9 Seating	109
4.2.10 Tillage	109
4.2.11 Storage	109
4.2.12 Ceramic Vessels	110
4.2.13 Toolkit	110
4.2.14 Musical Instruments	111
4.3 The General Ideological Configuration of Sonoran Culture, 1763-1775	112
4.3.1 Creating the New American Race	113
4.3.2 Labor Value	114
4.3.3 Unpleasant Life	115
4.3.4 Machismo	117
4.3.5 Egocentrism	117

4.3.6 Lineage	118
4.3.7 Behavioral Evidence.....	119
4.3.8 Sex Slaves.....	119
4.3.9 Personalismo.....	120
4.3.10 Spanish Colonial Roman Catholicism.....	120
4.3.11 Devotion of Our Lady of Guadalupe.....	121
4.3.12 Compadrazgo.....	125
4.3.13 Death and Burial.....	126
4.3.14 Holy Days.....	127
4.3.15 Dress.....	127
4.3.16 Needle and Thread.....	129
4.3.17 Adornment.....	129
4.3.18 Toilet.....	129
4.3.19 Diet.....	129
4.3.20 Seafood.....	130
4.3.21 Hot and Cold.....	131
4.3.22 Recreation.....	131
4.3.23 Curios.....	134
4.3.24 The Cortesian Model.....	134
4.3.25 Collecting on the Northern Frontier.....	136
4.3.26 Sonoran Collectors.....	136
4.4 The Culiacán Zone of San Francisco Founder Recruitment.....	138
4.4.1 Colonist Poverty: Pandemics and Tahue Depopulation.....	139
4.4.2 An Exclave.....	141
4.4.3 Roman Catholicism.....	143
4.4.4 Basque Brigade.....	148
4.4.5 Persisting Poverty.....	150

**CHAPTER FIVE
FAMILY STORIES**

Introduction: Methodology.....	153
5.1 Dora Coleman and Cecilia Angulo Family.....	154
5.2 Vicente Lopez.....	160
5.3 Manuel Velez Family Story.....	167
5.4 Frank, Trini and Queta Family Story.....	170
5.5 San Miguel de Horcasitas Reflects.....	174

**CHAPTER SIX
ACTIVITY COMPLEXES**

Introduction: Activity Complexes in San Miguel de Horcasitas.....	177
6.1 Salience of Juan Bautista de Anza and the Founding Expedition.....	178
6.1.1 The Cultural Importance of Juan Bautista de Anza.....	180
6.1.2 Learning About the Anza Expedition.....	182
6.1.3 Anza Reenactments.....	183

6.1.4 Expedition Members	184
6.1.5 Connections to Expedition Members	187
6.1.6 Anza's Skills.....	188
6.1.7 Historic Locations	191
6.2 Agricultural Practices	193
6.2.1 Water Concerns	193
6.2.2 Heirloom Crops	195
6.2.3 Irrigation	196
6.2.4 Cultigens.....	198
6.2.5 Planting and Harvesting Techniques	201
6.2.6 Planting Seasons	202
6.2.7 Relationship Building with Indigenous People	203
6.2.8 Inheritance	204
6.3 Wild Plant Use.....	205
6.3.1 Discovering Medicinal Plants.....	206
6.3.2 Collection and Preservation.....	210
6.3.3 Curanderas	211
6.3.4 Use Plants	213
6.3.5 Non-Specific Plant Use	243
6.3.6 Animal Medicine	243
6.4 Food and Food Preparation	246
6.4.1 Meat and Dairy	247
6.4.2 Wheat/Tortillas/Beans	252
6.4.3 Corn	256
6.4.4 Fruit	258
6.4.5 Soups/Stews.....	259
6.4.6 Wild Foods	260
6.4.7 Squash.....	265
6.4.8 Green Chili	266
6.4.9 Holiday Foods	266
6.5 Livestock Raising	268
6.5.1 Role of Cowboys/Cowgirls	268
6.5.2 Livestock Raised	273
6.5.3 Providing for Livestock.....	274
6.5.4 Fencing and Branding.....	275
6.5.5 Uses	277
6.6 Religious Practices	283
6.6.1 Virgen de Guadalupe.....	283
6.6.2 No Priest Present—Folk Religion, Popular Piety, Popular Religiosity.....	285
6.6.3 Religious Events/Traditions	286
6.6.4 Lent—February to April (Includes Holy Week)	286
6.6.5 Día de San Juan—June 24th.....	289
6.6.6 The San Francisco Pilgrimage—September 15 th to October 15 th	291
6.6.7 Día de San Miguel—September 29 th	292
6.6.8 Día de los Muertos—November 1st and 2nd	293

6.6.9 Christmas Season—December 8 th to January 6 th (Includes The Feast of the Immaculate Conception, Día de Guadalupe, Las Posadas 16 th to 24 th , Christmas, and Día de los Reyes).....	295
6.6.10 Religion in Every Day Life	296

**CHAPTER SEVEN
RECOMMENDATIONS**

Introduction	299
7.1 Community Recommendations	299
7.1.1 Anza Commemoration and Eco-Historical Tourism	299
7.1.2 Education	300
7.1.3 Historic Building	300
7.2 Ethnographic Recommendations	300
7.2.1 Ethnobotany	300
7.2.2 Oral Histories.....	301
7.2.3 Youth	301
Bibliography.....	303

APPENDICES

Appendix A: Survey Instruments	323
A.1 Community Oral History	324
A.2 Crops.....	337
A.3 Wild Plants	349
A.4 Our Lady of Guadalupe	360
A.5 Supplemental Community Oral History	367
Appendix B: Cost of Supplies for the Expedition.....	387
Appendix C: San Miguel de Horcasitas/San Francisco Ecological Comparison.....	397
Appendix D: Founders Calidad	407
Appendix E: Letter from Fray Francisco Obispo	413
Appendix F: The 1770 Floods.....	417
Glossary	421

LIST OF FIGURES

Figure i.i Naomi Torres Presenting at the Anza Society Conference in Magdalena, Sonora, MX.....	xxxi
Figure i.ii UofA Research Team Answering Questions at Town Hall Meeting in San Miguel de Horcasitas (Dr. Gaspar Mairal is on the Right).....	xxxii
Figure i.iii One of the Many Families of San Miguel de Horcasitas That Made This Study Possible	xxxiii
Figure 1.1 The Church in San Miguel de Horcasitas Before and After the Paved Road	4
Figure 1.2 The Anza Trail Marker	6
Figure 1.3 UofA Ethnographers with Community Members	8
Figure 2.1 Dr. Henry Dobyns	10
Figure 2.2 UofA Ethnographer Interviewing a Community Member.....	12
Figure 5.1 Cecilia Angulo and Dora Coleman	154
Figure 5.2 Antonio Garcia, San Miguel de Horcasitas, Vicente’s Great-Uncle.....	160
Figure 5.3 Vicente Lopez c. 1944	161
Figure 5.4 Vicente’s Great-Uncle Tending Their Family’s Burros	162
Figure 5.5 Osvaldo G. Lopez Riding His Grandfather’s Horse, c. 1893	163
Figure 5.6 Vicente Lopez and UofA Ethnographer.....	164
Figure 5.7 Community Member Portraying Virgen de Guadalupe in a Parade	165
Figure 5.8 Trinidad Tapia with UofA Ethnographer.....	170
Figure 5.9 Trinidad Tapia Riding Horse-Back	172
Figure 6.1 Town meeting at the Municipality	178
Figure 6.2 Community Member’s Photo of the Reenactment.....	179
Figure 6.3 Community Member and UofA Ethnographer	186
Figure 6.5 Anza’s House	191
Figure 6.6 Field of Sorghum	193
Figure 6.7 Markers Indicating Water Depth of San Miguel River.....	194
Figure 6.8 Irrigation Canal	197
Figure 6.9 UofA Ethnographers Interviewing Community Member	199
Figure 6.10 Cattle Grazing in a Field	200
Figure 6.11 Ethnographers Examining an Old Map of the Area.....	204
Figure 6.12 The San Miguel de Horcasitas Countryside.....	205
Figure 6.13 Recently Chopped Firewood.....	206
Figure 6.14 Community Members	208
Figure 6.15 Alamo.....	214
Figure 6.16 Bachata.....	215
Figure 6.17 Batamote	216
Figure 6.18 Brasil	217
Figure 6.19 Cholla	218
Figure 6.20 Copalquin	219
Figure 6.21 Cósahui.....	220

Figure 6.22 Epazote.....	221
Figure 6.23 Eucalyptus.....	221
Figure 6.24 Garambullo.....	222
Figure 6.25 Golodrina.....	223
Figure 6.26 Guaycán.....	223
Figure 6.27 Guarequi.....	224
Figure 6.28 Hediondilla.....	225
Figure 6.29 Hierba Colorado.....	226
Figure 6.30 Hierba del Coyote.....	227
Figure 6.31 Higuerrilla.....	227
Figure 6.32 Huevito.....	228
Figure 6.33 Jicara.....	229
Figure 6.34 Mesquite.....	230
Figure 6.35 Mostaza.....	231
Figure 6.36 Ocotillo.....	232
Figure 6.37 Palo Fierro.....	233
Figure 6.38 Pelos de Elote.....	233
Figure 6.39 Pitaya.....	234
Figure 6.40 Ruda.....	235
Figure 6.41 Sábila.....	235
Figure 6.42 Sauco.....	236
Figure 6.43 Sauz.....	236
Figure 6.44 Tobaco del Coyote.....	237
Figure 6.45 Toboso.....	238
Figure 6.46 Toloache.....	238
Figure 6.47 Torote.....	239
Figure 6.48 Tullidora.....	240
Figure 6.49 Hierba Buena.....	241
Figure 6.50 Yerba del Indio.....	241
Figure 6.51 Yerba Mansa.....	242
Figure 6.52 Zinnia.....	243
Figure 6.53 UofA Ethnographer Making Tortillas with a Community Member.....	246
Figure 6.54 Metate Used for Tenderizing Meat.....	247
Figure 6.55 Beef Dish in San Miguel de Horcasitas.....	249
Figure 6.56 Balls of Flour Ready to be Made into Tortillas.....	253
Figure 6.57 A Community Member’s Comal.....	254
Figure 6.58 Mano and Metate.....	257
Figure 6.59 An Orange Tree in a Community Member’s Yard.....	258
Figure 6.60 Field of Prickly Pear Cacti.....	260
Figure 6.61 Music and a Glass of Bacanora.....	262
Figure 6.62 Community Members.....	263
Figure 6.63 Several Types of Squash.....	265
Figure 6.64 Typical Charro Clothing.....	270
Figure 6.65 The Peak Referred to in the Story Below.....	271
Figure 6.66 Community Member on Horse-Back.....	272
Figure 6.67 UofA Ethnographer and Community Member.....	274

Figure 6.68 Roaming Cattle	275
Figure 6.69 Ranchers at a Fence in San Miguel de Horcasitas.	276
Figure 6.70 Handmade Reata	278
Figure 6.71 Colorado River Near Yuma	281
Figure 6.72 Cross on Top of a Hill in San Miguel de Horcasitas	283
Figure 6.73 Altar of Virgen de Guadalupe Atop a Hill Across From La Fabrica de Los Angeles.....	284
Figure 6.74 The Plaza and Church in San Miguel de Horcasitas	286
Figure 6.75 Hill Where the Town’s Stations of the Cross Ends	287
Figure 6.76 San Miguel River	289
Figure 6.77 Miniature Statue of Saint Francis in San Miguel de Horcasitas	291
Figure 6.78 Saint Michael Statue at a Church in San Miguel de Horcasitas.....	293
Figure 6.79 Fresh Flowers Placed at Gravesite in Honor of Día de los Muertos.....	294
Figure 7.1 UofA Ethnographer with Community Members	299
Figure 7.2 Community Members Showing Ethnographers Their Plants	301

LIST OF MAPS

Map 1.1 The Anza Expedition.....	1
Map 1.2 The Juan Bautista de Anza National Historic Trail	2
Map 2.1 Anza Colonists' Towns of Origin	14
Map 6.1 Map of San Miguel de Horcasitas and Surrounding Communities.....	269

LIST OF TABLES

Table 2.1 Colonists' Towns of Origin.....	13
Table 2.2 Number of Participants and Interviews by Date in San Miguel de Horcasitas	15
Table 2.3 Number of Participants and Interviews in Tucson and San Miguel de Horcasitas	15
Table 3.1 Demographic Strength and Ethnic Composition of Sonoran Roman Catholic Missions in 1760s	31
Table 3.2 Commodities Sonoran Missions Produced For Sale	35
Table 3.3 Provincial Administrative Structure of Jesuit Sonoran Missions.....	36
Table 3.4 Net Annual Product of Gold/Silver Mining in New Spain, 1765-1776	73
Table 6.1 Foods and Their Corresponding Holidays.....	266

PREFACE

Anza stands forth in the double capacity of explorer and colonial leader. Anza showed the qualities of a true frontier leader...he handled his stock with judgment and his people with tender care. He inspired his followers with loyalty...The genius and devotion with which he served in this time of need made him a distinguished figure...a man of heroic qualities
(Bolton 1966: v, vi).

This report is intended to contribute to a largely empty space on a topic that is otherwise well understood and documented. At the request of the superintendent of the Juan Bautista de Anza National Historic Trail (NPS 2010), a team at the University of Arizona (School of Anthropology, Bureau of Applied Research in Anthropology) was asked to provide ethnographic and ethnohistorical information to interpret and define the preexisting lifeways of the people who settled San Francisco. These settlers or founders, as they are variously referred to in this report, were selected, organized, educated, and guided to the new settlement (which would become San Francisco) by Juan Bautista de Anza (Anza) who was the son of a father by the same name.

This study is humbled by the volumes of information that have already been developed by scholars and others who have been intrigued by this event. Past studies include the massive five volumes by Bolton (1930) on Anza's expeditions to California, multiple diaries from the expedition to San Francisco and his previous scoping trip (Garate 1995, 1998, 2003, 2006; Smestad 2005; see *Antepasados* Series 2010), creative document-based interpretative histories of the event (Guerrero 2006), archaeological studies of the early settlement at San Francisco (Voss 2004, 2008a, 2008b, 2008c, 2008d; Voss et al. 2004), and the oral histories and family documents of descendants many of who today participate in Anza focused societies and web sites (Los Californianos 2010). In other words, the superintendent of the Juan Bautista de Anza National Historic Trail (JUBA) had the vision to find a place for new voices in what otherwise seemed to be a completed story.

The lifeways (material and non-material culture) of the settlers or founders of San Francisco are important to contemporary interpretations of the expedition and the adaptations which subsequently occurred because these would be the basis on which the new community would be established and the reasons why it would become a success. Failure to establish a viable community was a clear possibility due to a wide range of threat factors including (1) differences in climate and ecology, (2) chance of starvation, (3) potential conflicts with local American Indian people, (4) emergence of factions among the founders, and (5) the simple inability of the community to sustain itself—a synergetic factor that could derive from interactions between any of the previously listed factors and the appearance of unanticipated causes like diseases, attacks from Russians or distant Indian peoples, and even the emergence of ontological insecurity.

The researchers associated with this report found it useful to attempt to place themselves in the lives (some would say shoes) of the people who would accept the request from Anza to settle a new community in what was, at the time, a largely unknown land. This study is especially focused on why Anza selected potential founders, why founders would have gone on this settlement journey, and what lifeways the founders would have carried with them—mostly in their heads. We argue here that Anza chose people with lifeways and personal traits that would have been able to face his perceived challenges or threats to the success of this settlement. This was a spectacular expedition, more comparable to what it would be for us today to consider going to Mars than it was like the challenges associated with founding other frontier settlements in northern New Spain.

Establishing new settlements during the time of the expedition (the mid-1700s) normally involved moving settlers up known rivers to make a community near or just beyond the northern boundary of New Spain. Such communities were often protected by the quick infusion of troops or food supplies from relatively nearby communities to the south. Over the previous hundred years or so, it had become a regular pattern (an adaptive option) for settlers involved in newly established frontier settlements to retreat to well established and protected communities to the south when threatening factors such as Apache attacks made conditions unbearable (Spicer 1992).

Retreat from the proposed isolated San Francisco peninsula location, which was well beyond the northern boundary of Alta California, was neither desired nor clearly possible. This was a major contrast between this presidio's experience and that of the typical new settlements in northern New Spain and in some respects, other settlements in Alta California. Although a new settlement called Monterey had recently been established in 1769 to the south of San Francisco, Monterey was about 100 miles away and was itself having great difficulty and would not readily be a place of retreat or support were the conditions at San Francisco to become unbearable. Also there was an overwhelming perceived need by the Spanish Crown for a viable community to be present to the north in order to claim the newly discovered and valuable San Francisco Bay and its associated lands. In other words, the founders could not fail to establish a sustainable community and the previously positive reputation of Anza was clearly at stake. These factors had to be a central part of the decision of potential founders to participate in the expedition and a constant background factor in Anza's ongoing evaluation of potential candidates for the expedition.

Anza's success in establishing San Francisco at this time, especially given the limits of ocean and land transportation technologies and the extreme isolation of the place chosen for the settlement, reflects one of best planned and executed new settlements in all of northern New Spain and Alta California. Anza was clearly a genius on a number of levels—but it should be pointed out that he was carrying his father's dream of establishing a new settlement. Anza's father had thought through such a settlement but he never had the opportunity to implement these ideas. Although the father died when the son was very young, the mother and the father's friends would have been the bridge for conveying this dream. We know the dream was shared. He even attached his father's earlier petition to lead an expedition and to establish a settlement in Alta California (Garate 2003: 189-193) to his own petition to the Viceroy Bucareli and ultimately

Charles III King of Spain. Certainly Anza must have built on his father's settlement logic that would have been needed in order to create a sustainable planned community.

Threat Factors

What do we know today and believe was known by Anza in the early 1770s about the potential threatening factors at the time that Anza was planning the expedition? This discussion is intended to stimulate thought with ideas that emerged during this study. None of the questions are fully resolved by this or other studies, and some are just interesting curiosities.

Differences in Climate and Ecology

It is a given that there are fundamental differences in climate and ecology between the founder's home settlements in northern Sinaloa and Sonora and the proposed exposed peninsula site of San Francisco (see Appendix C). Spanish travelers in northern Alta California were often unprepared for the dangerous weather, especially the adverse effects of fog, wind, and even snow. These combined effects caused Miguel Costanso to describe December weather conditions in 1769 as "raw and tempestuous" in his diary, while participating in the Don Gaspar de Portola expedition (Teggart 1911: 289). These differences in climate from Sonora would pose a series of challenges to the founders who would have to adapt their clothing, housing, agriculture, and natural resource use patterns. Some of these would be rather easy changes, like learning to eat bear meat or add much more fish to the diet, but other climate and ecology adjustments, like getting accustomed to the cold fog or living exposed to the sea-driven weather, would provide subtle but fundamental challenges that could undoubtedly lead to sickness, depression, and perhaps ontological insecurity.

Chance of Starvation

The Founders would arrive at the proposed San Francisco site with some supplies that they had carried on available horses and mules on their journey across the 1,200 miles of desert, mountains, and rivers from their home settlements. Naturally there would be plans to reduce the possibility of starvation. These would include (1) arrangements for the settlement to be resupplied with caravans from Sonora or Sinaloa, (2) relational protocols and items for trade with local American Indian communities, (3) emergency relief from Monterey, and (4) the immediate use of the natural environment in terms of hunting, fishing, and gathering.

During the first year, most of these plans would play out. Some supplies came by ship and overland from Monterey. Large resupply caravans, however, would not arrive due to Spanish mistakes in their relationships with the Yuman people who would turn from peaceful to hostile in 1781. In 1781, they revolted against and killed local Spanish, and closed the only known Spanish crossing of the Colorado River for a generation (Spicer 1992: 264). Note the possible role of the 1775-1782 smallpox pandemic, which was especially devastating for tribes living along trade river routes, like the Yuma People (Fenn 2001). Indian people often blamed the Spanish for diseases. Closure of the Yuma Crossing effectively isolated all of the settlements in Alto California from trade via a land route with northern New Spain. Local trade and exchange did begin with the Ohlone peoples, using the protocols and trade items specified by Anza. There is

no evidence of emergency relief from Monterey although some supplies were sent during the earlier days. The use of the natural environment and exchange relationships with local Ohlone people became the foundation for basic survival and the beginning of subsistence resilience.

Potential Conflicts with Local American Indian People

Anza was planning the settlement of San Francisco at a strategic location that primarily served the needs of the Spanish Crown. Many American Indian peoples, who are called today by their language family the Costanoans (Levy 1978) and by the ethnographic term Ohlone (Bean 1994), already occupied this site, as they did the whole of the southern half of the San Francisco Bay area. While Anza described the Indians of the region as peaceful and gentle (Guerrero 2006:68), an earlier account of the Ohlone in 1769 describes them quite differently. According to Miguel Costanso in his diary while participating in the Don Gaspar de Portola expedition "...nor have we seen a rougher or more savage people...where are the numerous inhabitants upon which the old [voyagers] laid so much stress and what of the extreme docility of its inhabitants" (Teggart 1911 : 289). Father Palou had a much more positive experience with the local Ohlone people (Bolton 1966: 393-456), but the future of Indian-Spanish relations was very much in doubt given the mission revolts to the south.

The local Indian peoples on the peninsula had no significant direct contact with the Spanish before Anza's scoping trip in 1774. The Ohlone Indian people in the greater Bay Area briefly had encountered the Don Gaspar de Portola expedition in 1769 (Teggart 1911). The Ohlone were certainly aware of the Spanish settlement at Monterey, which was visited as an Indian-occupied port area as early as 1602, but only formally settled by the Spanish in 1769 (Broadbent 1972; Levy 1978). They would have also known about the expeditions of Captain Pedro Fages in 1770 and 1772, when he met with their linguistic cousins to the south and west of the San Francisco Bay area (Bolton 1911; Brown 1994). Father Palou participated in the original peninsula survey in 1774, which was needed for the exact placement of the presidio, mission, and settlement (Bolton 1966: 393-456). Despite these brief or nearby contacts, in 1774, the Ohlone bands on the peninsula were still living a way of life that had largely remained unmodified by Spanish technologies and settlement intrusions.

No American Indian people could be perceived as totally untouched in 1774 by the presence of Europeans in the New World. By the mid-1700s, all American Indian peoples in California had been impacted (depopulated and socially reorganized) by the various Virgin Soil Epidemics (Crosby 1976) that traversed all of North America beginning in the mid-1500s (Cook 1978; Dobyns 1966). In addition to these disruptive diseases, the Spanish directly exposed local Indian people to syphilis. According to Miguel and Zalvidea (1810) as cited in Cook (1976: 23), "this putrid and contagious disease had its beginnings with the time [when] Don Juan Bautista de Anza stopped at the mission San Gabriel with his expedition." Syphilis appeared in Upper California certainly within the first decade of settlement (Cook 1976:23). Local Indian people attributed this disease to the presence of the Spanish because it occurred soon after women were raped by the soldiers – a practice noted by Pedro Font in 1776, regarding Anza's men (Cook 1976: 24). Clearly this apparently uncontrollable behavior and its rather quick consequences were a threat issue for Anza and his new community.

It should be pointed out that Anza had extensive experience with violent responses to Spanish actions by a formerly peaceful coastal fishing population on the Sea of Cortez. In 1748, Spanish stimulated Seri hostility and raids on Spanish settlements which would continue for more than a generation (Spicer 1992: 107-108). Anza, as a military leader tasked with pacification of the Seri, did not want such an event to trigger hostility between the Ohlone and his fledgling settlement of San Francisco.

Emergence of Factions among the Founders

The founders were a collection of people, largely preexisting families, who probably did not know each other before deciding to go on the expedition. The common point in the pre-expedition social network was Anza. Therefore, Anza was challenged with creating a community of like-minded and functionally interdependent people that would hold together despite expected perturbations both on the journey to San Francisco and once the community was established. Were factions to emerge, they would reduce the willingness of founders to help each other across these dividing lines and weaken the overall strength of the community. Factions are less likely to occur when there is a strongly agreed to common purpose among the members of the new community and when people have clearly defined and not mutually conflictive roles in the new community.

The academic literature on this issue of community viability is quite clear and extensive. According to Noll (2004) a detailed review of the literature reveals (Berger-Schmitt and Noll 2000; Berger-Schmitt 2000) that the concept of social cohesion incorporates mainly two dimensions of societal development which may be related to each other, but should be distinguished analytically. The first dimension concerns the reduction of disparities, inequalities, fragmentations, and cleavages that have also been denoted as ‘fault lines’ of societies. The concept of social exclusion is covered by this notion too. The second dimension embraces the forces strengthening social relations, ties, and commitments to and within a community. This dimension is also stressed by the concepts of social inclusion and social capital.

The new San Francisco settlement could and would break apart due to factions unless these were mitigated by Anza. This was a fundamental challenge whose solution would be tied to resolving many of the other threats.

Inability of the Community to Sustain Itself

This is a synergetic factor that could derive from interactions between any of the previously listed factors or the appearance of unanticipated causes like diseases, attacks from Russians or distant Indian peoples, and even the emergence of ontological insecurity. A key here in this factor is a combination of social and physical isolation along with the disquieting psychological state that occurs when people are faced with an unpredictable future. The isolation component is easiest to describe and understand because the founders were truly alone in their new settlement due to the fact that they were not surrounded by people of an ethnocultural similarity (Baker, Arseneault, and Gallant 1994). The issue of an unpredictable future can derive from being somewhere where people like you have never successfully lived before and being faced with unique threats to your community and family that you have neither responded to nor

successfully adapted to before. Together these facts alone could result in demoralization (Flaherty et al. 1988) and a lack of confidence in the future – or what is often termed *ontological insecurity* (Giddens 1990). When this occurs the community can simply emotionally fall apart, people can leave, and the death of participants is not rare.

The reverse of this concept of ontological insecurity is what Anza would have planned for—the establishment of community resilience and sustainability through a process of co-adaptation with nature and the new social environment. Here, we then segue to the planning responses (known and hypothesized) of Anza to these perceived threats to his new settlement.

Planning Co-Adaptations

Anza and his military men were able to visit the potential site for the new San Francisco in 1774 during which trip he gained firsthand knowledge of both the planned settlement's place (in terms of ecology, climate, and local people) and the trail to be traveled by the expedition. He would have quickly built these into his extant settlement planning. We believe that Anza's settlement plans derived from his father's thinking on the subject, Anza's own subsequent thinking, and the grounding of these plans due to the scoping journey and the actual site visit.

In response to his understandings of the threat factors that could weaken or even dismantle his new community of San Francisco, Anza would have planned some potential solutions to reduce or fully mitigate the various threats. We understand his planning within the related contemporary cultural ecology concepts of environmental co-adaptation and resilience (Berkes 2008). Sustainability is understood here as a product of establishing (literally building through trial and error) resilience into social and environmental relationships.

Ecology and Climate Adaptations

Anza had little more experience than his potential founders with the climatic features of the San Francisco Bay area, especially with the peninsula where the new settlement was to be located. During his scoping trip in 1774, his visit to Monterey exposed him briefly and only for one season (late spring) to the new wetter, colder, and fog enshrouded land. His take away from that trip had to have been bring warmer and water resistant clothing – preferably wool. The warmest items taken with the founders were made of flannel. There would be a persistent problem getting good woolen goods to California as evident by the Old Spanish Trail caravans who exchanged woolen items made by the Indians of New Mexico for valuable California mules (Stoffle et al. 2008)

There was a sense of urgency on the part of the Spanish Crown to establish a legal presence and thus a legitimate claim to the Bay, so travel to California had to proceed with only some kinds of domestic animals likes cattle, mules, and horses but without basic animals such as sheep and chickens that would have been essential to the founders. Certainly such animals would eventually be acquired from stocks already in California, perhaps in Monterey, but the founders would have to wait for better wool clothes.

Anza knew the radically different ecology of his settlement would require that the founders learn about a whole corpus of new native plants from the local Ohlone people. As a plant specialist himself, Anza knew that ethnobotany involving natural and stimulated (by fire, transplant, and pruning) medicine and food plants took generations to learn about and become traditional ecological knowledge.

Adjusting to a radical shift in ecology may have been one of the major adaptations for the founders (see Appendix C). Preparing for this shift was made even more difficult because Anza was unable to do much more than tell people about what he observed in the late spring of 1774. Strange plants, maritime weather events, and fog must have been impossible to plan for and a challenge to understand. One interesting piece of cultural continuity was the persistent use of adobe for some of the buildings—a bit of home culture that probably gave solace more than function to the founders (Voss 2004, 2008a). Without materials other than woven local vegetation for roofs and no glass for windows, these homes provided little protection from the elements (Dwinelle 1978: xix-xx). Associated with this continuity was the practice of painting/washing the walls white. According to Vancouver, even though a source for lime had not been found in 16 years, he recorded that the founders had adapted to a lack of limestone by grinding up maritime shells and white washing some of their walls (Dwinelle 1978: xvii). Certainly this was a laborious process, but one that produced a culturally satisfying aesthetic result.

Sustainable Food Supplies

Anza knew that it would take a long time before the founders would be able to fully provide their own foods, so establishing and maintaining positive relationships and mutually useful exchanges with the Ohlone would be essential. The diary of Brother Francisco Palou, who participated in the founders' initial visit to the site of the new settlement, published in the 1867 report by Dwinelle (1978: xii-xiv), is instructive regarding the availability of local foods. He recorded that the local people shared acorns, hazelnuts, strawberries, raspberries, fish, several kinds of mussels, cockles, venison, rabbits, geese, quails, and thrushes. He observed or was told of the Ohlone eating stranded whales and seawolfs (*Anarhichas lupus*). They also made gruel (a watery soup) and cakes the size of oranges out of various unidentified natural seeds.

When Vancouver visited years later in November 16, 1792 (Dwinelle 1978: xviii - xix), he was not impressed with the four acres of fenced gardens which were located on good dark soil but produced very few useful vegetables. The under-producing gardens were supplemented with imported fig, peach, apple, and other trees. Vancouver also observed many crudely made wool blankets and garments woven on rudely wrought but well contrived looms. He observed Indian girls and women doing the weaving under Spanish supervision. The Indian novitiates were in the process of conversion and living at the mission.

Relations with Local Indian People

Anza knew, and this was probably one of his most adaptive traits, that good relations with the local Ohlone were essential, but his considerable skills in cross-cultural understanding and making good interracial relationships would not be available to the founders because he

would immediately drop them off, head back to Sonora, and subsequently move to assume his new appointment as governor of New Mexico. For this reason, it is assumed that Anza selected people who were comfortable in intimate and daily relationships with people of another culture and could negotiate common ground and mutual understanding over a long period of time.

Anza largely selected people with bi-cultural and bi-racial experiences and skills. The list of founders whose race is noted records that 27% were mixed Indian and Spanish and another 20% were of mixed African and Spanish ancestry (see Appendix D). Thus, 47% of the founders (for whom this fact is known) were themselves bi-cultural and bi-racial and it can be assumed that the remaining founders were comfortable with such a community and building relationships with the Ohlone people.

Developing Community Solidarity

Anza selected potential founders from many different communities. This may in part have been due to people's resistance to leave known and secure home communities and environments to risk everything, even their lives, to make a new settlement in a quite unknown and very distant land. Thus, it may have been that the pool of potential founders was small and these people were found coincidentally spread over many communities. An alternate theory is that Anza actually wanted people with different backgrounds and skills who did not know each other so he chose potential founders from different communities in order to mold them into the new community. Had most or all of the founders been from a single community, they would have brought generations of social baggage and different social status, some of which could and perhaps predictably would be used to form factions. One tactic that Anza employed as a social leveler was the purchase of similar clothing for all members of the expedition. This limited the ability of the founders to differentiate among themselves in racial, cultural, social, or economic terms (Voss 2008a, 2008c). With the founders generally being strangers to each other, they all began with the shared task of learning about each other and of forging new relationships that would be the social foundation of their new home community.

An interesting question is how Anza came to know the potential founders. He certainly did not have sufficient time after receiving his charge from the Viceroy to wander from community to community looking for and evaluating potential founders. He must have had in mind a profile of an ideal founder and how she/he would fit with other founders. Perhaps he had talked through the notion of a settlement in California with some of his potential founders before a specific opportunity presented itself. Certainly Anza chose people with families. People who were either failures or economically very successful were unlikely candidates. The former would involve an unwarranted risk and the latter would be unlikely give up their life's work to go to California. It is reasonable to think that these were issues confronted by his father and discussed with his mother who served as the bridge between the two Anzas' dreams.

Anza must have had a plan for bringing together strangers to make new relationships and begin the building of social credit (social capital), which would be needed to hold the new community together when perturbations occurred. When Anza gathered his potential founders, he brought them to San Miguel de Horcasitas, one of his favorite communities. There, he gave the founders time to learn about the challenges facing all of them, to learn about each other, to

invest in each other, and to make the interpersonal relationships needed for establishing a stable community in an isolated place. It is not known whether or not some potential founders decided not to go on to California or if Anza sent some back home who did not socially fit the structure of the new community. Clearly, Anza knew he was working with people who needed to be highly motivated to expose themselves and their families to great risks. To be successful, the founders needed to rely on each other as a community.

How did Anza instill a common goal and elevate it above individual and family goals, which would from time to time have to be set aside for the common good? How did he convince his founders that their primary unit of adaptation was the new community? Individual founder motivation is key. In broad terms, there had to be dimensions of the new settlement that were positive and aspects of life in Sonora and Sinalola communities that was negative. A key example of the latter push factors was a major regional flooding event that, in 1770, destroyed the capacity of many communities to sustain their preexisting ways of life (see Appendix F). The floods destroyed complex irrigation systems, eroded downstream farming land, and flooded residential areas. Pull factors include the more or less unlimited access to land, service to the Spanish Crown, possible social mobility, and even perhaps a spirit of adventure. When push and pull were taken together, the founders had many strong motivations to go to California.

Anza left San Miguel de Horcasitas with a budding community whose members had already begun to bond and invest in each other. The type of community Anza wanted to establish in California was modeled on the relationships among the people of San Miguel de Horcasitas who must have taught the potential founders by example—just by being the community Anza so favored.

Acquisition of Resilience

Resilient communities are developed over generations, but Anza was challenged to produce one without the luxury of time, trial, or error. Our research with coastal populations in the central Bahamas has documented the rapid rise of viable and resilient coastal communities. These resilient communities were developed when the slaves were abandoned due to the failure of their plantation between 1784 and 1800 (Stoffle and Stoffle 2007). The former slaves developed a sense of community which was symbolized by all of them taking the last name of the planter and assuming control of the plantation lands. With an agreed upon common destiny and a place to live out their lives as freepersons, the new community members worked together towards common goals. We do not know when resilience was fully achieved, but working together for mutual survival began immediately and community resilience must have come quickly and has lasted to the present. This is one of the few studies of how a small coastal community develops resilience. The Bahamas case contains many elements present in the early years of the San Francisco community, such as adaptation to a new ecology, being a small community with minimal external support, and facing the task of making a community out of very different people with few previous ties. Different from the San Francisco case, however, is the external force of the Spanish state, which we see below could both keep people in the community that may have wanted to leave and relocate members of the community against their will to the disadvantage of the community.

A measure of community stability is provided by the 1790 Census of California. Using the 191 names listed by Anza when the expedition left Tubac in 1775 as a baseline, the Census documents that only 44 (23 percent) remained. Of these 44 remaining founders, 30 (16 percent) were residing in San Francisco proper and 14 (7 percent) were in the nearby agricultural pueblo of San Jose. Many of the remaining founders are recorded by the census as living elsewhere in California—locations listed are San Diego, Los Angeles, Santa Barbara, and Monterey. The movement of founders was undoubtedly a combination of being relocated by the military or church, but some voluntary relocation and death account for the decline of founders in San Francisco. Voss (2008a: 73) maintains that military personnel being deployed to other locations, such as Santa Clara (which is not in the 1790 census, along with other missions and pueblos) undoubtedly accounted for the sharp drop in the Presidio's colonial population between 1776 (202 residents) and 1784 (110 residents).

The concept of Environmental Multiplicity is used to describe an elaborate system of redundant social and environmental ties which served to protect the community when either social or national perturbations occurred (Stoffle and Minnis 2008). The founders must have quickly developed such a system of social and natural relations because, when they were observed sixteen years later by Vancouver, San Francisco was a poor but viable frontier community having generally positive relationships with both its surrounding Ohlone Indian people and the natural resources. This was Anza's primary goal and our question has been what did he do to identify the potential threats to this community and how did he attempt to mitigate or even resolve these threats. We believe that many of these threats would have been recognized by his father and certainly had been mostly worked out before the Viceroy approved Anza's settlement. Anza rapidly scoped the new settlement, selected and trained his potential founders, outfitted his expedition, and got his founders to California safely. He instilled a common purpose, reduced the levels of ontological insecurity, and consequently, these founders successfully established a stable and sustainable community called San Francisco.

Dr. Richard Stoffle

PREFACIO

Anza se destaco en ambas capacidades de explorador y líder colonial. Anza mostro las cualidades de un verdadero líder fronterizo...manejo su ganado con juicio y a la gente con cariño. Inspiro a sus seguidores con lealtad...La inteligencia y dedicación con la que actuó durante este tiempo de necesidad lo convirtió en una figura distinguida...un hombre de cualidades heroicas.

(Bolton 1966: v, vi).

Este informe tiene el propósito de contribuir información hacia un espacio en gran parte vacío en un tema que por lo demás ha sido bien explorado y documentado. A petición de la Superintendente del Camino Histórico Nacional de Juan Bautista de Anza (NPS 2010), un equipo de la Universidad de Arizona (Escuela de Antropología, Oficina de Investigación Aplicada en Antropología) fue contactado para proporcionar un estudio etnográfico y etnohistórico para poder interpretar y definir las preexistentes formas de vida de la gente que establecieron San Francisco. Estos fundadores, fueron seleccionados, organizados, educados y guiados hacia este establecimiento (que después se convertiría en San Francisco) por Juan Bautista de Anza (Anza).

Este estudio es humilde en comparación a los amplios volúmenes de información que han sido desarrollados por varios académicos fascinados por este evento. Estudios anteriores incluyen cinco volúmenes por Bolton (1930) enfocándose en las expediciones de Anza a California y varios diarios de las expediciones a San Francisco (Garate 1995, 1998, 2003, 2006; Smestad 2005; ver *Antepasados* Serie 2010), historias interpretativas basadas en documentos de este evento (Guerrero 2006), estudios arqueológicos del establecimiento de San Francisco (Voss 2004, 2008a, 2008b, 2008c, 2008d; Voss et al. 2004), y las historias orales y documentos familiares de los descendientes de estos fundadores, muchos de los que ahora participan en sociedades y paginas de internet que se enfocan en Anza (Los Californianos 2010). En otras palabras, la superintendente del Camino Histórico Nacional de Juan Bautista de Anza (JUBA) tuvo la visión de encontrar un lugar para nuevas voces en una tema que muchos consideraban que había sido completado.

Los modos de vida de los fundadores de San Francisco son importantes par las interpretaciones contemporáneas de la expedición y las adaptaciones que ocurrieron mas tarde por la razón de que estos modos de vida fueron usados para establecer esta nueva comunidad y la razón por la que fue un éxito. El fracaso de una comunidad puede haber ocurrido a resultado de un amplio numero de factores posibles incluyendo (1) diferencias en clima y ecología, (2) la probabilidad de morir de hambre, (3) posibles conflictos con Indios Americanos, (4) la aparición de facciones entre los fundadores, y (5) la inhabilidad de la comunidad de sostenerse—un factor que puede haber sido causado por cualquier de los factores previamente mencionados y lo aparición de enfermedades, ataques de los rusos o indios, o tal vez la aparición de inseguridad ontológica entre los fundadores.

Los investigadores asociados con este informe lo encontraron útil de tratar de colocarse en la vida de la gente que aceptaron la petición de Anza de establecer una nueva comunidad, en un tiempo donde este terreno no había sido explorado. Este estudio se enfoca especialmente en tratar de entender porque Anza selecciono a cierta gente, las razones por la que esta gente lo siguió, y los modos de vida que los fundadores se llevaron con ellos—por la mayoría en sus cabezas. Aquí discutimos que Anza escogió gente con modos de vida y características personales que podrían superar los muchos desafíos que el sabía que aparecerían al tratar de fundar San Francisco. Esta fue una expedición espectacular, comparable al desafío de tratando de ir a Marte, con un gran numero de desafíos.

Estableciendo un poblado durante el tiempo de la expedición (1700s) normalmente requeriría mover a la gente cerca de un río conocido para poder establecer una comunidad cerca o un poco mas allá de los limites de Nueva España. Estas comunidades eran normalmente protegidas por tropas y recibían provisiones de parte de otras comunidades cercanas al sur. Durante un periodo de aproximadamente cien anos, se podía ver regularmente como la gente en estos nuevos poblados se retiraban hacia las comunidades mejor protegidas al sentirse amenazados por Apaches (Spicer 1992).

Retirándose de la posición aislada en donde se encontraba San Francisco, que estaba mucho mas allá de los limites de Alta California, no era posible. Este fue un contraste muy grande entre lo que fue esta expedición, y lo que era el típico poblado en el norte de Nueva España, y en otros respectos, otros poblados en Alta California. Aunque un Nuevo poblado llamado Monterey había sido establecido en 1769 al sur de San Francisco, Monterey se encontraba aproximadamente 100 millas de San Francisco y en si mismo estaba teniendo muchos problemas y no seria un lugar ideal para retirarse en caso que las condiciones en San Francisco se convertirían insoportables. También había mucha presión por parte de la Corona Española de establecer una comunidad estable al norte para poder reclamar la bahía de San Francisco y los terrenos alrededor. En otras palabras, los fundadores no podían fallar y estaban bajo mucha presión para establecer una comunidad que se podría sostener, mientras que la reputación de Anza estaba en juego. Estos factores tienen que haber sido fundamentales en la decisión de estos posibles fundadores de participar en esta expedición, así como un factor que Anza tomo en cuenta al evaluar los candidatos para la expedición.

El éxito de Anza en estableciendo San Francisco durante estos tiempos, especialmente dado los limites de transportación y el terreno aislado en donde se encontraba San Francisco, refleja una de las expediciones mejor planeadas en toda Nueva España y Alta California. Anza era claramente un genio en un gran numero de niveles—pero se tiene que señalar que el estaba llevando acabo el sueño de su padre de establecer un nuevo poblado. El padre de Anza le había puesto mucho pensamiento a lo se requeriría para poder fundar un poblado como este pero nunca tuvo la oportunidad de hacerlo. Aunque el padre de Anza murió cuando el era muy joven, su madre y los amigos de su padre tienen que haber tomado una gran parte en ayudándolo a realizar el sueño de su padre. Sabemos que este sueño era compartido. Hasta adjunto la petición anterior de su padre para establecer un poblado en Alta California (Garate 2003: 189-193) a su misma petición dirigida al Virrey Bucareli y a Carlos III, rey de España. Definitivamente Anza debe de haber tomado en cuenta la lógica de su padre al pensar sobre las cosas requeridas para poder empezar una comunidad exitosa.

Factores de Amenaza

¿Que sabemos hoy y pensamos que era conocido por Anza en los 1770s sobre los posibles factores de amenaza durante el periodo cuando Anza planeaba la expedición? Esta difusión tiene el propósito de estimular pensamiento con ideas que surgieron durante este estudio. Ninguna de las preguntas han sido completamente resueltas por este o cualquier otro estudio, y otras solamente son curiosidades interesantes.

Diferencias en Clima e Ecología

Es claro que hay diferencias fundamentales en clima e ecología entre el hogar de los fundadores quienes eran del norte de Sinaloa e Sonora y de la península expuesta en donde se encontraba San Francisco (ver Apéndice C). Españoles que viajaban al norte de Alta California con frecuencia se veían desprevenidos a causa del clima peligroso en esta área, especialmente la niebla, viento, y nieve. Estos factores combinados causaron a Miguel Costanso a describir las condiciones climáticas de esta región como “fuerte y tempestuosa” en su diario, mientras participando en la expedición de Don Gaspar de Portola (Teggart 1911: 289). Estas diferencias en clima en comparación a Sonora causaría varios problemas a los fundadores, quien tendrían que haber aprendido a adaptarse a la situación, adaptando su vestimenta, sus viviendas, agricultura, y sus recursos naturales. Algunas de estas cosas son bastante fácil de cambiar, como aprendiendo a comer carne de oso o agregando el pescado a sus dietas, pero otros cambios de clima e ecología, como acostumbrándose a la niebla o estar expuesto al clima cerca del mar, deben de haber sido desafíos muy grandes que sin cuestión pudieron haber causado enfermedades, depresión, y tal vez inseguridad ontológica.

Probabilidad de Morir de Hambre

Los fundadores llegarían a San Francisco con algunos suministros que habían traído en caballos y mulas durante su viaje a través de 1,200 millas de desierto, montañas, y ríos desde sus hogares. Naturalmente deben de haber tenido algún plan para reducir sus probabilidades de morir de hambre. Estos incluirían (1) algún acuerdo para que el poblado fuera reabastecido por caravanas desde Sonora y Sinaloa, (2) algún protocolo y algunos artículos para negociar con las comunidades indígenas, (3) ayuda de emergencia de Monterey, y (4) el inmediato uso del medio ambiente en termino de cacería, pesca, y recolección.

Durante el primer año, la mayoría de estos planes se llevarían a cabo. Algunos suministros llegaron por barco y por tierra desde Monterey. Grandes caravanas para reabastecerlos, sin embargo, no llegarían a causa de problemas de los Españoles con los indígenas de Yuma quienes se convirtieron de indígenas tranquilos a indígenas hostiles en 1781. En 1781, se rebelaron contra los Españoles y cerraron la única pasada del Río Colorado por una generación (Spicer 1992: 264). También se tiene que indicar la pandémica de la viruela en 1775-1782, que fue especialmente devastadora a las tribus viviendo a través rutas comerciales cercas del río, como los indígenas de Yuma (Fenn 2001). Los indígenas con frecuencia culpaban a los Españoles por las enfermedades que estaban apareciendo. La clausura de esta ruta por los Yumas

aíslo todos los poblados de Alta California del comercio efectivamente de todas las rutas terrestres con el norte de Nueva España. El comercio local empezó con los indígenas Ohlone, usando protocolos y artículos especificados por Anza. No hay evidencia de cualquier tipo ayuda de emergencia de Monterey aunque algunos suministros si fueron recibidos durante los primeros días. El uso del medio ambiente y la relación con la gente Ohlone fue la fundación para la supervivencia básica de los fundadores de San Francisco, ayudándolos a subsistir.

Posibles Conflictos con Indios Americanos

Anza estaba planeando establecer San Francisco en un lugar estratégico que principalmente serviría las necesidades de la Corona Española. Muchos indígenas, quienes hoy son conocidos por su familia de lenguas los Costanoanos (Levy 1978) y por el termino etnográfico Ohlone (Bean 1994), ya ocupaban este sitio, y mucha de la bahía de San Francisco hacia el sur. Mientras que Anza describía a los indígenas de esta región como pacíficos y amables (Guerrero 2006:68), un reporte anterior de los Ohlone en 1769 los describió diferente. De acuerdo al diario de Miguel Costanso durante su participación en la expedición de Don Gaspar de Portola, “...ni hemos visto a gente mas brutales y salvajes...donde se encuentran los numerosos habitantes quienes los viejos viajeros habían descrito como extremadamente dóciles” (Teggart 1911: 289). El Padre Palou tenia una experiencia mucha mas positiva con los Ohlone (Bolton 1966: 393-456), pero el futuro de la relación entre indígenas e Españoles estaba en duda a causa de los rebeliones en las misiones hacia el sur.

Los indígenas locales en la península no habían tenido contacto significativo con los Españoles antes del viaje de alcance de Anza en 1774. Los indios Ohlone en la parte grande de la bahía se habían encontrado muy brevemente a la expedición de Don Gaspar de Portola en 1769 (Teggart 1911). Los Ohlone definitivamente estaban conscientes del poblado de Monterey, cual había sido ocupado por indígenas desde los principios de los 1600s, pero solamente fue poblado por los Españoles en 1769 (Broadbent 1972; Levy 1978). Ellos ciertamente estaban conscientes de las expediciones de Pedro Fages en 1770 y 1772, cuando se encontró con ellos al sur e oeste de la bahía de San Francisco (Bolton 1911, Brown 1994). El Padre Palou participo en la encuesta de la península en 1774, que era requerida para determinar la colocación exacta del presidio, misión, y poblado (Bolton 1966: 393-456). Apesar de estos breves contactos con los Españoles, en 1774, los Ohlone en la península todavía llevaban un modo de vida que había permanecido sin modificación por la tecnología e intrusiones Españolas.

Sin embargo, ningún indígena Americano puede ser percibido como completamente inafectado en 1774 por la presencia de los europeos en el Nuevo Mundo. Para mediados de los 1700s, todos los Indios Americanos en California habían sido impactados de alguna manera (despoblados y reorganizados socialmente) por las varias epidémicas (Crosby 1976) que recorrieron todo Norte America empezando a mediados de los años 1500s (Cook 1978; Dobyns 1966). Aparte de estas enfermedades, los Españoles expusieron a los indígenas al sífilis. De acuerdo a Miguel y Zalvidea (1810) como citado en Cook (1976: 23), “esta asquerosa y contagiosa enfermedad tuvo sus inicios durante el periodo cuando Don Juan Bautista de Anza se detuvo en la misión de San Gabriel con su expedición.” Sífilis apareció en Alta California durante la primera década de establecimiento (Cook 1976:23). Los indígenas locales atribuyeron estas enfermedades a la presencia de los Españoles , ya que empezaron a ocurrir después de que

los soldados violaran a las mujeres - algo que Pedro Font había mencionado sobre los hombres de Anza (Cook 1976:24). Es claro que este comportamiento incontrolable y sus consecuencias eran una gran amenaza para Anza y su nueva comunidad.

Debería ser mencionado que Anza tenía mucha experiencia con las respuestas violentas de los indígenas a causa de acción Española a manos de indígenas alrededor del Mar de Cortez. En 1748, los Españoles causaron problemas con los indios Seri que continuarían por mas de una generación (Spicer 1992:107-108). Anza, como un líder militar, quien fue dado la responsabilidad de eliminar esta hostilidad, no quería que ocurriera lo mismo con los Ohlone y su nueva comunidad.

La Aparición de Facciones entre los Fundadores

Los fundadores eran una colección de gente, la mayoría familias, que probablemente no se conocían antes de ser reclutados por Anza. Esto fue un punto común para los miembros de la expedición. Por lo tanto, Anza fue retado con la creación de una comunidad de gente que tenían ideas semejantes que permanecerían juntos a pesar de grandes obstáculos, ambos durante el viaje y durante la fundación de San Francisco. Si facciones llegaran a ocurrir, causarían muchos problemas ya que impedirían la ayuda entre ellos mismos y debilitarían la fuerza de la comunidad. Facciones son menos probables de formar cuando hay un punto común entre los miembros de la nueva comunidad y cuanto cada miembro tiene un rol que tienen que llegar a cabo en la nueva comunidad.

La literatura académica en este tema de la comunidad es muy clara y amplia. Según Noll (2004) un revisión de la literatura detallada revela (Berger-Schmitt and Noll 200; Berger-Schmitt 2000) que el concepto de la cohesión social incorpora principalmente dos dimensiones del desarrollo de la sociedad, pero deberían de ser distinguidos analíticamente. La primera dimensión tiene que ver con la reducción de disparidades, desigualdades, fragmentaciones, y divisiones en exclusión social también es discutido por esto. La segunda dimensión se enfoca en los factores que fortalecen a las relaciones sociales y a los compromisos entre la comunidad. Esta dimensión también es afectada por los conceptos de la inclusión social y la capital social.

El nuevo establecimiento de San Francisco podría ser afectado a causa de facciones a menos que fueran eliminadas por Anza. Esto sería un desafío fundamental para Anza cuya solución ayudaría a eliminar muchos otros problemas que la expedición enfrentaba.

Incapacidad de la Comunidad para Sostenerse

Esto sería un factor que podría ser causado por interacciones entre cualquier de los factores ya mencionados o la aparición de problemas imprevistos como las enfermedades, ataques de los Rusos o indígenas, o la aparición de inseguridad ontológica. Algo importante que podría haber contribuido a este factor es la combinación de aislamiento social y física junto con un estado psicológico de no saber que era por venir. El aislamiento es lo mas fácil de explicar ya que los fundadores estaban realmente aislados en este nuevo poblado y no estaban rodeados de gente como ellos (Baker, Arsenaut Gallant 1994). Este problema de tener un futuro impredecible es a causa de estar en un lugar donde nadie similares a ellos han podido vivir, además de enfrentarse

con nuevos desafíos que ponen a ti y a tu familia en riesgo. Todo esto puede causar la demorización entre los fundadores (Flaherty et al. 1988) y una falta de confianza en el futuro—algo que se le llama *inseguridad ontológica* (Giddens 1990). Cuando esto ocurre la comunidad simplemente se puede deshacer, la gente se puede ir, y los miembros de la comunidad pueden morir.

Lo que Anza quería planear era lo contrario—el establecimiento de una comunidad que se podría sostener a través de un proceso de co-adaptación con la naturaleza y este nuevo ambiente social. Aquí, describimos como Anza planeo enfrentarse contra los problemas con los que su comunidad se enfrentaría.

Planeando como Co-Adaptar

Anza y sus soldados tuvieron la oportunidad de visitar el sitio donde fundarían San Francisco en 1774 durante pudo aprender sobre el lugar (ecología, clima, y la gente indígena al alrededor) y el camino que tomaría la expedición para llegar. Pensamos que los planes de Anza pueden haber venido de su padre quien le había puesto mucho pensamiento al tema, su propio pensamiento, y la información que obtuvo durante su primer viaje a San Francisco.

En respuesta a lo que el pensaba que serian problemas que podrían afectar a su nueva comunidad, Anza debe de haber planeado soluciones para cada cosa para eliminar o reducir las consecuencias de cada factor. Nosotros entendemos su planeación dentro de los conceptos ecológicos contemporáneos que son relacionados a la co-adaptación y resiliencia (Berkes 2008). La sostenibilidad en este caso fue un producto de estableciendo relaciones sociales y del medio ambiente.

Adaptaciones de Ecología y Clima

Anza tenía un poco mas de experiencia que los miembros de su expedición con las características climáticas de la bahía de San Francisco, especialmente con la península donde colocarían la nueva comunidad. Durante su viaje en 1774, su visita a Monterey lo expuso brevemente y solamente por una temporada a un terreno mas húmedo, frío, y con niebla. A causa de esta experiencia, sabia que tendría que traer vestimenta que los ayudaría con este tipo de clima – preferiblemente hecha de lana. Luego se enfrentarían con problemas al tratar de obtener este tipo de ropa, ya que las caravanas estaban teniendo muchos problemas al tratar de llegar a California (Stoffle et al. 2008).

Había mucha presión de la Corona Española de establecer una presencia legal en la Bahía, así que la expedición tuvo que viajar a California solamente con animales como ganado, mulas, y caballos pero sin animales importantes como las ovejas y pollos. Estos animales eventualmente serian obtenidos en California de Monterey, pero los fundadores tendrían que esperarse para obtener mejor vestimenta hecha de lana.

Anza sabia que la ecología de esta nueva área requeriría que los fundadores aprendieran sobre las plantas de los indígenas Ohlone. Como un especialista en plantas, Anza sabia que el

conocimiento de estas plantas usadas como medicina y comida tomaba generaciones de aprender.

Ajustándose a este cambio de ecología debe de haber sido uno de los cambios mas grandes para los fundadores (ver Apéndice C). Preparándose para este cambio fue difícil para Anza ya que solamente podía explicar sobre lo que aprendió en finales de la primavera de 1774. Las plantas diferentes y el clima deben de haber sido muy difícil de adaptar.

Suministro de Alimentos Sostenibles

Anza sabia que tomaría mucho tiempo para que los fundadores empezaran a producir su propia comida, así que estableciendo y manteniendo una relación con los Ohlone seria de mucha importancia. El diario del Hermano Francisco Palou, quien participo en la primer visita de los fundadores, publicado en 1867 por Dwinelle (1978: xii-xiv), es informativo con respecto a la comida local. El habla sobre la disponibilidad de bellotas, avellanas, fresas, frambuesas, pescado, carne de venado, conejos, gansos, codornices y zorzales. También explica como los Ohlone comían ballenas y lobos marinos (*Anarhichas lupus*).

Cuando Vancouver visito años después en 1792 (Dwinelle 1978: xviii - xix), no fue impresionado por los cuatro hectáreas de jardines que estaban produciendo muy pocos vegetales. Vancouver también observo vestimenta hecha de lana que eran hechas por mujeres indígenas bajo supervisión Española.

Relaciones con los Indígenas Locales

Anza sabia que buenas relaciones con los Ohlone era muy importante, pero sus habilidades para comunicarse con ellos no les fue útil a los fundadores ya que Anza solamente los dejo, y tuvo que regresar a Sonora para asumir su rol como gobernador de Nuevo México. Por esta razón, Anza selecciono gente que se sentían cómodos en comunicarse con gente de otra cultura y que tenían la capacidad de entender a los indígenas.

Anza selecciono fundadores que tenían experiencias bi-culturales. La lista de fundadores muestra que 27% de ellos eran de raza India y Española y 20% eran de raza Africana y Española (ver Apéndice D). Por lo tanto, 47% de los fundadores eran bi-culturales y bi-raciales y se puede asumir que los demás de los fundadores estaban cómodos teniendo una comunidad como esta y construyendo una relación con los Ohlone.

Desarrollando Solidaridad entre la Comunidad

Anza selecciono a los fundadores de muchas diferentes comunidades. Esto puede ser un resultado de las inseguridades de la gente de irse de sus hogares para ir a un lugar desconocido y peligroso. También puede haber sido que Anza quería seleccionar a gente de diferentes comunidades a propósito para que tuvieran diferentes habilidades y para poder moldearlos a una sola comunidad. Si todos los fundadores vieran sido de una sola comunidad, vieran traído

generaciones de problemas sociales que podrían haber creado facciones entre ellos. Una táctica que Anza utilizó para evitar estos problemas es que compró la misma ropa para todos los miembros de la expedición. Esto limitó la habilidad de los fundadores de diferenciar quien tenía más estatus social (Voss 2008a, 2008c). Ya que todos no se conocían, los fundadores tuvieron la oportunidad de conocerse y de crear nuevas relaciones que serían importantes en creando una nueva comunidad.

Una pregunta interesante es la de cómo Anza llegó a conocer a los fundadores. Definitivamente no tuvo suficiente tiempo para ir de comunidad a comunidad buscando y evaluando a los fundadores. Él debe haber tenido una idea de cómo esta gente debía de ser y cómo se llevaría con los demás. Él definitivamente escogió gente con familias y evitaba gente que era muy rica y gente que era muy pobre, ya que los ricos no sacrificarían sus bienes para mudarse y los pobres serían un riesgo. Es razonable pensar que estas ideas habían sido discutidas por el padre de Anza y con su madre, ayudándolo a desarrollar sus propias ideas.

Anza debe haber tenido un plan para reunir a gente extraña para crear relaciones entre ellos que los ayudarían a fundar San Francisco. Cuando Anza reunió a los posibles fundadores, los trajo a San Miguel de Horcasitas, una de sus comunidades favoritas. Aquí, dejó a los fundadores a pensar sobre los obstáculos que enfrentarían para que crearan relaciones interpersonales que serían requeridas en el futuro. No se sabe si algún posible fundador decidió no ir a California o si Anza lo regresó a su hogar. Es evidente que Anza sabía que necesitaba gente con bastante motivación. Para ser exitosos, deberían depender de los demás como comunidad.

¿Cómo inculco Anza este objetivo común por encima de objetivos individuales o familiares, que deberían de ser dejados a lado en ciertas situaciones para el bien de los demás? La motivación de cada individuo era la llave. En términos generales, debe haber existido dimensiones del poblado nuevo positivas y aspectos de sus vidas en Sonora y Sinaloa que deben haber sido negativos. Un ejemplo de algo que les causó problemas en Sonora y Sinaloa son las inundaciones regionales que enfrentaron en 1770, que destruyó la capacidad de muchas comunidades de poder sobrevivir (ver Apéndice F). Las inundaciones destruyeron sus sistemas de riego e inundaron áreas residenciales. Algo que los puede haber causado a unirse a la expedición es el acceso a terrenos, servicio a la Corona Española, movilidad social, o tal vez como aventura. Esto los puede haber causado a tener motivación para ser exitosos en esta expedición.

Anza dejó San Miguel de Horcasitas con una comunidad de miembros que ya habían comenzado a conocerse. El tipo de comunidad que Anza quería establecer en California era un modelo desarrollado por la gente de San Miguel de Horcasitas quienes le enseñaron a los fundadores cómo una comunidad debería funcionar.

La Adquisición de Resiliencia

Resiliencia en comunidades es desarrollada a través de generaciones, pero Anza fue retado a crear una sin la lujuria de tiempo o error. Nuestras investigaciones con comunidades en las Bahamas han documentado muchas de estas comunidades. Estas comunidades fueron

desarrolladas cuando los esclavos fueron abandonados entre 1784 y 1800 (Stoffle and Stoffle 2007). Estos esclavos desarrollaron un sentido de comunidad entre ellos. Con un destino común y un lugar en donde podrían ser libres, los miembros de la comunidad trabajaron juntos para llegar a sus metas comunes. Este fue un estudio de como una pequeña comunidad desarrollo resiliencia y demuestra muchas características que se pueden ver en los primeros años de la comunidad en San Francisco, tales como sus adaptaciones a la ecología, siendo una comunidad pequeña con muy poca ayuda externa, y tratando de crear una comunidad con gente muy diferente.

Una medida de la estabilidad de la comunidad se puede ver en el Census de California de 1790. Usando los 191 nombres en la lista de Anza de cuando salieron de Tubac en 1775, el Census muestra que solamente 44 (23%) permanecían en la misma región. De los 44 fundadores que quedaban, 30 (16%) vivían en San Francisco y 14 (7%) en el pueblo de San Jose. Muchos de los fundadores que permanecían se encontraban en lugares como San Diego, Los Ángeles, Santa Bárbara, y Monterey. El movimiento de los fundadores fue el resultado de ser reubicados por el ejercito o por la iglesia, pero algunas reubicaciones voluntarias y muertes de los fundadores son parte de la disminución de fundadores en San Francisco. Voss (2008a: 73) mantiene que el ejercito

El concepto de Multiplicidad Ambiental es usado para describir un sistema complicado de los lazos sociales y ambientales que ayudaban a la comunidad cuando se enfrentaban a problemas sociales o naturales (Stoffle and Minnis 2008). Los fundadores deben de haber desarrollado un sistema como este muy rápidamente, ya que cuando fueron observados por Vancouver, San Francisco era una pobre pero sostenible comunidad que tenia buenas relaciones con los Ohlone y sus recursos naturales. Esto fue la meta de Anza y la pregunta que nosotros estamos tratando de entender es como lo hizo y como identifico los problemas que ellos enfrentaban y como trato de corregirlos. Nosotros pensamos que estas amenazas fueron reconocidas por su padre y ya planeadas antes de que fuera aprobado por el virrey. Anza rápidamente escogió el lugar donde crearía esta comunidad, selecciono a los fundadores, equipo a su expedición, y los guío a California seguramente. Inculco un propósito común, redujo la inseguridad ontologica entre ellos, y a consecuencia, estos fundadores exitosamente establecieron una comunidad estable llamada San Francisco.

Dr. Richard Stoffle

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This study was facilitated by a wide range of people, each of whom have made valuable contributions to various aspects of this project and enabled its success. We greatly appreciate all of the hard work and time that each of these individuals have made in support of our project.



Figure i.i Naomi Torres Presenting at the Anza Society Conference in Magdalena, Sonora, MX

We would like to thank the following National Park Service (NPS) employees who have facilitated this study: Stanley Bond, former superintendent of the Juan Bautista de Anza National Historic Trail; David Louter, former superintendent of the Juan Bautista de Anza National Historic Trail; Naomi Torres (see Figure i.i), the current superintendent of the Juan Bautista de Anza National Historic Trail; Pat O'Brien and Larry Norris of the Desert Southwest Cooperative Ecosystem Studies Unit; and Don Garate, Chief of Interpretation/Historian at Tumacacori National Historical Park. The NPS Juan Bautista de Anza National Historic Trail website and the associated Web de Anza website hosted by the University of Oregon were also helpful in this study.

This report was prepared at the Bureau of Applied Research in Anthropology (BARA) in the School of Anthropology at the University of Arizona. María C. Rodríguez, BARA business manager, and Marcia L. Hollabaugh, administrative assistant, provided immense amounts of support and assistance throughout the entirety of the project and were always prompt, thorough, and responsive to all of our questions and requests. Dr. Marcela Vasquez, BARA Associate

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Dr. Gaspar Mairal (see Figure i.ii), associate professor of Anthropology at La Universidad de Zaragoza and visiting scholar at BARA in the University of Arizona in 2010, contributed greatly to the success of our March San Miguel de Horcasitas fieldwork session and its preparation. His formal Spanish language skills were of great help to our team, particularly in regard to official communications and the community meeting. Dr. Mairal was very generous with his time and his Spanish and ethnographic skills.



Figure i.ii UofA Research Team Answering Questions at Town Hall Meeting in San Miguel de Horcasitas (Dr. Gaspar Mairal is on the Right)

The Anza Society proved to be an immensely valuable resource. The 15th Annual International Conference of the Anza Society was an important venue for our team to network and see connections between our work and other Anza research that could be incorporated into this report. We were grateful to be given the opportunity to present our initial findings at the conference and to receive feedback from the society. Their website was extremely informative and the society as a whole was responsive to any query posed to them.

In addition, we would also like to thank all 36 study participants, both from the Tucson area and San Miguel de Horcasitas, who took the time to speak to us about what life would have been like in San Miguel de Horcasitas during the time Anza recruited and the relevance of the expedition in their lives today. Their enthusiasm towards and involvement in the study was more than we could have hoped for.

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particularly indebted to several community members of San Miguel de Horcasitas who were integral to the success of this project:

Presidente Municipal of San Miguel de Horcasitas, C. Tomás Cruz Reyes
Secretario Municipal of San Miguel de Horcasitas, Jesus Manuel de la Rosa Tapia
Trinidad Tapia
Cesar Badilla Cienfuegos
Genoviva Cañez Alcaraz
Isabel Badilla



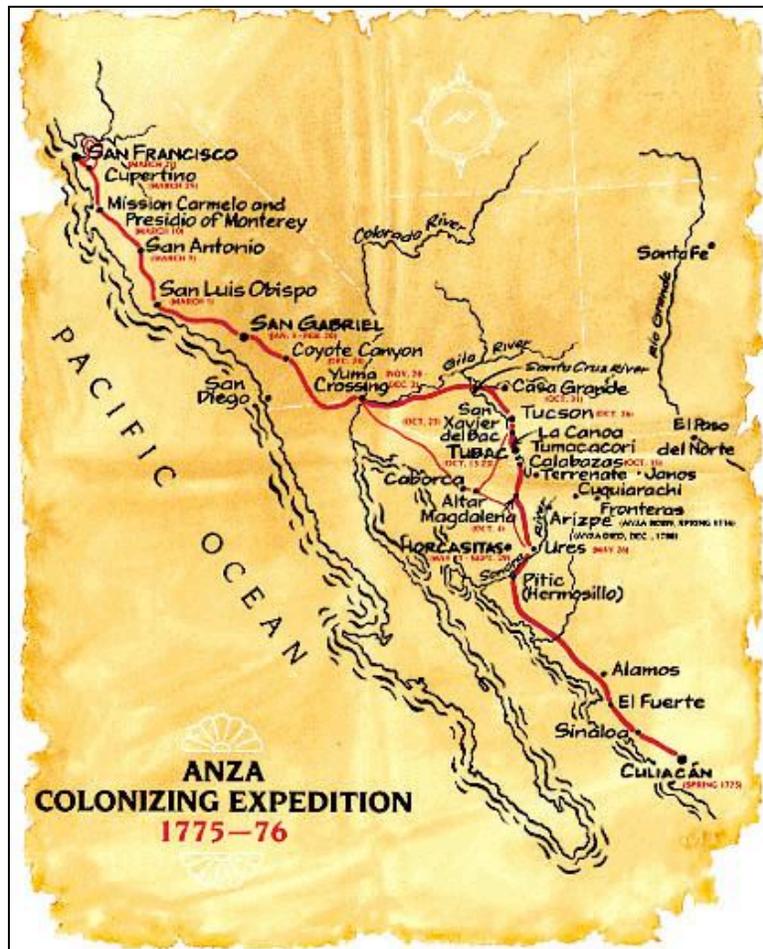
Figure i.iii One of the Many Families of San Miguel de Horcasitas That Made This Study Possible

Finally, our team owes a great debt to the municipal government of San Miguel de Horcasitas, who provided support for our study in numerous ways. They were vitally important in finding participants, as well as helping us to organize our town meetings and allowing us to use their building.

¡Muchas Gracias!

CHAPTER ONE INTRODUCTION

The purpose of this study is to provide an ethnohistorical reconstruction and an ethnographic assessment of a community from which Juan Bautista de Anza recruited and trained colonists (variously termed in this report as founders or settlers) to establish a Spanish presidio (variously termed in this report as a community or settlement) in what is present-day San Francisco, California. The purpose of this executive summary is to provide context for the National Park Service's (NPS) perceived need for this study, an overview of the study itself, and some of the study's overarching findings. A fuller discussion of some study implications was presented earlier in the Preface. The information from this study can potentially be used in the management of the Juan Bautista de Anza National Historic Trail, which runs approximately 1,840 miles—1,200 United States miles from Nogales, Arizona to the San Francisco Bay area and an additional 640 Mexico miles in Sinaloa, Sonora, and Baja California.



Map 1.1 The Anza Expedition

1.1 Background on the Juan Bautista de Anza Study

The Congressionally-authorized Juan Bautista de Anza National Historic Trail represents the south to north overland route used by the Anza Expedition to establish the Spanish presidio at San Francisco. Today, the Anza Trail passes through both rural and urban areas. The 2000 US census shows that well over 27 million people live in the 19 counties that contain segments of the Anza Trail. Since the NPS does not own most of the land associated with the Anza Trail, the program is administered through partnerships with federal, state, and local governments as well as non-profit groups and private landowners. Partnerships with Mexican organizations are essential as well because much of the trail is on Mexican soil.



Map 1.2 The Juan Bautista de Anza National Historic Trail

While in the United States EuroAmerican settlement is generally viewed as progressing from east to west, Spanish and Mexican settlement of the southwest moved from south to north. Research on the Anza Expedition has generally focused on the end of the trail, the community of San Francisco, rather than on the beginning of the trail in Sinaloa and Sonora, Mexico. This research project looks to remedy (in part) this situation by gathering data on the culture and lifeways of Anza Expedition members in Sinaloa and Sonora prior to their arrival in California. The region in northern New Spain that most California settlers came from is relatively small. The journals of Juan Bautista de Anza and Father Pedro Font, the 1790 Spanish California census,

and other documents give specific locations of origin of the settlers that were recruited for California. Information on 18th century lifeways in Sonora and Sinoloa has been found in a variety of documents, including administrative records, church records, journals, diaries, and letters. Mexican society in some small communities in this region today is relatively conservative in general and due to the small size of San Miguel de Horcasitas and its subsistence oriented economy specifically, many traditions that were likely part of the Anza settler's backgrounds are still practiced today. This project examines the broadest range of traditional institutions, which include such areas as material culture; farming and herding; trades and crafts; food preparation; medicinal and herbal practices; family traditions; stories, myths and legends; religious practices; festivals and holidays; and social structure. This information serves as a baseline against which to assess the acculturation of California society as it changed from its Spanish and Indian roots. This study thus provides a richer interpretation of the Anza Expedition itself and the cultural background of the participating colonists.

1.2 Chronology

The chronology presented here is meant to be a simple outline of key research events and will be discussed more in depth in the Methodology section of the report.

July 1, 2008
Project Start Date

August 2008 - June 2009
Dr. Dobyms conducted literature review

February 2009 - February 2010
Tucson area interviews conducted

October 29 - November 2, 2009
Fieldwork conducted in San Miguel de Horcasitas

March 11 - 12, 2010
Anza Society Conference

March 13 - 14, 2010
Follow Up Fieldwork and Community Meeting in San Miguel de
Horcasitas

June 2010
Draft Report Submitted

March 31, 2011
Project Completion Date

1.3 Major Findings

Community members consistently felt that many of the traditional ways of San Miguel de Horcasitas had remained virtually unchanged since the time of Juan Bautista de Anza. However, it was also uniformly noted that the town is currently undergoing large scale changes due to the recent road construction and paving. Even though, at the time of the October 2009 fieldwork, the highway was still lacking the final stretch crossing the San Miguel River into the community, they had already begun to see an influx of people and goods. As a result of these commodity goods and the longstanding drought, traditional foodways and plant use knowledge are quickly being lost. Thus, this is a pivotal moment for the community and this kind of ethnographic fieldwork will become increasingly less productive as time passes and the road is completed (See Figures 1.1 and 1.2).



Figures 1.1 The Church in San Miguel de Horcasitas Before (L) and After (R) the Paved Road (Courtesy of theanzaletters.com)

The many discussions of food and how to prepare it offer insights into the kinds of food that Anza's recruits would have likely taken on the expedition. Staple foods such as beef, beans, corn and wheat dishes, wild animal meats, and dairy are found in San Miguel de Horcasitas, on Anza's list of expedition supply costs (see Appendix B), and in the historical and archaeological record of the Presidio in San Francisco. Community members remember preservation methods of many types of foods that were used in the community and thus, likely used on the expedition and in San Francisco as well. Cooking techniques also seem to have remained consistent, with clay pots and comales being the main tools used in both places in order to create a cuisine high in both liquid based foods and tortillas. At least one founder's descendent, Juana Briones, maintains a fruit orchard at her home. It is very likely that wild plant foods were eaten when the founders established the San Francisco settlement, but there seems to have been an emphasis on fruits and leafy greens based on the archaeology record. Here again is another interesting question.

Community members discussed the current lack of water and its impact on their agricultural traditions that they believe have persisted since the time of Anza. The community has various strategies with which they can adjust when perturbations arise and their overall knowledge of irrigation, planting, maintaining, and harvesting techniques would have helped the new community to become agriculturally self-sufficient in a relatively short period of time (Voss 2008a). In addition to agricultural plots, almost all community members have or had before the

drought family gardens and/or fruit and nut trees for home consumption. On the one hand, the finite quantity of land in origin communities like San Miguel de Horcasitas, as well as the system of primogenital inheritance was likely a cause for some founders to decide to join the founding expedition. On the other hand, working agricultural lands together also previously served as a catalyst for building good relations with local indigenous populations, a skill which at least some descendants of the founders, such as the family of Juana Briones, seem to have utilized.

Many community members of both sexes demonstrate extensive knowledge of wild plants and their uses. They expressed the opinion that this knowledge could be better transmitted in the late spring when plants are in bloom and are thus more easily identifiable. Although the community knows the uses of many plants, they also know how to find new medicinal plants when necessary and they know the value of exchanging medicinal knowledge with local indigenous groups. The subsequently combined plant knowledge would have contributed greatly to the success of both the expedition and the founding of the Presidio at San Francisco. Community members had knowledge of various plant parts and how to use them, along with how to collect and preserve plants, which would have provided example methods to try upon arrival in San Francisco. Animals and other non-plant materials are also used medicinally. Although some people, such as curanderas, specialize in medicine, most community members have at least some knowledge of wild plant and animal uses.

Horses and livestock are clearly still an important part of the local culture. Some community members remember others making leather products and horse equipment. Many people still use meat and dairy products from their cattle for home consumption, although this practice is in decline due to their increased inclusion in the market economy. Community members emphasized flexibility, both in gender roles and use of materials, hard work, and respect for livestock's power as important characteristics needed when they work with cattle. Community members have had strategies, such as growing forage, in order to prevent cattle loss when the land cannot support either livestock or normal agriculture.

Religion and community events were discussed in detail. Several times it was noted that the Anza expedition left on the much celebrated patron saint day of San Miguel de Horcasitas, the 29th of September. Another much talked about religious icon was the Virgen de Guadalupe, she is considered to be very important. One community member argued that the people of San Miguel de Horcasitas are more than Catholic; they are Guadalupeños, demonstrating their religious fervor towards the Virgen. The image of the Virgen de Guadalupe is everywhere in the community, from household shrines to paintings on gravesites. Her saint day and many other religious days are still celebrated. These saints are prayed to not only on their day of worship, but also in times of need. For example, people pray to saints when there is drought, hunger, and/or ailments in the family. This is an example of the folk religion that exists in San Miguel. With no resident priest in the community they have adopted their own popular religiosity. This type of faith has created a strong community bond and it depends on each community member to play specific roles. These roles include godparents and catechism teachers, along with shorter term roles like who will host next year's "rosca". Events like the rosca, celebrating the coming of the three kings, and other religious holidays are accompanied with food, music and dancing. Community members emphasized the importance of music and dancing in community events and in the day to day life of the people of San Miguel de Horcasitas. These characteristics and

types of activities geared towards community cohesion would have played a pertinent role in the settling of San Francisco.

Community members continuously referenced the Anza expedition reenactments. They uniformly felt that Anza and this event were important to the community. A few community members in particular were noted as having extensive knowledge of the Anza expedition. Several community members emphasized how the last names of many of the founders matched up with community names and also emphasized certain skills that Anza brought to the founding expedition that aided its success. The Presidente Municipal emphasized his interest in our research project. He observed that the town's history and the connection it provides the two countries is a very important thing. He discussed the importance of Anza, noting the two expedition reenactments (in 1975 and in 2000). The image of Anza also serves as the municipality's logo. The municipal government is building an Anza archway where the new paved road will lead into San Miguel. The Presidente Municipal asked the UofA research team to express to the NPS his willingness to work with the NPS. San Miguel de Horcasitas community members felt that commemorations of the expedition and the reenactments provided important opportunities for people from both Mexico and the United States to remember and celebrate their common heritage.

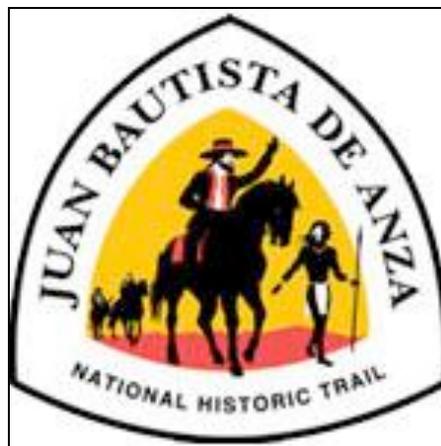


Figure 1.2 The Anza Trail Marker

Community members made several recommendations regarding additional ways to commemorate the event, such as putting in an Anza interactive museum, an Anza statue, marking the trail, and even encouraging eco-historical tourism. With outside organizers participation, community members are willing to serve as guides for trips and facilitators to include tourists in selected community experiences.

In addition to introducing new ways to commemorate Anza, many community members felt it was important to preserve and restore the historical buildings located in San Miguel de Horcasitas so that these important historical markers would not be lost. Community members noted that Anza's house, as well as two other captain's homes were still being used and/or lived in by community members. They mentioned that the governor's house was previously in good condition, but that it is currently in a state of disrepair. These community members felt that it was tragic for these historic places to be destroyed and for these important parts of the community's history to be lost. They commented on how the Anza descendents have helped

them to maintain Anza's house and that they would like additional assistance in maintaining, getting protection for, or even restoring the other sites as well. Arizpe, another historic Sonoran town, where Anza was buried, was pointed out as a model for how preservation should be conducted.

Community members would like to continue to teach the young people of their town about the history and traditional ways of the community, emphasizing core values like hard work. Several people felt that incorporating community history, such as the Anza expedition, into the local elementary and junior high school curriculums would be an important step in continuing to introduce the youth to the traditional ways. Incorporating traditional knowledge and information about the local ecology, in addition to history, into such a curriculum would also be important in maintaining community lifeways and slowing their increasing dependence on the market economy. Several community members specifically requested teaching tools, such as posters, lesson plans, powerpoints, and videos, along with the expositional panels for use in both local schools and within the community in order to educate the younger generations and visitors about Juan Bautista de Anza and the founding expedition.

1.4 Report Structure

The report consists of seven chapters and eight appendices. This section has brief summaries of the remaining chapters to help guide the readers.

Chapter Two discusses the methodology of this project. It explains how the project was carried out and the logic behind these research decisions. This study is compared with that of George M. Foster who argued that cultural changes in the New World should have a cultural baseline of cultural patterns brought from Spain.

Chapters Three and Four, written by Dr. Henry Dobyns, provide readers with important historical and ethnographic contexts of the area that Juan Bautista de Anza recruited settlers from, namely Sonora and Sinaloa. The chapters remain as drafted by Dr. Dobyns before his death, with the permission of the current JUBA Superintendent.

Chapter Five contains family stories of people who are connected to San Miguel de Horcasitas. The first section of these family stories is based on interviews conducted in and around Tucson with people originally from San Miguel de Horcasitas or whose family originated there. These families all consented to have their names and pictures included and have reviewed their individual family story for accuracy. These family stories provide an excellent overview of cultural practices within the community. These interviews demonstrate how the traditions prominent in San Miguel de Horcasitas have remained with people who have only recently left San Miguel de Horcasitas up to those whose great-grandparents moved from San Miguel de Horcasitas. These family stories demonstrate the importance and persistence of the activity complexes highlighted in our report and the fact that this was likely the case for those who settled in California as well.

The second section of the family chapter includes stories taken from interviews conducted with people in San Miguel de Horcasitas that were outside of the realm of the activity

complexes we focus on, but that are telling in their own right. The San Miguel de Horcasitas section of family stories are all combined into a singular section in order to maintain confidentiality for the participants.



Figure 1.3 UofA Ethnographers with Community Members

Chapter Six provides a more in-depth analysis of the activity complexes that were likely to have persisted since the time that settlers were recruited by Anza. These activities include agriculture and gardening, food preparation and conservation, horses and livestock, religion, and wild plant gathering. The salience of Anza and the expeditions in the present community is explored as well.

Chapter Seven focuses on potential next steps for understanding the founding community of San Francisco. This chapter includes community and ethnographic recommendations.

The eight appendices contain additional data and analysis. Some of these are very useful but simply too long to be included in the main body of the report. The Preface refers the reader to many of these important discussions.

CHAPTER 2 METHODOLOGY

The purpose of this chapter is to provide a deeper understanding of the processes by which this research was conducted. This methodology essay covers the notion of historical reconstruction, the historical research conducted by Dr. Henry Dobyns (see Figure 2.1), and the ethnographic work conducted in both Tucson and San Miguel de Horcasitas. Furthermore, this methodology chapter includes information about the team that carried out this project.

2.1 Historical Reconstruction

This study is about reconstructing the cultural patterns and consequential lifeways of the founders of San Francisco in 1776. As such, it must remain an effort towards a goal rather than a final solution to these questions. The notion of going back hundreds of years and reconstructing the cultural patterns and lifeways of a people is not new. One classic example is presented here to situate the present analysis. In the late 1940s, a noted ethnographer and ethnohistorian, George M. Foster, decided that studies of cultural patterns and change in the New World had been conducted without proper consideration of from what it was changing. Especially important was the stream of cultural patterns carried by settlers from Spain to the New World. However the ethnography of Spanish culture was only developed in the early 20th Century, so historical reconstruction would be needed. In his book, which presents the findings of this multiple year effort, Foster (1960: v-viii) describes the need for using historic documents, contemporary ethnography, and earlier efforts at Spanish ethnography to begin an historical reconstruction of the culture brought to the New World by Spanish settlers. Foster made a number of trips to Spain to view firsthand the complex diversity of Spanish culture as well as its similarities and patterns. He organized his observations around what we are calling *activity complexes*—physical order of community, agriculture, domestic animals, fishing, arts and crafts, transportation and markets, pregnancy birth and infancy, courtship and marriage, death, religion and feasts. From these and other observations and documents, he reconstructed what he termed *Conquest Culture* (Foster 10-20).

Foster concludes his analysis (1960: 227-234) with the notion of *cultural crystallization*. Conquest Culture represents but a small part of the totality of traits and complexes that comprise the donor culture. Through a second screening process in the geographic region of the recipient peoples, Conquest Culture is still further reduced in the process of playing its role as a builder of colonial culture. Culture crystallization as a concept looks at those factors that significantly influence the final stabilization of an acculturative (that is formed of multiple cultural elements from more than one origin culture) society in a local area.

Foster was trying to study which key Spanish cultural patterns and lifeways were significant in the formation of Latin American society. The present Anza study is focused much

more narrowly on the people who made a single settlement in Alta California. Despite these differences in scale, the two efforts at historical reconstruction take similar methodological paths. Each effort also necessarily remains an incomplete reconstruction given the limitations of time and data. Still the challenge of historical reconstruction is intellectually exciting because it provides both information and questions.

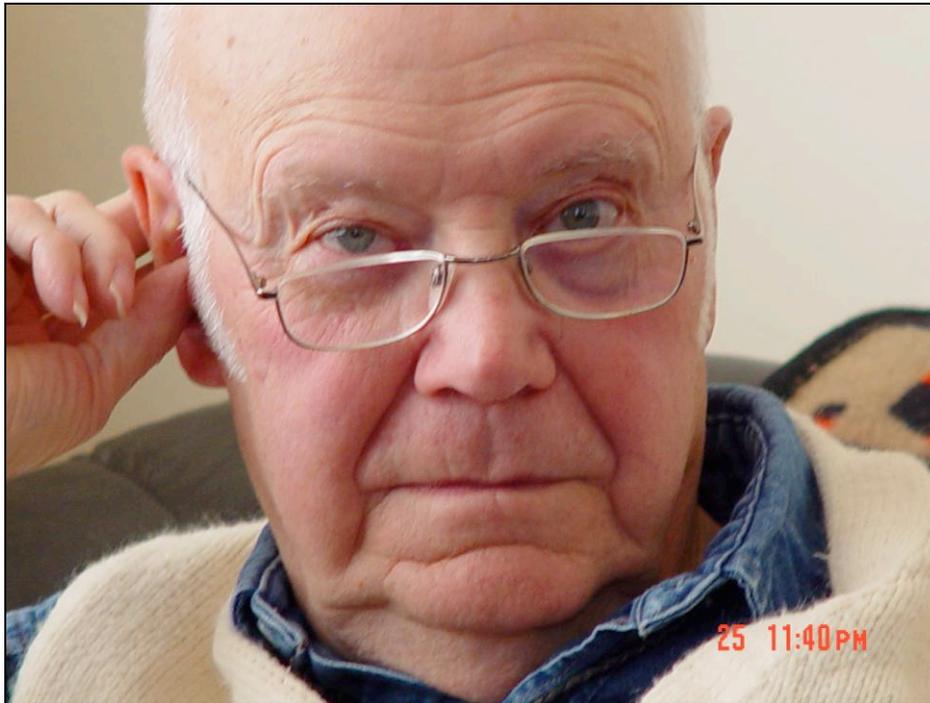


Figure 2.1 Dr. Henry Dobyns

2.2 Dr. Dobyns' Research Methodology

Dr. Henry Dobyns' study of the founders of San Francisco utilized diverse fields of study and incorporated varied perspectives ranging from the lives of individual soldiers, to the institutional actions of the Spanish Monarchy. His analyses are enriched by the balance of primary and secondary sources across his two chapters, with 169 references in total used. Dobyns presents the physical and biological context of the area: information on soils, geography, topography, geology, and ecology. These natural-resource knowledge domains would have informed the lives of the Anza's founders before traveling to Alta California. Information also is organized historically, in order to understand where and when notable elements of culture developed. Even beyond the immediate confines of 18th century Sonora, Dobyns includes global historical events where they are illustrative of a pattern or influence on the founder's culture. The cultural context of the surrounding area is also included; cultural exchanges with neighboring Native American groups demonstrate other areas of influence on the founder's society. In fine grained examinations, Dobyns often draws from tangible focal elements of culture, such as food, tools, furnishings, festivals, or rituals as the jumping off points for analysis. For larger scale impacts on founding cultures, Dobyns highlights important religious, social, and political institutions as the backdrop for cultural interpretation. Outside of the direct geographic sphere of the founders themselves, Dobyns also uses geographically specific examples to illustrate the

diversity of life in Sonora in the 18th century as a cultural launch pad for the founders. Dobyns observes contemporary manifestations of Sonoran culture in order to derive historical antecedents when possible. In addition to qualitative examinations of cultural themes, Dobyns frequently uses quantitative data when available, such as annotated species lists, population statistics, commodities, and economic yields. Throughout his two chapters, Dobyns examines the permeating impact of the founders' ideologies on the nature of their lives.

Henry Dobyns passed away (see Obituary presented earlier) after completing his two chapters for this report. With the permission of the Anza Trail (JUBA) Superintendent, the final authors of this report have left these chapters as they were at the time Dr. Dobyns passed away. Thus, there are some style and even transitional differences within these chapters and between them and the remainder of the report. The story remains the same.

2.3 The BARA Research Methodology

After Henry Dobyns completed the document-based research, the ethnographic team began conducting ethnographic field research in San Miguel de Horcasitas and with people in Tucson who previously lived in San Miguel de Horcasitas or whose families were from San Miguel de Horcasitas. For the ethnography section of this project, our team adopted a similar methodological approach to that used during our American Indian projects. Our research involves the use of mixed methods (Tashakkori and Teddlie 1998; Beebe 2001) and triangulation (Campbell and Fisk 1959). The mixed methods approach involves collecting qualitative and quantitative data, and where there is convergence, confidence in the findings grows considerably (Jick 1979). As part of our mixed methods approach, we have developed seven data collection instruments that have been used at various times during the past twenty years. These instruments have been successfully adapted for various projects with Native Americans across the United States, traditional Scandinavian fishers in the Great Lakes region, and Hispanic communities along the Old Spanish Trail. All forms were adapted for the requirements of the Anza research and were reflective of the findings from the earlier work of Henry Dobyns.

Formal interviews were conducted using our Community Oral History Form, which focuses on community cultural traditions, how they might have been similar or different in Anza's time, and the role of Anza and the expedition within the community (see Appendix A). The first section of the form has questions pertaining to the personal and family connections of the participant to San Miguel de Horcasitas. The next section focuses on the story of the Juan Bautista de Anza expedition and its resonance in the community. The final section includes questions regarding certain traditions, such as agriculture and gardening, food, horses and livestock, community events, religion, and wild plant knowledge. These questions helped to open the discussion with community members regarding what has remained consistent in the traditional ways of their community in order gain a more holistic view of what life may have been like when Anza stayed and recruited there. In the March fieldwork session in San Miguel de Horcasitas and in one Tucson interview, our Supplemental Community Oral History form was utilized. This form focused on more detailed aspects of each of the traits on which we wanted more information or clarification. The Agriculture Form and Wild Plant Use forms were also used as appropriate means to discuss these activities in further detail and allowed researches to assess whether or not continuity remained within them.

Experienced ethnographers administer these forms in a private session with community members (see Figure 2.2). The interviews were kept private in order to allow people to speak freely without fear of reprisals, and to ensure that all individual viewpoints were collected without a dominant voice overriding the others. After these viewpoints were collected, they were transcribed, translated, analyzed, and drafted into a report. The interviews were recorded and transcribed into a database for accuracy and comparative analysis.



Figure 2.2 UofA Ethnographer Interviewing a Community Member

It is important to note therefore that, except for some of the Tucson interviews, most of the quotes used in this report were translated from Spanish and that they reflect the intended meaning of the speaker as closely as is allowable by the two languages. The importance of some ideas can be best conveyed by including the richness of the original Spanish, and therefore, in some cases words, quotes, and text have been included in both Spanish and the closest possible English translation. When there is no clear English alternative, the Spanish word is maintained. In such cases that the Spanish word is maintained due to a lack of a clear English equivalent or that the word was emphasized by community members, it is included in the glossary at the end of this report.

2.4 Study Communities

Based on the list of colonists that Anza noted in Tubac and comparing it to the names listed in the 1790 California census data, our team was able to create a list of the places of origin of all but six (See Map 2.1)¹ of the colonists who went with Anza. It is important to note, however, that this list does not necessarily reflect where they may have been born, raised, or recruited, but simply what is noted in church records or their answer in 1790 to the census question of where in Mexico they were “from”. This is particularly important to note considering

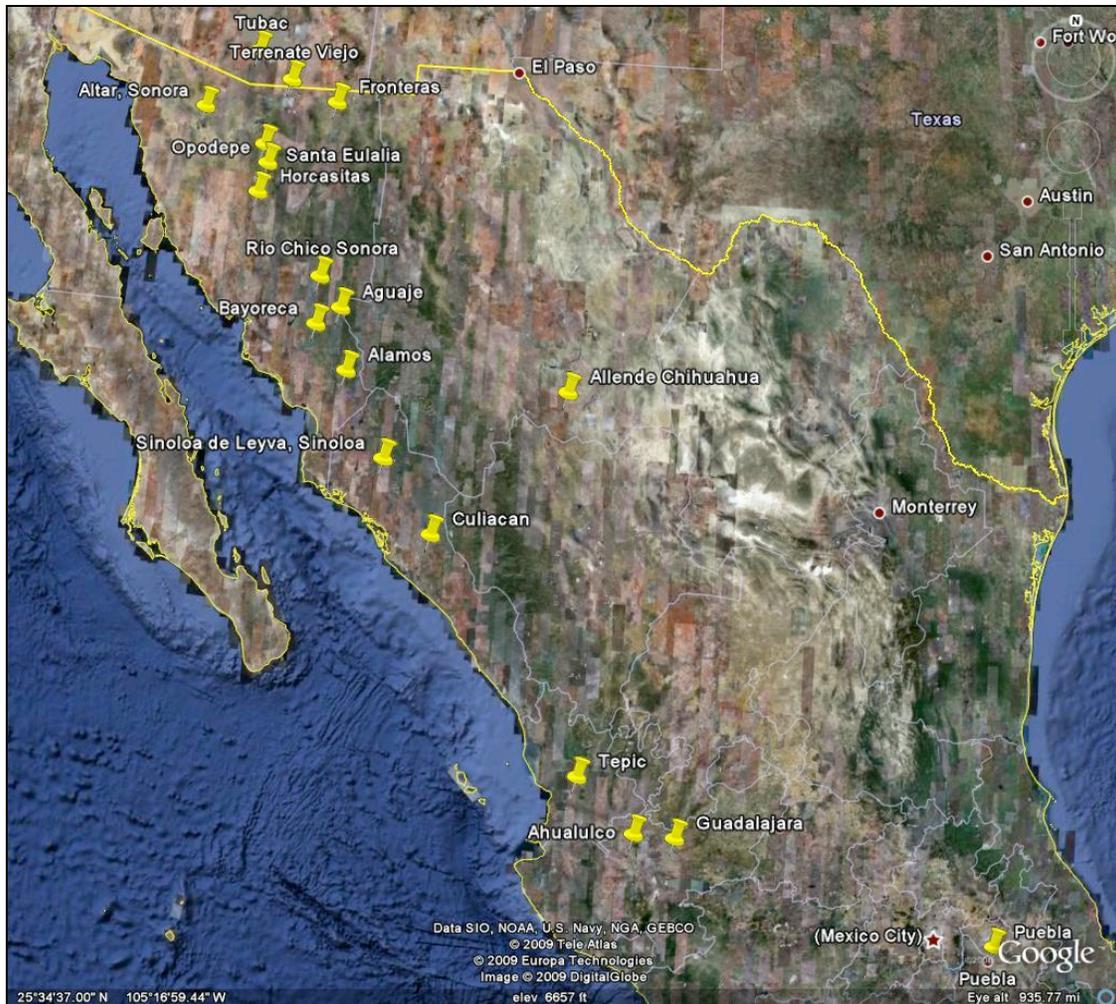
¹ Three of whose origin is unknown and three more listed only as being from Sonora

many Sinaloa inhabitants were compelled to move to Sonora based on the 1770 flood and difficulties faced by the mining industry and were then recruited in Sonora even though that was not their place of origin (Mason 1998). This is most true for Sinaloa de Leyva.

Settler Town of Origin	Contemporary Name	Contemporary State	Number of Settlers
Villa Sinaloa	Sinaloa de Leyva	Sinaloa	28
San Miguel de Horcasitas		Sonora	6
Terrenate	Terrenate Viejo	Sonora	6
Altar		Sonora	5
Culiacán		Sinaloa	4
San Bartolome	Allende	Chihuahua	4
San Xavier Cabazán		Sinaloa	3
Los Alamos		Sonora	3
Tubac		Arizona	2
Rio Chico		Sonora	1
San Juan Bautista	Opodepe	Sonora	1
Tepic		Nayarit	1
Bayoreca		Sonora	1
Aguage	Aguaje	Sonora	1
Ahualulco		Jalisco	1
Guadalajara		Jalisco	1
Fronteras		Sonora	1
Santa Eulalia		Sonora	1
Puebla		Puebla	1
Valle de San Luis		Sonora	1

Table 2.1 Colonists' Towns of Origin

Our team determined that San Miguel de Horcasitas was the best location to conduct this study based on this list of towns of origin of the Anza settlers. Several factors influenced this decision. First, team safety was an important consideration due to the recent increase in drug trafficking related violence. This factor left our team unable to do fieldwork in Culiacan and to delay the work in San Miguel de Horcasitas for many months. During that time interviews were conducted in Tucson with people originally from San Miguel de Horcasitas or whose families originated from there. Second, many of the towns of origin no longer exist. Third many other origin towns have seen such an influx of people that they are unlikely to have maintained local traditions dating back to the 1770s. San Miguel de Horcasitas was the second most common town of origin of the settlers and has remained small and stable, which make it considerably more likely that traits found there today would have been transferred to California.



Map 2.1 Anza Colonists' Towns of Origin

As mentioned above and discussed in Appendix F, many founders originally from Sinaloa were likely recruited there due to the 1770 flood. Some may have relocated to Sinoloa de Leyva which may account for the large percentage of founders from this settlement. Others even relocated to San Miguel de Horcasitas, such as the Pico family, who originally were from San Xavier de Cabazán in Sinoloa but who were recruited from San Miguel de Horcasitas (Mason 1998: 67). Virtually all of the settlers stayed in San Miguel de Horcasitas for the duration of the summer while they underwent training. San Miguel de Horcasitas thus contains a mixture of characteristics that best ensure effective fieldwork, likely cultural trait persistence, and cultural consistency with the founders who traveled with Anza to California.

2.5 Summary of Interviews

Our team consulted with the Presidente Municipal (roughly equivalent of a mayor) of San Miguel de Horcasitas and held a community meeting open to all community members during the October fieldwork trip in order to identify community members who were knowledgeable about community traditions, history and/or the Anza Expedition and who were willing to participate in our study. During four days of fieldwork in October 2009, 34 total interviews were conducted

with 26 participants. Two additional days of fieldwork in March 2010, yielded 9 interviews with 9 participants, 3 of whom were new to the study. During the two fieldwork sessions a total of 45 interviews were conducted with 29 people. A breakdown of the interviews is provided in Table 2.2. An attempt was made to balance the interviews by gender, as knowledge is often not distributed equally. Additional community members were recommended or demonstrated an interest in being interviewed, but time was not available to continue the interviewing.

In addition to interviews conducted in San Miguel de Horcasitas, our team also conducted thirteen interviews (4 informal and 9 formal) in the Tucson area with seven people from San Miguel de Horcasitas or who were descendents of people from there (Table 2.3). In total, 56 interviews were conducted with 36 participants in the Tucson area and San Miguel de Horcasitas, Mexico.

Date	Male*	Female*	Total Participants*	Informal	Formal	Total Interviews
10/29/09	4	3	7	7	-	7
10/30/09	1	-	1	3	1	4
10/31/09	7	5	12	5	9	14
11/01/09	3	3	6	6	3	9
3/13/10	1	1	2	4	5	9
3/14/10	1	-	1	1	1	2
TOTAL	17	12	29	26	19	45

* If participant was interviewed on more than one date, they are counted only on the first date they interviewed.

Table 2.2 Number of Participants and Interviews by Date in San Miguel de Horcasitas

Location	Male	Female	Total Participants	Informal	Formal	Total Interviews
Tucson	3	4	7	4	9	13
San Miguel de Horcasitas	17	12	29	24	19	43
TOTAL	20	16	36	28	28	56

Table 2.3 Number of Participants and Interviews in Tucson and San Miguel de Horcasitas

2.6 Chronology

The project officially began on July 1, 2008. Dr. Dobyns immediately began reviewing the literature and compiling an extensive series of chapters covering the documented context, institutions, and lifeways present in Sinaloa and Sonora prior to the commencement of the Anza expedition. Dr. Dobyns continued to expand upon this work up until the time of his passing.

The fieldwork was initially proposed for November of that year, but due to safety and health concerns it had to be postponed on several instances. As a result, from February to October of 2009, surrogate interviews were conducted in the Tucson area with participants who were from San Miguel de Horcasitas or whose families originated there. The information from these interviews was then compiled into family stories which present an overall picture of life in San Miguel which was later reflected in the fieldwork visit there. Once the travel alert on the

highway to Hermosillo and the travel health precaution for H1N1 were lifted, plans were made for the fieldwork visit.

From October 29th to November 2nd, 2009, the BARA team traveled to San Miguel de Horcasitas, Sonora, where 34 total interviews (13 formal and 21 informal) were conducted with 26 participants. After the fieldwork, the team focused on transcribing tapes, analyzing the data, and writing the draft report. In March of 2010, Dr. Stoffle presented at the Anza Society Conference in Magdalena, Mexico. After the conference, the team traveled to San Miguel de Horcasitas where they conducted follow-up interviews and held a community meeting about the project in order to receive feedback from the community. The draft report was submitted in July of 2010 and the project will be completed on March 31, 2011.

July 1, 2008
Project Start Date

August 2008 - June 2009
Dr. Dobyms conducted literature review

February 2009 - February 2010
Tucson area interviews conducted

October 29 - November 2, 2009
Fieldwork conducted in San Miguel de Horcasitas

March 11 - 12, 2010
Anza Society Conference

March 13 - 14, 2010
Follow Up Fieldwork and Community Meeting in San Miguel de Horcasitas

June 2010
Draft Report Submitted

March 31, 2011
Project Completion Date

2.7 Research Team Qualifications

Richard Stoffle, P.I.

Dr. Stoffle is a professor of anthropology and a full research anthropologist at BARA in the School of Anthropology. In addition to Dr. Stoffle's work with Hispanic communities along the Old Spanish Trail, he has worked extensively on American Indian environmental issues since 1976, when he participated in the first American Indian social impact assessment in the United States. This project was for an Environmental Impact Study of the Devers-Palo Verde Power-Line proposed to run from the Buckeye Atomic power plant near Phoenix, Arizona to the Palo

Verde substation of Southern California Edison in California. Since that first study, Dr. Stoffle has worked successfully with more than a hundred American Indian tribes and most federal agencies to represent Indian environmental issues in land management decisions. Dr. Stoffle has a record of scholarly publications and research reports, which are available on request. Recent articles that reflect his current scholarly partnerships with Indian people (Stoffle, 2000; Stoffle, et al. 2008). His most recent co-edited book (Stoffle, Zedeño and Halmo 2001) is a model of long-term research and consultation with Numic-speaking tribes and organizations in Nevada, California, Utah, and Arizona. He headed an extensive decade long ecological study on the north coast of the Dominican Republic (B. Stoffle et al. 1994; R. Stoffle et al. 1993).

Henry F. Dobyns, Co-P.I.

The late Dr. Dobyns was a noted anthropologist and ethnohistorian (see Obituary earlier). Throughout his career, he worked on topics addressing Native American and Spanish relations and borderlands issues and was considered an expert in this area. He contributed dozens of essays, which expanded our understanding of Spanish borderlands². He wrote a history of Peru and was in-country field director of the famous Cornell Peru Project. He was a recognized expert on traditional American Indian culture and the cultural and environmental changes, which have resulted from their contact with European society. Dobyns was the former President of the Society for American Ethnohistory and a lifetime member of the Arizona Historical Society.

Hector Acosta

Mr. Acosta is an undergraduate research assistant. He is a junior majoring in Political Science with minors in Latin American Studies, Spanish, and Business. His interests include transnational migration and cultural exchange in Latin America. Both of his parents were born in Mexico and consequently Spanish was his first language. He was a senior translator on the project and facilitated interviews in Mexico and the Tucson area.

² Some selected references are: Henry F. Dobyns, "Indians in the Colonial Spanish Borderlands." Pp. 66-93 in *Indians in American History* edited by F.E. Hoxie. Arlington Heights: Harlan Davidson, 1952; H. F. Dobyns, *Pioneering Christians Among the Perishing Indians of Tucson*. Lima: Editorial Estudios Andinos. 1962; H. F. Dobyns, *Spanish Colonial Tucson: A Demographic History*. Tucson: University of Arizona Press, 1976a; H. F. Dobyns, *Spanish Colonial Frontier Research*. Albuquerque: Center for Anthropological Studies. Spanish Borderlands Research No. 1., 1989; H. F. Dobyns and P.H. Ezell, "Sonoran Missionaries in 1790," *New Mexico Historical Review*. 34:1 Pp: 52-54, 1959; G.P. Nabhan, A. Whiting, H. F. Dobyns, R. Hevly and R.C. Euler, "Devil's Claw Domestication: Evidence from Southwestern Indian Fields," *Journal of Ethnobiology* 1:1 Pp. 135-64, 1981; H. F. Dobyns, *Prehistoric Indian Occupation within the Eastern Area of the Yuman Complex: A Study in Applied Archaeology*. New York: Garland Pub., 1976b; H. F. Dobyns, "Native American Trade Centers as Contagious Disease Foci," Pp. 215-222 in *Disease and Demography in the Americas*, edited by John W. Verano and Douglas H. Ubelaker. Washington, D. C.: Smithsonian Institution, 1992, 219; H. F. Dobyns and Robert C. Euler, *The Havasupai People*. Phoenix: Indian Tribal Series, 1971, 15; Henry F. Dobyns, *From Fire to Flood*. Socorro: Ballena Press Anthropology Monograph 20, 1981, 115; H. F. Dobyns, Paul H. Ezell and Greta S. Ezell "Death of a Society," *Ethnohistory* 10:2 (Spring 1963) 105-61, 135-36; H. F. Dobyns, "Trade Centers: The Concept and a Rancherian Culture Area Example," *American Indian Culture and Research Journal* – 10:1 1984, 23-35.

Phillip Dukes

Mr. Dukes received a B.A. from the University of Arizona in Anthropology, where he graduated with honors. He works as a research assistant at BARA with a special focus on ethnoecology. He is most responsible for Appendix C, which contrasts the ecology of the founder's home communities and the San Francisco area.

Shawn Kelley

Mr. Kelley received an M.A. in Applied Anthropology from Northern Arizona University and a B.A. from the University of Arizona in Anthropology with a Spanish language minor, where he graduated summa cum laude and with honors. He has wide-ranging experience partnering with community members and diverse organizations to develop ecological restoration, cultural preservation and educational projects. Shawn has worked on a variety of ethnographic research and oral history projects for consultation, affiliation, community assessment studies and other socio-cultural analysis. The common thread in his previous employment is the combination of working with people and environmental issues. He has worked with a number of tribes in the Southwest, as well as in bilingual communities in New Mexico, Arizona, and US/Mexico borderlands region.

Susanne Koestner

Ms. Koestner received a B.A. from the University of Arizona in Latin American Studies and Spanish Literature, where she graduated with honors. She is currently pursuing an M.A. in Counseling Education at the University of New Mexico. She has worked on ethnography projects in the US-Mexico borderlands regions, US Virgin Islands, and Guatemala. Her past fieldwork focused extensively on artisan development and community based initiatives. In addition to ethnographic research, she has experience in the fields of health and education.

James Madril

Mr. Madril received a B.S. from the University of Arizona in Psychology with minors in both Anthropology and Religion. He has worked with BARA as a Research Assistant since 2008 on federally funded projects to address Native American concerns in the western United States. He was instrumental in interviews, translation, and the final preparation of the report. He is currently working with at-risk youth in the Tucson area.

Gaspar Mairal Buil

Dr. Mairal received his Ph.D. from La Universidad Complutense de Madrid in 1990. He is an Associated Professor of Social Anthropology at the Universidad de Zaragoza, in Spain, where he leads a research group called *Studies on Risk Society*. He currently teaches anthropology for both undergraduate and graduate level courses. His most recent publication is *Tiempos de la Cultura. Ensayos de Antropología Histórica* (Prensas Universitarias de Zaragoza, 2010). In the spring of 2010, Dr. Mairal was a visiting scholar at the Bureau of Applied Research in Anthropology at the University of Arizona. Dr. Mairal assisted with public meeting in Mexico

and participated in a number of interviews. He helped with the preparation of formal Spanish letters to government officials.

Jessica Medwied-Savage

Miss Medwied-Savage received a B.A. from the University of Arizona in Anthropology and Spanish, where she graduated Summa Cum Laude and with Honors. She has worked with BARA as a Research Assistant since 2006 on federally funded projects to address Native American and Hispanic concerns in the western United States. Jessica took the day-to-day administrative responsibility of organizing fieldwork, translating interviews, and writing the final report. She is currently pursuing a degree at Northern Arizona University.

CHAPTER THREE INSITUTIONAL CONTEXT OF SONORA

Chapter one unifies Dr. Dobyns research on the institutions which sculpted the large scale social and political climates of Sonora. Both governmental and non-governmental institutions exerted influence on the society of the Founders. Dobyns begins with the role of governmental institutions, investigating the role of military posts in the region, predominantly as military hubs and centers of commerce for mission goods. Each major military settlement is explored in its subsection. The second section explores the role of Roman Catholic missions, the other major governmental institution. In addition to associations with military forts, the missions perform important roles in relations with surrounding indigenous peoples. Due to their substantial influence on the environment of the Founders, the prominence and eventual expulsion of the Jesuit Order of missionaries represent a focal point for the chapter. Dobyns also provides a spatial analysis of the significant waterways, describing important settlements which lie along the streams. The analysis then moves away from governmentally influenced military and religious institutions onto more economic institutions such as mines, seaports, ranches, and farms. The chapter also investigates the role of institutional differentiation, augmented by comparison with more current examples. The final portion of the chapter investigates the tribal climate of the region more in depth, surveying the nature of Yaqui, Ópata, and Comcáac relationships with the Founders.

3.1 The Viceroyalty of New Spain—A Government Institutional Overview of Provincial Sinaloa and Sonora on the Northwestern Frontier: Military Posts

This section and the next endeavor to present an overview or sketch of the types of settlements and institutions in provincial Sonora during the lifetimes of the founders of San Francisco. We date those lifetimes to the eight-year period 1767-1775, and the previous five year period 1763-1767. These dates are not arbitrarily selected.

In 1763, the Treaty of Paris terminated the Seven Years War (1756-1763), which was fought in so many places that historians consider it the first modern World War. Decisively defeated, Spain ceded colonial Florida to victorious England. Spain evacuated nearly all of its civilian population, including small surviving remnants of Christianized Native Americans. England returned its Cuban and Philippine conquests to Spain, and in 1764 France ceded Louisiana to Spain.¹

¹ Henry F. Dobyns, *'Their Number Became Thinned': Native American Population Dynamics in Eastern North America*. Knoxville: University of Tennessee Press, 1983, 284; Hubert Herring, *A History of Latin America*. New York: Alfred A. Knopf, 1966 2d edition, 247; Rafael Altamura, *A History of Spain from the Beginnings to the Present Day*, translated by Muna Lee. New York: D. Van Nostrand Co., 1949, 442; Charles E. Chapman, *A History of Spain*. New York: Macmillian, 1918, reprint New York: Free Press, 1965, 386-67.

The Spanish crown instituted major government changes in New Spain during the post war period. Among the most effective reforms was the royal reduction by half in the price of mercury which stimulated the mining sector. The royal regulation of 1772 standardizing frontier military posts and relocating many of them was another major reform.²

In historical perspective, the 1761-1769 decade marked a transition from a very slowly changing society and economy to a constantly accelerating rate of change in Western society. For example, England and Wales in 1766 began to measure and record precipitation.³ That was one case of increasing quantified measurement of natural phenomena, leading to increasing human prediction. Another key change in England was expanding literacy and prosperity which allowed readers to purchase a variety of types of publications. By 1760, the English middle class readers' purses guided what authors wrote and publishers printed.⁴

In 1767, Spanish King Charles III ordered a major colonial institutional change,⁵ Charles III expelled members of the Society of Jesus from his American dominions. The Society of Jesus was at the time certainly one of the most powerful institutions in colonial New Spain. Expelling the Jesuits drastically altered the number of Roman Catholic missions to Native Americans in Sonora, and Roman Catholic priests in the entire colony.

Our analysis will examine a number of colonial institutions. The two most important institutions expanding northward the Spanish-Native frontier, the mission and the military post, were both governmental. The other two significant contact institutions where Natives and Newcomers interacted were both NGOs in a contemporary parlance, the private sector. The non-governmental organizations were mines and ranches or haciendas.

Historically, a fifth institution operated at the junction of Spanish-Native interaction. This institution combined governmental and NGO elements. Early during the colonial period, this institution was called the *encomienda*.⁶ The crown granted certain numbers of Natives to an *encomendero*, who in turn owed military obligations to the crown. Ideally, encomenderos were conquistadors. As such they were an unruly element in colonial society from the crown's perspective. Consequently, Spanish kings pursued a long range goal of extinguishing encomiendas. Spanish Culiacán founded in 1531 was virtually the only Sonoran-Sinaloa settlement based on the encomienda institution. The encomienda institution rested firmly on

² Gálvez, *Informe General*, 40; Brinckerhoff & Faulk, *Lancers for the King*.

³ Thomas L. Freidman, *Hot, Flat and Crowded: Why We Need a Green Revolution and How It Can Renew America*. New York: Farrar, Straus & Giroux, 2008, 134.

⁴ S. H. Steinberg, *Five Hundred Years of Printing*. New York: Criterion Books, 1959, 165.

⁵ By "institution," we mean as consistently as possible, a group of human beings united to pursue an activity, be it complex or simple, possessing a material endowment, using a technical outfit, and training or preparing to carry out its task. This group was organized in accord with a definite customary or legal charter which is linguistically formulated in the form of maxim, rule, legend, or myth (Bronislaw Malinowski, *The Dynamics of Culture Change*, edited by Phyllis M. Kaberry. New Haven: Yale University Press, 1945, 50).

⁶ *Encomienda* is difficult to translate precisely into English, "a charge" coming close. In Twentieth Century Peru, drivers of standard automobiles traveled regularly between Lima, the metropolis, and provincial cities and towns. Clients who did not trust the government's postal service placed packets ("encomienda") in the charge of these drivers ("encomendar") to transport and deliver to the addressee. Modern usage does not, however, extend "encomendero" to the drivers.

Peninsular antecedents, and constituted a persistence of Medieval tradition in Spanish governance of conquered populations.

A parallel continuance of Iberian tradition was the *adelantado*, a private sector entrepreneur operating with government sanction and individual capital. Juan de Oñate was a prime exemplar. His uncle made a fortune in the Zacatecas mines opened during the mid-sixteenth century. Juan undertook to colonize provincial New Mexico with royal license and inherited wealth.⁷ Neither encomienda nor adelantado played any significant role in Sonora between 1763 and 1776.

3.1.1 Royal Military Posts

Like the missions, colonial military posts on the northwestern frontier were manned by Europeans, Creoles, Mestizos, Mulattos and indigenees. The troops can be considered mounted infantry, although a strong medieval influence of mounted conflict lingered. The military posts considered in this analysis were Indian fighting institutions. They were quite different from the massively fortified, heavily gunned posts in the Caribbean Sea designed to repel European attackers. Those European fighting posts had much larger garrisons than the posts of the Native American frontiers considered here.

San Francisco de Regis del Presidio Real de San Carlos de Buenavista

After the Yaqui Revolt in 1740, Governor Agustin de Vildósola stationed troops at Tecoripa Mission for a while. In 1741, authorities moved part of the Sinaloa garrison to Buenavista. This post continued active into the nineteenth century. Franciscans ministered to the garrison.⁸

In March of 1767, this post on the west bank of the Río Yaqui had the ubiquitous Sonoran garrison numbering 51 men including three officers. Sixty families of Lower Pimas continued inhabiting the site of their ancestral settlement.⁹

San Miguel de Horcasitas, 1749

San Miguel de Horcasitas was founded in 1749 by simply transferring the garrison previously stationed in Pitic to Horcasitas. The post occupied riverine lands close to and between two Jesuit mission visitation stations where captured and theoretically converted Comcáac resided.¹⁰ The location and the exploitative land ownership ethic of post soldiers with regard to recently hostile Natives generated quick conflict. At times the provincial capital, Horcasitas was served by secular clergymen.¹¹

⁷ George P. Hammond and Agapito Rey, translators, *Juan de Oñate*. Albuquerque: University of New Mexico Press, 1953.

⁸ Roca, *Paths of the Padres Through Sonora*, 253-54.

⁹ La Forá, *The Frontiers of New Spain*, trans. By Kinnaird, 120.

¹⁰ Thomas Sheridan, *Empire of Sand: The Seri Indians and the Struggle for Spanish Sonora 1645-1803*. Tucson: University of Arizona Press, 1999, 141.

¹¹ Roca, *Paths of the Padres Through Sonora*, 144-45; Ocaranza, *Los Franciscanos en las Provincias Internas de Sonora y Ostimuri*, 72-73.

San Miguel de Horcasitas was founded with the optimism of real estate developers. It was the first town in Sonora founded with a formal burghership of Spaniards and gente de razon. The population of Horcasitas was soon reinforced when the remnants of the mine camp and former provincial capital of San Juan Bautista moved to the new settlement. The founders of Horcasitas followed the mandates of the Laws of the Indies, laying out a central plaza and straight streets at right angles one to another.

Soon after San Miguel de Horcasitas was established, viceregal official José Rodríguez Gallardo ordered an ethnic cleansing of the Gulf of California coast of Sonora inhabited by fisher-hunter-gatherer Comcáac. Rodríguez Gallardo ordered presidial detachments to pursue Comcáac even on Tiburon Island, a major Comcáac refuge zone. The colonial government shipped captured Comcáacs at least as far as Guatemala, and even to Caribbean Islands.¹² Colonial Spaniards were never able to capture all of the embittered and vengeful Comcáac. Consequently, Rodríguez Gallardo's extermination policy set in train decades of inter-ethnic guerilla warfare. That warfare by and large defined the ethnocentrism of the founders of San Francisco, and their image of the hostile and ever dangerous Native "other." While Western Apaches had begun rustling central Sonoran horses and cattle, they were but a minor nuisance compared to the Comcáac until after 1776.

Logically, Capt. Juan Bautista de Anza energetically recruited colonists at San Miguel de Horcasitas. That post and its garrison and neighbors suffered Comcáac hostilities from the moment of its establishment. A general assessment of economic losses to Comcáac and Apache raiders in 1760 summarized Horcasitas' initial decade in grim terms. After 1755, the Comcáac "left the inhabitants of that region without possessions" (Sheridan 1999:246). Attacking the garrison and civilian colonists, Comcáac inflicted numerous casualties, and kidnapped youths. They repeatedly rustled the post's horse herd. They burned wheat granaries.¹³ In January of 1767, royal engineer Nicolas de La Fora considered the Horcasitas hinterland the most dangerous part of Sonora.¹⁴ Conditions at Horcasitas had not improved much if any when Anza came recruiting.

The post was at that time more or less in limbo. San Miguel de Horcasitas, facing the Comcáac at close range, was too far south to be useful against Apache raiders, or fit into the idealized line of frontier posts specified in the King's 1772 Regulation. In fact, the Regulation called for the transfer of the Horcasitas garrison onto the frontier line on the Gila or Colorado River.¹⁵ Spain never sent a true garrison to the Gila-Colorado River junction, leaving the pitiful excuse of an effective force to be massacred by the Quechan in 1781 along with Fathers Francisco Garcés, O.F.M., and Juan Díaz, O.F.M.

¹² Sheridan, *Empire of Sand*, 100.

¹³ Sheridan, *Empire of Sand*, 246, from "Breve Resumen de Desastres."

¹⁴ La Fora, *The Frontiers of New Spain*, trans. By Kinnaid, 116.

¹⁵ O'Connor, *Informe de Hugo de O'Connor sobre el Estado de las Provincias Internas del Norte 1771-76*, 70-71.

The industrious Yaquis, the laboring foundation of the Sonoran mining economy,¹⁶ stood out in stark contrast to the economically costly Comcáac. So did the Ópata, trying their best to convert themselves into imitation Spaniards. Even though various Lower and Upper Pimans might chafe under colonial oppression from time to time, their resorts to violence were few and scattered. The usually friendly O'odham, who exported cotton blankets and willow baskets to Sonoran villagers, were good guys compared to the evil Comcáac. The founders of San Francisco, perhaps recruited in the San Miguel River Valley, in particular held this view of Sonora's ethnic hierarchy, after decades of the Comcáac Conflict, fought up close and dirty.

King Charles III in his 1772 Regulation of frontier military posts sought to curb the economic power of post commandants who had typically treated their troops as captive customers. Still, enlisted men were to be paid only two reales daily in cash.¹⁷ The 1772 Regulation did not stop post commanders from exploiting their enlisted men. Commandants purchased wholesale and sold retail to their garrison, in kind, not cash. The payroll could have stimulated the provincial economy had the enlisted men been paid more cash they could spend. It did not, so the economy remained weak and underdeveloped. Commanding Inspector Hugo O'Connor blamed the scarcity of cash in circulation for provincial economic stagnation.¹⁸

The 1772, royal provision that troopers who recovered property from hostile Native Americans were to divide horses, mules, cattle, provisions or other effects equally among themselves¹⁹ provided a strong incentive for frequent hostilities. Capturing booty was virtually the only way that soldiers could accumulate any wealth. Commanding Inspector Hugo O'Connor boasted that frontier garrisons recovered during his 1771-1776 period some 7,000 head of livestock rustled by hostile Native Americans.²⁰ That figure indicates that Apache and other Native American rustling reached astronomical proportions.

The constant loss of thousands of horses and cattle by the frontier military posts meant that the most expensive commodity acquired by those posts was livestock. That created economic opportunity for missions and other ranchers. On the eve of the founding of San Francisco, the frontier military posts purchased some 2,000 head of cattle annually from the Río Grande Pueblos alone.²¹ The northwestern posts drew their replacement horses from haciendas near the Pacific Coast. When Apaches rustled 130 horses from Tubac two weeks before the 1774 expedition was to start for Alta California, Anza switched routes in hopes of acquiring replacements in the Altar Valley.²² On 7 September 1775, Apaches ran off the entire 500 head herd from Tubac, leaving its garrison on foot.²³ The founders finally departed from Tubac riding

¹⁶ O'Connor, *Informe de Hugo de O'Connor sobre el Estado de las Provincias Internas del Norte 1771-76*, 104-105. O'Connor specifically mentioned Cieneguilla as operating with Yaqui labor.

¹⁷ Brinckerhoff and Faulk, *Lancers for the King*, 22-23.

¹⁸ O'Connor, *Informe de Hugo de O'Connor sobre el Estado de las Provincias Internas del Norte 1771-76*, 74-75.

¹⁹ Brinckerhoff and Faulk, *Lancers for the King*, 32-33.

²⁰ O'Connor, *Informe de Hugo de O'Connor sobre el Estado de las Provincias Internas del Norte 1771-76*, 73.

²¹ O'Connor, *Informe de Hugo de O'Connor sobre el Estado de las Provincias Internas del Norte 1771-76*, 106-107.

²² Bolton, *Anza's California Expeditions. Vol. 1. An Outpost of Empire*, 64.

²³ Bolton, *Anza's California Expeditions. Vol. 1. An Outpost of Empire*, 229.

450 saddle horses and mules.²⁴ As the expedition travails on the trail later demonstrated, that number of mounts was really insufficient.

San Ignacio de Tubac, 1752

Tubac was founded in 1752 on the upper Río Santa Cruz in the wake of the so-called “Pima Revolt” of 1751. Colonial officials intended the new garrison to pacify those northern O’odham still restless after the “Revolt.” In 1760, new post commandant Juan Bautista de Anza effectively terminated O’odham hostilities by leading a patrol, which killed the last rebel son of the putative leader of the 1751 militant movement. Thereafter Tubac, like Horcasitas, devoted its military efforts to the Comcáac Conflict except for an occasional campaign against Apache rustlers.

On 30 November, 1764, Capt. Anza was at San Miguel de Horcasitas, and took the field against the Comcáac soon after, in the company of the governor of Sonora. After a trip back to Tubac, Anza was at Horcasitas again on 12 January, 1765. By late June Anza was at Tubac.

Late in February of 1766, Anza led a task force including detachments from Fronteras and Terrenate posts and 30 O’odham auxiliaries across Playa de los Pimas and the San Pedro River Valley into the Florida [Pinaleño] Mountains. There he tricked Apaches into fighting a battle. Anza’s task force surprised a ranchería, capturing a quantity of processed mescal and fifteen women, several of whom had recently given birth. Anza returned to Tubac on 16 March because his O’odham warriors fell ill of an epidemic ailment which struck the garrison in February and March.²⁵

After participating in the expulsion of Jesuit missionaries, Anza apparently spent the last two months of 1767 at Pitic on the Comcáac frontier. Then the King’s Inspector General José de Galvez threw hundreds of troops into the Comcáac Conflict. Gálvez placed Col. Domingo Elizondo in command of 100 Spanish Dragoons, 100 Mexican dragoons, 100 Catalan Volunteers from the Peninsula, 150 Highland Fusiliers, 51 Infantry of American soldiers, and the military post lancers. Capt. Anza met Col. Elizondo at San José de Pimas on 12 August, 1768, along with Governor Juan de Pineda (so obese he could not campaign), Capt. Lorenzo Cancio and Capt. José Bergosa.

During the last two weeks of August, Anza demonstrated the expertise of the military post troops. Anza led 50 men to engage Comcáac in the Cerro del Cautivo, killing eight and capturing 20 horses. That was about as well as any field force did during the Sonora Expedition. Disappointed with the picayune achievements of the European and creole troops, Col. Elizondo consulted with Captains Anza and Bernardo de Urrea of Altar about shifting the base of operations from the port of Guaymas to the hacienda and Native settlement at Pitic.

²⁴ Bolton, *Anza’s California Expeditions. Vol. 1. An Outpost of Empire*, 232.

²⁵ Juan Bautista de Anza, “Anza, Indian Fighter: The Spring Campaign of 1766,” edited by John L. Kessell, *Journal of Arizona History* 9:3 (Autumn 1968) 155-63, 158-62; Henry F. Dobyns, *Tubac Through Four Centuries*. Tucson: Arizona State Museum Report to Arizona State Parks Board, 1959, 371 for epidemic. Available online at University of Arizona Library.

In January of 1769, Elizondo dispatched three columns to force the Comcáac to give battle. They failed because their horses failed. After 13 January, Anza also had to give up following rustled horse tracks and retreated to water his horses. With 50 men, Anza then inflicted casualties on three Comcáac *rancherías*. He returned to Pitic on 9 May, 1769 with three rescued boys.

Halting hostilities in the summer of 1769, Gálvez achieved nothing. When the monsoon began late in July, Anza led 40 Dragoons and 40 lancers, guided by a captured Comcáac. The colonials burned provisions discovered in an abandoned *ranchería*. Anza's command killed a couple of Comcáac chasing them through the mountains. Scouting estuaries along the Gulf, Anza recovered 18 rustled horses.

When Gálvez fell ill, Col. Elizondo shifted to search and destroy tactics. Leading one of three 50 man-columns, Anza failed to dodge an O'odham arrow that struck his face. His troops slew 17 hostile O'odham.

In the fall, Anza again scouted the Cerro Prieto. His water gave out before he could attack any Comcáac; the springs were failing. Anza's column did recover 124 horses.

Yellow fever struck the Comcáac that winter. On 17 March, 1770, Anza took 60 men north to make sure the Tohono O'odham were truly pacific. Anza sallied into Apache country, slaying four adults and capturing eight children. The remainder of that year Anza spent harrying Comcáac. During the July-August monsoon, Anza searched unsuccessfully for Comcáac and hostile O'odham. In September, Anza's field force slew ten Comcáac near the Gulf coast. More Comcáac surrendered. Anza campaigned from 1 to 28 October, killing four and capturing 21 Comcáac. In December, Apaches raided Tubac, and Anza took 30 lancers to pursue them.

So many apostate O'odham in Comcáac country surrendered that early in 1771 Col. Elizondo was able to declare colonial victory. Meeting and campaigning with high ranking Spanish officers reinforced Juan Bautista de Anza's confidence and apparently his ambition.

Santa Gertrudis de Altar, 1754

Anza did not recruit colonists at the royal military post at Altar. We include Altar in the list of provincial presidios in order to accurately portray Sonoran settlement diversity and types at the time Anza was planning and executing his exploratory and colonizing expedition.

In January of 1767, the Altar garrison numbered 51, counting three officers. Altar had an additional 25 families and 10 armed men.²⁶

Realigning the frontier military posts in accordance with the King's sweeping 1772 regulations, Hugo O'Conor rode all the way west to the post at the western extremity of the new

²⁶ LaFora, *The Frontiers of New Spain*, 112.

alignment, Altar. O’Conor proposed moving the Altar garrison to Cosimac. As far as we know, it remained where it had been since 1757.²⁷

Fronteras, 1692 “Compañía volante de Sonora”

The colonial advance northward over the Central Plateau outpaced the Native mission frontier advance up the Pacific Coast of New Spain. Consequently, colonial officials established a garrison at Fronteras, in northeastern Sonora, in 1692. Apache raiding pressure was already sufficient to persuade authorities to reinforce the Fronteras garrison with the Sonoran Flying Company. That unit moved in response to official panic, rather than having a fixed location.

This unit was also known by the Ópata place name Corodéguachi. In November of 1766 it had 479 inhabitants, counting a 51 man cavalry company plus 50 settlers “skilled in the use of arms” (LaFora 1958:104). Apache raiders could easily scout the post from the slopes of nearby mountains.²⁸ The post’s military effectiveness may, therefore, be questioned.

San Felipe Gracia Real de Terrenate

Established in 1741, on the headwaters of the Río San Pedro, this post finally moved to Suamca at the headwaters of the Río Santa Cruz in 1787.²⁹ Meanwhile, Hugo O’Conor moved it down the Río San Pedro to Santa Cruz [de Haivan Pit] in the mid-1770s as part of the general realignment of frontier military posts into a line from the Gulf of Mexico to the Gulf of California.

In December, 1766, the post was known alternatively as San Felipe de Jesús Guebavi. The authorized garrison strength at that time was 51 men, including three officers. Total population was reportedly 300 persons, of whom 19 settlers were skilled in the use of arms. The post site was not well selected: the water supply was not good and the post was perceived as unhealthy. Irrigable land was so scant that residents gardened on the San Pedro River five leagues downstream. Apaches repeatedly burned storehouses the gardeners constructed near their gardens to store their crops.³⁰

3.1.2 Summation

Missions and military posts on the northwestern frontier of New Spain were related symbiotically to one another. The colonial government defined Roman Catholic missions to Natives as advancing the political frontier while converting the Natives to Christianity. That government defined the role of the military post as protecting missionaries going about their appropriate tasks. Economically the two institutions had a symbiotic relationship. Missions produced commodities – mainly beef, lamb, wheat, and maize – to export. Military garrisons

²⁷ O’Conor, *Informe de Hugo de O’Conor sobre el estado de las provincias internas del norte 1771-76*, 1952, 65.

²⁸ Nicolás de LaFora, *The Frontiers of New Spain*, translated by Lawrence Kinnaird. Berkeley: Quivira Society, 1958 (reprint, New York: Arno Press, 1967) 104.

²⁹ Roca, *Paths of the Padres Through Sonora*, 91; Kessell, “Anza Indian Fighter,” 159 map.

³⁰ LaFora, *The Frontiers of New Spain*, 107.

consumed precisely those commodities. In other words, military posts in Sonora functioned like cities in southern New Spain, as markets³¹ for the major commodities missions produced for sale.

During the quarter century before the founding of San Francisco, the relationship between military posts, missions, and ethnic Spaniards in Sonora changed dramatically. The severity of Apache and Comcáac depredations on Spanish ranches and farms steadily mounted after mid-eighteenth century. Spaniards who had operated large stock ranches and farms abandoned them if they survived hostile Native American raids. They took refuge at the missions and military posts. They struggled to continue ranching and farming on a much reduced scale.³² They and their livestock accelerated environmental degradation in the vicinity of both missions and military posts. As the Spanish private sector shrank, the relative economic importance of the missions increased until 1767.

3.2 The Viceroyalty of New Spain— A Governmental Institutional Overview of Provincial Sinaloa and Sonora on the Northwestern Frontier: Royal Roman Catholic Missions to Native Americans

Spanish King Charles III's 1767 expulsion of the Society of Jesus from his American dominions shook Sonora like an ideological earthquake. On the eve of the expulsion, Jesuit missions in Sonora spread over an area equal in size to Iberia itself. Consequently, the economic power of the Jesuit missions was imperial in scale. Moreover, the highly educated Jesuits were teachers and moral authorities throughout the province and the viceroyalty. Unlike the other Roman Catholic orders, the Jesuits constituted a church militant international.³³ Jesuits answered not to the King of Spain, who approved the appointments of other clerics in Spanish America, but to the Pope through their General, who resided in Rome.

One indicator of Jesuit mission influence is numbers. By mid-eighteenth century, Jesuits ran 92 missions in northwestern New Spain. In general, the Spanish crown subsidized these missions to Native Americans with annual stipends of P300-P350 paid to the missionaries. At mid-century, however, 28 of the 92 missions received no stipends.³⁴

The actual number of Native American settlements incorporated into the Jesuit missionary enterprise was considerably larger than the number of missions. A mission typically consisted of one primary settlement with a church edifice plus quarters for the missionary, plus one, two, or more visitation stations which contained usually smaller native populations and might or might not contain church edifices. Thus, $92 \times 2 = 184$ and $92 \times 3 = 276$, so the Jesuit empire numbered from 184 to 276 Native American settlements, which is to say productive units, situated in a wide variety of environmental niches.

³¹ Eric Van Young, *Hacienda and Market in Eighteenth-Century Mexico: The Rural Economy of the Guadalajara Region, 1675-1820*. Berkeley: University of California Press, 1981, 41-54, 59-63, 75-88.

³² Pfefferkorn, *Description of Sonora*, trans. Treutlein, 285.

³³ John L. Kessell, *Mission of Sorrows: Jesuit Guevavi and the Pimas, 1691-1767*. Tucson: University of Arizona Press, 1970, xii, 8-9.

³⁴ J. Augustine Donohue, "The Unlucky Jesuit Mission of Bac," *Arizona and the West*, 2:2 (Summer, 1960) 127-39, 131.

Christian missions to Natives had European or Creole priests in charge as chief executive officers of large scale enterprises. Mission wealth tended to consist of livestock. Large staffs of Creoles, Mestizos, Mulattos, and Natives belonging to ethnic groups other than the one at which a specific mission was aimed backed up the CEO priest.

3.2.1 Ethnic Diversity

Numerous ethnic groups inhabited Sonora when Spaniards explored and then conquered and colonized the province. These native ethnic groups included Tahues, Mayos, Yaqui, Lower Pimas (O'odham), Aibino Pimans, Ópatas, Jovas, Eudebes, Upper Pimas, Ahomé, Tepahui, Conicaris, Ocoronis, Tehueco, Guasaves, Tamazulas, Moceritos, Chicoratos (Chicuras), Sinaloas, Huitestzoes, Zuaques, and very hostile Comcáac and Apaches (Diné). Table 3.1 summarizes the preconquest ethnic diversity of the native peoples of Sonora.

The various ethnic groups usually were hostile to one another, with Apaches and Comcáac consistently hostile toward all other natives. During the period while the founders of San Francisco were growing up in Sonora, frontier officialdom deployed “the most faithful Ópata Indians” against the Apaches because of their “proven valor” and detailed knowledge of the terrain.³⁵

The church militant international imposed as best it could peace on the natives of Northwestern New Spain. The Jesuit missions linked together culturally diverse peoples within the church militant international in ways they had never before been unified.

The manifest function of Spanish colonial missions to Native Americans was to convert them all to minimalist Roman Catholic faith and rituals deemed proper in the colonial context. Many missionaries, especially Jesuits, strove to make themselves fluent in the language of whichever native ethnic group they worked among. They recognized that they could convert Native Americans to Roman Catholicism only if they could communicate with them effectively in their native language. A basic goal of conversion was, however, teaching converts the Spanish language so that they could recite rituals in the conquerors' tongue.

Another basic goal of Roman Catholic missionaries in Northwestern New Spain was the “reduction” of scattered native settlements to compact villages or towns like those of the Pueblo Indians or Spain. The native peoples of Sonora prior to conquest dwelled mostly in rancherías. That is, their houses were scattered more or less distant from one another, within sight but not sound.³⁶

A missionary invading a new native settlement promptly began constructing a church of European style. Natives quickly learned that these foreign priests conducted their important rituals indoors. A mission church bore at least one cross, typically at the highest point of the

³⁵ Hugo O'Connor, *Informe de Hugo O'Connor sobre el estado de ls Provincias Internas del Norte, 1771-76*, 103.

³⁶ Edward H. Spicer, *Cycles of Conquest: The Impact of Spain, Mexico and the United States on the Indians of the Southwest, 1533-1960*. Tucson: University of Arizona Press, 1962, 288.

building façade, as a symbol of Christian sacredness. The church typically had at least one bell; the residents of a proper reduced settlement lived within sound of the bell.

MISSION	ETHNIC GROUP	POPULATION
NORTHERN PIMAN MISSIONS (7 Missions and 17 Visitation Stations)		
Sonora	Spanish	4266 (South, Central)
San Ygnacio	North Piman	300 (1723), 98 (1759)
San Ygnacio- Magdalena (Visitation Station)	North Piman	207
San Ygnacio- Imuris (Visitation Station)	North Piman	326
Tubutama	North Piman	167 (1768), 368
Tubutama- Santa Teresa (Visitation Station)	North Piman	156
Tubutama- Atil (Visitation Station)	North Piman	142
Tubutama- Oquitoa (Visitation Station)	North Piman	131
Caborca	North Piman	564 (1768), 556
Caborca- Pitiquin (Visitation Station)	North Piman	269
Caborca- Bisani (Visitation Station)	North Piman	241
Guevavi	North Piman	50 (Dec. 19, 1766), 111
Guevavi- Calabazas (Visitation Station)	North Piman	116
Guevavi- Sonoita	North Piman	91
Guevavi- Tumacacori (Visitation Station)	North Piman	N/A
Guevavi- Santa Barbara (Visitation Station)	North Piman	N/A
Guevavi- Saric (Visitation Station)	North Piman	212
Guevavi- Busani (Visitation Station)	North Piman	241
Guevavi- Aquimuri (Visitation Station)	North Piman	67
Suamca	North Piman	114
Suamca- Cocospera (Visitation Station)	North Piman	133
Suamca- Santa Cruz (Visitation Station)	North Piman	N/A
Wa:k	North Piman	270 (1765), 399
Wa:k- Tucson (Visitation Station)	North Piman	220 (1765), 331
OPATA MISSIONS (17 Missions and 15 Visitation Stations)		
Bacerac	Opata	Impoverished by Apache Raids
Arivechi	Opata- Sisibotaris	N/A
Arivechi- Ponida (Visitation Station)	Opata- Sisibotaris, Jovas	131
Arivechi- Teopari (Visitation Station)	Jova	121
Arivechi- Sahuaripa (Visitation Station)	Opata- Sisibotaris	201
Arivechi- Bacanora (Visitation Station)	Eudebes	163
Bacadeguachi	Opata	208
Batacosa	Opata	109
Batuco	Opata	210
Tepupa	Opata	N/A
Cucurpe	Opata but Ymeris circa 1650	241
Cucurpe- Tuape (Visitation Station)	Opata but Ymeris circa 1650	N/A
Cucurpe- Saracachi (Visitation Station)	Opata	N/A

Opodepe (later Eudebe)	Opata	N/A
Opodepe- Nacameri (Visitation Station)	Opata	34 (1772)
Arizpe (secularized in 1760)	Opata	423
Arizpe- Chinapa (Visitation Station)	Opata	N/A
Banamichi	Opata	158
Banamichi- Huepac (Visitation Station)	Opata	129
Banamichi- Sinoquipe (Visitation Station)	Opata	134
Acontzi	Opata	N/A
Acontzi- Babiadora (Visitation Station)	Opata	N/A
Cumuripa	Opata	180
Cuquiarachi	Opata	N/A
Cuquiarachi- Cuchuta (Visitation Station)	Opata	N/A
Cuquiarachi- Bacoachi (Visitation Station)	Opata	N/A
Tuericachi	Opata	N/A
Guasavas	Opata	N/A
Nacori Grande	Opata	N/A
Oposura	Opata	N/A
Oposura- Cumpas (Visitation Station)	Opata	N/A
Oposura- Tarape (Visitation Station)	Opata	N/A
LOWER PIMAN MISSIONS (7 Missions and 12 Visitation Stations)		
Matape	Aibino Piman & Mixed-Eudebes	114
Matape- Rebeico (Visitation Station)	Spanish?	N/A
Matape-Quizani (Visitation Station)	Unknown	N/A
Matape- Mazatan (Visitation Station)	Unknown	N/A
Tecoripa	Lower Piman	N/A
Tecoripa- San Jose de Pimas (Visitation Station)	Lower Piman	276 (1772)
Tecoripa- Suaque Grande (Visitation Station)	Lower Piman	N/A
Ures	Lower Piman	236
Ures- Santa Rosalia (Visitation Station)	Lower Piman	125
Ures- S. Pablo de Pescadero (Visitation Station)	Lower Piman	N/A
Movas	Lower Piman	70
Movas- Nuri (Visitation Station)	Lower Piman	70
Onapa	Lower Piman	33 (9 families, less than 50 in 1773)
Onapa- Tairachi (Visitation Station)	Lower Piman, Yaquis, Jovas	50
Onapa- Yecora (Visitation Station)	Lower Piman	N/A
Onavas	Lower Piman	N/A
Onavas- Tonichi (Visitation Station)	Unknown	N/A
Onavas- Soyopa (Visitation Station)	Unknown	N/A
Bamoa	Lower Piman	N/A
YAQUI RIVER MISSIONS (5 Missions and 5 Visitation Stations)		
Ocoroni (Visitation Station)	Ocoronis	636
Bacum	Yaqui	2530

Bacum- Cocorit (Visitation Station)	Yaqui	1900
Rahum	Yaqui	2684
Rahum- Potam (Visitation Station)	Yaqui	2458
Huirivis	Yaqui	5077
Huirivis- Guaymas (Visitation Station)	Yaqui, etc.	N/A
Belen	Yaqui	1054
Torim	Yaqui	3645
Torim- Vicam (Visitation Station)	Yaqui	3618
MAYO MISSIONS (4 Missions and 4 Visitation Stations)		
Santa Cruz	Mayo	1200
Santa Cruz- Etchojoa (Visitation Station)	Mayo	1156
Navajoa	Mayo	309
Navajoa- Cohuirimpo (Visitation Station)	Mayo	630
Camoa	Mayo	200
Conicarit	Conicaris	196
Conicarit- Macoyahui (Visitation Station)	Mayo	596
Conicarit- Tesia (Visitation Station)	Mayo	388
TEHUECO MISSIONS (1 Mission and 1 Visitation Station)		
Tehueco (Mission and Visitation Station)	Tehuecos	612
ZUAQUE MISSIONS (1 Mission and 3 Visitation Stations)		
Charai Zuaques (Visitation Station)	Tehuecos	212 Families
Sivirijoa (Visitation Station)	Tehuecos	N/A
Mochicahui	Tehuecos	1006
Mochicahui- San Miguel (Visitation Station)	Tehuecos	N/A
OTHER NORTHERN NEW SPAIN MISSIONS (8 Missions and 5 Visitation Stations)		
Ahome (Visitation Station)	Ahomes	501
Guasave	Guasaves	651
Guasave- Tamazula (Visitation Station)	Tamazulas	589
San Felipe de Sinaloa	Spanish/ Mixed	N/A
Mocorito	Mocoritos	190
Bacubiritu	Chicoratos	N/A
Ohuera (Visitation Station)		11
Nio	Guasaves	800
Vaca	Huitestzoes	145
Vaca- Vites (Visitation Station)	Unknown	208
Toro	Sinaloas	216
Toro- Choix (Visitation Station)	Huitestzoes	204
Baimena	Sinaloas	461

Table 3.1 Demographic Strength and Ethnic Composition of Sonoran Roman Catholic Missions in 1760s.^{37/38}

³⁷ Pradeau, *La expulsion de los Jesuitas de las Provincias de Sonora, Ostimuri, Sinaloa en 1767*, 224, 233, 127, 130, 133, 162, 167; Robert H., Jackson, *Indian Population Decline: The Missions of Northwestern New Spain, 1687-1840*. Albuquerque: University of New Mexico Press, 1994, 109; Spicer, *Cycles of Conquest*; Henry F. Dobyns, "Indian Extinction in the Middle Santa Cruz River Valley, Arizona," *New Mexico Historical Review*, 38:2

Captain Juan Bautista de Anza, carrying out his part in the expulsion of the Jesuits, arrested Nicolas Perera at Aconchi, Carlos Rojas at Arizpe, Francisco Villaroya at Banamichi, Ignatz Pfefferkorn at Cucurpe, Bartolome Saenz at Cuquiariichi, Miguel Almera at Opodepe, and Andres Michel at Ures. Anza escorted these Jesuits to Mátape, where he turned them over to royal officials who accompanied them to Guaymas from which others escorted them from the Pacific coast across New Spain to the Atlantic port of Vera Cruz. Mortality was 40% during the difficult march.

Seeking to convey the overwhelming importance of the Roman Catholic missions in Sonora-Sinaloa until 1767, we shall describe them from four perspectives. First, we have indicated in table 3.1 affiliations of missionized Native Americans, and the reported magnitude of the missionized native population on the eve of the 1767 expulsion of the Jesuits from New Spain.

3.2.2 Priestly Economic Power

Second, we briefly indicate the key economic contribution of the Roman Catholic missions to the natives of the region. Under Jesuit management, taking advantage of virtually free native labor, missions produced economic surpluses for sale (see table 3.2)(Table 3.2 has been removed for revisions). Documents recording the expulsion of the Jesuits from Sonora themselves record the key contributions of mission production to even ordinary subsistence. Purchasers found it impossible to purchase lard, honey, preserves, and spices outside the missions. It was difficult to purchase meat and grains outside the missions. At least some of the non-Spanish Jesuit missionaries considered foodstuffs, especially beef, cheap.³⁹

Contrary to widespread provincial rumor, the Jesuits were not individually wealthy,⁴⁰ (except for a few from noble European families). As a result of variations in the weather, raids by hostile natives, etc., specific missions could be poverty stricken at any given time. After two drought years, “the poverty in this province of Ostimuri is everywhere” in 1773. At Vámori in 1773, the “Spaniards are as destitute as the neighboring Indians, both being dependent on others for their basic needs.”

(April, 1963) 163-81, 168, citing Nicolas de LaFora, *Relacion del viaje que hizo a los Presidios Internos situados en la frontera de America Septentrional Perteneciente al Rey de España*. Mexico: Editorial Pedro Robredo, 1939, 126. The previous year, 1765, Guebavi reportedly numbered 100 + 97 at Calabzas and 164 at Tumacácori or 381 total (Donohue, “The Unlucky Jesuit Mission of Bac,” 135; Donohue, “The Unlucky Jesuit Mission of Bac,” 135. Charles R. Carlisle & Bernard L. Fontana, “Sonora in 1773: reports by Five Jaliscan Friars,” *Arizona and the West*, 11:2 (Summer, 1969); Charles W. Polzer, S.J., “The Franciscan Entrada into Sonora, 1645-1652,” *Arizona and the West*, 14:3 (Autumn, 1972) 253-78, 274; Francisco Xavier Alegre, S.J., *Historia de la Provincia de la Compañía de Jesus de Nueva Espana, tomo IV. Años 1678-1760*, edited by Ernest J. Burrus, S.J., and Felix Zubillaga, S.J. Roma: Institutum Historicum S. J., 1960, 509; Och, *Missionary in Sonora*, 43; Alegre, *Historia de la Provincia de la Compañía de Jesus de Nueva Espana*, IV, 114.

³⁸ Pradeau, *La expulsion de los Jesuitas de las Provincias de Sonora, Ostimuri, Sinaloa en 1767*, 224, 233, 127, 130, 133, 162, 167; Robert H., Jackson, *Indian Population Decline: The Missions of Northwestern New Spain, 1687-1840*. Albuquerque: University of New Mexico Press, 1994, 109.

³⁹ Och, *Missionary in Sonora*, 34.

⁴⁰ Pradeau, *La Expulsion de los Jesuitas de ls Provincias de Sonora, Ostimuri, y Sinaloa en 1767*, 49, 68, 70.

One inherent limitation on missionary wealth was the scarcity of truly profitable commodities that mission lands and hands could produce. Throughout the Americas, missions grew cattle and cereal grains for export sale. The Jesuit Guarani missions on the Río Uruguay in 1750 “raised” cattle much as did the Sonoran Jesuit missions. The Guaranies obtained cattle by hunting them on the eastern plains. There the cattle took care of themselves with but minimal human intervention.⁴¹

Mission	Date	Wheat	Bean	Maize	Cattle	Horse	Mule	Sheep
Aconchi	1764	X		X				
Arivechi	1764	X		C				
	1773	Roasted Mescal						
Bacadéguachi	1764	300f		300f.	300	400 yeg.		
Banámichi	1764	X		X				
Batuco	1764	X		X				
Cumuripa	1764			X				
Cuquiarachi	1764	X		X				
Guásavas	1764	X		X				
Huírivis	1760	?		?	X			
Movas	1764	X		X	X	X	X	
Onopa		X						
Oposura	1764	X	X	X	X			
Saric	1764	X		X	X	X		
Suamca	1764	X		X				
Tairachi visita		X	X		X	X		X
Tecoripa	1764	X		X				
Ures	1764	X		X				
Yécora	1773		X		X	X		X
Wa:k						1000		

Table 3.2 Commodities Sonoran Missions Produced for Sale

As CEOs of productive enterprises, however, most Jesuits created wealth for their missions’ material endowments and their church militant international. Moreover, the Jesuits shared resources within their order. Established missions subsidized the establishment of new missions with aid in livestock and goods if not in cash. Prosperous missions came to the aid of drought, storm, or epidemic stricken missions. This sharing of capital in kind lent a resiliency to the Jesuit mission which was lacking in contemporary NGOs.

⁴¹ Lia Quateri, “Gobierno y liderazgo Jesuito-Guarani en tiempos de Guerra (1752-1756),” *Revista de Indias* (mayo-ago sto 2008) 89-114, 93.

3.2.3 Jesuit Institutional Structure

Third, we shall indicate how the Jesuit church militant international organized itself on this northwestern frontier of New Spain (see Table 3.3). The Jesuits grouped the missions they led in half a dozen rectorates. The number of missions varied from rectorate to rectorate, averaging eight. In accord with the military thinking of founder Ignacio de Loyola, the 1767 missions might be conceived as the equivalent of platoons, including each visitation station as a squad, the minimal military unit in European style armies. The rectorate may be viewed, then, as equivalent to a company, with the total organization equivalent to a battalion. A Jesuit colonial province could be equated with a brigade, and the Society of Jesus constituted the army.

MISSION	VISITATION STATIONS	MISSIONARY
The Sinaloa Rectorate Consisting of 11 Missions		
1. San Felipe de Sinaloa	-	Rector José Garfias
2. Mocorito	-	Francisco Hlava
3. Bacobiritu	-	Fernando Berra
4. Chicorato	Ohuera	Juan Antonio Cedano
5. Bamoa	Ocoroni	Miguel Fernández Somera
6. Nio	-	Andrés Ignacio Gonzáles
7. Vaca	Vites	Sebastián Cava
8. Toro	Choix	Juan Francisco Acuna
	Biamena	
9. Tehueco	Sirvirijoa	Francisco Xavier Anaya
	Charai	
10. Mochicahui	San Miguel	Antonio Ventura
	Ahome	
11. Guasave	Tamazula	José Ignacio Palomino
San Ignacio del Yaqui Rectorate Consisting of 10 Missions		
1. Santa Cruz del Mayo	Etchojoa	Jorge Frideneg
	Huatabambo (Today)	
2. Huirivis	Guaymas	Rector Juan Lorenzo Salgado
3. Bahcum	Cocorit	Julián Salazar
4. Torin	Vicam	Lorenzo García
5. Rahum	Potam	Juan Mariano Blanco
6. Belem	-	Maximiliano LeRoy
7. Conicarit	Macoyahui	Vicente Rubio
8. Camoa	-	José Rondero
9. Navojoa	Cohuirimpo	Lucas Atanacio Moreno
10. Tepahua	Batacosa	Francisco Ita
The Holy Martyrs of Japan Rectorate Consisting of 6 Missions		
1. Guasavas	Oputo	Rector Juan Nentvig
2. Bacadeguachi	Nacori Chico	Manuel Aguirre
3. Batuco	Tepupe	Alejandro Rapicani
4. Oposura	Cumpas	José Garrucho
	Terape	
5. Bavispe	Guachibera	Francisco Xavier Pascua
	San Miguelito	

6. Bacerac	-	José Pio Laguna
St. Francis Borja Rectorate Consisting of 7 Missions		
1. Arivechi	Ponida	Rector José Roldan
	Teopari	
	Bacanora	
	Sahuaripa	
2. Movas	Nuri	Bernardo Middendorff
3. Onavas	Tonichi	Enrique Kurtzel
	Soyopa	
4. Onapa	Yecora	Antonio Castro
	Tarachi	
5. Cumuripa	Presidio de Buenavista	Benito Antonio Romero
6. Tecoripa	Suaqui Grande	Franco Xavier González
	San José de Pimas	
7. Matape	Nacori Grande	Jacobo Sedelmayr
	Alamos	
	Rebei	
	Quizani	
Mazatan St. Francis Xavier Rectorate Consisting of 6 Missions		
1. Arizpe	Chinapa	Carlos Rojas
2. Cuquiarachi	Bacoachi	Rector Bartolome Saenz
	Cuchuta	
3. Ures	Santa Rosalia	Andres Michel
4. Opodepe	Nacameri (Now Rayon)	Miguel Almela
5. Banamichi	Huepac	Francisco Xavier Villaroya
	Sinoquipe	
6. Aconchi	Babiacora	Nicolas Perera
Our Lady of Sorrows Rectorate Consisting of 8 Missions		
1. Tubutama	Santa Teresa	Luis Vivas
	Ati	
	Oquitoa	
2. Suamca	Cocospera	Diego Barrera
	Terrenate	
	Santa Cruz	
3. Guevavi	Calabazas	Pedro Rafael Diaz
	Sonoita	
	Tumacacori	
	Santa Barbara	
4. San Xavier del Wa:k	Tucson	Jose Neve
5. Saric	Aquimuri	Miguel Gerstner
	Busani	
6. Caborca	Pitiquin	Custodio Ximeno
	Bisini	
7. San Ygnacio	Magdalena	Francisco Xavier Bauer
	Imuris	
8. Cucurpe	Remedios	Ignatz Pfefferkorn
	Tuape	
	Saracachi	

Table 3.3 Provincial Administrative Structure of Jesuit Sonoran Missions

Fourth, we shall place the nearly 50 missions and their visitation stations in geographic—which is to say spatial—context. That is, we shall group the missions by precipitation catchments, thus relating the missions as economic enterprises to their indispensable water supplies.

The roll of Jesuit missionaries working in Sonora in 1767 is indeed impressive. Economically and socially the Jesuit missions loomed larger than any other institution in provincial Sonora. Yet, the Sonoran missions constituted but a small part of the Jesuit church militant in the Viceroyalty of New Spain (much less all of Spanish America).

As we pointed out elsewhere, the Roman Catholic church was essentially an urban institution, as it still is. Resident priests in the Mayo River Valley ministered at mid-twentieth century to large Mestizo urban churches.⁴² In 1763, Jesuits operated a number of *colegios*—secondary schools—in New Spain's principal cities. The most impressive was the Colegio of St. Peter and St. Paul in Mexico City. It benefited from income from houses, ranches and cash endowments worth many thousands of pesos. Despite the anti-usury stance of the church, most of its endowments were loaned at five percent interest.

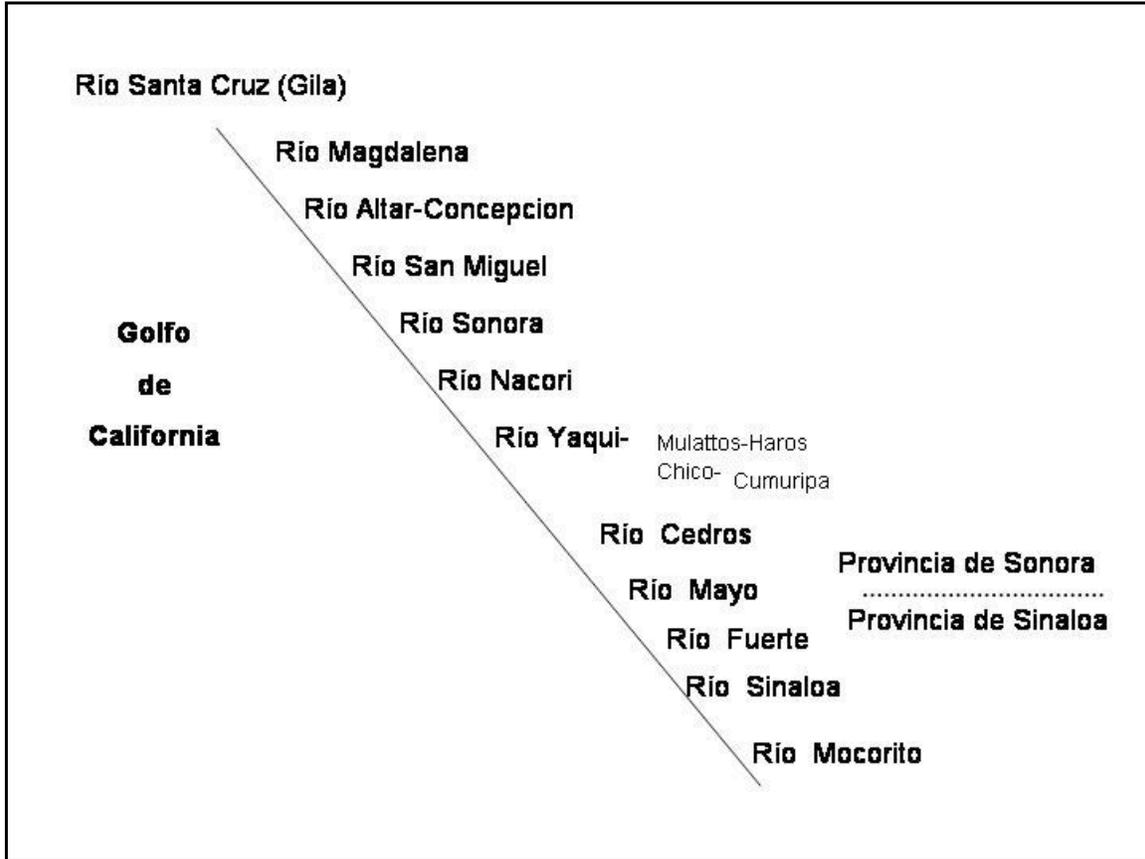
Other urban colegios included Espiritu Santo, San Andrés, San Ildefonso, San Hieronymo, and San Gregorio in Mexico City, Santo Tomás in Guadalajara, Espiritu Santo and San Xavier in Puebla, others in Valladolid, Oaxaca, Durango and Tepozotlan, San Ignacio in Querétaro, San Javier in Guanajuato, el Colegio de San Felipe el Real in Chihuahua, another in San Luis Potosí, San Javier de Veracruz, and one in Zacatecas.⁴³

The Society of Jesus operated more educational institutions in the capital than did any other order. More than 300 students attended the largest Jesuit seminary there. A single Jesuit colegio had 90-100 staff members. In other words, a single colegio in Mexico City mustered twice as many Jesuits as all of the Sonoran missions. Quite clearly, the bulk of the Jesuit manpower and wealth was located in old Mesoamerica, the densely populated southern portion of New Spain, and sometime mine cities farther north.

⁴² Crumrine, *The Mayo Indians of Sonora*, 45.

⁴³ Anonymous, *Documentos sobre la Expulsion de los Jesuitas y Ocupacion de sus Temporaidades en Nueva España (1772-1783)*. Mexico: Instituto de Historia de la Universidad Nacional Autonoma de Mexico, 1949, 38, 54, 56-58, 60, 74, 62, 75, 65-66, 89, 141-43; Och, *Missionary in Sonora*, 39 Zacatecas, 65 San Hieronymo; Alegre *Historia de la Provincia de la Compañia*. . . . IV, 530, 480.

3.2.4 Sketch of Sonoran Mission Geography



3.2.5 Spatial Relationships and Hydrology

Having outlined how the Jesuits themselves organized their church militant in Sonora-Sinaloa, we now present a geographic and demographic sketch of these Jesuit missions. We begin at the southern extreme and move our perspective northward. While geography is the primary focus of this section, its secondary focus is demographic change in the indigenous populations missionized by the Jesuits and transferred to Franciscans in 1768 or secularized. For a century before the expulsion of the Jesuits from New Spain, lethal communicable diseases steadily depopulated northwestern New Spain. Some ailments were endemic at particular missionized native settlements. Periodic pandemics of viral diseases cumulatively decimated the indigenous population of the region. We present population figures for the century or so prior to the founding of San Francisco. While we have not found demographic information for all known missions and visitation stations, we present enough cases to make clear that 1656-1775 was a period of catastrophic indigenous collapse and decline caused by lethal endemic and epidemic pathogens. Ironically, depopulation weakened the economies of the missions at the very same time the missionaries were expanding their zone of activity in northwestern New Spain and otherwise strengthening the church militant international. In gross terms the missions lost two-thirds of their indigenous humans between 1656 and 1759.

There were only two exceptions to this devastating regional trend. First, the Río Sinaloa towns lost but 10 percent of their numbers between 1656 and 1759. Moreover, the newcomer population of the Villa de Sinaloa more than doubled, in clear contrast to the shrinking indigenous population.

Second, the indigenous exception – the ethnic Yaquis living in the Río Yaqui delta gained 19 percent. Inasmuch as clerics concerned estimated that as many Yaquis worked in mines and on ranches elsewhere as lived in the delta, this apparent Yaqui fecundity must have been real. It was not a result of concentrating people in delta towns, given the recorded geographic dispersion of Yaqui laborers.

The founders of San Francisco would have been aware at some level of these demographic trends. The relatively rapid growth of the Villa de Sinaloa was certainly not unrelated to its contributing of a majority of the founders of San Francisco. While the decline of the indigenous populations freed lands for exploitation, arguably Villa de Sinaloa land became increasingly expensive while local labor became cheaper and cheaper. A century of opposing demographic processes created the acute poverty that Juan Bautista de Anza in 1774 astutely analyzed as impelling “Spaniards” and Mestizos to migrate.

Río Culiacán

The Villa de Culiacán is our starting point, although it was never a mission. The first Spanish colony in Sonora-Sinaloa, Culiacán in 1759 had two secular curates ministering to 1,583 Spaniards and “mixed” which they divided between them. They also dealt with 14 native rancherías. In other words, the Jesuit mission frontier then lay north of Culiacán.

Río Mocorito

Mocorito Mission was located upstream on the Río Mocorito at the western escarpment of the Sierra Madre. In 1759, it was still a native pueblo of only 190 residents of an arid area and dependent on well water. Yet the church was new and the priest’s quarters sumptuous. San Benito, a Spanish-Mestizo parish was 14 leagues east.⁴⁴

Río Sinaloa

According to Bishop Pedro Tamarón y Romeral, the native inhabitants of the Río Sinaloa in 1759 still spoke dialects of Nahuatl. Whether this situation was a survival from aboriginal times, or resulted from colonial expansion of Nahuatl speaking as a lingua franca we know not.

The energetic bishop reported the total population of the Río Sinaloa valley as 6,965. His figure of 3,500 inhabitants of the Villa de Sinaloa is arguably at best an estimate and at worst a guess. In effect, Tamarón considered the valley population equally divided between Spaniards and mixed ancestry individuals in urban Sinaloa, and natives living in four missions and three visitation stations—3,465 of them. Five Río Sinaloa towns (Guasabe, Tamazula, Nio, Bámoa, Ocoroni) in 1759 held 90 percent (3,198) of their calculated 1658 population (3,528). This was a

⁴⁴ Tamaarón y Romeral, *Demostración del Vastísimo Obispado*. . . . 223.

remarkably high survival rate given the decline of indigenous populations throughout New Spain during this century.

Natividad del Señor de Guásabe

This Mission was located on the west bank of the Río Sinaloa just below the junction of the Río Sinaloa and its Ocoroni tributary, two leagues south and downstream from Nio. In 1759, this native pueblo had 651 inhabitants, according to Bishop Tamarón. The population had fallen by more than 50 percent from the 1,438 Reff calculated in 1656, which fell to 531 in 1678, and only 420 by 1720 before recovery began.

Tamazula

Tamazula was located downstream from Guásabe, was a visitation station of that mission. An Indian pueblo, it had, according to Reff's calculation, 864 inhabitants in 1656, only 265 in 1678, recovered to 345 by 1720 rising to a population of 589 inhabitants Bishop Tamarón reported in 1759.⁴⁵ The Tamazula ethnic group nearly perished.

San Ignacio de Nio

The Nio Mission was located on the Río Sinaloa a short distance up the main stream from its confluence with the Río Ocoroni.⁴⁶ It lay upstream from Guásabe, therefore, and downstream from Bámoa, which had become a visitation station of Nio by 1769. Its population was 355 in 1656, 308 in 1678, doubled to 639 by 1720, according to Reff's calculation, then reached 800 by 1759 according to Bishop Tamarón

Bámoa

Several hundred Lower Pimas accompanied Alvar Nuñez Cabeza de Vaca when he and his companions reached Pacific Coast colonial territory in 1536. The migrants decided to stay in close touch with Spanish authorities, so they established their own ethnic settlement on the Río Sinaloa. Some 350 more Lower Pimas migrated to Bámoa in 1615, reinforcing the Piman enclave. The Jesuits staffed a mission to the Lower Pimas, with a visitation station at Ocoroni on the Río Ocoroni tributary of the Sinaloa. A visitation station of Nio by 1769, Bámoa, then had 522 inhabitants, in 1759, approximating the ideal Piman settlement size under colonial epidemiological conditions. During the preceding century, the population fell and then rebounded, according to Reff's calculations. From 528 in 1656, it dropped to 240 in 1678, then

⁴⁵ Gerhard, *The North Frontier of New Spain*, 273 map; Alegre, *Historia de la Provincia de la Compañía de Jesus de Nueva España*, IV, 315; Tamarón y Romeral, *Demostración del Vastísimo Obispado* 225-26; Gordon F. Ekholm, *Excavations at Guasave, Sinaloa, Mexico*. New York: American Museum of Natural History, Anthropological Papers XXXVIII:Part 11, 1942, 35; Reff, *Disease, Depopulation* 212.

⁴⁶ Gerhard, *The North Frontier of New Spain*, 273 map; Alegre, *Historia de la Provincia de la Compañía de Jesus de Nueva España*, IV, 315; Tamarón y Romeral, *Demostración del Vastísimo Obispado*. . . 225; Reff, *Disease, Depopulation*. . . . 212.

rose to 269 in 1720, then to 522.⁴⁷ The partially documented reinforcement of Bámooa by ethnic migration suggests that the entire Río Sinaloa Valley nearly maintained its numbers by the same process.

San Felipe de Sinaloa

This colonial outpost founded by refugees from the Río Fuerte is upstream from Bámooa. It lies a considerable distance downstream from Ohuera, a visitation station of Chicorato Mission. Sinaloa was located at the breaking point of the Río Sinaloa Valley with mountain bajadas upstream and “broad flood plains of soft river silt which are mainly under cultivation and which, when irrigated yield two harvests a year” downstream. Old channels attest dynamic stream alteration of the alluvial silt.

Over a century, the population more than doubled, according to Reff’s calculations. From 793 in 1656 it dropped to 600 in 1678, rose slightly to 630 in 1720, then soared to 1,750 in 1759 and a demographic power house in its region. In 1759, the reported population of “Spaniards and mixed” numbered 3,500, ministered to by a pair of Jesuits. A small sample (28) of founders of San Francisco recruited at the Villa de Sinaloa indicates that in 1775 the town consisted of 43 percent Spaniards, 43 percent Mestizos, 7 percent Mulatos (and 7 percent unknown). A larger sample (79) of founders consisted of 52 percent Spaniards, 25 percent Mestizos, 19 percent Mulatos, and 1 percent each Indian, Coyote, and pardo (black). The very diversity of the gene pool arguably had something to do with the higher rate of survival in the Villa. At the least, the Villa de Sinaloa appears to have had a quality make up different from that of the province in general. We discuss the Villa de Sinaloa with missions to Native Americans because the Jesuits seem to have treated the settlement much like a mission.

The climate was too hot and dry for wheat or grapes to yield—a reason for rural poverty. The people apparently regressed to hunting, fishing, and collecting besides cultivating maize, bean, and some sugar cane. Their principal export to Nueva Vizcaya was beeswax. They did not, however, tend bees in hives. Bees nested in trees until the colonists felled the tree to collect both wax for export and honey for consumption, while the dislocated bees moved to another tree. This continued pre-Conquest indigenous management of the domesticated American bee. Natives hollowed out pseudo-hives in tree trunks, but drained them of honey and wax by sucking one end of a long tube inserted in the hive by removing a plug.⁴⁸

In 1770, a report to the Viceroy identified the Villa de Sinaloa as the provincial capital but poorly laid out. “The people are very poorly clothed and entirely lacking stores.”

The loss of government offices contributed to the poverty of the inhabitants.

⁴⁷ Spicer, *Cycles of Conquest*, 87-88; Alegre, *Historia de la Provincia de la Compañía de Jesus de Nueva España* IV, 17-18, 315; Tamarón y Romeral, *Demostación del vastísimo Obispado* 225; Reff, *Disease, Depopulation* 211.

⁴⁸ Tamarón y Romeral, *Demostación del Vastísimo Obispado*. . . . 224; Ekholm, *Excavations at Guasave*, 35; Carl O. Sauer and Donald D. Brand, *Aztatlan*. Berkeley: University of California Press, Ibero-Americana 1, 1932, 53.

At mid-eighteenth century, colonial authorities transferred the jail which had functioned in Villa de Sinaloa with Black militia guards to the Baroyeca mine camp. Thus Villa de Sinaloa regressed in terms of institutional complexity.⁴⁹

Bacubiritu (Bacobrito)

This settlement is in the Sierra Madre Occidental on a sharp angled bend of the Río Sinaloa. It lies upstream from Ohuera visitation station, and downstream from Chicorato mission. In 1768, a gold rush greatly increased the importance of Bacubiritu.⁵⁰

La Purísima Concepción de Chicorato

The missionaries who launched conversion efforts in this area considered the Chicuras a distinct ethnic group. Missionaries evidently took a mountain path through a pass to the Ohuera visitation station instead of following the Río Sinaloa through tortuous canyons. In 1759, the population of this mission was only 156 persons.

San Lorenzo de Ohuera

A visitation station of the Chicorato Mission, was a native pueblo with a mere 111 inhabitants in 1759.

Santiago de Ocoroni

A mission located on the Río Ocoroni tributary of the Río Sinaloa, was eight leagues northeast of the Villa de Sinaloa. It numbered 636 inhabitants in 1759. Reff calculated widely different populations prior to that: 352 in 1656, 150 in 1678, only 75 in 1720, and then apparent recovery.

Secularization

The expulsion of the Jesuits from New Spain profoundly affected all of the Roman Catholic missions on the Río Sinaloa. Following the departure of the Jesuits, all of the missions on that stream were secularized and staffed by secular clergy. Actually, secularization constituted a second blow to the former Jesuit mission economy. The first blow was civil supervision instituted as soon as the Jesuits left. The colonial authorities installed commissioners to replace the Jesuit missionaries as CEOs of the missions, while they awaited the arrival of Franciscan or secular priests. The result was financially highly beneficial to the commissioners and their families, but a heavy blow to the natives.

The resources were labeled with the respectable title of Temporal Properties of the King, in charge of and administered by the aforesaid Royal Commissaries who, taking advantages of this expansive title, ordered as though they were superior the Justices of the pueblos and obliged

⁴⁹ Felsén, *Oficio al Virrey*, 2 de Enero de 1770, Arizona Historical Society typescript, 4; Fernando Ocaranza, *Los Franciscanos en las Provincias Internas de Sonora y Ostimuri*. Mexico, 1933, 61.

⁵⁰ Gerhard, *The North Frontier of New Spain*, 278.

the Indians to labor without payment except for only their daily ration. Some of these Commissaries of low birth, who had shortly before lived hungry and naked, seized so much authority that they castigated the Justices, whipped the Indians and ordered the Indian woman to serve them and their families in their own houses. They provided their families with food and clothing in abundance, and finally holding absolute power they dedicated these goods in the quantity dictated by their greed as their private interest suggested.⁵¹

The panmission economy of Sonora was significantly weakened by secularization. A half-dozen missions may not seem to be a large number, but these were productive institutions despite the limitations of the environment. Nor were these the only missions to be secularized soon after the departure of the Jesuits. While we cannot present details, it seems quite clear that mission secularization following the 1767 expulsion of the Jesuits constituted one factor significantly fostering the dire poverty which enabled Juan Bautista de Anza to recruit twenty soldier-founders, most with large families,⁵² to migrate to San Francisco Bay.

Río Fuerte

Bishop Pedro Tamarón y Romeral called this stream “this most powerful river.” Arguably he perceived the Río Fuerte either as carrying a greater volume of water than the other streams flowing into the Gulf of California, or flowing faster, perhaps both. Tamarón also differentiated the Río Fuerte Valley between mountains and sea as populated by Spaniards and “reasonable people” operating ranches.⁵³

Bishop Tamarón reported a settlement population of 5,239 persons, presumably not counting the rural ranchers in the Río Fuerte Valley. 64 percent of that population, 3,353 natives, lived in four Jesuit missions and four visitation stations. Missions ranged in size from 145 to 1,006 residents, so missionaries shouldered quite different work loads. Five of the towns (Ahomé, Mochicahui, Tehueco, Toro, Vaca) in 1759 held only 34 percent (2,480) of the calculated population in 1658 (7,242), very different from the demography of the Río Sinaloa.

La Natividad de Nuestra Señora de Ahomé

The ethnic Ahomé group which Spaniards encountered in the sixteenth century took economic advantage of its geographic location on the lower Río Fuerte adjacent to the ocean. It

⁵¹ Antonio de los Reyes, O.F.M., *Copia del Manifiesto Estado de las Provincias de Sonora*. Mexico: Biblioteca aportacion Historica, 1945, 16; Reff, *Disease, Depopulation*. . . . 211.

⁵² Juan Bautista de Anza, Report of the Troops recruited in the provinces of the government of Sonora on order of His Most Excellent Lord Frey, Sir Antonio Maria Bucareli y Ursua, Lieutenant General of the Royal Armies, Viceroy, Governor and Captain General of this new Spain by the under signed Lieutenant Colonel and Captain of the Royal Presidio of Tubac, showing the officer, sergeant and soldiers that have left the presidios of said government, the wives, children and families of each individual with a notation of the age of everyone and the days they were commissioned to serve, with the destination of going to reinforce the Royal Presidio of San Carlos de Monterey in northern California [Archivo General de la Nacion. Provincias Internas 237, Año 1775, ff 75, 75v, 76, 76v]. Pp. 159-65 in *Anza Correspondence 1775*, transcribed and translated by Donald T. Garate, *Antepasados VIII*, 1995.

⁵³ Tamarón y Romeral, *Desmostracion del Vastisimo Obispado* 237.

specialized in fishing, trading sea foods upriver inland in exchange for horticultural products. By 1700, colonial Spaniards treated the Ahomé settlement as a seaport.⁵⁴

Reff calculated that there were about 7,500 Ahomé in 1500, 5,000 in 1598, 1,261 by 1620, 1,013 in 1656, 620 by 1678 and 613 in 1720.

On the eve of the expulsion of the Jesuit missionaries from New Spain, Ahomé was a visitation station of Mochicahui Mission eight leagues upstream, along with San Miguel de Zuaque, located between Ahomé and Mochicahui. In 1759, the 501 surviving Ahomé still spoke their own aboriginal language.

San Geronimo de Mochicahui

During the Spanish conquest of the ethnic Zuaque early in the seventeenth century, Mochicahui was one Zuaque pueblo.⁵⁵ In 1759, it was still a native town with 1,006 inhabitants, barely half the 1,959 that Reff calculated in 1658. The population apparently fell to 559 in 1578, 555 in 1720, and nearly doubled in 1759. It was a Jesuit mission with visitation stations at Ahomé and San Miguel.

La Visitación de Nuestra Señora de Tehueco

The ethnic Tehueco inhabiting the upper Río Fuerte, strongly resisted Spanish conquest in the late-sixteenth and early-seventeenth century. The town of Tehueco became a Jesuit mission to these riverine natives. Its visitation stations included Sivirijoa (a sometimes mining camp) and Charai. The Tehueco appear to have been hostile to the Ahomé during the early Spanish-Native contact period. Still a native town in 1759, Tehueco then had 612 inhabitants, less than half the 1,270 that Reff calculated for 1638, which declined to 891 in 1656, to 782 in 1678 and then to 568 in 1720 before beginning to recover.⁵⁶

Villa de San Juan de Montesclaros del Fuerte

The next settlement up the Río Fuerte was the Spanish-Mestizo, Villa del Fuerte with 1,886 inhabitants in 1759. At that time the parish church was falling down, so the clergymen undertook to construct a new one.⁵⁷

Although this dominant ethnic group Villa was not a mission to natives, we mention it here so that our sketch of the settlement pattern of provincial river valleys may be as complete as

⁵⁴ Spicer, *Cycles of Conquest*, 47; Alegre, *Historia de la Provincia de la Compañía de Jesus de Nueva España* IV, 168, 209; Gerhard, *The North Frontier of New Spain*, 273.

⁵⁵ Harry Prescott Johnson, "Diego Martínez de Hurdaide, Defender of Spain's Pacific Coast Frontier." Pp. 199-218 in *Greater America: Essays in Honor of Herbert E. Bolton*, edited by Adele Ogden. Berkeley: University of California Press, 1945, 204.

⁵⁶ Spicer, *Cycles of Conquest*, 47; Alegre, *Historia de la Provincia de la Compañía de Jesus de Nueva España* IV 399; Tamarón, *Demostación del Vastísimo Obispado* 238.

⁵⁷ Tamarón y Romeral, *Demostación del Vastísimo Obispado* . . . 237; Reff, *Disease, Depopulation* . . . 213.

possible, and because this Villa of nearly 2,000 persons was one of the most urban places in the province.

Señor San Jose de Toro

Upstream from El Fuerte at the edge of the mountains, Toro in 1759 was a Jesuit mission with 216 ethnic Cinaloa inhabitants. The missionary visited two settlements in the mountains. Nicolás de LaFora considered the natives at Toro an ethnic entity. Reff calculated the population as 1,627 in 1638, 1,141 in 1656, plummeting to 360 in 1678, and 221 in 1720 without recovery in 1759.

San Ignacio de Choix

Ten leagues from Toro, this native pueblo had 204 inhabitants in 1759. The missionary at Toro visited here. Choix is an example of a town in hot country, with a mean annual temperature of 24-25 degrees centigrade.

Santa Catalina de Biamena

This visitation station of Toro Mission laid eight leagues east of it in the mountains and had 461 inhabitants in 1759.⁵⁸

La Purísima Concepción de Vaca

Upstream from Toro, ethnic Cinaloa Vaca in 1759 had 145 inhabitants, less than 10 percent of the 1,959 that Reff calculated in 1638, which fell to 1,373 in 1658, then declined to 584 in 1678 and to 252 in 1720. The Jesuit missionary here visited one pueblo higher in the mountains—the highest settlement on the stream.

Santiago de Vites

Vites was the high altitude visitation station at the headwaters of the Río Fuerte. In 1759 it was a native pueblo with 208 inhabitants.⁵⁹

Post Expulsion Changes

After 1767, some Río Fuerte missions were promptly secularized; others were secularized before the end of the eighteenth century, and Franciscan missionaries took over some of them. In any event, the productive economy of the ex-Jesuit missions declined. The secularization of the former Jesuit missions in northern Sinaloa helped to generate the dire poverty, which Juan

⁵⁸ Tamarón y Romeral, *Demostación del Vastísimo Obispado*. . . . 238; LaFora, *The Frontiers of New Spain*, trans. Kinnaird, 126; James R. Hastings and Robert H. Humphrey, editors, *Climatological Data and Statistics for Sonora and Northern Sinaloa*. Tucson: University of Arizona Institute of Atmospheric Physics, 1969, 82; Reff, *Disease, Depopulation* 213.

⁵⁹ Tamarón y Romeral, *Demostación del Vastísimo Obispado*. . . . 237-38; Reff, *Disease, Depopulation* 213.

Bautista de Anza observed and reported to the Viceroy in 1775. That rural poverty persisted 200 years later.⁶⁰

Río Mayo

We continue to describe Sonoran missions catchment by catchment, proceeding from the Gulf of California upstream. The Río Mayo Jesuit establishments consisted of eight native towns ranging in size from 200 to 1,200, with a total of 3,883 persons in 1759. That was 6.5 percent of a calculated 1,500 population of 60,000 or 13 percent of the calculated 1614 population of 30,000. A Half-dozen towns (Santa Cruz, Echojoa, Navajoa, Corimpo, Camoa, Tessia) by 1759 held only 30 percent (2,873) of the calculated population of those places in 1658 (9,551).

La Exaltación de la Santa Cruz del Río Mayo

This mission was located at the mouth of the river. In 1740, the Santa Cruz Mayos disarmed a Spanish military detachment and whipped the soldiers out of town.⁶¹ In 1759, this native pueblo mission had 1,200 inhabitants, the largest population of any settlement on the stream. This difference suggests that a high-protein diet from seafood may have been a fundamental factor keeping residents of this seaside town relatively healthy. The 1759 population was only 30 percent of the 1656 population of 3,984, calculated by Reff, who estimated 2,803 in 1678, falling to 2,520 in 1720, and less than half that by 1759.

In 1771, the missions to the ethnic Mayo were secularized. Following the expulsion of the Jesuits, Franciscans briefly took charge of the Mayo missions.

El Espíritu Santo de Echojoa

Echojoa was a visitation station of Santa Cruz when it was founded in about 1616. And a visitation station it remained. In 1759, Echojoa was a native pueblo of 1,156 inhabitants, or 57 percent of its 1656 calculated 2,031 populace. It rose to 2,164 in 1678, but declined to 1,680 by 1720.⁶²

Santa María Nuestra Señora de Navajoa

This native pueblo was also a Jesuit mission in 1759 with a population of 309, down from 1,094 in 1656, a mere 172 in 1678, rising to 319 in 1720 and then down again. Navajoa was one of the two principal towns on the river. The Jesuits had established a colegio for boys, two from each town, teaching reading, writing in Spanish, singing, and playing instruments.

⁶⁰ N. Ross Crumrine, "Fiestas and Exchange Pilgrimage: The Yorem Pahko and Mayo Identity, Northwest Mexico." Pp. 73-90 in *Pilgrimage in Latin America*, edited by N. Ross Crumrine and Alan Morinis. New York: Greenwood Press, 1991, 73.

⁶¹ Decorme, *La obra. . . . II Misiones*, 318, 336.

⁶² Tamarón y Romeral, *Demostación del Vastísimo Obispado. . . .* 241; Reff, *Disease, Depopulation. . . .* 217.

Nuestra Señora la Virgen María de Cohurimpo

Also known as, Corimpo, the Jesuits treated Cohurimpo as a visitation station of Navajoa Mission. In 1740, militant Yaquis involved Cohurimpo in their revolt against colonialism. Still a native pueblo in 1759, it had 630 inhabitants, less than 47 percent of the 1,342 Reff calculated for 1656. It fell to 1,141 by 1678, and 840 in 1720. It was three leagues downstream from the mission.⁶³

San Ignacio de Thessia

This visitation station laid six leagues downstream from Camoa. The mean annual temperature was 26.8 degrees centigrade. In the 1750s and 1760s, two Jesuit missionaries briefly treated Thessia as a mission, but it reverted to visitation station status. In 1759 it remained a native pueblo with 388 inhabitants, down from 559 in 1656, 497 in 1678, and 420 in 1720. At mid-twentieth century, Tessia survived as a medium ranked ethnic Mayo ceremonial center.⁶⁴

Santa Catalina de Camoa

In 1616, this native pueblo was a visitation station of San Ignacio de Tessia, six leagues downstream. Later the Jesuits reversed their categories. In 1759, Camoa had 200 inhabitants, or 37 percent of the 541 Reff calculated for 1656. It fell to 420 in 1678 and 316 in 1720.⁶⁵

San Andres de Conicari

The Conicaris were a small Cahitan speaking people on the upper Río Mayo upstream from the ethnic Mayo. This native pueblo was eight leagues downstream from Macoyahui. In 1759, it had a mere 196 inhabitants.⁶⁶

San Miguel de Macoyahui

This native pueblo is located farthest upstream on the Río Mayo, eight leagues upstream from Conicari in the midst of the Sierra Madre Occidental. The Jesuits constructed one of the largest churches in Sonora at Macoyahui, which numbered 596 inhabitants in 1759.⁶⁷

Río Cedros

The Río Cedros flows almost due south into the Río Mayo at Conicari.

⁶³ Decorme, *La obra. . . . II Misiones*, 318, 335; Tamarón, *Demostación del Vastísimo Obispado. . . .* 241.

⁶⁴ Tamarón, *Demostación del Vastísimo Obispado. . . .* 240; Erasmus, *Man takes Control*, 277; Hastings and Humfrey, *Climatological Data and Statistics for Sonora. . . .* 71.

⁶⁵ Tamarón, *Demostación del Vastísimo Obispado. . . .* 240.

⁶⁶ Decorme, *La obra. . . . II Misiones*, 318, 335; Roca, *The Paths of the Padres Through Sonora*, 341; Tamarón, *Demostación del Vastísimo Obispado. . . .* 241.

⁶⁷ Roca. *The Paths of the Padres Through Sonora*, 332-33; Tamarón, *Demostación del Vastísimo Obispado. . . .* 240.

La Asunción de Nuestra Señora de Tepahui

Located on the Río Cedros, this pueblo continued the heritage of the Tepahui, another small Cahitan speaking people on the upper Río Mayo. Refugee Zacatecos who took cover among the Tepahuis brought this ethnic group to the attention of Capt. Diego Martínez de Hurdaide before 1600. A Roman Catholic missionary did not invade Tepahui territory until after 1620. In 1678, the mission numbered 368 inhabitants; in 1759 it numbered 211, attesting the continued decline of the native population. At mid-twentieth century, Tepahui was a small-scale ethnic Mayo ceremonial center. The dialect difference between Mayo and Tepahui seems to have disappeared by 1759.⁶⁸

San Bartolomé de Batacosa

Batacosa was a visitation station of Tepahui Mission and was located 10 leagues west of the river over a good road. It contained but 109 residents in 1759.

Río Yaqui

The largest river in Sonora, the Río Yaqui is historically the most important. The catchment drains most of the state of Sonora via multiple tributaries. Jesuit missionaries congregated Yaqui residents of scores of scattered aboriginal rancherías into a few historic Yaqui towns clustered along the lower river on the coastal plain. Through time, Yaquis came to regard eight of the historic riverine pueblos as sacred.

Bishop Tamarón y Romeral estimated that twice as many Yaquis worked in Sonora and Nueva Vizcaya as lived in the Río Yaqui Valley. In numbers that would imply some 30,000 emigrants, inasmuch as ethnic Yaqui numbered 15,125 according to the bishop. The Yaqui homebodies outnumbered any other ethnic group in the province. The riverine population, including the ethnic Guaymas, was 15,675 in four missions and four visitation stations. Moreover, the delta population was growing. It gained 19 percent from 1658 (11,063) to 1759 (13,217) in a sample of five towns (Rahum, Bahcum, Torim, Pótam, Cocorit).

Soon after the expulsion of the Jesuits, their former missions to the Yaquis were secularized. This change alone significantly altered the economic structure of the province.

Upstream from the delta, the Río Yaqui with its 10 local names, drained a long frontage of the Sierra Madre Occidental from the drainage divide with the Río Mayo north to the southeastern corner of later Arizona. We count 63 missions and visitation stations in this vast catchment, or 52.5 percent of the 120 total (excluding military posts and mine camps). These upstream establishments catered to Lower and Upper Pimas, Ópatas, Jobas, Eudebes, Jeguis, etc., not Yaquis in the delta.

⁶⁸ Spicer, *Cycles of Conquest*, 48; Decorme, *La obra . . . II Misiones*, 177, 181-84, 319, 321; Tamarón, *Demostración del Vastísimo Obispado. . .* 241; Erasmus, *Man Takes Control*, 278.

Señor San José de Huimas [Guaymas]

We start with Guaymas because it is located on the coast near the mouth of the Río Mátape. We discuss the seaport of Guaymas in another section. Here we sketch only the mission aspect of the Guaymas, whom the Spaniards regarded as an independent ethnic group distinct from the Yaquis. Prior to the expulsion of the Jesuits, Comcáac hostility motivated the 550 surviving ethnic Guaymas to retreat to Yaqui Belén.

Santa Barbara de Huírivis

In 1759, this native pueblo counted 1,336 families. With 5,077 inhabitants it was the largest Yaqui town.

La Asunción de Nuestra Señora de Rahum

This native mission had 2,684 inhabitants on the eve of the expulsion of the Jesuits, according to Bishop Tamarón. That was, however, not quite half the 5,400 that Reff calculated for 1624. The population fell to 4,090 in 1656, to 3,230 in 1678 then to 1,277 in 1720, and then recovered.

San Miguel de Belén

Bishop Tamarón credited Belén with 1,054 inhabitants in 1759.⁶⁹

Natividad de Nuestra Señora de Vicam

A visitation station of Torim Mission, Vicam was located two and a half leagues downstream. In 1759, this native pueblo numbered 3,618 inhabitants.

San Ignacio de Torim

A mission native pueblo six leagues downstream from Bahcum, Torim had 3,645 inhabitants in 1759. That was its highest figure in over a century – 2,397 in 1656, than 1,070 in 1678, and 1,340 in 1720.

Santísima Trinidad de Potam

In 1759, the native pueblo of Potam was a visitation station of Bahcum Mission, one league to the southwest. It had 2,458 inhabitants, a third of the 7,250 Reff calculated in 1624. The population fell to 2,539 in 1656, to 1,131 in 1678 and then recovered to 1,218 in 1720.

⁶⁹ Tamarón y Romeral, *Demostración del Vastísimo Obispado* 245-46; Reff, *Disease, Depopulation*. . . . 216.

Santa Rosa de Bahcum

This mission had a population of 2,530 individuals on the eve of the Jesuit expulsion. Like Torim, it gained from 1,061 in 1656 after falling to 510 in 1678, then gaining to 899 in 1720.

El Espíritu Santo de Cócorim

This a visitation station of Bahcum Mission three leagues downstream. In 1759, it had 1,900 inhabitants, according to Bishop Tamarón. That was double the 976 that Reff calculated for 1656, which fell to 337 in 1678 before gaining to 487 by 1720.⁷⁰

Río Yaqui-Cumuripa

A short distance upstream from the Yaqui towns in the delta, the Río Yaqui makes a virtual 90 degree turn from its hitherto southward course to flow westward toward the Gulf of California. The Río Cumuripa flows southward into the Río Yaqui, which makes another right angle turn at this confluence, turning southward from its previously westward course.

The Río Yaqui-Cumuripa reach sustained four Jesuit missions, with a colonial military post. These were ethnic Lower Piman settlements.

San Francisco Regis de Buenavista

This settlement was the farthest downstream on the Río Yaqui mainstream off the southward flowing reach. Buenavista was also the southernmost Piman settlement, and consequently demarcated the Yaqui-Piman ethnic frontier on the river. In 1759, the Piman population numbered 299, up from 105 in 1730. Buenavista was a visitation station of Cumuripa Mission. The Spaniards established a military post at Buenavista to deter Yaqui military action in this direction.

San Francisco Javier de Cumuripa

Cumuripa was the next settlement north from Buenavista, at the confluence of the Río Cumuripa and the mainstream, located where the Río Yaqui turned its course from westward to southward. Cumuripa was 20 leagues west of Onabas, 12 leagues south of Tecoripa and a dozen leagues north of Buenavista.

In 1759, Cumuripa had 180 Lower Pima inhabitants, a 10 percent reduction since 200 in 1730. Franciscans of the Colegio de Santiago de Jalisco took over here following the 1767 Jesuit expulsion. By 1772, the reported population had dropped to 136. Much of the decline stemmed from construction of the physical plant at the Buenavista military post. Cumuripa natives were drafted not only for construction labor, but also as servants after the post was built.

⁷⁰ Tamarón y Romeral, *Demostración del Vastísimo Obispado*. . . . 244.

Located on a wide plain, Cumuripa's fields could not be irrigated from the Río Yaqui, but were well irrigated by water from the Tecoripa Arroyo. Crops included sugarcane, cotton, wheat, maize, and Spanish fruit trees.

San Ygnacio de Suaqui

Suaqui was located up the Río Cumuripa on the west bank, in a mountain valley which was sterile. Still the Lower Pima natives planted squash, melons and a little maize on the river bank. Smelters closed in 1760 and 1763; the natives fled to the Cerro Prieto (the Comcáac stronghold). In 1770, they congregated at Belén. By 1772, only 62 individuals could be identified under colonial control.⁷¹

San Francisco de Borja de Tecoripa

Farther upstream in the headwaters of the Río Cumuripa, this Lower Piman mission reportedly numbered 210 in 1759.⁷² In 1734, Felipe Segesser von Brunegg arrived from Upper Pimeria, staying until before 1748. Thus, Segesser witnessed the fighting around Tecoripa during the 1740 Yaqui militancy. There were only 25 Pima families in February of 1767—Bishop Tamarón had reported 66 families at the end of the previous decade. Arguably a lethal epidemic struck the natives between the two counts. In 1772, a population of 135 was reported.

Juan Velderrain, O.F.M., was building a new church in 1775, before his construction career on the northern frontier (San Xavier del Wa:k). Then Franciscans of the Colegio de Santiago de Jalisco took over. Located on an open plain beside an arroyo with plentiful water year round, this pueblo raised wheat, maize, and beans.⁷³

The Río Névome reach of the Río Yaqui

Spanish nomenclature divided the Río Yaqui into segments with distinctive names. The reach from Cumuripa eastward and then northward the Spaniards referred to at least alternatively as the Névome. The Río Névome supported half a dozen native settlements which the Jesuits converted into missions or visitation stations. Five of these towns (Onavas, Tonichi, San Miguel, Batuc, Movas) in 1759 had 1,883 inhabitants, but 36 percent of their population a century earlier (5,295).

Nuestro Padre San Ignacio of Onavas

This settlement was the southernmost on the southward flowing Río Névome. This ethnic Lower Piman pueblo contained a reported 520 residents in 1759, down from 1,406 in 1656 according to Reff's calculations. The population fell to 865 in 1678, then to 436 in 1720 and later rebounded. Built on the slope of a hill overlooking the Yaqui River, Onabas lacked irrigation. Its

⁷¹ Reyes, *Report*, McCarty trans., 26; Reff, *Disease, Depopulation*. . . . 219.

⁷² Tamarón y Romeral, *Demostración del Vastísimo Obispado*. . . . xxx; Reyes, *Report*, McCarty trans. 20.

⁷³ Tamarón y Romeral, *Demostración del Vastísimo Obispado*, 282; Roca, *The Paths of the Padres*, 247; LaFora, trans. Kinnaid, *The Frontiers*, 119; Spicer, *Cycles of Conquest*, 52; Reyes, *Report*, McCarty trans., 25; Reff, *Disease, Depopulation*. . . . 219.

scattered dry farmed fields produced maize, beans and lentils. In 1772, it had 530 Lower Pima inhabitants.⁷⁴

Nuestra Señora de los Dolores de Tónichi

A visitation station of Onavas Mission, Tónichi was located on the eastside of the Río Névome on a hill just south of the Río Yaqui, and just upstream from the confluence of a short tributary. It was five leagues north of Onavas. In 1759, this ethnic Jeguis and Eudebe pueblo had 372 inhabitants, down from 781 in 1656 and 510 in 1678. In 1772, it had a reported 398 inhabitants.⁷⁵

San Antonio

Across the river on the west bank, San Antonio sat a short distance upstream from Tónichi.

San Francisco de Soyopa

This ethnic native pueblo located 14 leagues north upstream from Onabas Mission. Its population was 221 in 1759 and 213 in 1772. Located on a hill just north of the Río Yaqui, this native pueblo could grow any crop. It irrigated wheat, cotton, and sugarcane.⁷⁶

Rebeico

Colonized colonial Spaniards, this settlement was located in the headwaters of the Westside tributary which emptied into the main stream at Soyopa.

San Miguel

Located upstream from Soyopa. San Miguel was situated on the east bank of the mainstream.

Río Moctezuma

North of San Miguel, the southward flowing Río Yaqui (Névome) was known as the Río Moctezuma, rising in the Mule Mountains between Bisbee and Douglas, Arizona. The Río Yaqui mainstream flows due west into the north-south stream carrying the run off of the Río Bavispe on the north and the Río Sahuaripa on the south.⁷⁷

⁷⁴ Tamarón y Romeral, *Demostación del Vastísimo Obispado* . . . 279; Reyes, *Report*, McCarty trans.; Reff, *Disease, Depopulation* . . . 219.

⁷⁵ Tamarón y Romeral, *Demostación del Vastísimo Obispado*, 279; Reyes, *Report*, McCarty trans.15; Reff, *Disease, Depopulation*, 223.

⁷⁶ Tamarón y Romeral, *Demostación del Vastísimo Obispado*, 280; Reyes, *Report*, McCarty trans. 16. Reyes had San Miguel as patron of this visita.

⁷⁷ Reff, *Disease, Depopulation*, 64, 223; Obregon, eds. Hammond & Rey, *Explorations*, 164; Tamarón y Romeral, *Demostación del Vastísimo Obispado*, 283.

Tepupa

On the east side of the Río Moctezuma was the first mission north of the confluence. In 1759, its population was 163. There were several hamlets of Spaniards nearby.

San Francisco Xavier de Batuc

Only a league and a half up stream from Tepupa was Batuc. The Batuc Ópata and Eudebe fought other Ópatas to hold onto their rock salt deposits. In 1759, the population was 210, down from 820 in 1656 and 480 in 1678. The population slumped to 138 in 1720 before rebounding.

San Clemente de Térapa

Far upstream from Batuc, Térapa stood on the east bank. In 1759 its population was only 59.

San Miguel de Oposura

Oposura was also on the east bank upstream. In 1759, its Ópata inhabitants numbered but 205, down about 91 percent from the 2,290 Reff calculated in 1658, dropping to 734 in 1678, 281 by 1720 and 260 in 1730. By 1764, after a lethal smallpox epidemic, the total was down to 192.

Cumpas

Farther upstream, Cumpas was also an east bank pueblo visitation station. Reff calculated the 1656 population as 2,210, declining sharply to 882 in 1678, 227 in 1720, 124 in 1730, 116 in 1759, and 112 in 1764.

Río Nacozari

To the north, the stream was called the Río Nacozari. Nacozari Mission was on the west bank.

Teuricachi

This pueblo was also on the west bank upstream.

Cuchuta

Cuchuta was farther upstream.

Río Fronteras

Fronteras

This military post also stood on the west bank upstream. Its reach was called the Río Fronteras. Before the post was sited, a native pueblo occupied the location. Hostile Apaches forced abandonment of the stream's headwaters by colonists.

Cuquiáchi

Cuquiáchi was located on a westside tributary which rose near Cananea.

Río Chico

The Río Chico debouched into the Río Yaqui-Névome from the east about halfway between Onavas and the right angle turn from southward flowing to westward flowing. The Río Chico catchment supported half a dozen missionized native settlements, three on the Río Chico proper, and three along the tributary Río Trinidad. One mission and one visitation station on the Río Chico averaged a scant 95 inhabitants in 1759.

Río Chico mine camp was located a short distance up the Río Chico from the Yaqui. By 1772, Río Chico was half abandoned.

Nuestra Señora de la Concepción de Movas

This mission stood north of a long curve in the Río Chico that took it from a southwestward to a northwestward course just upstream from the confluence with the Río Trinidad. In 1759, Movas had but 121 Lower Piman residents, down from 660 in 1656 and 307 in 1678 – a 53 percent decline – dropping to a mere 88 in 1730 before rebounding. It was seven leagues south of the Río Chico mine camp.

Santa Ana de Nuri

Just upstream from the Río Chico-Trinidad confluence, the Río Chico twisted again from a north northwest course to a south westward course. Toward its headwaters was the Jesuit visitation station at Nuri, five leagues northeast of Movas Mission. This native pueblo numbered only 70 in 1759.⁷⁸

Río Trinidad

The Río Trinidad flows into the Río Chico from the northeast. This catchment supported three missionized native settlements on eastside tributaries.

⁷⁸ Tamarón y Romeral, *Demostración del Vastísimo Obispado*. . . . 279; Reff, *Disease, Depopulation*, 219.

Toyopa

A native pueblo that was the southernmost (downstream) on the Río Trinidad.

Santa Ana

This native pueblo was upstream from Toyopa.

Trinidad

Trinidad itself was the native settlement farther upstream.

Río Bacanora

The relatively short Río Bacanora supported a single mission establishment.

Bacanora

Ten leagues northeast of its mission, Aribetzi, this visitation station had in 1759, 163 ethnic Jeguis inhabitants, well down from a calculated 752 in 1658 to 253 by 1678, and 168 in 1720. In addition, the Aribetzi missionary ministered to 449 burghers at the behest of the Río Chico secular cleric.⁷⁹

Río Sahauripa (a southside tributary of the Yaqui River)

The Río Sahuaripa was densely settled. On the west bank moving upstream southward were Sahuaripa, Santo Tomás, Ponida, Arivechi and Bamori with Tacupeto and Onapa upstream upon the east bank. Then there were two additional establishments on an eastside tributary stream, Tarachi and Ostimuri.

Nuestra Señora de los Angeles de Sahuaripa

There was no Jesuit missionary here at the time of the expulsion. The population was 140 in 1759, down from 1,445 in 1656, and 682 in 1678, and 168 in 1720.⁸⁰

Pónida

Another visitation station of Arivetzi Mission, it was located half a league to the south. In 1759, it had only 131 ethnic Joba inhabitants. They subsisted on roots, herbs, wild fruits and occasional maize crops. They exported palm leaf mats in exchange for clothing.

⁷⁹ Tamarón y Romeral, *Demostración del Vastísimo Obispado*. . . . 280.

⁸⁰ Roca, *The Paths of the Padres*, 273-74; Tamarón y Romeral, *Demostración del Vastísimo Obispado*, 281; Reff, *Disease, Depopulation*, 222.

San Francisco Javier de Arivechi

This was ethnic Ópata pueblo and a Jesuit mission. Its population in 1759 was a mere 112 persons, down from 930 calculated for 1656, 476 in 1678, and 135 by 1720.⁸¹

Vamori

Tacupeto

Onapa

This mission had barely 33 inhabitants in 1759, down from 171 in 1678 and 248 in 1730. Its few survivors were ethnic Lower Pimans.⁸²

Tarachi/Taraizi

Located on a mountain trail between the Sahuaripa and Haros tributaries, the population here in 1759 was reported to be a mere 40 persons.⁸³

Ostímuri

South of Tarachi between the Sahuaripa and Mulatos tributaries, Ostímuri was sometimes a colonial administrative unit, it reflected mining wealth.

Río Mulattos-Haros (a Yaqui river tributary)

The Río Haros segment had two missionary establishments: Teópare on a small eastside tributary near the Yaqui-Haros confluence, and Natora near the Haros-Mulattos confluence. The Mulattos reach had a pair of missions far upstream in its headwaters, Maicoba and Yecora.

San Jose de Teópare

Located near the bend of a short northward flowing tributary of the Haros, Teópare was an Ópata and Joba pueblo turned visitation station of Saguaripa Mission. It had only 121 inhabitants in 1759, plus 46 Jobas in outlying San Camino. These Jobas subsisted on wild fruits, herbs, roots, and an “occasional” maize harvest. They sold palm leaf mats to buy clothing. The Jesuit missionary also cared for 52 Spaniards.⁸⁴

⁸¹ Tamarón y Romeral, *Demostración del Vastísimo Obispado*, 280; Nentvig, *Rudo Ensayo*, 69; Reff, *Disease, Depopulation*, 222.

⁸² Tamarón, *Demostración*, 280; Reff, *Disease, Depopulation*, 220.

⁸³ Tamarón, *Demostración*, 280; Reff, *Disease*, 220.

⁸⁴ Tamarón, *Demostración*, 281; Nentvig, *Rudo Ensayo*, 69.

Maicoba

A small mountain town of 153 inhabitants in 1678, this town had an estimated 170 by 1730.

San Ildefonso de Yécora

At an altitude of 1652 m., Yécora's mean annual precipitation is 1071 mm., compared to 324 at coastal Ahomé at 35m. Jesuit conversion efforts dated to 1673. In the spring of 1767 there were reportedly 45 Pima families at Yécora. The population was calculated by Reff as 1,800 in 1656, halved to 904 by 1678, and fell to 863 in 1730. The Querétaro Franciscans sent a missionary to Yécora but soon gave up trying to staff it.⁸⁵

Río Bavispe

The Río Bavispe, or Río Yaqui mainstream, flows westward from San Mateo to Suaqui. It flows virtually due southward into the mainstream. The lower Río Bavispe was almost uninhabited, although the upper reach was densely populated.

San Mateo

San Mateo was located south of the upper Yaqui River opposite the mouth of the Río Bavispe. We list it with the missions along the Río Bavispe because of its distance from other components of the Jesuit mission system.

San Luis Gonzaga de Bacadéguachi

This native Ópata pueblo was located on an east side tributary of the lower Río Bavispe. In 1759, Bacadéguachi had but 208 inhabitants. This mission had two visitation stations, Nacori and Mochopa, neither on the Río Bavispe. These Ópatas fought others to control rock salt deposits nearby.

San Francisco Javier de Guásabas

Standing on the west bank of the Río Bavispe upstream from the Bacadéguachi tributary, this mission had 205 inhabitants in 1759. Juan Nentvig, S.J., was in charge at the 1767 expulsion.⁸⁶

⁸⁵ Tamarón y Romeral, *Demostración del Vastísimo Obispado* . . . 245; LaFora, *The Frontiers of New Spain*, trans. Kinnaird.; Hastings and Humphrey, *Climatological Data and Statistics for Sonora*, 383; Reff, *Disease, Depopulation*, 220.

⁸⁶ Tamarón y Romeral, *Demostración del Vastísimo Obispado* . . . 292; Roca, *The Paths of the Padres Through Sonora*, 000; Reff, *Disease Depopulation and Cultural Change*, 64; Nentvig, *Rudo Ensayo*, 113; Pfefferkorn, *Description of Sonora*, 256-57.

Oputo

A visitation station of Huásabas mission located 11 leagues upstream from Huásabas and downstream from San Juan which stood on the west bank. Bishop Tamarón credited it with 221 Ópata and 27 Yaqui inhabitants in 1759.

San Juan

This was also a west bank native pueblo, located upstream from Oputo.

Teras

Well upstream from San Juan, was another west bank native pueblo.

Batepito

A native pueblo that was well upstream from Teras. It was located on the north side of a 180 degree curve in the Río Bavispe. The Bavispe flowed north toward Batepito, turned and flowed south away from Batepito.

San Miguelito

The native pueblo farthest downstream (north) above the 180 degree curve was San Miguelito. It stood on the west bank of the river.

San Miguel de Bavispe

An Ópata native pueblo that was next upstream above (south of) San Miguelito. It was another west bank settlement. It was situated on a full loop of the river at the base of a wide slope/pass which climbed into Nueva Vizcaya. Apaches frequently attacked travelers through this pass in the time period with which we are concerned. When Bishop Tamarón traversed the pass, he was protected by a large armed escort.

Bacerac

An Ópata settlement next upstream from Bavispe, Bacerac was also located on the west bank.

Tamichopa

This ethnic Ópata pueblo was located on the east bank of the Río Bavispe upstream (south) of Bacerac.

Huachinera

Nestled inside another sharp curve in the Río Bavispe upstream a short distance from Tamichopa, Huachinera was in the far headwaters of the Río Bavispe-Río Yaqui.

Río Nacori

The Río Nacori flowed into the Río Yaqui at the curve where the Río Haros reach turned sharply from a northward course to flow west southwest. There were four mission establishments on the Nacori.

Serva

Serva was east of the Río Nacori just above the confluence.

Móchapa

On the west bank a bit upstream, it was 12 leagues south of Bacadéguachi Mission and had only 141 inhabitants. A subsidiary rancheria called Tobas held another 42 persons. These Jobas survived on wild fruits, roots, and herbs, plus an “occasional” maize crop. They wove palm leaf mats to export for clothing, and the women wove wool from their few sheep.

Satachi

More or less due east of Móchapa, Satachi was perhaps actually in the Río Satachi catchment (a tributary of the Río Haros). The economy was the same as that at Móchapa.

Nacori Chico

The farthest native pueblo upstream, Nacori Chico was on the cross-canyon trail connecting Satachi with Bacadéguachi and Guásabas. The resident depended upon wells for domestic water.

Río Mátape

The Río Mátape rises in the mountains due east of the confluence of the Río Moctezuma and the Río Bavispe and flows south by southwest towards the north shore of the Bay of Guaymas. The mission at Guaymas actually was located north of the Río Mátape, but it has been discussed as part of the Río Yaqui system because colonial Spaniards so treated and conceptualized it.

San Jose de los Pimas

A *shon*⁸⁷ furnished the Lower Pimas here with water which the surface runoff in the river did not. Philip von Segesser von Brunegg, S.J., built a church here about 1742. In February of 1767, there were reportedly 64 Lower Pima families at this visitation station 16 leagues west of Tecoripa Mission. There had been 68 families in 1759, indicating a rather smaller decline than that at Tecoripa. Part of the reason was forced native migration to reinforce Bacadéguachi. As requested by Juan Antonio de Baltasar, O.F.M., Don Agustin Arriola ordered the inhabitants of Satechi to move to Bacadéguachi.⁸⁸

Franciscan missionaries took over after the Jesuit expulsion. Inspector General José de Galvez, in 1769, ordered a missionary stipend (formerly San José was a visitation station). Friar Pedro Font, O.F.M., chronicler of the 1775-1776 expedition to found San Francisco, came here in 1773. Franciscans of the Colegio de Santiago de Jalisco later took over from those from the Querétaro colegio.

San José de Pimas

Located on high ground, the terrain here was broken by hills and ravines. Its inhabitants practiced *ak chin* (flood water) horticulture. By 1772, they were mostly displaced natives who had deserted their native settlements. They numbered 276.⁸⁹

Mazatan

Here people depended on a shon on the course of the Río Mátape three leagues west of Mátape. Dropping below surface, the flow resurfaced at Cobrichi Springs and then disappeared.

Señor San José de Mátape

Daniel Angelo Marras, S.J., introduced the first black slaves to Sonora at Mátape in 1672-1673. By mid-seventeenth century, a *colegium*—elementary school—operated here, 40 leagues north of Tecoripa. It was “Pimeria Baja’s first stride toward any kind of educational activity.” By 1759 there were but 114 inhabitants of this mission, well down from 1,050 in 1656, and 482 in 1678 – a 57 percent decline – to a scant 44 in 1730 before some recovery or reinforcement occurred. Mátape benefited from the forced reinforcement campaign of Juan Antonio Baltasar, O.F.M., and Don Agustin Arriola. The survivors at Rebeico were relocated to Mátape. “Father Sedelmayr was in charge at Mátape when the expulsion order came, and the Jesuits of the frontier were gathered at Mátape to be taken into custody and escorted to Spain.” Then this mission was secularized.⁹⁰

⁸⁷ *Shon* is Piman for riverine alluvial spring. Numerous Sonoran Desert place names incorporate this word, as *tjuk shon*, Black Water.

⁸⁸ Fernando Ocaranza, *Los Franciscanos*, 71; Nentvig, *Rudo Ensayo*, 9, 69.

⁸⁹ Reyes, *Report*, McCarty trans., 28-30.

⁹⁰ Tamarón y Romeral, *Demostración del Vastísimo Obispado*, . . . 282; Roca, *The Paths of the Padres Through Sonora*, 240-42; Ocaranza, *Los Franciscanos*, 71..

Río Sonora

The Río Sonora is the second largest catchment in the historic northwestern indigenous mission region. Its dozen mission establishments amounted to only 10 percent of the total, much smaller than the Río Yaqui majority.

A sample of eight towns (Alamos, Ures, Baviácora, Aconchi, Huapac, Banámichi, Sinoquipe, Arizpe) indicates that the 1759 population of 1662 was only 32 percent of the calculated 7,610 in 1656. This is the lowest rate of survival among the half-dozen river valleys computed. Pimas and Ópatas suffered the highest mortality of the ethnic groups analyzed – or could attract the fewest reinforcements.

La Santísima Trinidad de Pitic

This ranchería became a colonial stronghold during the Comcáac War.

San José de Gracia

Gracia was upstream from Pitic.

Santa Rosalia

A visitation station that was 12 leagues south of Ures in open country with a small spring on the lower Río de la Junta southside tributary. Residents dry farmed their fields (or were ak chin cultivators). They had 22 yokes of oxen in 1772 and grew wheat despite the low altitude. The 1772 population was reportedly 99 persons compared to 125 in 1759. Only a copious spring enabled anyone to live at Santa Rosalia and subsist largely on fish.⁹¹

Alamos

This town was located between the south and north forks of the Río de la Junta. It numbered barely 132 persons in 1656, down to 57 in 1678 and 23 by 1730, bouncing slightly to 38 in 1759.

San Miguel Archangel de los Ures

Ures was located in a beautiful valley about 12 by 14 leagues square on the lower Río Sonora. The Lower Piman-speaking natives cultivated wheat, maize, beans, and other crops; tended quince, pomegranate, peach and fig trees; and harvested sugar cane to make syrup. Irrigation water was abundant and easily managed.

Basic cultural and demographic changes in the indigenous missions fostered institutional change at some of them. Toward the end of his reign, Viceroy de Croix, for example, ordered the Royal Depository for Sonora split, establishing one branch at the big mine camp of Rosario, Sinaloa, and the other at the “pueblo” of Ures, Sonora. With this expansion there still were only

⁹¹ Reyes, *Report*, McCarty trans., 32-33; Ocaranza, *Los franciscanos*, 247; Tamarón, *Demostración*, 283.

15 depositories in the viceroyalty, most of them in cities such as Vera Cruz, Guadalajara, and Zacatecas.⁹²

In 1772, Antonio de los Reyes, O.F.M., thought the native houses the best in Pimería. All 317 natives spoke Spanish, down from 1,875 in 1656 and 904 in 1678 and 836 in 1730, about 400 around 1740 and more than the 236 reported in 1759. The Ures church registers began in 1659.⁹³

Baviácora

Upstream from Ures, the southward flowing Río Sonora made a nearly right angle turn to flow west southwestward toward the Gulf. A few leagues up the southward flowing stream was Baviácora, with 952 inhabitants calculated for 1656. It declined by half to 445 in 1678 then 219 in 1720 and 208 in 1730. It rebounded to 259 by 1764.

San Pedro de Aconchi

When calculated 1656, Aconchi had a population of 1,210 Ópata, which declined to 880 in 1678 and 365 by 1720 and rose to 392 in 1730 but fell to 272 in 1764.

San Lorenzo de Huepaca

A visitation station that was five leagues south of Banamichi Mission. In 1759, it had a reported 129 inhabitants, down from a calculated 1,958 in 1656, 268 in 1678, up from 106 in 1720, 84 in 1730, and rising to 147 in 1764. Population recovery apparently began between 1730 and 1759.

Nuestra Señora de los Remedios de Banámichi

In 1759, Banámichi had 158 Jeguis inhabitants, compared to 1,234 in 1656, 338 in 1678, 190 in 1720, 172 in 1730, and 179 in 1764.⁹⁴

Motepore

A Spanish settlement between Banamichi and Sinoquipe, it had, in 1759, a chapel building, and a reported population of 296 Spaniards.

⁹² José de Galvez, *Informe general que en virtud de real orden instruyo y entrego el Excelentísimo Señor Marqués de Sonora siendo visitador general de este reino, al Excmo. Sr. Virrey Frey Antonio Bucarely y Ursua, con fecha de 31 de Diciembre de 1771*. Mexico: Imprenta Imperial, 1866. 8.

⁹³ Reyes, *Report*, McCarty trans., 30-31; Ocaranza, *Los franciscanos*, 246; Tamarón, *Demostración*, 283; Reff, *Disease, Depopulation*, 219-20.

⁹⁴ Tamarón, *Demostración*, 310; Reff, *Disease, Depopulation*, 224.

San Ignacio de Sinoquipe

Here in 1759, there were 134 native inhabitants, compared to 445 in 1658, 367 in 1678, 164 in 1720, and 112 by 1730, then rebounding to 139 in 1764.

Nuestra Señora de la Anunciación de Arizpe

Arizpe had a calculated 807 inhabitants in 1658, down to 446 by 1678, and 231 in 1720, then rebounding to 432 in 1730 and holding almost steady at 423 in 1764.⁹⁵

Chinapa

Up the Río Sonora above Arizpe was Chinapa.

Bacoachi

Located higher up the Río Sonora, Bacoachi was where a short eastern tributary joined a western tributary that originated near Cananea to form the mainstream.

Río San Miguel

Nuestra Señora del Rosario de Nacámeri

This visitation station was seven leagues south of Opodepe Mission. The church was ruined by 1772. A dozen native families mustered but 34 souls, down from 362 in 1678 and 88 in 1730—a 76 percent decline. Fifty Spanish families dominated by 1772.⁹⁶

Nuestra Señora de la Asunción de Opodepe

This mission was located on an arroyo bank, cultivating small fields. A dozen “white” families had by 1772 seized such good crop lands as there were. Their settlement was known as El Realito. The natives cultivated wheat, maize and other crops, figs, peaches, quince, and pomegranates along an arroyo south of the town. The natives claimed to be Eudebe and Ópata; Reyes considered them a mix of Spaniards, Mulatos, Natives and “other castes”. Speaking Spanish, the 259 “natives” did not want missionary instruction or supervision. The men prospected for gold, and made mescal, rum, and other liqueurs. On one small communal field, they grew wheat, maize, beans, lentils, and chick-peas.

San Miguel de Tuape

This visitation station was seven leagues south of Cucurpe on a plateau beside an arroyo. The gigantic flood of 1770 carried away all of the lands and gardens of the natives of this Eudebe and Ópata village of 228 inhabitants. A large adobe church somehow survived the flood.

⁹⁵ Tamarón, *Demostración*, 310; Reff, *Disease, Depopulation*, 221, 224.

⁹⁶ Reyes, *Report*, McCarty trans., 37-38; Reff, *Disease, Depopulation*, 220, 224.

Los Santos Reyes de Cucurpe

Here was the scene of exceptionally bitter inter ethnic strife. In a macabre minuet of precedence, Spanish settlers claimed that they alone had the right to be buried in a marked sepulcher inside the church. The Eudebe and Ópata women grew crops – wheat, maize, and chick-peas – on fields along an arroyo which flowed during the rainy season. In other words, they practiced ak chin horticulture. The men prospected for placer metals. The reported 286 natives nearly all spoke Spanish in 1772. The population had gained since 1759, when 141 inhabitants were reported.⁹⁷

Nuestra Señora de los Dolores

Newcomers claimed to have purchased the surviving settlement and lands of the defunct mission pioneered by Eusebio F. Kino, S.J. They constituted part of the interethnic problem at Cucurpe. By mid-eighteenth century, the indigenous population was essentially extinct.

Río Altar

The long Comcáac Conflict had demographic impacts on the adjoining ethnic groups. Relocation of Upper Piman populations reportedly seriously affected the settlements in the Altar River valley. Depopulation from disease mortality characterized the area between 1723 and 1774. Ten towns (Bisani, Caborca Pitiquin, Tubutama, Ati, Oquitoa, Santa Teresa, Magdalena, San Ygnacio, Imuris) in 1774 held only 32 percent (1,013) of their 1723 or 1730 populations (3,215). Inasmuch as this was but half-century, the rate of decline was roughly double that of the valleys for which we have figures for the trend across a century.

San Juan Bisani

This visitation station was located five or six leagues west of Caborca Mission. Like other native settlements downriver toward the ocean, its residents fished in Gulf waters. In 1759, it reportedly had 241 residents. In 1772, it reportedly had 271 inhabitants. In other words, this pueblo bucked the general downward population trend in the Sonoran missions.

La Purísima Concepción de Nuestra Señora de Caborca

Laying 16 leagues inland from the shore of the Gulf of California, this mission was located on a floodplain and was subject to destructive flooding. In 1759, Caborca reportedly had 556 inhabitants. The 634 persons reported in 1772, communally cultivated wheat, maize, and other crops. Like Bisani, Caborca gained population during the resettlement of Comcáac War participants.

⁹⁷ Reyes, Report, McCarty trans., 34-36, 39-44; Tamarón, Demostración, 309

Pitiquin

A visitation station lacked a church in 1772. The settlement reportedly had 269 inhabitants in 1759, then in 1772 rose to 360 inhabitants.⁹⁸ Pitiquito also benefited from the resettlement program.

San Pedro y San Pablo de Tubutama

This mission had fertile floodplain fields nine leagues south of Saric. The Upper Pimas there communally cultivated wheat, maize, beans, and other crops. It had 368 residents in 1759, falling to 176 inhabitants in 1772.

Santa Teresa

This visitation station was five leagues west of Tubutama. In 1759, it had 156 inhabitants, but in 1772 had only 52 inhabitants, a loss on the order of two-thirds.

Santa Gertrudis del Saric

In 1766, this mission lost two visitation stations located at a shon which fed its creek — *Alishonac* (small shon), and the shon-fed marsh at Bisani (1759 population 41), which formed the Tubutama River. It produced wheat, maize and other crops. Saric reportedly had 212 inhabitants in 1759, but only had 137 inhabitants in 1772. The steep population decline may be attributed to the 1762-64 smallpox pandemic.

Aquimuri

A visitation station that had a population of 67 in 1759.

San Francisco de Ati

Located in a long valley two and three leagues wide seven leagues west of Tubutama, this village numbered 142 in 1759, declining to 137 in 1772.

Oquitoa

Because this visitation station lacked a church in 1772, indications that the standing chapel there was not constructed by Jesuits as oral tradition claims, but was a Franciscan addition are present. Oquitoa had 131 residents in 1759, falling to 106 inhabitants in 1772⁹⁹

⁹⁸ Reyes, *Report*, McCarty trans., 56-58; Tamarón, *Demostración del Vastísimo*, 308; Nentvig, *Rudo Ensayo*, 11.

⁹⁹ Reyes, *Report*, McCarty trans., 53-56; Tamarón, *Demostración*, 305-306; Nentvig, *Rudo Ensayo*, 11

Río Magdalena

Santa Maria Magdalena

This visitation station was two leagues south of Caburica. In 1759, it had 207 inhabitants, and in 1772 had a reported 86 residents. Thus, it lost more than two-thirds of its population.

San Ygnacio de Caburica

This mission stood on high ground within a flood plain. The Upper Piman natives communally cultivated maize, wheat, beans, and other crops. The population fluctuated between epidemic mortality and migration reinforcement. From 300 in 1723, it fell to 94 in 1730, jumped to 322 in 1761 and declined to 204 in 1766 due to smallpox and then dropped more to 149 in 1768 and 128 in 1774. In 1759, it reported 98 residents; then in 1772 it reportedly had 148 inhabitants. Thus it gained about 50 percent.

San Jose de Hímuris

Hímuris received surface flow from Sucuri sustac [*sukuli shootak* (flowing water)]. In 1772, it reportedly consisted of but 39 individuals, compared to 326 in 1759. This precipitous decline resembled the trend in Mesoamerica during the sixteenth century.

Santiago de Cocóspera

Like Bacadéguachi and Mátape, Cocóspera received reinforcements during the Juan Antonio Baltasar-Agustin Arriola settlement consolidation campaign. They reached out beyond the northern frontier to the pueblo of Guachuca in one of the well-watered cañones of the Huachuca Mountains. The Guachuca natives, whose forebears were visited in the 1690s by Eusebio F. Kino, S.J., were moved to Cocóspera. By 1759 the Cocóspera population was reportedly only 133.¹⁰⁰

Río Santa Cruz

San José de Tucson (Black Water)

Here was the northernmost colonial outpost in Sonora, six leagues (of two miles) north of Wa:k mission. Riverine alluvial springs (shon) which surfaced upstream provided abundant irrigation water. In 1752, an army officer counted 156 inhabitants. Capt. Francisco Elias Gonzalez forced 250 San Pedro River Valley O'odham to resettle at Tucson in 1762. Yet the Jesuit missionary at Wa:k reported only 200 inhabitants in 1765, reflecting 1764 epidemic disease mortality. By late February of 1767, Black Water was down to 139 individuals. In 1759,

¹⁰⁰ Ocaranza, *Los Franciscanos*, 71; Tamarón, *Demostración del Vastísimo Obispado*. . . . 303, 309; Nentvig, *Rudo Ensayo*, 11; Reyes, *Report*, McCarty trans., 51-53; Robert H. Jackson, *Indian Population Decline: The Missions of Northwestern New Spain, 1687-1840*. Albuquerque: University of New Mexico Press, 0000, 168.

Black Water had a reported 331 Upper Piman inhabitants. Francisco Garcés succeeded in raising the population to 239 by 1774.

San Francisco Xavier del Wa:k (Reeds)

This mission also had abundant water from shon upstream. The 1759 population at this mission reportedly was 399; that number dropped to 270 individuals reported in 1772, almost certainly because of high smallpox mortality in 1762-1764. They cultivated small fields of wheat, maize, and other crops.¹⁰¹

Tumacácori

This mission was devastated in 1752 when the Tubac military post was established but a league distant. The soldiers irrigated their gardens with irrigation water subtracted from the aboriginal share of Tumacacori, that is, 100 percent. In 1772, Tumacácori reportedly had 93 inhabitants, growing from 87 in 1761 and 80 in 1766.

Santos Angeles de Guebavi

Located on an open and fertile plain of good land, the residents of this mission produced wheat, maize, and other crops. They numbered 111 in 1760, 41 in 1761, 58 in 1766, and only 86 in 1772.

San Cayetano de Calabazas

Located west of the Santa Cruz River, in 1759, Calabazas had 116 inhabitants, 50 in 1761, 93 in 1766, and then in 1772 had but 64 residents, having lost nearly half its numbers.. They did little or no cultivating. There was no church or priests' quarters.

San Ygnacio de Sonoita

Sonoita was located in a fertile valley east of the Santa Cruz, on the tributary Sonoita Creek. In 1759, it reportedly mustered 91 residents; in 1761, it had fallen to 38, rose in 1766 to 85, then in 1772, it had reportedly 94 inhabitants. Thus, Sonoita apparently was, like the Río Santa Cruz establishments, quite unstable. Even Tohono O'odham fled the river for their desert settlements.

Santa Maria Suamca

This mission was located in the headwaters of the Río Santa Cruz, where it flowed southward before turning 180 degrees to flow northward into the Río Gila. In 1768, Apaches raided, burning the church and missionary's quarters. The natives fled to Cocóspera where they lacked irrigation water. The 1759 population was reported as 114; 1772 population was

¹⁰¹ Tamarón, *Demostración*, 305; Reyes, *Report*, McCarty trans., 48

reportedly 110.¹⁰² Thus, Suamca apparently was losing numbers slowly, like most of the Sonoran native missions.

This section has sketched an indigenous mission system under significant stress generating sometimes contradictory population trends. For a century prior to 1775, indigenous missions, over-all, lost about two-thirds of their population to endemic and epidemic disease mortality. At the same time until 1767, the Jesuits expanded the number of indigenous missions they administered, relying upon institutional forms inherited from earlier periods of proletarianization. Moreover, they attempted to maintain the number of natives congregated in certain missions by moving to them – by force or by persuasion – natives born and living beyond the colonial frontier. This process created an uninhabited no man’s land between the frontier settlements which colonial officials tried to maintain and hostile ethnic groups such as the Apaches.

3.3 The Viceroyalty of New Spain: A Nongovernmental Institutional Overview of Provincial Sinaloa and Sonora on the Northwestern Frontier

This section continues to present an overview of the types of settlements and institutions in provincial Sonora during the lifetimes of the founders of San Francisco. It deals with nongovernmental rather than governmental institutions. These NGOs were mostly mines and ranches rather than haciendas.

3.3.1 Mine Camps

Joseph Och, S.J., who was expelled from New Spain in 1767, wrote: “it seems as though the Spaniards walk on gold and silver.” Och contrasted colonial Spanish mining technology unfavorably with German mining. European “pick, shaft, lantern, tackle, windlass, capstan, wheelbarrow, cable, and so on – are not used in America.” Och claimed that only the surface ores were worked, ore being knocked off by “quarter to half hundred weight, steel pointed crowbars.” Spaniards, wrote Och, worked ores only during the day, not at night. Actually, “laborers are usually runaway Indians who must be permitted all misdemeanors by the Spaniards lest they stop work.” Och went into detail concerning how miners stole rich ore so the owners made little profit.¹⁰³

Mine camps were populated by a wide range of biological and cultural types. The mine labor force was overwhelmingly Native American, reinforced by some Blacks, Mulattos, and other castas, and a few very poor Creoles and Gachupines. Despite the Spanish prejudice against engaging in trade, New Spain’s mine camp merchants and mine owners were almost all Spaniards. Some of the Spaniards were members of ethnic minorities on the Peninsula – Basques most importantly, Catalans, Extremadurans, etc. Many ore discoveries gave out soon after discovery. Others yielded metals for decades and even centuries. This analysis does not attempt

¹⁰² Reyes, *Report*, McCarty translation, 48-49-50-51; Tamarón, *Demostración del Vastísimo Obispado*. . . 303-305; Dobyns, *Spanish Colonial Tucson*, 134-35, 164-65; Kessell, *Mission of Sorrows*, 160, 172.

¹⁰³ Joseph Och, *Missionary in Sonora: The Travel Reports of Joseph Och, S.J., 1755-1767*, translated by Theodore E. Treutlein. San Francisco: California Historical Society, 1965, 143-45.

to list every mineral strike in Sonora-Sinaloa. Rather, it seeks to illustrate something of the range of variation among mine camps.

While mine camps were atypical colonial settlements, they actually constituted the financial pillars of Spanish colonial empire. The mines generated the income which sustained the Spanish monarchy with a 20 percent tax on the value of metals recovered.

The economy of New Spain was mostly monetized, in those settlements where royal mints were located, followed by the mine camps. Frequently, mine camp transactions involved exchanges of gold dust, gold and silver nuggets, as well as minted coins.

The economy of colonial New Spain was but spottily commercialized. Again, the few true cities (Mexico, Guadalajara, Guanajuato, Puebla) and the mine camps were the most commercialized settlements in the viceroyalty. Native Americans lived largely outside the monetized economy, and participated quite marginally in the commercialized economy. In other words, the vast majority of the population did not contribute to the international marketplace of Western civilization. Only a relatively small elite population of urbanites and mine owners and merchants functioned within the global market and extended it as feasible. A quintessential enduring mining town turned city with administrative components and considerable institutional differentiation significantly diversified, commercialized, and monetized the Sonoran economy.

La Purísima Concepción de los Alamos

The most important and enduring mine town in Sonora was la Purísima Concepción de los Alamos. The initial silver strike occurred in 1683 at Promontorios near Alamos in the foothills of the Sierra Madre Occidental south of the Río Mayo. The *Europa* was the first mine opened. The small city became the residence of powerful Spanish mine owners and merchants who chafed at missionary control over Native lands and labor. In 1687, General Domingo Terán and other residents were building a new town with its new plaza and new church as well as their residences.¹⁰⁴

In 1769, Inspector General José de Gálvez crossed the Gulf of California from the peninsula of Lower California to Sonora. There the inspector General made a bee line for Alamos, which he reached on 23 May. Gálvez fell desperately ill, and the relative urbanity and comfort of Alamos manifestly attracted him. With the Inspector General in town, even if temporarily, Alamos became the de facto administrative headquarters of Sonora-Sinaloa.

The Inspector General ordered an official who had incurred his displeasure confined to quarters in Alamos for 54 days. He instituted amnesties for Comcáac to try to rescue the anti-Comcáac campaign. Gálvez ordered Alamos to file land titles.¹⁰⁵

The Inspector General held a conference at Alamos in May with representatives of the mining industry and commercial enterprises. Conferees agreed that the wages of mine workers should be increased and that the Crown should reduce its charges for mercury and salt. The

¹⁰⁴ Roca, *Paths of the Padres Through Sonora*, 345.

¹⁰⁵ Priestley, *José de Gálvez*, 274-76, 284.

Mayo and Yaqui missions should be secularized, and tribute should be collected from those Native Americans.¹⁰⁶ Gálvez terminated Alamos' brief career as capital city when he departed on 4 September.

The Inspector General held conflicting views of the mines of New Spain. In 1769, Gálvez perceived the mines of Sonora-Sinaloa as a bonanza to the Crown. On the other hand, Gálvez viewed the gold and silver mine camps as full of the lowest rabble.¹⁰⁷ Gálvez was apparently both egocentric and class centric. Whatever "rabble" lived at Alamos, at the time it was the largest and most prosperous city in northwestern New Spain.¹⁰⁸

The Crown in 1769 ordered a branch of the royal treasury established at Alamos.¹⁰⁹ That action was one of the reforms, or at least changes, ordered by inspector General José de Gálvez.¹¹⁰ The Alamos Caja Real actually opened in June of 1770.¹¹¹ That institution addition symbolized an official perception of Alamos as an interior settlement rather than a frontier outpost. After 1770, Alamos functioned in part as a governmental administrative city. Alamos offered the founders of San Francisco their most impressive model for upward social and economic mobility.

Like most mine camps, Alamos did not observe the letter of Spanish law in physical layout. Its streets followed contours and routes to mines rather than the legally prescribed square blocks with streets either parallel or at right angles. Still, a cathedral constructed between 1786 and 1804 faces a Plaza de Armas which is more or less central in the city. Constructed after 1776, this cathedral bears no witness to Sonoran culture between 1763 and 1776. Nonetheless, it bears mentioning that antique China plates were set into the walls of the cathedral tower.¹¹² They attest persisting wealth and allegiance to the Church by leading Alamos families.

A Plaza de la Alameda parallels the Arroyo la Aduana, with a sizeable marketplace extending eastward. As in other Spanish colonial and contemporary settlements, "firewood was the commonest commodity" (Hilton 1947:75)¹¹³.

Alamos boasted metal works, blacksmiths, tanneries, as well as the royal mint. Mules trod a major mule trail from Alamos to Culiacán and El Fuerte. The modern national historic monument offers numerous mansions converted into hotels, restaurants, post office, taxis, and a Museum of Sonoran Customs.¹¹⁴

Alamos is noteworthy for an additional reason: it is located at the edge of two adjoining major ecotones. South of Alamos lies the lush tropical jungle. North of Alamos is the arid

¹⁰⁶ Priestley, *José de Gálvez*, 283.

¹⁰⁷ Priestley, *José de Gálvez*, 273, 230.

¹⁰⁸ Pradeau, *La Expulsion de los Jesuitas de las Provincias de Sonora, Ostimuri y Sinaloa en 1767*, 26.

¹⁰⁹ Thomas Sheridan, *Empire of Sand: The Seri Indians and the Struggle for Spanish Sonora 1645-1803*. Tucson: University of Arizona Press, 1999, n. 2.

¹¹⁰ Priestley, *José de Gálvez*, 268.

¹¹¹ Priestley, *José de Gálvez*, 287.

¹¹² Hilton, *Sonoran Sketch Book*, 77.

¹¹³ The persistence of reliance upon firewood until World War II attests earlier reliance.

¹¹⁴ John Noble, et. al., *Mexico*. Melbourne: Lonely Planet, n. d., 360-62.

Sonoran Desert. Some Spaniards used Los Alamos as their base from which to colonize the upper Mayo River Valley.¹¹⁵

The festival of the city's patroness, Our Lady of the Immaculate Conception, is observed on 8 December. Contemporary Alamos holds singing competitions from 4 to 14 December.¹¹⁶

San Antonio de la Huerta

A gold discovery in 1759 started a rush to de la Huerta. Hundreds of laborers rushed to Cieneguilla in 1771, but mining continued here. In 1776, the Cieneguilla and de la Huerta mines reputedly produced sufficient royal income to finance the province of Sonora.¹¹⁷

Cieneguilla

In 1770, a Sonora expedition soldier on patrol discovered placer gold barely within O'odham desert territory on the Comcáac frontier. The subsequent gold rush quickly populated the extremely arid location with approximately 2,000 miners, laborers, merchants, servants, transportation workers, and some women. This boom town became the second most populous settlement in the province, after Alamos.

According to word of mouth intelligence reaching Mexico City, the gold placer extended for 14 leagues. Workers recovered nuggets from a depth of as much as half a yard. Many nuggets reportedly were large – as much as 11 pounds 6 ounces. Discoveries at Cornelio and Aguas Frías eight and a dozen leagues from Cieneguilla went underworked because miners preferred to exploit the primary discovery.¹¹⁸

Mine camps such as Cieneguilla were the indispensable pillars of the colonial empire, including provincial Sonora. Mine owners and laborers alike achieved a specialization of labor not present in other types of settlements. All strove to work as long as possible in pursuit of bullion. Consequently, merchants flocked to new mine camps to sell to miners and laborers the food they required to keep working. Merchants and tailors also sold clothing; the mine camp work force lacked the skills to produce clothing so specialists purchased cloth and sewed garments. In a word, mine camp economies were commercialized.

This meant that mine camp economies were largely monetized. During a rush, merchants might accept gold dust or gold or silver nuggets in exchange for their merchandise. Given the high level of distrust and of social caution in the Hispanic and Sonoran population that we have already described, merchants much preferred to exchange their goods for minted coins – after examining them for filing and weighing them to verify their value.

¹¹⁵ Crumrine, *The Mayo Indians of Sonora*, 18.

¹¹⁶ Noble, *Mexico*, 364.

¹¹⁷ Roca, *Paths of the Padres Through Sonora*, 257.

¹¹⁸ Pedro Alonso O'Crouley, *A Description of the Kingdom of New Spain, 1774*, translated and edited by Seán Galvin. n.p.: John Howell – Books, 1972, 97-98.

Cieneguilla had a prompt and significant impact on Crown revenues. This 1771-1772 impact is presented quantitatively in Table 3.4. Emigré Yaquis constituted the main labor force at Cieneguilla as at other Sonoran mine camps. Colonial officials lauded ethnic Yaquis as peaceful (since 1740) and hard working.¹¹⁹

YEAR	GOLD (pesos)	SILVER (pesos)
1765	076,012	1,249,018
1766	069,338	1,318,179
1767	073,783	1,310,822
1768	092,787	1,349,569
1769	083,551	1,474,273
1770	068,663	1,567,913
1771	102,363	1,404,335
1772	115,446	1,560,941
1773	096,910	1,730,532
1774	097,319	1,521,078
1775	100,432	1,611,956
1776	092,913	2,020,276
Total	1,069,517	18,118,892

Table 3.4 Net Annual Product of Gold and Silver Mining in New Spain, 1765-1776.¹²⁰

Cieneguilla and presumably other mine camps afforded successful laborers considerable opportunities for upward social mobility. Officiating at baptisms and marriages with enthusiastic fictive kinship relations, and writing the official records of these events, a secular priest functioned as the gatekeeper for socially mobile individuals. We shall discuss this phenomenon in greater detail below.

Perhaps the termination of the Sonora Expedition seemed to proclaim victory in the Comcáac Conflict, despite official recognition that royal forces had not prevailed. In any event, early in the 1770s miners and their laborers began to reopen mines abandoned during the conflict. Bacoachi was one instance. It yielded up to four pounds per hundredweight.¹²¹

¹¹⁹ O'Connor, *Informe de Hugo de O'Connor sobre el estado de las Provincias Internas del Norte 1771-76*. Mexico: Editorial Cultura, 1952, 104-105.

¹²⁰ Priestley, *José de Gálvez*

¹²¹ O'Crouley, *A Description of the Kingdom of New Spain 1774*, 97-98.

San Francisco de Asis del Río Chico

The Spanish mining town of Río Chico functioned also as capital of Ostimuri province at mid-eighteenth century. Secular clergymen ministered to its population.¹²²

Nuestra Señora de Loreto del Real de Baroyeca

At the headwaters of the arroyo flowing from the western slope of the Sierra Madre Occidental past Batacosa Mission the mining camp of Baroyeca resulted from a discovery and rush in 1701. At mid-eighteenth century, Baroyeca served as residence to the population. Even though Baroyeca was located far inland in the mountains, hostile Comcáac attacked it not long before the Jesuit expulsion. The Comcáac killed the curate, and in 1772 the population of Baroyeca fled. Sufficient ore remained to motivate reoccupation at mid-nineteenth century.¹²³

Bacubiritu

Mineral rushes and ore body declines kept provincial mining in a constant state of flux. The indigenous settlement of Bacubiritu formed one unit in the Jesuit mission system. During the 1760's, prospectors found placer gold deposits nearby, and the subsequent gold rush converted Bacubiritu into a mine camp. Bacubiritu became famous for the large quantity of gold recovered there by 1770.¹²⁴

Saracache

At the confluence of the Saracache River with the Río San Miguel, a small group of miners extracted placer gold, and dug holes seeking primary deposits. Apache raiders kept the mining population small in early 1767. This mining camp was close to Cucurpe Mission.¹²⁵

Trinidad de Arriba

The horse trail connecting Buenavista Presidio and Yécora passed through a mineralized zone of the Sierra Madre Occidental which was exploited during the 1760s. In the spring of 1767, miners from Enmedio and Abajo concentrated at Trinidad de Arriba for safety from Comcáac and Apache raiders, and because outlying ores were playing out.¹²⁶ Pine-oak forests on the slopes of surrounding mountains attracted Spanish woodcutters. The miners preferred pinewood, so that was what the Spanish woodcutters supplied them.¹²⁷

¹²² Roca, *Paths of the Padres Through Sonora*, 262-63.

¹²³ Roca, *Paths of the Padres Through Sonora*, 329-30; Almada, *Diccionario*, 102.

¹²⁴ Fersén. Pitic, Oficio de 2 de Enero de 1770 al Virrey, S.r Marqués de Croix.

¹²⁵ La Fora, *The Frontiers of New Spain*, by Kinnaid, 114.

¹²⁶ La Fora, *The Frontiers of New Spain*, by Kinnaid, 122-23.

¹²⁷ Carlisle & Fontana, "Sonora in 1773," 53.

Oral Tradition

A few mines such as those at Zacatecas yielded abundantly for decades. Many discoveries which attracted miners were, on the other hand, short lived mines. Their veins played out, or the shafts flooded with water and the miners could not afford pumps, or Apaches attacked frequently, and mine camps became ghost towns. A number of former mine camps lingered in memory toward the end of the period leading to the 1775-1776 colonization of San Francisco Bay: Tanaran, El Satac, Bacaiopa, Zapte, San Juan Nepomuceno, San Joseph de las Cruces, Monserrate, Los Tajos, El Agua Caliente, Los Molinos, Los Cercanos, Suristado.¹²⁸

3.3.2 Seaports

The scarcity of waterways and improved roads handicapped economic and political development in colonial Spanish America, and particularly independent Mexico.¹²⁹ Pre-Columbian Tawantinsuyu constructed roadways and bridges which greatly facilitated Spanish travel and political unification of the central Andean peoples. Pre-conquest peoples left no such endowment north of Mesoamerica. Moreover, rivers draining the central plateau of New Spain flowed but short and steep distances into the seas.

The native peoples of the Pacific Coast of North America ventured short distances to sea in canoes. They lacked sailing technology, so at the time of conquest had not developed substantial seaports. Spanish colonials started from a very restricted seaport base, therefore, consisting of Native canoes at or near river mouths.

A faunal factor further retarded seaport development near river mouths. The American Crocodile (*Crocodylus acutus*) inhabited river delta environmental niches all along the Pacific coast.¹³⁰ These reptiles posed a lethal threat of unknown proportions to canoe traffic.

Mazatlán

Located on a peninsula in the Pacific Ocean near the mouth of the Río del Presidio in southern Sinaloa, Mazatlán is outside the study area. We nevertheless consider it appropriate to take Mazatlán into account because it very significantly influenced the distribution of socio-ethnic quality in the area of origin of the founders of San Francisco. Bishop Tamarón y Romeral described Mazatlán as a new settlement in 1759. "This town is composed of Mulatos who are governed by a captain who is one of their own." Tamarón reported the population as 966 persons. A secular deputy curate ministered to these Mulatos.

Mazatlán was one of the larger towns in northwestern New Spain. That it consisted entirely of Mulatos made it unique as far as we are aware in the viceroyalty. The concentration of Mulatos in Mazatlán meant that Mulatos who might otherwise have lived in the area of origin of

¹²⁸ Fersén, *Oficio*, 2 de Enero de 1770, 4.

¹²⁹ E.J. Dillon, *Mexico on the Verge*. London: Hutchinson, n.d., 80.

¹³⁰ James C. Rorabaugh, An Introduction to the Herpetofauna of Mainland Sonora, Mexico, with Comments on Conservation and Management," *Journal of the Arizona-Nevada Academy of Science*, 40:1 (2008) 20-65, 33.

the founders of San Francisco did not – they were apparently self-segregated in Mazatlán. We infer that the uniqueness of Mazatlán as a single quality settlement would have made its nature widely known to the founders of San Francisco as a topic of gossip, at the very least. Speculating about the behavior of the segregated Mulatos would have been well nigh irresistible.

Ahomé

During the earlier years of the Jesuit campaign to convert to Christianity the Natives of Lower California, the missionaries used Ahomé as their seaport of departure to the Peninsula.¹³¹ Ahomé was at the upstream edge of the coastal mangrove swamps at the mouth of the Río Fuerte. Native canoes probably continued to use Ahomé after the early eighteenth century, but it would not have much influenced the northwestern Sinaloa area.

Altata

West of Culiacán near the mouth of the Río Fuerte, a small seaport known as Altata functioned during the nineteenth-century economic development boom in the region. The “harbor” was really too shallow for industrial age ships, small though they may be.¹³² We infer that the indigenous Tahue operated a canoe port, at least, which persisted during colonial times without generating too much commerce.

Guaymas

The leaders of the massive colonial military effort to terminate the Comcáac Conflict founded the Sonoran seaport at Guaymas Bay in 1767. They insured its growth by routing supplies for the several hundred soldiers involved in the Sonoran War through Guaymas Bay. Before long, entrepreneurial fishermen established a local fishery in the Gulf of California to furnish port residents and people in the hinterland with sea foods not previously available to the Hispanic populace.¹³³

Commanders of the various units committed to the Comcáac Conflict also helped to sustain the new seaport. Soon after expedition, commander Elizondo landed at Guaymas on 10 March, 1768, he attacked Comcáac near the port.¹³⁴ Late in June three Spanish columns invaded Comcáac coastal territory – Elizondo from Guaymas again, Capt. Bernardo Urrea from Pitic, and Capt. Lorenzo Cancio from Buenavista. In October, the Newcomers tried again. Columns based on Guaymas and Pitic advanced on the Cerro Prieto, losing three men.¹³⁵

¹³¹ Alegre, *Historia de la Provincia de la Compañía de Jesus de Nueva España*

¹³² Clark, “An Iowan Visits Sinaloa: Observations...in 1883,” 267.

¹³³ The Comcáac subsisted largely on fish and sea turtles, but Hispanics had no access to the Comcáac fishery.

¹³⁴ Herbert Ingram Priestley, *José Gálvez: Visitor General of New Spain (1765-1771)*. Berkeley: University of California Press, 1916, 270.

¹³⁵ Priestley, *José de Galvez*, 271. King Charles III was wiser than his Inspector General. He ordered the European style large scale invasions halted.

Viceroy Croix allowed Elizondo to keep waging a style of warfare which fairly obviously was not accomplishing any colonial good. In November, 500+ troops based in Guaymas and Pitic again invaded without success.¹³⁶

When Inspector General José de Gálvez reached Sonora, he issued regulations aimed toward fostering the growth of the new seaport. Guaymas was to have free trade with Lower California, and an annual trade fair.¹³⁷

3.3.3 Institutional Differentiation

Thus far, we have been sketching the characteristics of Spanish colonial frontier institutions which also constituted settlements. We have identified Roman Catholic missions to Native peoples, military posts, seaports, and mining towns as distinctive types of frontier institutions. Our brief sketch of La Purísima Concepción de Alamos indicated that it consisted of several smaller scale institutions. As a relatively urban settlement, Alamos grouped together a number of institutions which did not constitute settlements. In the twentieth century, social scientists paid a good deal of research attention to the institutional complexity of hamlets, towns, and cities. Cornell University anthropologists, to illustrate quantitatively, measured the impact of U.S. Peace Corps volunteer on Peru by comparing the rate of institution building volunteers achieved.¹³⁸ A mid-twentieth-century institutional inventory inevitably reflects the rapid pace of technological innovation and change during the years since the Industrial Revolution which took place after the founding of San Francisco. We cannot adapt the Peruvian institutional inventory analysis to eighteenth-century Sonora; the social structure of the world has changed too much.

During the 1763-1776 period there was but limited commercial differentiation in rural Sonora; that is, there were at least specialized stores, including bakeries and taverns.

Novelist Isabel Allende outlined the institutional differentiation in Santiago de Chile at mid-sixteenth century. It had a tanner, several workshops for making pottery, wickerwork, candles, harness, furniture, sawmills, a quarry, tailor shop, scribes, and public ovens.¹³⁹ At the opposite edge of Spanish America, excavation of the ruined military post at San Diego, California, revealed an oven for baking wheat flour products. "Such ovens were indispensable in Spanish colonial times, inasmuch as wheat bread formed a mainstay of the diet of Spaniards and Mestizos" (Ezell and Ezell 1980:87). It resembled ovens still used in New Mexico pueblos¹⁴⁰ and country towns in Mexico.

¹³⁶ Priestley, *José de Galvez*, 272.

¹³⁷ Priestley, *José de Galvez*, 242.

¹³⁸ Henry F. Dobyns, Paul L. Doughty, and Allan R. Holmberg, *Measurement of Peace Corps Program Impact in the Peruvian Andes: Final Report*. Ithaca: Cornell University Department of Anthropology, Cornell Peru Project.

¹³⁹ Isabel Allende, *Inés of My Soul*. London: Fourth Estate, 2006, 230.

¹⁴⁰ Mrs. William T. Sedgewick, *Acoma, The Sky City*. Cambridge: Harvard University Press, 2nd ed., 1927, 26.

Almost every Cochiti Pueblo family had at mid-twentieth century, one or more outdoor Spanish style ovens for baking. They built their ovens of volcanic tuff.¹⁴¹

At Zuñi Pueblo, with its high ritualized life, ovens were, late in the nineteenth century, ceremonially cleaned every four or every eight years. One man – the “demon inspector” – covered with soot, semi comically cleaned every oven in the pueblo.¹⁴²

Royal officials constructing housing at Guaymas in 1767 to receive the Sonoran Expedition led by Col. Domingo Elizondo, constructed ovens along with quarters.¹⁴³ In view of the burden on the royal exchequer the Expedition constituted, we doubt that the Guaymas ovens were public—that is accessible to the public.

On the other hand, individually petty enterprise spread widely the Spanish bread oven. At mid-twentieth century, an ethnic Mayo woman worked as a baker with her Spanish style oven.¹⁴⁴ The known distribution of Spanish ovens to San Diego and Río Grande Pueblos far north of the Culiacán-Sinaloa area implies that at least a few entrepreneurial bakers catered to Spanish, Mestizo, and perhaps even Native American taste for white bread whether the founders of San Francisco could afford to buy from them or not.

Other occupational specialists in eighteenth-century Sonora should have included the tanner, potter, wicker worker, candle maker, fireworks maker, harness maker and saddle maker, furniture maker, tailor, scribe, and herbalist.

Ranches (Haciendas)

During the Comcaac Conflict, farmers, ranchers, and miners abandoned the majority of their rural economic enterprises. In the Ostimuri jurisdiction, the number of ranches plummeted from 57 to four. In Sonora, miners abandoned 40+ mine camps while haciendas dropped from 125 to two.¹⁴⁵ The provincial economy rapidly collapsed just when King Charles III expected his Inspector General of New Spain to generate additional royal revenues, particularly from the mining sector. Presumably the deflation of the Sonoran economy left many families destitute and willing to migrate to Upper California with a government subsidy.

The cattle ranch developed as a frontier institution of New Spain simultaneously with the silver mining camp in the mid-sixteenth century. Mine workers required food, and beef raised near a mine camp competed successfully against agricultural produce hauled from Mesoamerican fields at high cost and high risk from Chichimeca raiders. We are uncertain how early the vaquero – cowboy – specialist crystallized on the Mesa Central, but infer that the role and its distinctive gear emerged long before the colonization of provincial Sonora.

¹⁴¹ Charles W. Lange, *Cochiti, A New Mexico Pueblo Past and Present*. Austin: University of Texas Press, 1959, 69.

¹⁴² Frank H. Cushing, *Zuñi*, edited by Jesse Green. Lincoln: University of Nebraska Press, Bison Book, 1979, 327.

¹⁴³ Pradeau, *La Expulsión de los Jesuits de las Provincias de Sonora, Ostimuri, y Sinaloa en 1767*, 77.

¹⁴⁴ Crumrine, *The Mayo Indians of Sonora*, 55.

¹⁴⁵ Herbert Ingram Priestly, *José de Gálvez, Visitor General of New Spain (1765-1771)*. Berkeley: University of California Press, 1916, 270.

In Sonora, and elsewhere in “the North,” some families consciously embraced vaquero subculture, and specifically identified themselves as beef eaters, as contrasted to mutton eaters, fish eaters, pork eaters, etc.¹⁴⁶

An early-twentieth-century sketch of the vaquero working where Chihuahua, Nuevo León, and Zacatecas adjoin may be projected back in time. Nineteenth-century Anglo-American expansions of cowboy equipment such as tents and chuck wagons were unknown to the colonial vaquero. A *morral*, or bag of woven fiber carried at the saddle horn, carried the vaquero’s salt, dried beans, and tortillas.¹⁴⁷ Rural colonists continued to utilize bags and ropes woven from locally available fibers as Natives had for centuries prior to conquest.¹⁴⁸ To roast a bull’s head in a pit, the vaquero roasted yucca leaves in ashes to make pliable the tough fibers he twisted into string to keep in place grass wrapped around the head.¹⁴⁹

The vaquero’s gear was in good part mental – cultural – in other words, rather than material.¹⁵⁰ A significant portion of the vaquero’s cultural equipment for dealing with his vocation and environment consisted of the words and notes of songs. The vaquero sang when close herding cattle. He sang by his campfire after a filling meal.¹⁵¹

The vaquero applied both quirt and spurs to his mount. Vaquero heavy spurs might appear to be an encumbrance to the walking man. They helped to balance the vaquero swinging quickly into his saddle and kept him there, as where evading a charging bull.¹⁵²

Vaqueros protected their legs from mesquite tree and other thorns with a range of clothing. Some wore thigh-high leggings. Other put on *chivarras* reaching to the waist and kept in place by a belt.¹⁵³

The successful livestock hacienda in colonial Sonora was of necessity a large scale business and social enterprise. *Santísima Nombre de Jesus de Bacanuche* mustered 250 Spaniards, Yaquis, Ópatas, and servants. Located on the headwaters of several streams, the land was well watered, supporting livestock of all kinds. Workers tended gardens which produced for export. The owner, Gerardo Ortiz Cortés, ran a store in the village of Chinapa.¹⁵⁴

Colonial Spaniards close herded small stock, on foot, but worked cattle on horseback. Horse husbandry was, therefore, a necessary concomitant of cattle ranching. A few ranchers

¹⁴⁶ Lopez interview April 2009.

¹⁴⁷ Dobie, *Tongues of the Monte*, 4.

¹⁴⁸ Henry F. Dobyns, “Indoamerica and the Greater Southwest: Ropes, Bags, and Backpack Frames,” Pp. 169-76 in *Culture and Environment in the American Southwest: Essays in Honor of Robert C. Euler*, edited by David A. Phillips, Jr., and John A. Ware. Phoenix: SWCA Anthropological Research Paper No. 8, 2002.

¹⁴⁹ Dobie, *Tongues of the Monte*, 5.

¹⁵⁰ We employ Robert Redfield’s (*The Folk Culture of Yucatan*. Chicago: University of Chicago Press, 0000, 132 [“conventional understandings made manifest in act and artifact”])

¹⁵¹ Dobie, *Tongues of the Monte*, 5 [the vaquero “will always sing at night after a good fill of meat”]

¹⁵² Dobie, *Tongues of the Monte*, 1, 4.

¹⁵³ Dobie, *Tongues of the Monte*, 20.

¹⁵⁴ Carlisle & Fontana, “Sonora in 1773 (Part II),” 184.

specialized in raising horses rather than cows. Apache economic raiders made horse husbandry risky in colonial Sonora, especially after mid-eighteenth century. Ethnic Apaches relished horse flesh, so they targeted horses to rustle.

Colonial Spaniards did not customarily geld stallions.¹⁵⁵ Consequently, horses which escaped from Spanish ranches or Native American herds bred and reproduced rapidly on the North American Great Plains. Huge herds of wild horses appeared on the Southern Great Plains during the last decades of the eighteenth century, as they did in Upper California after 1769.

Farms

As a conquest state, fifteenth-century Spain presented tremendous differences in size of real estate holdings, from imperial monarch to lowest peasant. The land holdings at the large end of the continuum are known as *latifundium*. Royal land grants in conquered territory laid the foundations for Spanish latifundium, particularly in Andalusia. Land holdings at the small end of the continuum are known as *minifundium*. In Spanish Galicia, minifundium is so extreme that many small plots are uneconomic.¹⁵⁶

Spanish America is characterized by much the same extremes of latifundium and minifundium present on the Peninsula. We presume that the founders of San Francisco lived in a zone of minifundium between Culiacán and Sinaloa.

Spanish farmers typically named every cultivated field. Thus, people could discuss or travel to fields without ambiguity.¹⁵⁷ Apparently this rural behavior diffused to the Andes, if Native Americans there were not already naming their cultivated fields when Spaniards invaded the Inca Empire. We expect that founders of San Francisco departed from named fields – a very familiar agrarian landscape.

3.4 A Different Frontier

Conflict between American Natives and European newcomers in 1519 resulted in cultural shock among both groups. On the native side, mortality from the continental smallpox pandemic started by a member of Hernán Cortés' force greatly augmented the level of cultural shock.

As Newcomers created colonial institutions to deal with subjugated Natives, they diminished the continuing cultural shock among both invaders and the invaded. Indirect colonial rule through conquered native rulers, direct rule through Spanish encomenderos and mine owners, etc., made native life relatively predictable however unpleasant. Native psyches could deal with the predictable.

¹⁵⁵ Dan Flores, "Bringing Home All the Pretty Horses: The Horse Trade and the Early American West, 1775-1825," *Montana*, 58:2 (Summer, 2008 3-21, 12. Machismo entered into this pattern. Riding a stallion was macho; riding a gelding was not.

¹⁵⁶ George M. Foster, *Conquest and Culture: America's Spanish Heritage*. Chicago: Quadrangle Book, 1960, 29, 51.

¹⁵⁷ Foster, *Culture and Conquest*, 50.

In the course of the sixteenth century, royal officials in New Spain invented the military post and the Roman Catholic mission as frontier institutions. The mission pursued three imperial goals: 1) to convert the Natives to Roman Catholicism, 2) to civilize Natives, and 3) to exploit Natives.¹⁵⁸ Having existing institutional models for dealing with Natives somewhat lowered Newcomer stress as the newcomer-native frontier of contact and conflict moved northward beyond Mesoamerica.

By the early-seventeenth century, the northwestern frontier of New Spain stood roughly at the Sinaloa-Sonora border. It had stalled there for several decades after the initial, early Spanish advance to Culiacán. The Cahitan-speaking Mayos negotiated an alliance with the Newcomers in 1609.

3.4.1 The Yaqui

The frontier stalled because colonial military power proved insufficient to defeat the Cahitan-speaking inhabitants of the Yaqui River. The Yaquis mobilized multiple thousands of warriors led by capable tacticians. Spanish descendants of the conquistadors of Mesoamerican empires and kingdoms suffered some cultural shock as the Yaqui tribal armies repeatedly trounced them. The Yaquis defeated 40 soldiers with 2,000 Native allies, then 50 mounted Spaniards with 4,000 Native allies, completely dispersing the latter force.

Yaqui leaders then dumfounded colonial officials. The Yaquis visited Jesuit missionaries to the south of their holy homelands and asked the Jesuits to send missionaries to convert them to Catholicism.¹⁵⁹ The abrupt Yaqui complete change of tribal policy caused a new sort of cultural shock among both colonial missionaries and military officers. The jubilant Jesuits were only too happy to dispatch missionaries to the Yaqui River, where they concentrated inhabitants of scores of small rancherías into eight populous pueblos. Through historic times, those eight towns became sacred to Yaquis, with important consequences in the nineteenth century.

Meanwhile, Yaquis lived peacefully in missions until intergroup relations deteriorated so much that Yaquis resorted to forceful protest in 1740. Colonial forces quickly suppressed the protest – rebellion in colonial perception and labeling. Spaniards living on the interethnic frontier again suffered cultural shock in 1740.

After 1740, Yaquis adjusted to conquest and colonial subjugation in a new way. Hundreds of Yaquis chose to emigrate from their holy land and the eight pueblos acquiring sacredness. They sought and found wage labor in mine camps, in towns, and on haciendas as far away as Chihuahua and Durango provinces¹⁶⁰ on the Central Plateau east of the study area. By the time King Charles III expelled members of the Society of Jesus from his American dominion in 1767, perhaps 2,000 Yaqui émigrés found employment throughout Sonora, they became the

¹⁵⁸ Herbert E. Bolton, "The Mission as a Frontier Institution in the Spanish-American Colonies," *American Historical Review*, 1916.

¹⁵⁹ Edward H. Spicer, *Cycles of Conquest: The Impact of Spain, Mexico, and the United States on the Indians of the Southwest, 1533- 1960*. Tucson: University of Arizona Press, 1962, 46-47.

¹⁶⁰ Spicer, *Cycles of Conquest*, 58-59.

labor fundamental to the Sonoran economy. Indeed, mobile and versatile Yaqui labor enabled the Sonoran economy to expand and diversify as it had not done previously.

Although Yaqui (Yoreme) bellicosity was episodic, it has been so successful that it has shaped Spanish-Mexican (Yori) perception of this ethnic group despite its largely pacific integration into regional economy and society. Many a Yori writer has waxed quite eloquent about Yoreme fighting men. In one such view, the happiest man in the world is the warrior invested with the ethnic symbols of warfare. “For the Yaqui nothing is more important than fulfilling his duty; war on behalf of his people, for his race, or his customs, for his land and for his religion is the supreme ideal of his breed.”

Despite Yaqui freedom fighters decisive defeats by federal forces, oral tradition keeps the Yoreme undefeated. One San Miguel de Horcasitas community member living in the United States argued that the “Yaqui were never tamed or defeated to this day.”

Since the Yaqui resistance to conquest (1530-1614+) the colonial Spaniard and then the Mexican land grabber has been the enemy of the Yaqui. “Land, Nation, people, race and customs constitute a single entity. In it are included justice, liberty, social redemption, collective improvement, all.”

The newcomers’ stereotype of Yaqui falls largely into the “noble savage” category. “The Yaqui does not go to war exalted by his love for a philosophical ideal; all his philosophy is in his people, in his race in his language and customs and when he struggles he does so illuminated by his religion, which presently is Catholic led in part by Yaqui religious officials.”

This perception had aboriginal Yaqui armies well organized and very disciplined, in differentially armed squadrons of lancers, archers, and war clubbers, wearing totemic headdresses. Such armies opened battle with a deafening noise of shouts, shell trumpets, whistles and drums which ordered attack, retreat, dispersion, concentration, aid to wounded according to the demands of combat. Through time, Yaquis adopted European army organization into squads, platoons, company, etc.¹⁶¹

3.4.2 Ópata Imitators

The Ópata ethnic group occupied the western slopes of the Sierra Madre Occidental north of Yaqui county. Ópatas conspicuously courted colonial Spaniards. They imitated Spanish cultural patterns. They negotiated a military alliance with the Spaniards, and colonial officials finally founded ethnic Ópata presidial garrisons. Spaniards even found Ópata women appropriate wives.¹⁶² Spaniards and Ópatas caused each other quite minimal cultural shock.

Bishop Diego Tamarón y Romeral¹⁶³ eloquently summed up the Spanish colonial perception of the Ópata ethnic group as of 1759. “It manifests a singular inclination toward the sacred Catholic faith. It is a pleasure to watch them pray in their language and the Spanish

¹⁶¹ Manuel Sandomingo, *Historia de Sonora: Tiempos Prehistoricos*, 271.

¹⁶² Spicer, *Cycles of Conquest*, 90-104.

¹⁶³ Demostración del Vastísimo Obispado

language, as they do every day. They are very loyal to the King and Our Lord, and obedient to their superiors, very liable and obsequious.”

Between the Ópata and the Pacific coast, southern O’odham irrigated crops in river valleys draining the mountain slopes. Farther north to the Gila River, northern O’odham also irrigated river valley fields, or relied upon ak chin or delta flood irrigation to grow crops in the desert. O’odham generally cooperated with colonial authorities. From time to time, however, leaders of portions of the O’odham population found colonial rule so onerous that they “rebelled.” Typically, these militant protests stemmed from more than adequate cause.¹⁶⁴

The “Pima Revolt” in November of 1751, for example, began when mission converts took revenge on new German Jesuit missionaries who murdered O’odham in an excess of zeal and authoritarianism. This protest generated considerable cultural shock among frontier Spaniards as the protesters killed approximately 100 Spaniards and EuroAmericans and threw the colonial frontier back south some distance.¹⁶⁵

3.4.3 Comcáac Resisters

The cultural shock between Spaniards and Yaquis, Spaniards and O’odham, and even later Spaniards and Apaches, was trivial, however, compared to the cultural shock generated by colonial invasion of Comcáac country on the Gulf of California Coast.¹⁶⁶ Yaquis, Ópatas, O’odham (except for the Tohono O’odham who moved between field and mountain spring villages) grew irrigated crops in riverine oases, lived sedentary lives, and traded commodities. The Comcáac, frequently called the Seris, were not sedentary. They fished, they hunted, they gathered wild foods from desert plants and marine eel grass. They did not grow anything; their territory lacked surface flowing water with which to irrigate. Spaniards simply could not comprehend how human beings could live as Comcáac did. Comcáac simply could not comprehend how Spaniards wanted them to build vertical walled, square cornered dwellings of earth instead of native vegetable materials. Nor could Comcáac comprehend why military officers and missionaries wanted them to migrate from their holy land to riverine oasis fields among O’odham or Newcomers, and irrigate, cultivate, and weed field crops once they migrated.

Severe cultural shock continued and virtually complete incomprehension between Comcáac and Newcomers generated decades of open and bitter warfare. In 1662, Native men and women fought to the death against colonial invaders.¹⁶⁷ Thereafter, Comcáac leaders possessed too much intelligence to attempt to confront colonial forces in European style battles. Like Apaches and many another native groups under attack, Comcáac dispersed when faced with superior forces. They resorted to guerrilla tactics – hit and run economic raids. Dependent on horses and mules, newcomers invading Comcáac territory were especially vulnerable to rustling by small hostile bands.

¹⁶⁴ Spicer, *Cycles of Conquest*, 86-91, 118-132

¹⁶⁵ “The Pima Revolt in 1751 constituted a shock from which the Jesuit missions had not recovered by the time of the expulsion in 1767.” (Spicer, *Cycles of Conquest*, 132).

¹⁶⁶ Thomas Sheridan, *Empire of Sand*. Tucson: University of Arizona Press, 1999.

¹⁶⁷ Spicer, *Cycles of Conquest*, 105. Each native ethnic group suffered rampant culture shock when conquered (Stafford Poole, *Our Lady of Guadalupe: The Origins and Sources of a Mexican National Symbol, 1531-1797*. Tucson: University of Arizona Press, 1998, 17.

Comcáac raids triggered renewed cultural shock among newcomers seeking wealth in livestock on this frontier. Every punitive expedition, every pursuit of rustlers resulted in renewed cultural shock. The Comcáac Conflict dragged on for decades during the eighteenth century, turning especially bitter after the colonial 1751 invasion of Tiburón Island with O'odham and Yaqui allies. The Comcáac Conflict constituted not only a deadly fact of life in Sonora, but lodged significantly in the psyche of Sonorans of that period.

CHAPTER 4

CULTURAL ELEMENTS OF ANZA COLONISTS

Chapter Four focuses around Dr. Doby's research on the cultural elements and characteristics of the founders of San Francisco who were recruited by Anza in northwestern New Spain. Doby's begins by depicting some of the environmental and cultural characteristics from the area of origin of the founders of San Francisco. A general description of the flora and fauna of each region is given, as well as a description of a variety of tools and instruments, including an explanation of how each listed item was utilized by the inhabitants of the region. In the second section, the general structure of Sonoran culture is investigated in order to understand the patterns of the colonist's culture that remained with them throughout their journey and during their settling of San Francisco. This section investigates some of the cultural aspects of the colonists such as religion and poverty in order to have a thorough understanding of the lifestyle that the founders of San Francisco had at the time prior and after their departure.

4.1 The Area of Origin of the Founders of San Francisco

Northwestern New Spain, where Juan Bautista de Anza recruited the founders of San Francisco, differed markedly from the San Francisco Bay area. The two climates differed. The physiographies differed. The hydrologies differed. So the vegetations differed. In the interest of textual brevity, we will call the area of origin of the founders "Sonora" even though Culiacán is located in the modern state and colonial province of Sinaloa. There are not sufficient cultural differences between Culiacán, Sinaloa hinterland and Sonora immediately to the north to justify constantly repeating "Culiacán" or "Sinaloa."

The area of origin of the migrants and their escort extended from Culiacán on the south to the military post of Tubac on the north, and from the Pacific coast on the west to the western slope of the Sierra Madre Occidental on the east. Although the post at Tubac was the northernmost colonial outpost on the Sonoran frontier in 1775, the physiographic area actually extended north to the Gila-Salt River catchment. Consequently, our maps show that stream at the northern limit of the study area.

The areas of origin, organization and staging are a southern extension of the Basin and Range Physiographic Province of western North America. North-south trending mountains dominate this landscape. Between the mountains deep alluvium fills deeply faulted basins. Precipitation here is a function of altitude, so drainage channels radiate outward from key peaks. Cosmologically sacred to the Tohono O'odham, Baboquivari Peak consists of erosion resistant granite of Jurassic age remaining above sedimentary and metamorphosed rock.¹ This sacred peak is visible for approximately 100 miles in any direction. From Alamos, Sonora, the northbound

¹ John Bezy and Charles F. Hutchinson, "Landforms and Geology," in Buenos Aires National Wildlife Refuge, Arizona, *Desert Plants* 23:2 (Dec., 2007) 6.

founders of San Francisco crossed most of the Sonoran Desert, which is one of the seven major deserts on earth.

The area of origin of most of the founders of San Francisco is vegetated by tropical thorn forest. Culiacán, at the southern edge of the Sonoran Desert, receives fifteen+ inches of annual precipitation. This is sufficient moisture to support a thorn forest reflecting proximity to the tropics. As the Spanish Newcomers explored northward, this familiar if hostile vegetation persisted past the Culiacán, Sinaloa, Fuerte, and Mayo Rivers. The coastal plain between Culiacán and the ocean supported, among other trees, Brazilwood (*Haematoxylum brasiletto*), mahogany, rosewood, and ebony (*Caesalpinia sclerocarpa*).² The eighty-five miles of coastal plain between the Fuerte and Mayo River valleys supported subtropical giant cacti and thorny shrubs.³

Contemporary ethnic Mayo consume the fruits of more than a dozen large cacti and trees: 1) *Pachycereus pectin aboriginum*, 2) sahuira (*Stenoceerus montanus*), the dominant arboreal cactus in northern Sinaloa near the Villa de Sinaloa where Anza recruited the majority of the founders, 3) pitahaya (*S. thurberi*), which often grows hundreds of arms, 4) saguaro (*Carnegiea gigantea*), 5) palo hito (*Forchhammeria watsonii*), 6) Sonoran persimmon (*Diospyros sonorae*), 7) mesquite beans (*Prosopis glandulosa*), whose pods and seeds were ground and the flour incorporated into many recipes, 8) strangler fig (*Ficus cotinifolia*), typically an immense plant, 9) chilate (*Ficus insipidis*), 10) cacachila (*Karwinskia humboldtiana*), 11) papache (*Randia echinocarpa*), 12) tempisque (*Sideroxylo tepicense*), 13) Tropical Hackberry (*Celtis iguanea*), 14) desert hackberry (*C. pallida*), 15) net leaf hackberry (*C. reticulata*), which bears large orange fruit, 16) guajilote (*Pseudobombax palmeri*), 17) guamuchil (*Pithecellobium dulce*).⁴ The latter and the Sonoran persimmon both are “handsome shade trees.” Their distribution near settlements indicates that people manage these trees even if they have not domesticated them.⁵

At least one additional cactus component of the tropical deciduous forest bears edible fruits. This is nopal (*Opuntia willcoxii*). The forest also includes additional figs (*Ficus pertusa*, *F. petiolaris*) and guayabo (*Psidium guajava*), a domesticate.⁶

² William E. Blake, “An Iowan Visits Sinaloa: Observations of William E. Blake in 1883,” edited by Robert E. Wilson, and Linda Tays Dunn, *Arizona and the West*, 8:3 (Autumn 1966) 271.

³ N. Ross Crumrine, *The Mayo Indians of Sonora: A People Who Refuse to Die*. Tucson: University of Arizona Press, 1977, 3, 13.

⁴ N. Ross Crumrine, *The Mayo Indians of Sonora: A People Who Refuse to Die*. Tucson: University of Arizona Press, 1977, 3, 13; David A. Yetman, Thomas R. Van Devender, Rigoberto A. Lopez Estudillo, and Ana Lilia Reina Guerrero, “Monte Mojino: Mayo People and Trees in Southern Sonora.” Pp. 102-51 in *The Tropical Deciduous Forest of Alamos Biodiversity of a Threatened Ecosystem in Mexico*, edited by Robert H. Robichaux and David A. Yetman. Tucson: University of Arizona Press, 2000, 129, 131-33, 141-44, 147; Juan Nentvig, *Rudo Ensayo: A Description of Sonora and Arizona in 1764*, translated by Albeto Francisco Pradeau and Robert R Ramussen. Tucson: University of Arizona Press, 1980, 36-43.

⁵ Thomas R. Van Devender, Andrew C. Sanders, Rebecca K. Wilson, and Stephanie A. Meyer, “Vegetation, Flora and Seasons of the Rio Cuchujagui, A Tropical Deciduous Forest Near Alamos, Sonora.” Pp. 36-101 in *The Tropical Deciduous Forest of Alamos: Biodiversity of a Threatened Ecosystem in Mexico*, edited by Robert H. Robichaux and David A. Yetman. Tucson: University of Arizona Press, 2000, 36.

⁶ Van Devender, et. al., “Vegetation, Flora and Seasons of the Rio Cuchujagui. . . . Near Alamos, Sonora,” 61, 87; Nentvig, *Rudo Ensayo*, 37.

Probably the Spanish colonizers of the Culiacán, Sinaloa, and Fuerte River valleys never learned the food qualities of all of the wild fruits that ethnic Mayo picked in the thorn forest. On the other hand, the poverty of the newcomer populations in those valleys would have motivated the Newcomers to observe Mayo wild fruit gathering and to emulate it. Almost certainly the newcomers ate giant columnar cactus fruits, figs, guamúchil, and mesquite pods. The San Francisco Bay area vegetation certainly produced nothing like this abundance of semi-tropical fruits. Moreover, the Newcomers treated acorns as mast in Sonora, whereas Upper California natives relied on acorns as staple food.

A modern study of a tributary in the headwaters of the Río Fuerte identified 736 plant species, of which 46 were introduced. Herbs constituted 49 percent of the total, grasses and sedges 14 percent, vines 5 percent, aquatics 2 percent, shrubs 14 percent, trees 9 percent, cacti and other succulents a mere 2 percent.⁷

At the drainage divide between the Mayo and Yaqui Rivers, the thorn forest disappears, and the cacti and mesquite dominate the arboreal Sonoran Desert with its broad vistas. Within the thorn forest, trees grow notably taller in sub-irrigated alluvial soils in valleys watered by perennial streams than they can in the arboreal desert farther north. Mesquite trees reach forty feet or higher. Espino (*Acacia cymbispina*), palo verde (*Cercidium floridum*), ironwood (*Olneya tesota*) also grow taller in these valleys than on the arboreal desert farther north. Secondary plants bear thorns which make thickets penetrable only “with the greatest difficulty and considerable pain.”⁸

The region north (southern Sonora) and south (northern Sinaloa) of the Sonora-Sinaloa state line is geographically unstable. Consequently, earthquakes occur there with some frequency. Therefore, the founders of San Francisco were preconditioned to earthquakes in Upper California. Hurricanes which form over the Pacific Ocean move onto land in this area, which is also subject to other very strong winds.⁹

4.1.1 Riverine Oases

According to Pedro Font, O.F.M., Anza recruited thirty families in the Culiacán and Sinaloa River valleys to found San Francisco.¹⁰ Anza’s muster roll of the expedition written at Tubac clarifies that he actually recruited, as authorized by the Viceroy, twenty families to found the new military post on the bay.¹¹

⁷ Van Devender, et. al., “Vegetation, Flora, and Seasons of the Rio Cuchujaqui, A Tropical Deciduous Forest Near Alamos, Sonora,” 59-64.

⁸ Roger Dunbier, *The Sonoran Desert: Its Geography, Economy, and People*. Tucson: University of Arizona Press, 1968, 70.

⁹ Crumrine, *The Mayo Indians of Sonora*, 150.

¹⁰ Pedro Font, O.F.M., *Font’s Complete Diary*, translated by Herbert Eugene Bolton. Berkeley: University of California Press, 1931, 1 “Senor Anza recruited them between Culiacan and Sinoloa.” 30 families, 10 veterans plus 20 recruits.

¹¹ Pedro Font, *Font’s Complete Diary*, trans. By Herbert E. Bolton. Berkeley: University of California Press, 1931; Juan B. de Anza, “Report of the Troops Recruited in the Provinces of the Government of Sonora on Order of His Most Excellent Lord Frey, Sir Antonio María Bucareli y Ursúa, Lieutenant General of the royal Armies, Viceroy, Governor, and Captain General of this New Spain, by the undersigned Lieutenant Colonel and Captain of the Royal Presidio of Tubac, showing the Officer, sergeant, and soldiers who have left the Presidios of the said government,

Anza's reports make clear that he allowed the wife of a soldier assigned to Upper California to join the expedition at Los Alamos with her three children so that the Duarte family could be reunited. Arguably, neither Font nor Anza wrote a complete roster of the expedition, inasmuch as the number of riding and pack animals required more muleteers than were mentioned. Although documents attest that Anza used at least three scribes, no scribe is mentioned, either.

In terms of the objective of this study to reconstruct the culture and society which conditioned the founders of San Francisco before they migrated, it behooves us to define their area of origin as precisely as we can. Riding north from Mexico City, Lt. Col. Anza reached Culiacán on 25 March, 1775. There, "many single men have presented themselves to me," but families were reluctant to commit to the project because of the uncertainty of caring for children on the trail. Nonetheless, by 5 April Anza had signed up three families. Juan Athanacio Vázquez enlisted on 28 March, followed by Joseph Anttonio Garcia and Antonio Quiterio Aceves on 1 April. Phelipe Santtiago Tapia and Ignacio María Gutierrez enlisted on 5 April and Agustín de Valenzuela the next day. That was the date of Anza's departure from Culiacán for Sinaloa. Having enrolled six families at Culiacán, Anza had then recruited just 30 percent of his goal.

Anza did better at the Villa de Sinaloa on the Río Sinaloa. There Anza apparently enlisted Luis Joachin Alvarez de Acevedo on 11 April, Ignacio de Sotto on 13 April, Pedro Pinto on 14 April, with a trio of Joseph Antonio Sotelo, Pedro Bohorquez, and Santhiago de la Cruz Pico enlisted on 16 April, followed by the trio of Josef Manuel Valenzia, Sebasthian Anttonio Lopez, and Juan Francisco Vernal on 17 April, Josef Anttonio Sanchez on 23 April, Joachin Isidro de Castro on 28 April. These eleven recruits constituted 55 percent of Anza's target. The majority of the founders of San Francisco came, therefore, from the Sinaloa River valley.

Nicolas Galindo signed up for California on 2 May at El Fuerte on the Río Fuerte. In Los Alamos a week later on 9 May Anza commissioned Vicente Feliz. Each of them constituted five percent of the authorized recruits, bringing Anza's total to 95 percent. At Alamos, he also added to the expedition the wife and children of the presidial soldier Alexo Duarte. They were supernumerary additions who did not affect Anza's recruitment efforts.

Earlier, Anza had enlisted Casimiro Gonzalez on 17 April and Nicolás Anttonio Berrelleza, aged only fifteen years, on 19 April. These men were, however, not recruits; they were relatives of recruits whom Anza had fed and clothed, and mounted, but paid no salary. Anza labeled them "populators."¹²

While the expedition waited in San Miguel de Horcasitas for the proper season to make the long ride to San Francisco Bay, a serious sickness struck during June. Before it ended, three

the wives, children, and the families of each individual with a notation of the age of everyone, and the days they were commissioned to serve, with the destination of going to reinforce the Royal Presidio of San Carlos de Monterey in northern California." Pp. 159-65 in *Anza Correspondence, 1775*, translated by Donald T. Garate, *Antepasados* Vol. VIII, 1995.

¹² Juan Bautista de Anza, Oficio al Ex.mo S.or B.o F.r D.n Antt.o M.a Bucareli y Ursúa, Tubac, Oct. 20, 1775. Pp. 153-58 in *Anza Correspondence 1775*, translated by Donald T. Garate, *Antepasados* VIII, 1995, 154.

recruits had died. So Anza had to recruit again, apparently at Horcasitas. While waiting in Horcasitas, Anza apparently gained himself some “wiggle room by adding more populators to the expedition. Casimiro Barela enlisted on 16 June, Pedro Perez de la Fuente signed on 22 June, Juan Salvio Pacheco signed up on 28 July. Gregorio Sandoval was enrolled on 8 September, and Manuel Ramirez Arellano and Ignacio de Higuera (aged eighteen) on 20 September.¹³

Culiacán, Sinaloa, El Fuerte, and Horcasitas were riverside settlements. Only Los Alamos among the sources of the founders was a mountain mine camp. The founders of San Francisco were, therefore, almost all accustomed to living in riverine oases seasonally flooded by tropical rainy season precipitation. Northern Sinaloa had two seasons: hot and cold.¹⁴ The founders were accustomed to living in the riverine oases in part because the tropical thorn forest inhibited movement outside the oases where human habitation and horticultural intervention facilitated mammalian movement.

The exuberant vegetation in the riverine valleys contrasted markedly with that on both sides. Tall cottonwoods, mesquite, and oaks towered over extensive carizo (*Arundo donax*) thickets.¹⁵ Crossing the “barren cactus plain” north of the Fuerte, a traveler abruptly “came to large trees with beautiful foliage—farms on every hand.” Wheat, maize, and maguey fields flourished. “Tomatoes grow wild and in large quantities.” Abundant oasis vegetation sheltered “birds of abundance—parrots, paraquets, . . . quail, magpie, blackbird, buzzards, and eagles.”¹⁶ Plus doves, towhees, sparrows, kingfishers, and herons in the foothills.¹⁷

Anza recruited the founders of San Francisco, presumptive Spaniards or at least Mestizos, with a smattering of Mulatos, in the oldest Spanish society in provincial Sonora (actually northern Sinaloa). Spaniards colonized Tahue Culiacán in 1531. Spaniards colonized Fuerte at mid Sixteenth Century. Both Sinaloa and Mocorito also were Native American towns colonized by Spaniards early in the colonial period.¹⁸

4.1.2 Water Quality and Management

At this writing, unsafe (for human consumption) water supply is still one of the ten main causes of human mortality world-wide.¹⁹ An example of non-potable water comes from Móchapa on the Río Nácori in central Sonora. At mid -twentieth century, “our hotel got its water

¹³ Anza, “Report of the troops recruited . . . Donald T. Garate, “Commentary.” Pp. 183-92 in *Anza Correspondence 1775*, ed. Donald T. Garate, *Antepasados* Vol. VIII, 1995, 183, 185, 187-88.

¹⁴ N. Ross Crumrine. “Fiestas and Exchange Pilgrimages: The Yorem Pahko and Mayo Identity, Northwestern Mexico.” Pp. 71-90 in *Pilgrimage in Latin America*, edited by N. Ross Crumrine and Alan Morinis. New York: Greenwood Press, 1991, 73.

¹⁵ Crumrine, *The Mayo Indians of Sonora*, 13.

¹⁶ Blake, “A Iowan Visits Sinaloa: Observations by William E. Blake in 1883;” 256.

¹⁷ Crumrine, *The Mayo Indians of Sonora*, 13, citing Howard Gentry, *Rio Mayo Plants*. Carnegie Institute Publication No. 527, 1942, and *The Warihio Indians of Sonora-Chihuahua: An Ethnographic Survey*. Washington, D.C.: Bureau of Ethnology Bulletin, 196, 186.

¹⁸ Herbert E. Bolton, *Anza’s California Expeditions. Vol. 1. Outpost of Empire*, 227 emphasized the antiquity of the provincial society in which the founders were reared.

¹⁹ John P. Holdren, “Science and Technology for Sustainable Well-Being,” *Science* 319:5862 (25 January 2008) 424-34, 425 Table 1.

from bags slung across the back of a *burro*, filled at the river and emptied through a great horn spigot.²⁰

In 1883, after a railroad reached Culiacan, that city had “neither well nor cistern.” All water is packed by donkeys in leather saddle bags from the river to the houses. The donkey walks right into the house, into the kitchen, up by the side of the oyer [*olla*] into which the water is to be emptied, stands perfectly still until the vessel is filled, steps to the next, or turns and goes out as he may be ordered by the driver.²¹

At Alamos, girls wearing their rebozos at mid-twentieth century still carried river water to their homes in a ceramic olla. Rather than dip water directly from the stream, however, these girls dipped water out of *positos* (little wells), pits excavated into gravel which filters the water. A locally grown bottle gourd serves as a dipper.²²

We think it is safe to infer, therefore, that in 1763-1775, the Culiacán and Sinaloa Rivers were not entirely safe water supplies. The founders of San Francisco were, we believe, subject to some range of intestinal ailments caused by river contamination; others would have been caused by pathogens derived from humans handling vessels carrying water from stream to home, domestic storage vessels, cooling vessels if the founders employed the widespread Spanish-Native American technology of keeping water in porous pots so surface evaporation chilled the stored water, by family members drinking from the same dipper or cup, etc. The June 1775 illness that killed three of Anza’s recruits could very well have been caused by a water borne pathogen.

4.1.3 Laundry

The riverine habitat in which the founders of San Francisco grew up conditioned them to river bank clothes laundering, and stream bathing. Women typically preferred washing clothes in a small creek with handy stones on which to beat garments being washed, and handy bushes nearby on which to spread cloth to sun dry.

This pattern persisted at Culiacán in 1883, when the population had grown into the thousands. “All washing is done on the river bank, and for two miles the bank is lined with women washing, clothes flying and drying, children playing in the water, burros coming and going and standing in the stream while the water pouches are being filled. Bathing is promiscuous, but with proper modesty by the women and girls, but with none whatever by the men and boys.” In post railroad times, soap was replacing yucca suds, although stones still functioned as washboards.²³ Stream bathing was one way to cool off in the warm tropical climate – and cool beer cans or bottles in contemporary times as one former San Miguel de Horcasitas

²⁰ John W. Hilton, *Sonoran Sketch Book*. New York: Macmillan, 1947, 00.

²¹ Blake, “An Iowan Visits Sinaloa,” 270. The donkey “walks around among flower pots, while the driver waters the flowers...”

²² Hilton, *Sonoran Sketch Book*, 171.

²³ Blake, “An Iowan Visits Sinaloa: Observations.... In 1883,” 270.

community member joked. This pattern persisted at Alamos until mid-twentieth century. Women carried heavy bundles of laundry on their heads when they went down to the river to wash.²⁴

European soap was hardly available in colonial Sonora. Spaniards therefore relied largely on a yucca, crushing the stalks to obtain the “milk” which cleaned even silks well. Clothes washed in this manner had to be well rinsed if the wearer were not to itch. Weekly laundering was necessary if Sonorans were to appear in church on Sunday wearing clean linen.²⁵

We have not been able to discover information about the sanitary habits of the founders of San Francisco. It seems quite possible that inhabitants of the Culiacán and Sinaloa riverine oases went out along paths cut through the thorn forest to urinate and defecate. Given the thorniness of that forest, however, people may well have crouched modestly behind phreatophytes along the river banks, or crop plants in their fields, like the ethnic Mayo immediately to the north.²⁶ Such human waste would sooner or later wash into the stream. Thus human digestive tract parasites may well have been water transmitted.

4.1.4 Sonoran Desert

Aboriginal Yaqui country at the southern edge of the Sonoran Desert was heavily vegetated by brushy plants. Mesquite (*Prosopis velutina*) dominated the thorny brush, reinforced by palo verde (*Cercidium microphyllum*), ironwood (*Olneya tesota*), scattered palms, palo blanco, and jito. Stream courses supported riparian willow, cottonwood, and bamboo like *carrizo*. The mesquite dominated by sheer force of numbers.²⁷ “The mesquite is the most numerous, and one can with certainty figure ten of these to one of the other trees.”²⁸ Moreover, the subtropical Mesquite grows large enough to year 20 foot long timbers.²⁹

From Horcasitas (which is to say the lower San Miguel River valley) northward, the colonizing expedition traversed a wide, flat mesquite tree covered plain. Striking the San Ygnacio River, the expedition ascended it, crossed the drainage divide and descended the Santa Cruz River to Tubac.³⁰ Vegetation along the streams was riparian. The giant cardon cactus gave way to saguaro (*Cereus giganteus*), while the Organ Pipe cacti (*Cereus thurberi*, *Lophocereus schottii*) dropped out of the plant mixture.

²⁴ Hilton, *Sonoran Sketch Book*, 85. Hilton did not indicate whether Alamos was like villages where a “girl who would blush to show her ankle in the village may bathe in the nude, and stand waist-deep to wave at passers-by without the slightest embarrassment,” or where “women wear long slips to go into the water, and do not remove them even in sight of each other.” (107).

²⁵ Ignaz Pfefferkorn, *Description of Sonora*, translated by Theodore E. Treutlein. Albuquerque: University of New Mexico Press, 1949, 56.

²⁶ Crumrine, *The Mayo Indians of Sonora*, 111. The field as latrine is widely resorted to a rural Latin America, including the Mestizo villages on the western slope of the Andes (HFD).

²⁷ Ralph L. Beals, *The Aboriginal Culture of the Cáhita Indians*. Berkeley: University of California Press, Ibero Americana 19, 1943, 5.

²⁸ Pfefferkorn, *Description of Sonora*, 71.

²⁹ Hilton, *Sonoran Sketch Book*, 29.

³⁰ Herbert Eugene Bolton, *Anza's California Expeditions Vol. 1, An Outpost of Empire*. Berkeley: University of California Press, 1930, 234.

Streams from the Yaqui River northward carry less water than those from the Mayo River southward in the tropics. These permanent streams all originate outside the desert itself, on the mountainous western slope of the Sierra Madre Occidental or its Rocky Mountain equivalent. Not all of the streams originating on the western flank of the plateau or on “Sky Island” ranges in the desert (the Huachuca Mountains, for example) are permanent or even perennial. Many are intermittent or interrupted. The Huachuca Mountain complex is an example. The intermittent San Pedro, Santa Cruz, Sonoita, Sonora and Magdalena Rivers all rise in the range.³¹

The aboriginal population of the Sonoran Desert learned millennia ago to irrigate food and fiber crops in the oasis valleys of the streams crossing the desert. Colonial Newcomers emulated them. Consequently, the founders of San Francisco were accustomed to riverine habitats, and necessarily skilled crop and garden irrigators.

With surface flow irrigation, especially on a large scale, come “elaborate rules and regulations with respect to water rights,” in colonial America as in Spain.³² The probable minifundium where the founders of San Francisco lived before they migrated would not have lacked rules for apportioning surface run off to field ditches.

Through most of its very extensive range, wheat is a dry farmed crop. It is not, however, dry farmed in the Sonoran Desert. Newcomers irrigated wheat in order to have flour to fashion into bread loaves or tortillas. Anza’s pack train carried wheat flour for tortillas on the expedition.³³

Wheat (and barley) was a winter crop in Sonora. Winter precipitation being unpredictable from December to June, Sonorans led “water to the fields in small ditches.” This was not difficult, ‘especially near rivers,’ according to Ignaz Pfefferkorn, S. J. Experimenting, he obtained a wheat yield of 75 to one.³⁴ In the tropical Culiacán River Valley, wheat was a winter season crop, if it grew at all.

Newcomers and Natives alike irrigated maize, bean, and cucurbit staple foods. Apparently newcomers managed to grow less wheat than they might have liked. According to Ignaz Pfefferkorn, S. J., Sonoran Spaniards got along with posole, pinole, atole, tortillas, and dried beef. He asserted that only the wealthy had mutton or chicken.³⁵ The priest indicated a basically maize diet. The foodstuffs Anza packed for the expedition confirms the importance of pinole (corn meal) and beans in the Sonoran diet. The expedition’s provisions also included chocolate and sugar.³⁶ Some sugar cane was grown under irrigation in Sonora, but it apparently was not a major crop for lack of capital investment in sugar making mills.³⁷

³¹ Dunbier, *The Sonoran Desert*, 73.

³² George M. Foster, *Culture and Conquest, America’s Spanish Heritage*. Chicago: Quadrangle Books, 1960, 64.

³³ Bolton, *An Outpost of Empire*, 223.

³⁴ Ignaz Pfefferkorn, *Description of Sonora*, translated by Theodore E. Treutlein. Albuquerque: University of New Mexico Press, 1949, 46-47

³⁵ Pfefferkorn, *Description of Sonora*, 288

³⁶ Bolton, *An Outpost of Empire*, 223. The officer’s mess also enjoyed ham, sausage, hardtack, cheese, fine chocolate, wine, pepper, saffron, cloves, cinnamon, olive oil, and vinegar.

³⁷ Pfefferkorn, *Description of Sonora*, 50-50.

Sonorans did water garden plants, including peas, lentils, beans, radishes, onions, sweet potatoes, watermelons, pumpkins, and American peppers. These last required watering every other day. It was worth the trouble because chili sauce was a “must serve on and in everything.” The flagship dish was *chile con carne*. To prepare it, the cook split the pepper, removed the seeds and the thickest fibers, crushed the cleansed pod on a stone as water was added, sieved, then boiled with fat and already cooked meat. This dish “appears on the table every day throughout the year, especially at supper time.” Cooks poured the same sauce over boiled fish or baked eggs after they were cooked.³⁸

Jesuit missionaries started fruit orchards in various missions, demonstrating that Old World pomegranates, peaches, apricots, quinces, figs, lemons, and oranges would grow in Sonora.³⁹ The Sonorans did not, however, much emulate the Jesuit orchardists. One reason was the difficulty in harvesting ripe fruit. The problem was faulty enculturation. Packs of children raided the orchards to pick green fruits. So, orchardists had to harvest green fruit or none at all.⁴⁰ Arguably boys would have been as hungry in 1763 as their descendents were in the 1950s. Agrarian parents valued their offspring as candidates to care for them in their old age. Therefore, parents logically avoided alienating children by disciplining them.

In the course of the historic Columbian Exchange, Old World blackberries, and grapefruit also spread to favorable niches in the Sierra Madre Occidental.⁴¹ We are uncertain whether these Old World cultigens reached Sonora before 1763.

Newcomers also watered flowering plants required by their cultural traditions. Family members traditionally cleaned graves of relatives on All Souls Day, and renewed floral offerings or decorations of daisies (*margaritas*). Founder women irrigated daisies, therefore, and cut them as needed.⁴²

Crop irrigators prefer predictable water supplies. They are, therefore doubly sensitive to the extremes of riverine runoff—drought and deluge. Sonora, at least the Sonora River catchment, suffered both in succession in 1770-1773. A very large flood raged down the Río Sonora in 1770. Then drought followed during 1771 and 1772. The result was impoverished mission Native gardeners.⁴³ During the twentieth century, major floods occurred at seven and 35-year intervals. This pattern arguably had not changed since earlier centuries. Most years the hot summers lasted from May to October. The summer monsoon lasted from July through September.⁴⁴

³⁸ Pfefferkorn, *Description of Sonora*, 49, 55, 57-8.

³⁹ Pfefferkorn, *Description of Sonora*, 74.

⁴⁰ Charles J. Erasmus, *Man Takes Control: Cultural Development and American Aid*. Minneapolis: University of Minnesota Press, 1961m 6.

⁴¹ Hilton, *Sonoran Sketch Book*, 53; Alfred W. Crosby, Jr., *The Columbian Exchange: Biological and Cultural Consequences of 1492*. Westport: Greenwood Pub. Co., 1972, 66, 68.

⁴² Charles R. Carlisle & Bernard L. Fontana, “Sonora in 1773L Reports from Five Jaliscan Friars (Part II),” *Arizona and the West* 11:2 (Summer 1969) 179-190, 186.

⁴³ Carlisle & Fontana, “Sonora in 1773: Reports from Five Jaliscan Friars (Part II),” 190, 186; William Marvin Mason, *The Census of 1790: A Demographic History of Colonial California*. Menlo Park: Ballena Press Anthropological Papers No. 45, 1998, 66 [1770 flood].

⁴⁴ Erasmus, *Man Takes Control*, 190.

Although Sonora Spaniards viewed farming as civilized activity, they did not disdain gathering and consuming at least some desert plant products. An important spice was the *chiltipin*, a most piquant wild *capsicum*. Pfefferkorn reported that it grew “on many hills” and described the plant presumably from personal observation.⁴⁵ Natives may have picked the chiltipines and swapped them to the Spaniards. The latter served the round pepper on a salt cellar, allowing each person to take as much as he desired.

Like other residents of colonial Sonora, the founders of San Francisco turned their otherwise quite bland diet quite piquant with chiltipines (*Capsicum annum*). Indeed, judging from late twentieth century treatment of chiltipines growing in the Río Fuerte headwaters, the founders grew up to be true connoisseurs of the chiltipin. The berry “is a hot, spicy condiment that is widely harvested, sold and eaten.” The modern ethnic Mayo “recognize populations with berries of different potency.” Arguably, the potency of chiltipines would have influenced their marketing during the eighteenth century. The founders of San Francisco would have been among the Sonoran “Spaniards” whom Pfefferkorn described as purchasing chiltipines to eat. A short shrub near Cucurpe, Pfefferkorn’s last mission post, grew to as much as two meters in the tropical deciduous forest by “leaning” on other shrubs.⁴⁶

Water borne pathogens were not the only threats colonial Sonorans faced. Epidemic bacteria and viruses not infrequently spread through the Sonoran population causing catastrophic mortality. Smallpox struck in 1762-1764,⁴⁷ as measles did in 1768-1770. Even today the health of poor people is threatened by “heavy pathogen loads, environmental exposure, inadequate sanitation infrastructure, and socio-economic barriers to behavior change.”⁴⁸ We believe that such conditions were obtained in colonial Sonora.⁴⁹

4.1.5 Fuel Wood

During the twentieth century, a few indigenous communities in the central Andes planted groves of eucalyptus trees on steep or poor quality soil. (Native to Australia, the eucalyptus was imported to the Andes and the Sonoran Desert because it grows rapidly with relatively little irrigation.)⁵⁰ Some communities fashioned furniture from the soft eucalyptus wood, but most cut their trees for fuel wood. Throughout Hispanic America, rural peasants cook and heat their homes with wood fires. At mid-twentieth century, ethnic Tarahumara customarily spent an hour per day with hatchet in hand cutting firewood for cooking and heating.⁵¹ The Tajin Totonac,

⁴⁵ Pfefferkorn, *Description of Sonora*, 50.

⁴⁶ Van Devender, et. al., “Vegetation, Flora, and Seasons of the Rio Cuchujaqui. . . . Near Alamos, Sonora,” 61.

⁴⁷ José de Gálvez, *Informe General que en virtud de real orden instruyo y entegro el excelentísimo señor Marqués de Sonora. . . al Excmo. S.r Virrey Frey D. Antonio Bucareli y Ursúa, con fecha de 31 de diciembre de 1771.*

MexicoL Imprenta Imperial, 1866, 57.

⁴⁸ Temina Madon, Karen J. Hofman, Linda Kupfer, and RogerI. Glass, “Implementation Science,” *Science* 318:5867 (14 Dec. 2007) 1728.

⁴⁹ Henry F. Dobyns, “*Their Number Became Thinned*”: *Native American Population Dynamics in Eastern North America*. Knoxville: University of Tennessee Press, 1983, 15, 17.

⁵⁰ Henry F. Dobyns, *The Social Matrix of Peruvian Indigenous Communities*. Ithaca: Cornell University Department of Anthropology Cornell Peru Project Monograph, 1964, 93-94.

⁵¹ John G. Kennedy, *Inapuchi*. Mexico: Instituto Indigenista Interamericano, Ediciones Especiales, 58, 1970, 80.

living in a virtually destroyed tropical forest, still depended on fuel wood for cooking and occasional heating.⁵² Typically, wood cutters depauperate always expanding areas around each rural settlement. Once the native vegetative cover is removed, small springs run dry, and soil erosion typically follows.

This course of events has characterized rural Mexico. Recognizing this problem, the national government created a Forestry Department to regulate forest use. Legally, this department levies a tax on wood cutters and charcoal makers.⁵³

The founders of San Francisco came from a rural society dependent on fuel wood for cooking foods and for space heating. When Commanding Inspector Hugo O’Conor moved the garrison of San Ygnacio de Tubac downstream on the Santa Cruz River to Tucson in 1775, for example, he named three basic criteria for siting the new military post. The “requisite conditions” were “water, pasture, and wood” as well as a location strategically placed to defend the province against Apache depredations.⁵⁴ On the same theme, one objection raised in 1772 to the site proposed for the abortive Franciscan mission project at Carrizal in Comcáac country was that “there was very little firewood and no wood for building.”⁵⁵

The Santa Cruz River mesquite forest between San Xavier del Wa:k and Tucson appears to have been the prevailing Sonoran pattern, and the dearth of trees around Carrizal the exception. For firewood was purportedly never lacking because of the numerous mesquite thickets in the province.⁵⁶ The founders of San Francisco seemingly came out of a desert environment abundant in firewood—mainly Mesquite with its flavorful smoke.

Smoke from open cooking or heating fires has a negative impact on human health. At the beginning of the twenty-first century, the smoke of ineffective stoves and pots caused an estimated 1,600,000 deaths annually, mostly women and children.⁵⁷ The founders of San Francisco came from a society suffering proportionate mortality from smoke from open fires.

4.1.6 Herbalists

The Sonoran province lacked doctors or surgeons or apothecaries. Consequently, Sonoran Spaniards relied on a number of herbal remedies, like colonial Spaniards everywhere in the Americas. Old Spanish women served as herbalists – “old Spanish women who have set themselves up as a sort of royal tribunal of medicine.”⁵⁸ It seems quite remarkable, therefore, that Lt. Col. Juan B. Anza functioned as a doctor to the founders of San Francisco during their long

⁵² Isabel Kelly and Angel Palerm, *The Tijin Totonac Part 1 History, Subsistence, Shelter and Technology*. Washington, D. C.: Smithsonian Institution, Institute of Social Anthropology. Pub. 13, 1952, 72.

⁵³ Oscar Lewis, *Life in a Mexican Village: Tepoztlán Restudied*. Urbana: University of Illinois Press, 1951, 116. Residents of Tepoztlán have clashed with residents of adjacent haciendas over access to forests. (114)

⁵⁴ Henry F. Dobyns, *Spanish Colonial Tucson, A Demographic History*. Tucson: University of Arizona Press, 58. Certification by O’Conor, Fr. Francisco Garcés, and Juan Fernandez Carmona.

⁵⁵ Sheridan, *Empire of Sand*, 409, following Juan Domingo Arricivita, *Crónica Seráfica*.

⁵⁶ Sheridan, *Empire of Sand*, 23, 24.

⁵⁷ Thomas L. Friedman, *Hot, Flat, and Crowded: Why We Need a Green Revolution—and How It Can Renew America*. New York: Farrar, Straus & Giroux, 2008, 155.

⁵⁸ Pfefferkorn, *Description of Sonora*, 64-65.

journey. “His office of doctor at times overshadowed his position as captain.”⁵⁹ One may speculate that Juan the Younger learned how to treat ill people from his undoubtedly redoubtable mother.

Sonoran Spaniards considered several local plants medicinal, surely having learned from Natives their belief in specific curative properties of plant species native to the Sonora desert. A Jesuit expelled from New Spain in 1767 later wrote a book about Sonora in which he identified a number of herbal remedies which Sonoran Spaniards resorted to. Another Jesuit who had described the province in 1764 also identified herbal remedies. Thus their accounts can be checked against each other.

Juice expressed from *agave* leaves serves as an antiscorbutic. Like other distilled alcoholic beverages, mescal served to settle the stomach. “This liquor, when applied externally to wounds or bruises caused by blows or falls, is very efficacious.” Pit roasted maguey stalks prevented hunger for poor people. Chicamilla plants provided a gentle laxative. Pipichagui, a kind of wild lettuce (probably *Perezia adnata*), root also functioned as a laxative and restored menstruation. A greenbriar (*Smilaxboma-nox*) root decoction also promoted menstruation.⁶⁰

Sonorans considered *jaramatracá* (*Wilcoxia tuberosus*) a cure-all—stomach ailments, insect stings and bites, malaria, diarrhea, and nose-bleed. No plant, in their opinion, approached it in miraculous power. Even Gachupines believed, provincial Governor Juan Mendoza among them.⁶¹

Snakes, scorpions, and other poisonous insects abounded in the Sonoran Desert.⁶² Spaniards applied the root of *contra yerba* to bites and stings. The plant spread its leaves over the ground. Rattlesnake weed (*Myriadenus tetraphylus* or *Zornia tetraphrilla*) was a specific against snake bite. Sonoran gum (probably *Coursetia glandulosa*) taken internally countered scorpion stings, spider and insect bites.

Engaged in rural, agrarian pursuits, Sonoran Spaniards not infrequently suffered wounds. Their herb of first choice of treating wounds was *matadura*. People ground the plant into a powder which they poured onto wounds.

⁵⁹ Bolton, *Anza's California Expeditions Vol. I An Outpost of Empire*, 266; Nentvig, *Rudo Ensayo*, 46, 43.

⁶⁰ Pfefferkorn, *Description of Sonora*, 60-61; Nentvig, *Rudo Ensayo*, 35, 47-48.

⁶¹ Pfefferkorn, *Description of Sonora*, 62; Nentvig, *Rudo Ensayo*, 50-51.

⁶² James C. Rorabaugh, “An Introduction to the Herpetofauna of Mainland Sonora, Mexico, with Comments on Conservation and Management,” *Journal of the Arizona-Nevada Academy of Science* 40:1 (2008) 20-65 lists snakes widely distributed in Sonora: Boa constrictor, *Culebra brillante* (*Arizona elegans*), Corlillo flso (*Chilomeniscus stramineus*) (45), Nightsnake (*Hypsiglena torquata*), Kingsnake (*Lampropeltis getula*), milk snake (*Lampropeltis triangulum*) (47), Whip snake (*Masticophis bilineatus*), Coachwhip (*Masticophis flagellum*) (48), Brown vine snake (*Oxybelisaeneus*), Saddle leaf nose snake (*Phyllorhynchus browni*), Gophersnake (*Pituophis catenifer*) (49), Coralsnake (*Micruroides euryxanthus*) (53), Diamond back rattlesnake (*Crotalus atrox*), Sidewinder (*Crotalus cerastes*) (54), Tiger Rattlesnake (*Crotalus tigris*) (55) and others with smaller habitats.

The Newcomers in Sonora believed that *toloache* or jimsonweed leaves (*Datura stramonium*) applied to a swelling or abscess would open it in a few hours. They were more or less aware that Natives employed parts of this plant as a hallucinogen.⁶³ Sonoran Spaniards labeled *pasmo* nerve twitching that developed from inflammatory fevers. Logically, they used *yerba del pasmo* to treat the symptoms, at least. They boiled portions of the woody stemmed seep willow plant (*Baccharis pteronioides*) in water and then administered the herbal tea to the patient. This tea was also used to ameliorate symptoms of lockjaw, tetanus and the common cold. The fever herb (*Iresine calea*) made into a tea was drunk to reduce fevers, whatever their causes.⁶⁴

Widely distributed *chayotillo* when dried and steeped for seven or eight minutes in lukewarm water made an effective emetic. An infusion made with the fresh plant was too strong to be drunk safely.⁶⁵ Tea made from *cenizo* (*Atriplex canescens*) also functioned as a laxative, reportedly cured jaundice and *susto*.⁶⁶ J. Frank Dobie recorded oral tradition of its use near the junction of Zacatecas, Nuevo León, and Coahuila states on the Mesa Central. Botanists Thomas H. Kearney and Robert H. Peebles reported that it ranges into northern Mexico. We infer, therefore, that the plant called *cenizo* ranged through Sonora.

Herbalists administered the stinking *hedionda* or *hediondilla* to de-worm both adults and children. This shrub – creosote bush (*Larrea tridentata*) in places grew in extensive thickets. Fried in tallow, the leaves made an ointment to massage into rheumatic joints.⁶⁷

The jojoba bush (*Simmondsia chinensis*)⁶⁸ appeared in the desert vegetation on the hills from Santa Maria Magdalena north and east. In other words, only the founders from Tubac could have been familiar with it; Horcasitas and Culiacán were too far south. Sonorans considered the fruit a fine remedy for aching stomachs, although ingesting too much could produce constipation. Roasting and grinding the fruit produced an oil to apply to hardened swellings so they would burst. Jojoba oil worked even better than *yerba del pasmo*.

Mesquite trees (*Prosopis*) exuded not only an edible gum, but also a sap. This sap was then “employed in the treatment of sores.”

Sonoran herbalists perceived fruit from the frijolillo tree a remedy for toothache. The tree itself was dry like cork.⁶⁹

The Sonorans used an infusion of the root of manzo grass or *Yerba mansa* (*Anemopsis californica*) as a remedy for various ailments, as a mouthwash to relieve toothache. Fried in

⁶³ Pfefferkorn, *Description of Sonora*, 63; Thomas H. Kearney and Robert H. Peebles, *Flowering Plants and Ferns of Arizona*. Washington, D. C.: Government Printing Office, Department of Agriculture, Misc. Pub. 423, 1942, 728.

⁶⁴ Pfefferkorn, *Description of Sonora*, 64; Kearney & Peebles, *Flowering Plants and Ferns of Arizona*, 933; Nentvig, *Rudo Ensayo*, 47.

⁶⁵ Pfefferkorn, *Description of Sonora*, 65.

⁶⁶ J. Frank Dobie, *Tongues of Monte*. Garden City: Doubleday, Doran & Co., 1935, 19. 3; Kearney & Peebles, *Flowering Plants and Ferns of Arizona*, 273 [also chamizo and chamiza or fourwing saltbrush in English].

⁶⁷ Pfefferkorn, *Description of Sonora*. 65; Nentvig, *Rudo Ensayo*, 50.

⁶⁸ Kearney & Peebles, *Flowering Plants and Ferns of Arizona*, 547.

⁶⁹ Pfefferkorn, *Description of Sonora*, 73; Nentvig, *Rudo Ensayo*, 40, 49.

tallow, it makes an ointment which when applied to “fresh wounds or postpartum tears brings about healing.” The Antonio Armijo expedition from New Mexico to California in 1829-1830 employed *Yerba mansa* as a place name. Swallow’s herb (*Euphorbia prostrata*) was also applied to fresh wounds.⁷⁰

Rural Mexicans used plants to treat animals as well as human beings. A common and common sense treatment of sprains consisted of either prickly pear pad or maguey leaf split and heated before applying to the injured part.⁷¹

4.1.7 Functional Folklore and St. John

People intimate with the flora and fauna with which they live, and upon which they depend, tend to develop considerable folklore about these plants and animals. Indeed, they bandy about *dichos* relating them to their environment. Dobyns grew up in Tucson and Casa Grande hearing frequently the dicho that the summer rains began on St. John’s Day, which is 24 June. In actual fact, the southern Arizona monsoon starts more frequently than not on 10 July. Folklorist J. Frank Dobie recorded this dicho on the Central Plateau not far north from Zacatecas. Pues, “as everybody knows the time for the rainy season to begin is the Day of San Juan, the twenty-fourth of June.”⁷²

Aha! This dicho has diffused northward to the Sonoran Desert, where it no longer actually applies. This dicho did not originate on the desert where there is both a summer monsoon and winter precipitation. This dicho originated far to the south in Mesoamerica or its northern frontier where there are only two seasons, wet and dry. “The people do not distinguish more than the rainy season, which is very wet, and the dry season, equally dry.”⁷³

The dicho concerning St. John’s Day and the rainfall necessarily diffused through Sinaloa and Sonora to reach Tucson on the Spanish colonial frontier. We have no idea how it managed to do so, becoming counter productive in the process!

George M. Foster pointed out that thousands of local Roman Catholic festivals observed in Spain failed to cross the Atlantic Ocean to the Americas. Only a standard core of what the church defined as basic observances is celebrated through former colonial Spanish America. St. John’s Day is not one of the basic observances. Yet, its celebration seems to be too widespread for it to be dismissed as simply one of the welter of Peninsular saints’ days that reached the colonial Americas. Listening to the fireworks anywhere in the Andes on St. John’s Eve, one could easily think that this is one of the core observances. Admittedly, the people are making the noise, not the clergy.⁷⁴

We do not desire to leave readers with the impression that St. John’s Eve and Day were observed only in the rural parts of colonial Spanish America. Urbanites also observed the

⁷⁰ Kearney & Peebles, *Flowering Plants and Ferns of Arizona*, 214; Nentvig, *Rudo Ensayo*, 47.

⁷¹ Dobie, *Tongues of Monte*, 35.

⁷² Dobie, *Tongues of Monte*, 83.

⁷³ Mariano Cuevas, S. J., *Historia de la Inglesia en Mexico. Tomo Primero 1511-1548*. Mexico: Editorial Patria, 1947, 136.

⁷⁴ HFD personal observation; Foster, *Culture and Conquest*, 128, 208 n. 6, citing Frances Toor, *The Three World’s of Peru*. New York,: 1949, 134, 217-18.

anniversary in an urbane manner. In the city of Querétaro, for example, the populace of all classes promenaded through the streets, gardens and along the river banks on the afternoon of St. John's Day. One attraction was the music played for the occasion. Another attraction consisted of the races and games to watch or to participate in.⁷⁵

Foster found diverse activities on St. John's Day in New Spain. In some places, unmarried women try to prognosticate the name of their future husbands. Some stockmen take their cattle to bathe for their health at dawn on 24 June. People may bathe for the same reason. Shepherds' contracts run from 24 June to 24 June, or from 29 June to 29 June (St. Peter's Day). In Venezuela, contracts also run from San Juan to San Juan.⁷⁶

St. John plays a large role in Mayo ceremonialism. (The Mayo are the aboriginal ethnic group located immediately north of the Culiacán-Sinaloa River territory where the founders grew up.) On the Sunday preceding 24 June, people in the southern Mayo ceremonial center decorate many crosses with new red flowers. At houses where a household member has promised to serve St. John on his day, people cover house yard crosses with red laurel. During the preparatory week, *Paskome* (ceremonial hosts) are active around the church and various *ramadas* (food, etc.). Paskome of the Holy Trinity from one town and Holy Cross from another town will recite the proper prayers, prepare food, recruit deer dancers, *pascola* dancers, and diverse musicians including a water drummer. The head pascola preaches a sermon explaining the week-long period of reversal of normal roles as approved by the saints. Deer songs are sung in highly allegorical and poetic Mayo.⁷⁷

On St. John's Day, members of the two Mayo sodalities dramatize their special ritual relationship to St. John. Leaving the church at mid-morning, a procession makes 13 stops for the maestro to read selections of Christian literature, for musicians to play and *matachines* and others to dance. The procession reaches the river where myth history holds that the local image of St. John jumped into the stream to save itself from the anti-church campaign of statue burning by government officials in the mid-1920s. A ritual official delivers a speech in Mayo to the river. Another officiant undresses the statue, and presents it three times to each of the four directions, finally dipping it in the stream. Officiants then baptize each other with the river water. They then dress again, and the procession reforms and returns to the church.⁷⁸

Ethnic Mayo have further naturalized St. John the Baptist. Disregarding Christian scripture, Mayos say that St. John christened Christ in the, to them, sacred Mayo river with its sacred water.⁷⁹ This is a fundamental postulate of Mayo culture. Immediately to the south, the founders of San Francisco may have held similar fundamental postulates relating St. John to the Sinaloa and Culiacán Rivers.

⁷⁵ Juan Domingo Arricivita, *Crónica seráfica apostólica del colegio de propaganda fide de la Santa Cruz de Querétaro en Nueva España*. Segunda parte. Mexico: Felipe de Zúñiga y Ontiveros, 1792, 307-308.

⁷⁶ Foster, *Culture and Conquest*, 128, 208 n. 6, citing Toor, *The Three Worlds of Peru*, 134, 217-18.

⁷⁷ Crumrine, *The Mayo Indians of Sonora*, 26.

⁷⁸ Crumrine, *The Mayo Indians of Sonora*, 116.

⁷⁹ Crumrine, *The Mayo Indians of Sonora*, 79.

At this writing, we are seeking information concerning the significance of St. John's Day to the founders of San Francisco, convinced that it was something out of the ordinary. The distinctive and significant role that St. John plays in contemporary Mayo ritual just north of the area whence came the founders of San Francisco suggests that St. John may well be or have been equally important in the ritual round with which the founders grew up. Admittedly, the Mayo St. John statue saving itself from being burned during the 1920s anti-church campaign of the Mexican government is a distinctive as well as very recent elaboration of the role of this saint in Mayo mythistory, which certainly did not exist in 1763-1776. Still, this Mayo elaboration built on a very firm foundation of devotion to St. John that existed when the government "persecutions" began. Immediately to the south, St. John may well have been as important to the residents of the Culiacán and Sinaloa River Valleys as he was to those in the Mayo River Valley. At the very least, the founders may have grown up offering watermelon (an Old World domesticated plant Spaniards introduced to the Americas) to St. John on his day.⁸⁰ Mayo ceremonial exchange reaching as far south as the Guásavas River would have spread knowledge of the Mayo devotion to St. John.

4.1.8 Avian Exuberance

The Sonoran Desert north of Guaymas was not particularly hospitable toward birds, yet they abounded. The riverine oases, taking the middle Gila River as representative, supported breeding populations of quail, dove, woodpeckers, yellow-billed cuckoo (*Coccyzus americanus*), pied-billed grebe (*Podilymbus podiceps*), green heron (*Ardeola virescens*), least bittern (*Ixobrychus exilis*), Ferruginos pygmy-owl (*Glaucidium tyrannulus*), brown-crested flycatcher (*Myiarchus tyrannulus*), vermilion flycatcher (*Pyrocephalus rubinus*), barn swallow (*Hirundo rufica*), yellow warbler (*Dendroica petechia*), common yellowthroat (*Geothlypis trichas*), yellow-breasted chat (*Icteria virens*), and summer tanager (*Piranga rubra*), turkey vulture (*Cathartes aura*), raven (*Corvus corax clarionensis*), snowy egret (*Ardea thula*), and Say's phoebe (*Sayornis saya*).

The riverine oasis attracted over wintering populations of geese – Canada goose (*Branta canadensis*), white-fronted goose (*Anser albifrons*), snow goose (*Anser caerulescens*) – ducks – pintail (*Anas acuta*), common merganser (*Mergus merganser*) – whistling swan (*Olor Columbianus*), great-blue-heron (*Ardea Herodias*), black-crowned night heron (*Nycticorax nycticorax*), of raptors including harris hawk (*Parabuteo unicinctus*), golden eagle (*Aquila crysaetos*), belted kingfisher (*Megaceryle alcyon*), and the sandhill crane (*Grus canadensis*), American coot (*Fulica americana*), bridled titmouse (*Parus wollseberi*), and long-billed marsh wren (*Cistothorus palustris*),⁸¹ etc.

South of Guaymas and especially from Alamos southward tropical birds abounded. Their brilliantly colored feathers glittered through the thorn forest while their songs and calls constantly reminded people of their presence. Parrots loomed large in numbers and visual impact, ranging from the large Sonoran military macaw (*Ara militaris*) through half dozen species including the Thick-billed Parrot (*Rhynchopsitta pachyrhyncha*), Mexican parrotlet

⁸⁰ Crumrine, *The Mayo Indians of Sonora*, 79.

⁸¹ Amadeo M. Rea, *Once a River: Bird Life and Habitat Changes on the Middle Gila*. Tucson: University of Arizona Press, 1983, 80 extirpated species; 127-28, 199-200, 143-44, 184-85.

(*Forpus cyanopygius*), white-fronted parrot (*Amazona albifrons*), and lilac-crowned parrot (*A. finschi*) to green-parakeet (*Aratinga holochlora*) the size of canaries which flew in flocks numbering in the thousands. Macaw pairs nested on the slope of the Sierra Madre Occidental. These parrots inhabited both deciduous and coniferous forests.⁸² Also brilliantly plumaged is the elegant trogon (*Trogon elegans*).

North American birds such as the jay had much longer tails in Sonora, and much brighter colored feathers. The most spectacular of the thorn forest jays is the black-throated magpie jay (*Calocitta collieri*), with its blue, white, and black feathers and long trailing tail. At least three species of jays lived south of Los Alamos: Steller's Jay (*Cyanocitta stelleri*), Purplish backed Jay (*Cyanocorax beecherii*), and Mexican Jay (*Aphelocoma ultramarina*).

Game birds include the often hunted Rufus bellied chachalaca (*Ortalis wagleri*), elegant quail (*Callipepla douglasii*), Montezuma quail (*Cyrtonyx montezumae*), rock dove (*Columba livia*), and red-billed pigeon (*C. flavirostris*).

A dozen migratory ducks visit wetlands south of Los Alamos, including mallard (*Anas platyrhynchos*), blue-winged teal (*A. discors*), cinnamon teal (*A. cyanoptera*), green-winged teal (*A. crecca*), northern pintail (*A. acuta*), American wigeon (*A. americana*), gadwall (*A. strepera*), northern shoveler (*A. clypeata*), canvasback (*Aythya valisineria*), ring-necked duck (*A. collaris*), and lesser scaup (*A. affinis*), hooded merganser (*Lophodytes cucullatus*), common merganser (*Mergus merganser*), and black-bellied whistling duck (*Dendrocygna autumnalis*).

Raptor/scavengers south of Los Alamos included two roadrunners, the greater (*Geococcyx californianus*) and the lesser (*G. velox*); the carrion eagle, solitary eagle (*Harpyhaliactes solitarius*), a pair of buzzards -- black-vulture (*Coragyps atratus*) and turkey vulture (*Cathartes aura*) -- a dozen hawks including the common black-hawk (*Buteogallus athracinus*), the great-black-hawk (*B. urubitinga*), short-tailed hawk (*Buteo brachyurus*), white-tailed hawk (*B. albicaudus*), zone-tailed hawk (*B. albonotatus*), red-tailed hawk (*B. jamaicensis*), sharp-shinned hawk (*Accipiter striates*), Cooper's hawk (*A. cooperii*), northern goshawk (*A. gentiles*), gray hawk (*Asturina nitidus*), crane hawk (*Geranospiza carulescens*), Harris's hawk (*Parabuteo unicinctus*), and Swainson's hawk (*Buteo swainsoni*).

There were half a dozen falcons, including the crested caracara (*Caracara plancus*), peregrine falcon (*Falco peregrinus*), bat falcon (*F. ruficularis*), merlin (*F. columbarus*), American kestrel (*F. sparverius*) and the laughing falcon (*Herpetotheres cachinnans*).⁸³

Moreover, there were seven owls including the great horned owl (*Bubo virginianus*), western screech owl (*Otus kennecottii*), the vermiculated screech owl (*O. guatemalae*), the Central American pygmy owl (*Glaucidium griseiceps*), the Furriginus pygmy owl (*G. brasilianum*), the elf owl (*Micrathene whitneyi*), and the mottled owl (*Ciccaba virgata*).

⁸² John W. Hilton, *Sonoran Sketch Book*. New York: Macmillan, 1947, 47, 53, 191, 194, 196, 197.

⁸³ Hilton, *Sonoran Sketch Book*, 191-92, 195, 197.

Other bright birds included the paloma azul (blue dove) of pigeon size, the pheasant sized chachalaca, koa, crested woodpecker, whippoorwill, squirrel cuckoo, a baker's dozen of hummingbirds, and the Russett-crowned mot-mot (*Momotus mexicanus*).⁸⁴

The avian exuberance that the founders of San Francisco grew up taking for granted was and is partly a matter of sheer numbers. Ornithologists have documented 350+ avian species in Sonora south of Los Alamos, so the number between the villas of Culiacán and Sinaloa should be at least that. The bright plumage of many large birds in the deciduous thorn forest has attracted much human attention, ranging from hunting and capture and commerce to admiration. The environment in which the founders of San Francisco grew up in was as rich in avian and plant resources as it was poor in cash.

4.2 The General Configuration of Sonoran Culture, 1763-1775

In reconstructing the Sonoran culture which conditioned the founders of San Francisco until they embarked upon their epic colonizing journey, we usually proceed from generalizations to specificities. That is to say that we describe a cultural pattern or even a trait that has been identified as part of historic (1519-1763) colonial Spanish, or contemporary Hispanic American or Mexican culture. In anthropological terms, all of Hispanic America constitutes a single culture area, making this procedure feasible.⁸⁵ Then we infer that a pattern or trait which presently persists from the period of this analysis from the 1763 Treaty of Paris terminating the Seven Years' War to the departure of the Anza expedition in late 1775. Whenever possible, we then confirm that Sonorans shared in that pattern or trait during the pertinent time period from contemporary written or behavioral evidence.

When evidence from 1763-1775 Sonora allows, we rely upon eye witness testimony which was written down at that time or within a reasonable period after. For example, the reminiscences of a Jesuit missionary expelled from New Spain in 1767 may be presented without evidence of twentieth century survival of a cultural pattern. While a priest's memory arguably did not recall everything he witnessed in Sonora with complete accuracy, at least he reminisced about what he actually saw and heard prior to his order's 1767 expulsion from colonial America.

4.2.1 Crucial Components of Conquest

As Europeans, Spaniards in the Americas enjoyed military superiority over Native American peoples which facilitated the Spanish conquest of those natives. Scholars from the conquerors themselves to contemporary academics have repeatedly analyzed from various perspectives the crucial components of conquest of the Americas – pathogens, steel, cannon, horses, and cattle. Indeed, Jared Diamond entitled a wide ranging semi-philosophical analysis of the differential resilience of human societies *Guns, Germs, and Steel: The Fates of Human Societies*.⁸⁶

⁸⁴ Hilton, *Sonoran Sketch Book*, 135-36, 191, 196, 101, 131.

⁸⁵ George M. Foster, *Culture and Conquest: America's Spanish Heritage*. Chicago: Quadrangle Books,

⁸⁶ New York: W. W. Norton, 1999.

The Spanish conquest of the Americas involved not only weapons and warhorses and wardogs, but also a biological offensive by means of not only human pathogens but animals including horses, cattle, donkeys, goats, sheep,⁸⁷ dogs, cats, and pests such as rats. The changes wrought by these multiple forms of life redistributed about the globe have been brilliantly explicated by Alfred W. Crosby in *Ecological Imperialism: The Biological Expansion of Europe, 900-1900*,⁸⁸ and the process perceptively labeled by Crosby as *The Colombian Exchange*.⁸⁹

4.2.2 Rural Agrarian Milieu

The present essay outlines the technology of conquest and change not overtly military. In other words, our concern here is pacific technology of food and fiber production by Spaniards themselves, and by subjugated Native Americans paying tribute and other exactions. Cities and towns constituted an important part of the technology of conquest. At mid eighteenth century, cities and towns remained concentrated in the Mesoamerican or Southern portion of colonial New Spain. Only there did population densities remain high enough to support urban life.

In contrast, in 1763-1775, the population of Sonora was overwhelmingly rural. There was but one true city, the long enduring mine camp of Alamos, located at the southern edge of the province. While truly urban and relatively prosperous, Alamos itself was not notably large. As discussed previously, Sonora lacked even a seaport until colonial authorities founded Guaymas in 1767 during the Comcáac conflict.

A placer gold discovery in 1770 triggered a rush to Cieneguilla of perhaps 5,000 miners, merchants, and laborers, creating the second largest settlement in Sonora. Its location was again peripheral barely within extremely arid Tohono O'odham territory and exposed to Comcáac raiding.

Rural life in Sonora was necessarily agrarian. The United States English word "agrarian" carries a connotation of Jeffersonian agricultural yeomanry which can mislead, however, when applied to Spanish colonial life. This analytical difficulty is illustrated in discussion of Mesoamerican society in the late twentieth century: "agrarian versus conservative," and "radical agrarian peasants."⁹⁰ Agrarian eighteenth century Sonora engaged in mixed farming with a cattle and horse husbandry component rather more important than it was in English speaking North America.

4.2.3 Patria Chica

The Spanish colonial countryman pledged his allegiance to a very specific relatively small area known in Spanish as the *patria chica* (the little Fatherland). By definition, the patria

⁸⁷ Isabelle Allende, *Ines of My Soul*. London: Fourth Estate, 2006, 230.

⁸⁸ Cambridge: Cambridge University Press, 1986

⁸⁹ Alfred W. Crosby, Jr., *The Colombian Exchange: The Biological and Cultural Consequences of 1492*. Westport: Greenwood Press, 1972.

⁹⁰ Frans J. Schryer, "Discussion and Conclusions: Agrarian Conflict and Pilgrimage." Pp. 357-68 in *Pilgrimage in Latin America*, edited by N. Ross Crumrine and Alan Morinis. New York: Greenwood Press Contributions to the Study of Anthropology No. 4, 1991, 364.

chica is where an individual is born. The colonial Spaniard, like his contemporary descendant,⁹¹ intensely loved his natal place, and suspected all outsiders.

4.2.4 The Image of Limited Good

Social scientists have identified an image of limited good as characteristic of peasant part-societies world wide. Perceiving good things as limited is closely related to the pattern of worrying about what the neighbors will say that we discussed above.

Owning land, especially productive land such as irrigated fields to grow row crops and pasture, was a major value and goal of colonial Spanish Americans, including Sonorans, whether of Native or Newcomer ancestry. Native ethnic groups actually perceived themselves as inhabiting what were to them Holy Lands upon which their creators, according to their several cosmologies, had placed them.⁹² The Roman Catholic priests in the Americas taught about the Christian Biblical Holy Land, but their Hispanic parishioners perceived land as a principal fruit of colonial conquest.

The image of limited land prevailed throughout rural Sonora, as elsewhere in New Spain.⁹³ This perception handicapped cooperation, inasmuch as people believed that one individual could enlarge his or her land holding only at the expense of someone else.

Productive land was in fact finite in rural Sonora. Riverine valley irrigation systems consisted of very well defined canals, ditches, and laterals, and the fields to which these conducted surface water. Green irrigated fields contrasted starkly with brown unirrigated uplands, so they were highly visible. Yet an irrigation system defined not only the maximum production potential achievable when all inputs were favorable – neither deluge nor drought, neither late nor early frost, no plague of insects, but bees enough to pollinate flowers creating crops. Rarely were all factors favorable, growing up in such an environment, the founders of San Francisco realistically perceived production outcomes as limited.

Colonial governance focused significantly upon transferring American land from Native to Newcomer control. The Spanish king, viceroys, provincial governors, and military post commanders made grants of land to Newcomer individuals or communities.

Virtually as soon as the San Miguel de Horcasitas military post garrison took up its position between the Jesuit missions to the Comcáac (Pópulo and Los Angeles) soldiers began to seize land and stream flow to irrigate it. The establishment of the military post on the Río San Miguel between the missions doomed the missionary effort to convert Comcáac to Christianity by resettling them on irrigated farms as subsistence gardeners instead of fisher-hunter-gatherers. Viceregal agent José Rodríguez Gallardo's Comcáac extermination policy sanctioned local Spanish land seizures at the highest level of colonial governance.

⁹¹ Foster, *Culture and Conquest*, 18, 34.

⁹² Edward H. Spicer, "Worlds Apart," *Arizona Quarterly*, (1957).

⁹³ Foster, *Tzintzuntzan*, 124.

In twentieth-century Latin America, barriers to social mobility were great.⁹⁴ This disheartening reality interacted with the prevailing image of limited good to foster a pessimistic outlook. We infer that this theme shaped San Francisco founder culture some years earlier. An interesting corollary to the prevailing image of limited good arose in Sonora. This was a widespread belief in buried treasure. Finding buried treasure serves to “explain” how and why a hard working peer succeeds while his envious neighbors do not. The twentieth century belief specifies treasure in gold coins.⁹⁵ Such coins were so scarce in 1763-1776 Sonora that the buried treasure myths may well have risen later.

4.2.5 Molino or Metate

Novelist Isabel Allende had Spaniards in Chile building grain mills (*molinos*) by the mid sixteenth century. Spanish South America and Spanish North America diverged in terms of the technology of processing staple food grains into flour. In Chile, where wheat grows well, Spaniards processed the grain with water powered mills equipped with European style milling stones. In the central Andes, Quechua speaking natives processed wheat and corn with a *batan*, a rocker of quarter-moon shape, upper stone crushing grains on a waist high nether boulder.⁹⁶ In Mesoamerica and northern New Spain, native women ground wheat or maize kernels into flour or corn meal on *metates* (nether stones) with hand held *manos*. The women of Acoma Pueblo, for example, ground grain on a battery of three metates sloping like a wash board in a tub. Each metate made the meal finer than the one before. Women sang maize grinding songs while they ground.⁹⁷

Even legged metates stood but a few inches above the floor level, so native women knelt in front of the metate, and leaned over to wield the mano or handstone. The posture caused bare women’s breasts to dangle – and at contact nearly all native women’s breasts in the Americas were bare. The back and forth motion of the woman’s torso while grinding grain also caused the breasts to move back and forth. Journalist J. Ross Browne sketched a Pima (Akimel O’odham) woman grinding wheat in 1864, showing long, pendulous breasts of a nursing mother with a child clinging to her back.⁹⁸ While the Akimel O’odham lived at the edge of effective Spanish colonial control at the Gila River frontier of colonial Sonora, the persistence of this grain processing technology in northern Sonora in 1864, indicates that it would have typified southern Sonora in 1763-1776.

Thus the most time consuming daily female task in multi-caste Spanish households put on a show of secondary sexual characteristics tremendously appealing to Spanish males free to force sex on conquered native women. We suggest that the metate was a significant factor in the intercaste sexual interaction of dominant group men and subordinate group women in historic New Spain, from 1519 to 1776.

⁹⁴ Beals, “Social Stratification in Latin America,” 351.

⁹⁵ Erasmus, *Man Takes Control*, 250; Lopez 04/07/09..

⁹⁶ HFD observation at Vicos, Ancash, Perú, 1960-62

⁹⁷ Sedgewick, *Acoma*, 27.

⁹⁸ J. Ross Browne, *A Tour through Arizona: Adventures in the Apache Country 1864*. New York: Harper & Brothers, 1869; reprint Tucson: Arizona Silhouettes, 1950, 110.

George M. Foster claimed that all Spaniards adopted the mano and metate because scarcity of water and wind hindered the operation of waterfalls and windmills. He did not mention who used said implements.⁹⁹

Some settlements on the arid Sonoran Desert also had donkey powered wheat grain mills equipped with European style circular mill stones which ground grains into flour between them. In 1848, Lieut. Cave J. Coutts wrote that every household in Tucson (the military post which succeeded Tubac) had its donkey powered grist mill grinding half a bushel of wheat in 24 hours.¹⁰⁰ Distributional evidence thus shows that the donkey driven grist mill did historically spread to the north westernmost frontier of New Spain. Whether this grain mill was used everywhere south of Tucson is another question. The poverty of the founders of San Francisco suggests that they and their relatives relied on woman power to reduce grains to flour or meal with the mano on the metate.

4.2.6 Adobe

The founders of San Francisco likely lived in adobe houses before their trek to California. That is, they excavated a shallow pit, in which they mixed water with clay and straw. When they had worked (trampled) the mixture to a plastic consistency, they shoveled the mixture into a wooden form to shape it with vertical sides. When the bricks had dried sufficiently, the brick maker lifted the form away, later turning the earthen bricks on their edges to dry out more. When thoroughly dry, the bricks could be handled. A dry 16"x10"x4" brick weighs 40-50 pounds. A mason laid them up on vertical walls with square corners, binding them with moist mortar.¹⁰¹

Allende identified adobe as mid-sixteenth century construction material in colonial Chile. In historic Sonora, adobe making became to a certain extent specialty of ethnic Yaqui entrepreneurs. These men independently contracted with lot owners to make adobes on site for a sum agreed upon in advance. This pattern was personally observed in southern Arizona during the Great Depression of the 1930s. This Yaqui economic strategy developed evidently after the 1740 ethnic revolt against colonial domination; unfortunately we have not discovered records of the development of this pattern.

The adobe dwelling was so thoroughly integrated into colonial Sonoran culture that it constituted part of the Spanish program of directed cultural change for Native peoples. During the Jesuit missionary effort to convert Comcáac to Roman Catholicism, officials demanded that the neophytes abandon their dome shaped dwellings fashioned from vegetable materials native to the desert, and build earthen walled houses.¹⁰² Public buildings characteristically were fashioned with adobes. Only the richest of churches were made of fired brick or burned adobe bricks. The frontier military posts consisted of adobe walls

⁹⁹ Foster, *Culture and Conquest*, 17.

¹⁰⁰ Cave J. Coutts, *Hepah, California! The Journal of Cave Johnson Coutts from Monterey, Nuevo Leon, Mexico to Los Angeles, California during the years 1848-1849*, edited by Henry F. Dobyns. Tucson: Arizona Pioneers' Historical Society, 1961, 63.

¹⁰¹ Ronald R. Dickey, *New Mexico Village Arts*. Albuquerque: University of New Mexico Press, 1949, 34-35.

¹⁰² Sheridan, *Empire of Sand*, 60, 94.

with corner redoubts, and interior quarters, chapel, store houses, etc.¹⁰³ These Indian-fighting presidios were physically quite unlike the massive stone walled circum Caribbean presidios like San Agustín in Florida. European ships carried cannons and colonial Spanish defensive presidios were constructed accordingly. Native Americans lacked cannons, so adobe sufficed for the Indian fighting posts.

Because of either poverty or lack of technical skills, Sonoran Spanish houses failed to meet the general Hispanic American pattern. Throughout most of Hispanic America, the adobe dwelling was roofed with red – from firing the clay in an oxidizing atmosphere – ceramic tile.¹⁰⁴ Perhaps influenced by the Pueblo Natives they conquered, Spaniards in New Mexico did not roof their dwellings with tile. Instead, they employed nearly flat roofs. They felled pine trees tall enough to reach across the narrow width of rooms. These *vigas* or beams supported a layer of smaller logs split with wedges laid with the flat side down. The builders then layered yucca leaves or chamiso branches over the ceiling logs, and covered that layer with eight or more inches of earth. Building the walls above beam level created a parapet which slowed erosion.) A layer of flat stones atop the parapet turned precipitation. An annually renewed layer of mud plaster on the outside of the walls protected the earth bricks from erosion by rain, snow, and wind. Women plastered, typically just before a settlement's patron saint's day.¹⁰⁵

During the period with which this analysis is concerned rural Sonorans spread dirt over their almost flat house roofs, just as Natives spread soil over the tops of their wooden and thatched dome shaped dwellings. Masons left some window openings in adobe house walls, installing wooden lintels to bear the weight of heavy adobe bricks above the openings.¹⁰⁶

The Sonoran flat roof diffused to southern California. When James Ohio Pattie visited Los Angeles in the 1820s, he described its dwellings as flat roofed. The La Brea tar pits enabled Angelinos to waterproof their roofs. Breaking off pieces of hardened tar, the Angelinos spread them over the earth piled on the flat roofs. The heat of the sun softened the tar so that it spread over the dirt.¹⁰⁷

Like New Mexicans, Sonorans constructed some dwellings with parapets protecting their nearly level roofs. Apaches attacked the new Tucson, Sonora, military post on 1 May, 1782. Lieutenant José María Abate's servant warned him that the Apaches were there. "I grabbed my weapons and climbed to the parapeted roof of my house."¹⁰⁸ Abate killed two Apaches with musket balls; his servant slew a third with an arrow. Although Abate did not specifically label his roof as flat, that characteristic may be safely inferred. Given the frequency of Comcáac and

¹⁰³ Hugo O'Conor, *Informe de Hugo de O'Conor sobre el Estado de las Provincias Internas del Norte 1771-1776*, edited by Enrique González Flores. México: Editorial Cultura, 1952, 39. Implementing King Charles III's 1772 regulations for the relocated frontier military posts, O'Conor ordered the new posts to be built of adobes.

¹⁰⁴ Foster, *Culture and Conquest*, 4; Allende, *Inés of My Soul*, 230, attributed tile to mid sixteenth century colonial Chile.

¹⁰⁵ Dickey, *New Mexico Village Arts*, 36-37

¹⁰⁶ Sheridan, *Empire of Sand*, 108.

¹⁰⁷ James O. Pattie, *The Personal Narrative of ...*, Lincoln: University of Nebraska Press, 1984 [1831 edited by Timothy Flint], 196.

¹⁰⁸ Josef María Abate, Statement, 2 de mayo de 1782. Pp. 76-77 in *Spanish Colonial Tucson: A Demographic History*, by H. F. Dobyns. Tucson: University of Arizona Press, 1976, 76.

Apache raids, one may infer that Sonoran Spaniards extended their house walls upward to form parapets, not only at military posts, but elsewhere as well.

Being processed dirt, the adobe brick wall is subject to the same natural processes as the soil if brick is bonded to the soil. Soil moisture moves upward in an adobe wall by capillary action. Where the water stops, mineral salts in solution evaporate and crystallize in a horizontal line, typically near the base of the wall. The accumulating salts slough off, leaving a slash in the wall. If the slash expands sufficiently, the undercut wall falls.

Sonoran Spaniards knew how to avoid this problem. The builder simply lays a course of rocks on the ground, or digs a shallow trench to hold a thick stone footing which prevents soil moisture from reaching the earthen bricks laid over the stone foundation.¹⁰⁹ The original commandant's quarters at Tubac, constructed between 1752 and 1760, were so built with cobble footings under most walls.¹¹⁰ The adobe maker made bricks 60 cm long, 30 cm wide, and 10 cm thick. The mason laid alternate brick courses, one with the 60 cm length parallel to the wall, the next with two bricks crosswise. Thus the walls were 60 cm thick.¹¹¹

Ordinary villagers made quite efficient use of the small space within an adobe house. They harvested maize ears with sufficient husk to braid ears together. They suspended these festoons from the ceiling. Ristras of harvested chiles, strings of jerky, and bundles of herbs hung from roof beams.¹¹²

4.2.7 Illumination

Egyptians were using candles for illumination by 3,000 B.C.¹¹³ The candle had not changed significantly over the millennia until the 1770s. When Massachusetts Colony revolted in 1776, British troops attempted to seize military stores the rebels had secreted in Lexington and Concord. Along with cannon, muskets, powder, axes, and other supplies, the military stores included – candles!¹¹⁴ Small wonder, therefore, that Sonorans at the time also depended upon candles for night time illumination.

Expensive bees' wax candles lit dim church interiors. Sale of surplus products enabled mission priests to purchase bees' wax tapers. Ordinary households such as San Francisco's founders made do with cheaper tallow candles. Tallow candles provided flickering light, but had unpleasant side effects; they stank and they smoked. Open heating fires and tallow candles kept low-roofed houses full of smoke so that breathing was usually unpleasant.

Oil lamps appear to be approximately 20,000 years old in Eurasia.¹¹⁵ The rural Sonoran lamps of the 1770s differed little from ancient lamps. Like tallow candles, they flickered,

¹⁰⁹ Dickey, *New Mexico Village Arts*, 35.

¹¹⁰ Lynette O. Shenk and George A. Teague, *Excavations at the Tubac Presidio*. Tucson: University of Arizona, Arizona State Museum Archaeological Series No. 85, 1975, 26-27, Figures 5-9.

¹¹¹ Shenk and Teague, *Excavations at the Tubac Presidio*, 25.

¹¹² Dickey, *New Mexico Village Arts*, 73.

¹¹³ Isaac Azimov, *Azimov's Chronology of Science & Discovery*. New York: Harper & Row, 1989, 21.

¹¹⁴ Geoffrey Perret, *A Country Made by War: From the Revolution to Vietnam – The Story of America's Rise to Power*. New York: Random House, 1989, 4.

¹¹⁵ Azimov, *Azimov's Chronology of Science & Discovery*, 9.

smelled bad, and smoked copiously. Thus they contributed to the indoor pollution of the houses where they were used.

Feeble illumination and indoor pollution in pre-electric light times¹¹⁶ discouraged people from attempting to do very much indoors after dark. Consequently the Spanish Sonoran daily round tended to be going to bed at dark, and rising at dawn if not at false dawn.

New Mexican adobe dwellings typically included a corner fireplace which functioned to cook meals, to heat the interior space, and to provide some illumination. The soot and smoke from candles, lamps, and fireplaces stained ceilings black, even if they had been white washed.¹¹⁷ The homes of the small better-off elite families were more commodious and better furnished than those of the masses.

4.2.8 Furnishings

Spanish colonial homes in the frontier provinces contained few furnishings. Furniture was costly; frontiers people typically were poor. Furniture took up floor space; homes of the poor were not spacious, but small. "Furnishings bore the stamp of the neighborhood and the owner's craftsmanship" (Dickey 1949:51). Bancroft considered the bench ubiquitous in New Spain, noting that higher class households contained chairs as well as carpets on the floor.¹¹⁸

4.2.9 Seating

A split log bench was the most common piece of furniture in New Mexico's Spanish homes. Woolen blankets woven by Pueblo or Navajo artisans softened the bench when spread over it. A wooden back attached to a bench, converting it into a settee.

4.2.10 Tillage

The tillage category includes numerous traits: the plants cultivated and their relative importance; special treatment accorded each crop; the intensity of cultivation; land clearing; soil preparation by hoe, plow, etc.; fertilizer use; irrigation; planting; care and protection of growing crops (that is, weeding, fencing, scarecrows); tools and implements used; economic importance and adequacy for needs organization of labor and production; distribution of products; agricultural beliefs, ritual, taboos, etc.¹¹⁹

4.2.11 Storage

"The transient quality of frontier life made chests essential" (Dickey 1949:72). During the earlier colonial period, frontier Spaniards kept spare, clean clothing in wooden chests. Moreover, "chests doubled as tables during the first two centuries of the northern Spanish

¹¹⁶ Not available until 1879 (Azimov, *Azimov's Chronology of Science & Discovery*, 369).

¹¹⁷ Dickey, *New Mexico Village Arts*, 51

¹¹⁸ Bancroft, *History of Mexico Vol. III*, 770.

¹¹⁹ George P. Murdock, et al., *Outline of Cultural Materials*. New Haven: Human Relations Area Files, 1950, 21

colonies.” Tables were not really designed for eating or writing. “At social gatherings the table was a buffet, being heaped with food and pots of liquor.”¹²⁰

“Storage was one of the problems in New Mexico houses.” Colonial Spaniards like Peninsulars, cut niches in their adobe walls to hold statuettes of the Virgin and saints.¹²¹ This conserved floor space. “For a dish cupboard, the villager built a tall box with shelves and doors, which he called a *trastero*.” Kitchen utensils stored in the *trastero* actually were not numerous.¹²²

Small cereal grains had to be threshed soon after harvesting, and then stored safely away from rodents and moisture. Consequently, wheat and oat grains went into chests. Flour went into large storage pots or tightly woven baskets.¹²³ New Mexico Spaniards stored fresh water, cornmeal, wheat flour, and beans in large ceramic vessels purchased from native woman potters.¹²⁴

4.2.12 Ceramic Vessels

While colonial Spaniards did rely extensively on ceramic vessels fashioned by Native American women, they also brought to colonial America European ceramics, particularly Majolica ware. Introduced to the Peninsula from Italy in 1503, majolica soon reached cities in New Spain during the same century. Aguascalientes, Guadalajara, and Pueblo became production centers.¹²⁵

A more plebian plain ware had “an ideal porosity to keep drinking water at an agreeable temperature” (Foster 1960:88). This raises a question: did Piman-speaking potters on the Sonoran Desert independently invent this type of water storage olla, or did they learn to make it from colonial Spaniards?

4.2.13 Toolkit

The toolkit with which colonial Spaniards interacted with their environment was not large, nor was it very sophisticated. Spaniards in Sonora and northern Sinaloa themselves made tools from local woods, lacking many more tools than a metal knife.

Plow. Spaniards introduced agriculture to the Americas, in the technical sense of the animal powered plow. The most commonly employed plow was, however, the simple Mediterranean or Egyptian wooden plow or the Andalusian *arado dental*, which could be made relatively easily from a stout branch of Mesquite or ironwood. This simple plow did not turn soil like the Northwestern European moldboard plow. It scratched the surface of the soil; the result was essentially almost tillless cultivation. The pointed working tip of the Mediterranean plow required frequent sharpening as soil blunted it.

¹²⁰ Dickey, *New Mexico Village Arts*, 59

¹²¹ Dickey, *New Mexico Village Arts*, 64

¹²² Dickey, *New Mexico Village Arts*, 66

¹²³ Dickey, *New Mexico Village Arts*, 72

¹²⁴ Dickey, *New Mexico Village Arts*, 90

¹²⁵ Foster, *Culture and Conquest*, 87

The general adoption of the Mediterranean plow in the Americas meant that the pattern of cultivation required by that type of plow accompanied it to the fields of Spanish colonial farmers (as well as Native Americans who adopted wheat and other Old World grain crops). Oxen crossed the Atlantic to pull this plow, yoked in pairs by the horns. To prepare a field for sowing, a farmer some weeks in advance of sowing time plowed the field in parallel scratches. Then the farmer plowed the field at a right angle to the previous scratches. He repeated his scratching at right angles until the soil was prepared for the seed to be sown.¹²⁶

Cart. Colonial Spaniards brought with them to the Americas wheeled vehicles. The most spectacular ones on display in México and Lima were the ornate and expensive carriages of the colonial urban elite, drawn by beautiful and expensive horses. In provincial colonial Sonora, the most frequently seen wheeled vehicle was the two wooden wheeled farm cart drawn by oxen like the plow. While colonial Spaniards used donkeys and mules as pack animals to carry many burdens, the squeaky axle farm cart was versatile and relatively inexpensive to make. It moved farm products to markets. We can be sure that this cart spread across colonial Sonora because it diffused north to the Akimel O'odham on the middle Gila River frontier by the mid-nineteenth century.¹²⁷

In southern Sonora, ethnic Mayo use a cart with wheels with spokes,¹²⁸ a significantly lighter vehicle. The Mayo's living interspersed with Mestizos likely accounts for their adoption of this cart.

Pitchfork. At the end of a very long transportation route, Sonoran Spaniards fashioned some of their tools out of local materials. A woody skeleton of ribs supports the huge *cardón* cactus. Sonoran Spaniards converted *cardón* ribs into pitchforks. Farmers cut main stem ribs for handles, with flaring arm ribs for tines. They soaked the ribs in water for several days until the tines softened, then let them dry under a weight to straighten them out.¹²⁹

4.2.14 Musical Instruments

Spaniards in New Spain typically sang or played their own music. Professional musicians were few in number and worked mostly in the cities. Colonial officials did not plan the movement of Spanish music across the Atlantic and to the northwestern frontier of New Spain. Yet Peninsular music and musical instruments did make that long journey.

Guitar. Under colonial conditions, the guitar was a favorite instrument of Spaniards¹³⁰ and other classes. The guitar furnished musical eminently suitable for dancing in rural areas.

Violin. The violin provided music in Sonora during the 1763-1776 time period. We know this from records of Juan Bautista de Anza's 1774 expedition to California from Sonora. At least

¹²⁶ Foster, *Culture and Conquest*, 4, 16, 50.

¹²⁷ Foster, *Culture and Conquest*, 5, 106-107; Paul H. Ezell, *Hispanic Acculturation of the Gila River Pimas*. Menasha: American Anthropological Association, Memoir 90, 1960, 63-64, following A. B. Clarke.

¹²⁸ Crumrine, *The Mayo Indians of Sonora*, 20.

¹²⁹ Hilton, *Sonoran Sketch Book*, 30.

¹³⁰ Bancroft, *History of Mexico*, Vol. III, 775.

one soldier carried his violin with him. The Quechan Natives at the Colorado River Crossing were thoroughly enchanted by violin music and learned to dance Spanish forms to its music.¹³¹

Harp. Yaqui harp playing attests diffusion of the European harp across colonial New Spain to the northwestern frontier.

4.3 The General Ideological Configuration of Sonoran Culture, 1763-1775

Colonial Spanish America created a new American race. Historian Hubert H. Bancroft long ago recognized this phenomenon. “Spanish Americans present the distinct features of may be essentially classed as a new race, sprung from the union of the proudest European peoples, and the most advanced of the Americans.”¹³² Colonial Spanish Americans were acutely aware of the details of the process of miscegenation of individuals from different genetic antecedents. Their spoken vocabulary was replete with ostensibly biological labels. Natives of Iberia were Peninsulares, or Gachupines, or Chapetones, perceived as fundamentally different from Criollos – Europeans born in the Americas. Today, scientists would classify Creoles and Europeans as belonging to the same gene pool, differing only in their place of birth. Spanish colonials, however, classified Creoles as different from and inferior to (mostly for cultural reasons related to institutional deficiencies in the colonies) those born in Europe. Colonial governance being highly centralized and royal, the colonial government was dominated by appointed Peninsulares. Creoles could not compete for government employment on an even footing with Peninsulares. This cultural reality bears emphasis, inasmuch as much of our analysis deals with the feats of a very noteworthy Creole overachiever, Juan Bautista de Anza, the younger.

Scholars sometimes forget that these terms – Peninsulares, Chapetones, Gachupines – were simplified labels employed in the colonial context. Natives of the Peninsula perceived themselves as Andalusians, new and old Castellians, Extremadurans, Leones, Galicians, Asturians, Catalans, Basques, etc. Only when these people migrated to the Americas were they lumped into a single category and relabeled Gachupines. Colonization mingled individuals of diverse Peninsular ethnic and political origins in the new colonial category of “Spaniard.”

Even in colonial America, the ethnic Catalans and Basques typically did not fully integrate into colonial Spanish society. Where they settled in sufficient numbers, they spoke their native languages with Spanish as their second language. Whether conditions among the Basques worsened through time, or whether Basque success in colonial America became a powerful magnet, the proportion of Basques migrating to the Americas increased during the colonial period. Basques ranked sixth in number of migrants to Chile during the sixteenth century, then fourth during the initial half of the seventeenth century, third during the last half of that century, second during the first half of the eighteenth century, then first during the final half of that century.¹³³ We discuss elsewhere eighteenth-century Basque migration to Sonora.

¹³¹ Bolton, *Anza's California*

¹³² Hubert H. Bancroft, *History of Mexico*. Vol III. 1600-1803. San Francisco: A. L. Bancroft & Co., 1883, 731.

¹³³ Foster, *Culture and Conquest*, 32.

4.3.1 Creating the New American Race

A rich vocabulary distinguished stages and components of the racial mingling process which operated through colonial times in the Americas. Originally, a Mestizo was the offspring of a Spanish man and a Native American woman. Far fewer Iberian women migrated to the Americas than men, so male colonial Spaniards found, one way or another, Native American sexual partners. Native herbal contraceptives and abortifacents did not work all of the time. Through colonial time, Spaniards selected Mestizo women who looked most European. Thus, by the eighteenth century, more than a few “Mestizo” women could and did pass as Europeans, so the “European” population increased at a rate significantly higher than natural increase could achieve. The ethnic/racial categorization allowed, in other words, considerable upward social mobility. Through time, the white or “Spanish” category actually included not only Europeans and Creoles but also legitimate Mestizos and Castizos free from African admixture, who lived “like Spaniards.”¹³⁴ Colonial Spaniards mixed biological and cultural characteristics.

This conceptual imprecision also kept the *casta* category difficult to define, so individuals could move out of it into the *gente decente* category. The dominant group only reluctantly recognized the existence of the castas. The “whites” viewed castas, like Blacks, as lazy, vicious, irresponsible, and a social menace.¹³⁵

Sonorans used an abbreviated version of the rich colonial vocabulary of miscegenation. Their provincial dialect also employed some labels which differed from the general parlance. Sonoran Spaniards called *coyotes* what elsewhere were *Mestizos*,¹³⁶ the offspring of a Spaniard or Creole and a Native woman. This label reflected the low esteem in which *coyotes* were held in the province.

Colonial Spanish America imported African slaves from its Caribbean plantation beginnings. Spanish men did not hesitate to exploit the Black women, creating a *mulatto* population. A Spaniard mating with a mulatta produced a *morisco*.¹³⁷ Some Black men found native American women, creating another category.

The colonial Spaniards definitely viewed Africans and African-Americans as an “other.” They were repelled by black skin and physical appearance. They stereotyped Blacks, including mulattos, as vile, traitorous, lazy, and drunks, perfidious and immoral. Colonial law excluded Blacks from military service, the clergy, public office, and outlawed marriage between Blacks and either Spaniards or Native Americans.¹³⁸

In New Spain, Africans congregated in cities and the lowland coasts where malaria and yellow fever virtually exterminated the native population. Consequently, Black admixture in the

¹³⁴ Lyle N. McAlister, “Social Structure and Social Change in New Spain.” Pp. 750-64 in *Latin American History: Essays in the Study and Teaching 1898-1965. Vol. II*, ed. Howard F. Cline. Austin: University of Texas Press, 1967, 753.

¹³⁵ McAlister, “Social Structure and Social Change in New Spain,” 755.

¹³⁶ Pfefferkorn, *Description of Sonora*, trans. Treutlein, 284.

¹³⁷ Dobyns, *Spanish Colonial Tucson*, 65, following Gregorio Torres Quintero, *México hasta el fin del Virreinato español: antecedentes sociológicos del pueblo mexicano*. México: El Pensamiento Vivo de América, 1931.

¹³⁸ McAlister, “Social Structure and Social Change in New Spain.” 754.

New American Race was not as extensive in Sonora as in old Mesoamerica. Still, the mineral rushes attracted mobile Blacks who participated in the upward mobility characteristic of the mine camps.

The founders of San Francisco grew up in a provincial small scale society acutely aware of this complex colonial process of creating the New American Race. They were themselves most likely Coyotes – Mestizos – of one variety or another, primarily the result of Spanish sexual exploitation of Tahue women.

Indisputably, the founders of San Francisco typically were dissatisfied with their positions within the Spanish colonial system of *castas*. Several of them manipulated the classification system to improve their status. Then, at the beginning of the nineteenth century, they coined a new term, *Californios*, and claimed a new ethnic identity. The newly minted *Californios* stressed their Spanish heritage but not their Tahue or African heritages.¹³⁹ This attempt at colonial ethnogenesis indicates that the founders responded to Anza's recruitment in part precisely because they were Indios, Coyotes, Mulattos, *Moriscos*, in other words, the lowest of the *castas*, who were eager to escape the constraining system of castas in Sonora and become social upwardly mobile.

The temporal persistence of the Sonoran caste system attests its strength in the eighteenth century. During the twentieth century, the ethnic mixture has been enriched by ethnic Chinese and Lebanese. In a Sierra Madre Occidental village the beautiful daughter of an ethnic Chinese man and a local woman could find no marriage partner. Being of mixed "blood," she was unsuitable for an upper class Mexican to marry. Her proud mother refused to allow her to marry a peon. So she hoped to become the mistress of a foreign mining engineer.¹⁴⁰

Not all eighteenth-century Sonoran social structures stemmed from biological or what were assumed to be biological ascribed statuses. The officer cadre of the military posts constituted the core of a provincial elite based on achieved statuses, primarily via royal appointments. A few large land owners belonged to the provincial elite, but there were not many. Exceptionally active priests were considered members of the elite as a matter of courtesy – men such as Philip von Segesser von Brunigg, Ignatz Kohler, Francisco T. H. Garcés, Carlos Rojas, and Antonio Baltasar. Members of the provincial elite occupied social niches which required them to make policy decisions affecting other people; so they made decisions.

4.3.2 Labor Value

When combined with fundamental Spanish values, the biological classification became even more complex in its impacts on colonial life and society. The 700 year long Christian reconquest of Iberia from Islam firmly implanted among Spaniards the positive value of the medieval knight. Conditioned to fight, the reconqueror became a military entrepreneur. His tools were weapons and warhorses. Heaven forbid that he sully his gloves by touching a plow! Peasants plow. Virtually every peninsular migrant to colonial America presented himself as a

¹³⁹ Barbara L. Voss, "Domestication Imperialism: Sexual Politics and the Archaeology of Empire," *American Anthropologist*, 110:2 (June, 2008) 191-203, 199.

¹⁴⁰ John W. Hilton, *Sonoran Sketch Book*. New York: Macmillan, 1947, 41.

hidalgo, a nobleman. Colonial Spaniards regarded physical work, therefore, as a necessary but abhorred evil.¹⁴¹ Work with the hands was virtually forbidden, save with the sword and the pen. Indeed “there are certain manual activities which may never be engaged in, even for recreation, certain implements which may never be touched.”¹⁴² This pattern of behavior persists. The Cuzco Spaniard still strolls along the sidewalk leaning back, hands clasped behind his back, to emphasize even by body language that he does not carry a burden like the Native American porters sharing the sidewalk, bent forward from the hips in order to carry heavy bundles.¹⁴³

4.3.3 Unpleasant Life

Some social scientists regard *Homo sapiens* as “an intensely social, gossiping species.” Humans are acutely sensitive to their “prosocial reputation.”¹⁴⁴ The colonial residents of Sonora in 1760-1776 constituted an exemplary case of this general pattern.

Rural life in Sonora was not notably pleasant. As rural Sonorans perceived their world, it was undoubtedly unpleasant. Social scientists studying rural populations around the globe have documented many negative dimensions of rural agrarian culture. Peasants are suspicious of one another. They distrust each other. They are so prone to criticize everyone that criticism is a “law of life.” They are gossipy. They are greedy and stingy. They are abusive and quarrelsome. Consequently they find it inordinately difficult to cooperate with one another,¹⁴⁵ however mutually beneficial cooperation might be. A “deep distrust of strangers” prevented social cohesiveness¹⁴⁶ necessary for effective social and economic improvement.

The social scientific portrayal of rural peasant life runs head on into a polar opposite portrayal present in Western Civilization since classic Greek times. As George M. Foster warns, this portrait depicts the peasant as possessed of all virtues absent from urban life. It almost seems as though city intellectuals feel guilty about living in the cities, so apologize by claiming that society’s “fundamental virtues” persist in pure form in the countryside.¹⁴⁷ Sadly, this theme of Western Civilization is a case of ideal culture – what people want to be rather than the real culture social scientists describe based on objective research into peasant behavior.¹⁴⁸

Living in rural peasant society, a person must constantly keep his or her guard up.¹⁴⁹ Sonorans in 1763-1775 would, like Hispanic American peasants today, have frequently the quite rhetorical question, “Qué dirían?” What would they say? People living in their sort of society are extremely sensitive to public opinion, which all too often derives from rumor rather than

¹⁴¹ Foster, *Culture and Conquest*, 4.

¹⁴² Ralph L. Beals, “Social Stratification in Latin America.” Pp. 342-60 in *Contemporary Cultures and Societies of Latin America*, edited by Dwight B. Heath and Richard N. Adams. New York: Random House, 1965, 343, 360.

¹⁴³ HFD personal observation. Many Native Americans share a work ethic that in the United States would be labeled Protestant.

¹⁴⁴ Norensayan, Ara, and Azim F. Shariff, “The Origin and Evolution of Religious Prosociality,” *Science* 322:5898 (3 October 2008) 58-62, 58.

¹⁴⁵ George M. Foster, *Tzintzuntzan: Mexican Peasants in a Changing World*. Boston: Little Brown Series in Anthropology, 1967, 88, 91, 95.

¹⁴⁶ Dillion, *Mexico on the Verge*, 73.

¹⁴⁷ Foster, *Tzintzuntzan*, 87.

¹⁴⁸ Cara E. Richard (American Anthropologist) pointed out the distinction between ideal and real culture

¹⁴⁹ Foster, *Tzintzuntzan*, 94

research.¹⁵⁰ A participant in such a society is typically programmed never to admit making a mistake. He or she finds a scapegoat to blame for every contretemps¹⁵¹ – yet is timid and fearful.¹⁵²

Novelist Isabel Allende described this pattern in pioneer Spanish colonial Chile at mid-sixteenth century. “Malicious eyes followed our every move” one of Allende’s characters says. Moreover, “no one could take a step without being spied upon and criticized.”¹⁵³ According to Allende, when Santiago de Chile grew to 500 inhabitants, “gossip circulated as quickly as in a hamlet.”¹⁵⁴

Can this cultural pattern be documented for 1763-1775 Sonora? Indeed it can. Even Roman Catholic priests curbed their behavior in terms of what their parishioners said about them. Jesuit Tomás Miranda wrote that he and his colleagues had “to reflect constantly on one’s actions, words, and deeds. Not only the Natives watched them, “but much more with the gente de razon...they watch over a priest’s every action in order to bring censure upon him.”¹⁵⁵ These words strike us as eloquent proof that the Hispanic American cultural pattern we have described above obtained in Sonora continued on to the eve of the founding of San Francisco.

In other words, people forming such a society as existed in Sonora circa 1763-1776, do not trust one another much if at all. Trust is a fundamental factor in institutional and economic development, particularly to the extent that development depends upon borrowing and lending capital.¹⁵⁶ Contemporary sociologists and therapists are developing fairly sophisticated contests between more and less trusting groups and individuals which demonstrate this social characteristic.¹⁵⁷

One of the ubiquitous discords between colonial Spaniards and Natives of whatever ethnic group involved physical sanctions.¹⁵⁸ “Punishment by the lash and incarceration were standard for all Spanish subjects, but humiliating and traumatic for native peoples.”¹⁵⁹

¹⁵⁰ Foster, *Tzintzuntzan*, 96, 93.

¹⁵¹ Foster, *Tzintzuntzan*, 99.

¹⁵² Foster, *Tzintzuntzan*, 103.

¹⁵³ Allende, *Ines of My Soul*, 293.

¹⁵⁴ Allende, *Ines of My Soul*, 254

¹⁵⁵ Thomas Sheridan, *Empire of Sand: The Seri Indians and the Struggle for Spanish Sonora 1645-1803*. Tucson: University of Arizona Press, 1999, 152. “Many times the life I have described is simply not worth it, not worth it at all.” A native of Oaxaca, Miranda implied that Sonoran settler gossip and criticism were fiercer than in Mesoamerica.

¹⁵⁶ Brooks King-Casas, Carla Sharp, Laura Lomax-Bream, Terry Lohrenz, Peter Fongay, and P., Read Montague, “The Rupture and Repair of Cooperation in Borderline Personality Disorder,” *Science* 321: 5890 (8 August 2008) 806-10.

¹⁵⁷ Andreas Meyer-Lindenberg, “Trust Me on This,” *Science* 321:5890 (8 August 2008)778-80.

¹⁵⁸ Sanctions is number 681 in the *Outline of Cultural Materials*, including capital punishment, corporal punishment (e.g. flogging...), property sanctions, deprivation of civil rights (...imprisonment)

¹⁵⁹ Julia G. Costello and David Hornbeck, “Alta California: An Overview.” Pp. 303-11 in *Columbian Consequences Vol. I Archaeology and Historical Perspectives on the Spanish Borderlands West*, ed. David Hurst Thomas. Washington, D. C.: Smithsonian Institution Press, 1989, 313.

4.3.4 Machismo

Machismo is a behavioral pattern ubiquitous in contemporary Latin America, urban and rural. It has clear peninsular antecedents, particularly in Andalusia. There, its roots are a “complex of political, social, and economic factors that have crippled personal initiative in the south for centuries.”¹⁶⁰ Machismo involves aggressive social behavior, and male dominance, real or imagined, over females. Some social scientists interpret Andalusian machismo in psychological terms as a “genital hegemony” compensating for economic poverty and political impotence.¹⁶¹

4.3.5 Egocentrism

Machismo displays many permutations. The Andalusian macho reifies and nearly deifies his penis. Insofar as a man really feels subordinate to his genitals, he suffers a degrading self-perception.¹⁶² The bundle of behaviors characteristic of machismo are at risk in modernizing societies. An example comes from Mexico.

For some years, the Mexican central government subsidized the prices of food such as tortillas and milk in order to assist the poor. Policy makers recognized, however, that price subsidies benefited not only the poor, but also those who did not need them. So Deputy Finance Minister Santiago Levy and others decided to institute a direct “conditional cash transfer” subsidy to truly poor families identified from census data and surveys. This program increased school attendance, diminished bouts of illness, and speeded toddler growth. A key dimension of the program is that cash payments go only to mothers because research “showed that they were less likely than fathers to squander it.”¹⁶³

Capt. Juan Bautista de Anza arguably recognized this pattern among his Sonoran colonists. He motivated Sonorans to migrate to Upper California by offering families subsidies in commodities – livestock, seeds, foodstuffs, clothing, etc. Anza expected that if recruits received cash, they would “squander” it, and thereafter remain ill equipped for the colonizing expedition.¹⁶⁴ Anza took a dim and evidently realistic view of the quality of rural Sonorans of his time. He perceived them as improvident and given to gambling. Paying them in cash would serve no purpose save to afford them more opportunity for prodigality and gambling, to which all the people of the interior districts are excessively given.”¹⁶⁵ Anza added a small cash payment to his offer only after what was in effect a strike by those whom he had already recruited.

¹⁶⁰ Timothy Mitchell, *Passional Culture: Emotion, Religion and Society in Southern Spain*. Philadelphia: University of Pennsylvania Press, 1990, 36.

¹⁶¹ Mitchell, *Passional Culture*, 36, quoting David D. Gilmore, *Aggression and Community: Paradoxes of Andalusian Culture*. New Haven: Yale University Press, 1987, 150. See also Margaret M. Gilmore and David D. Gilmore, “Machismo” A Psychodynamic Approach (Spain),” *Journal of Psychological Anthropology* 2 (1979) 281-300.

¹⁶² Mitchell, *Passional Culture*, 37.

¹⁶³ Jocelyn Kaiser, “Money – With Strings – To Fight Poverty,” *Science* 319: 5864 (8 February 2008) 754-55, 754.

¹⁶⁴ Herbert E. Bolton, *An Outpost of Empire. Anza's California Expeditions Vol. I*. Berkeley: University of California Press, 1930, 206; Juan Bap.ta de Anza, “Preparing the Expedition: LV Anza to Bucareli Mexico, November 17, 1774.” Pp. 209-13 in *Anza's California Expeditions, Vol. V Correspondence*. Berkeley: University of California Press, 1930, 210.

¹⁶⁵ Anza in Bolton, *An Outpost of Empire*, 207.

A general Latin American component of this machismo pattern is the competitive consumption of alcoholic beverages. The most common competition involves two men *tragando* drink for drink until one of them becomes too intoxicated to continue. The first U. S. Peace Corps Volunteers sent to Peru included a middle aged construction worker accustomed to hard drinking. A Peruvian critical of the volunteers engaged the construction worker in a *pisco* (grape brandy) drinking match. The contest seemed to go on forever as both men put away prodigious quantities of pisco. Ultimately local criticism of the volunteers stopped when the Peruvian critic lost consciousness. The victor became something of a folk hero, and the other Volunteers shared the respect thereafter accorded their companion. This incident illustrates how closely alcoholic beverage consumption partially identifies the macho male.

We infer that this behavioral pattern well known to social scientists during the twentieth century, was practiced among the founders of San Francisco during the eighteenth century. Spaniards who colonized steep barrancas of the subtropical thorn forest acquired from native agave cultivators, shoots of *A. angustifolia* that they cultivated in the lower oak forest zone to harvest the sap to distill into tequila. The hearts of the cultivated Agave grew larger than those of wild plants, and this species is considered the most delicious species grown.¹⁶⁶

4.3.6 Lineage

One aspect of machismo is a patriarchal society with a strong concern over lineage – extended family – typically large in size.¹⁶⁷ Spanish colonial law established male dominance in family relationships. At the same time, colonial culture left the patriarch free “to avail himself of a socially sanctioned double sex standard.”¹⁶⁸ Urban residence enabled the solvent patriarch to maintain a *casa chica* for his mistress and bastards, as well as a *casa grande* for his preferably large legitimate family.¹⁶⁹ Rural poverty as well as fear of what people would say militated against stable extra marital relationships in provincial Sonora.

Circumstances reinforced the psychological insecurity of Sonorans, including the founders of San Francisco. On the arduous journey from Sonora to the Bay, some of the soldiers exhibited such jealousy of their wives that they prohibited them from speaking to anyone, or even attending Mass.¹⁷⁰

¹⁶⁶ Barney T. Burns, Mahina Dress, Gary P. Nabhan, and Suzanne C. Nelson, “Crop Diversity Among Indigenous Farming Cultures in the Tropical Deciduous Forest.” Pp. 152-71 in *The Tropical Deciduous Forest of Alamos: Biodiversity of a Threatened Ecosystem in Mexico*, edited by Robert H. Robicheux and David A. Yetman. Tucson: University of Arizona Press, 2000, 161.

¹⁶⁷ Deni Ramirez Losada, “Carlos A. Mayo, *Porque la quiero tanto: Historia del amor en la sociedad rioplatense (1750-1860)*,” *Revista de Indias* LXVII No. 241 (Sept.-Dec., 2007) 805.

¹⁶⁸ Foster, *Culture & Conquest*, 3 “the double standard of sex morality in most of Latin America” (Erasmus, *Man Takes Control*, 244.

¹⁶⁹ Novelist Isabel Allende (*Ines of My Soul*. London: Fourth Estate, 2006, 231) mentioned the *casa grande-casa chica* pattern in both contemporary Spain and Chile. She attributes some of its historic origin in conquest society to conquerors preferring to cohabit with young Indian girls to living with an aging Spanish wife. HFD learned of this pattern in mid twentieth century Lima, Perú.

¹⁷⁰ Bolton, *Anza's California Expeditions Vol. I, An Outpost of Empire*, 274, citing Pedro Font, *Font's Complete Diary: A Chronicle of the Founding of San Francisco*, translated by Herbert Eugene Boston. Berkely: University of California Press, 1931, 67.

4.3.7 Behavioral Evidence

Soon after San Francisco was founded, the founders behaved in ways demonstrating that their Sonoran upbringing and enculturation included a strong component of Spanish machismo. The first violence between the founders and the local Native American ethnic group flared up on post. The Yelamu Ohlone infringed on founder machismo. Launching an arrow close to the corporal of the guard was threatening enough, but trying to kiss a soldier's wife was absolutely unforgivable. Sgt. Juan Pablo Grijalva seized a Yelamu man to have flogged. When other Yelamu tried to free the floggee, Grijalva ordered his men to open fire. Bullets killed one Yelamu and severely wounded another. The founders seized two more Yelamu to flog.¹⁷¹

4.3.8 Sex Slaves

Another manifestation of traditional machismo occurred inland from San Francisco when members of a garrison raided Native American settlements. Using their skill with the lariat they brought from Sonora, small squads of soldiers lassoed Native American women "to become prey to their unbridled lust."¹⁷² These sex raids were not, be it remembered, purely expressions of machismo. They also continued the tradition of conquest in the Americas stretching back through time to Hernán Cortés and Christopher Columbus. Raping Native women was what Spanish soldiers did. Japan did not invent sex slavery during its run-up to World War II.

This history of Spanish colonial exploitation of Natives began with royal grants of Natives in *encomienda* – charge of – Spaniards responsible for converting them and rendering militia service as needed. "Encomenderos used their Indians in all forms of manual labor....overtaxed and overworked them....jailed them, killed them, beat them, as beasts of burden....The *encomenderos*understood Spanish authority as provision for unlimited personal opportunism."¹⁷³ The Spanish crown eventually managed to abolish the *encomienda* institution. The sexist and violent exploitative cant of colonial Spaniards persisted through the colonial period relative to all non-Spanish ethnic groups.

Another type of slave raid expressed San Francisco machismo differently. Troopers seized captives of all ages and sexes after winning an engagement. They turned women and children over to missionaries to be converted in a mission. Men they retained as slaves sentenced to manual labor at the military post. These Native men freed founders from having to engage in manual labor – a no-no for real Spaniards. The new post had but 5-20 such Native workers during the 1780's, rising to 60-70 during the 1790's and 100 after 1800.¹⁷⁴ This disruption of Native American families contributed, along with epidemic and endemic Old World pathogens, to the historic disappearance of the Ohlone.

¹⁷¹ Barbara L. Voss, "Domesticating Imperialism: Sexual Politics and the Archaeology of Empire," *American Anthropologist*, 110:2 (June 2008) 191-203, 196, following Francisco Palou, *Historical Memoirs of New California* ed. and trans. Herbert Eugene Bolton. Berkeley: University of California Press, 1926, 1: 36.

¹⁷² Voss, "Domesticating Imperialism," 197.

¹⁷³ Charles Gibson, *The Aztecs Under Spanish Rule: A History of the Indians of the Valley of Mexico 1519-1810*. Stanford: Stanford University Press, 1964, 78.

¹⁷⁴ Voss, "Domesticating Imperialism," 198.

4.3.9 Personalismo

Personalism in colonial Spanish America was closely related to machismo. It was “an effective working relationships with the right people.”¹⁷⁵ In the Spanish Empire, the King was obviously the most right of people. On the colonial northwestern frontier of New Spain, the founders of San Francisco and their relatives stood about as far from the King as it was possible to go in the Spanish Empire. Personalismo still dominated interpersonal relationships, between Culiacán and Sinaloa, but even the most personable of men or women could achieve little personal fulfillment because economic and personal mobility was sharply constrained. At the same time, New Spaniards failed to subjugate the interests of the individual to those of society, so society lacked cohesiveness.¹⁷⁶ Consequently, when Juan Bautista de Anza came recruiting families to migrate to San Francisco Bay, he had correctly identified a zone containing many likely recruits.

A somewhat different version of personalismo entered into pregnancy. Generally in Hispanic America, people believe it important that a pregnant woman satisfy her food cravings so that the infant will not have birthmarks. In rural areas, midwives attend births, doctors being urban residents. Typically the placenta is ritually disposed of, but the umbilical cord stump is preserved as an amulet. Ideally, a mother remains idle and house bound for 40 days after giving birth.¹⁷⁷ Also widespread in Hispanic America is belief in a “milk snake.” That is, a snake sneaks into the house of a lactating women at night and sucks her nipples, placing its tail in the infant’s mouth to pacify it.¹⁷⁸

4.3.10 Spanish Colonial Roman Catholicism

Spain exalted its Roman Catholicism, compared to the rest of Europe.¹⁷⁹ Roman Catholic behavior on the Iberian Peninsula is and long has been tremendously varied and diverse. That diversity did not spread to colonial Spanish America. Spanish authorities and the colonial clergy greatly simplified the American colonial church, generally transferring only the basic observances – Epiphany, Candlemas, Lent, Holy Week, Corpus Christi, All Saint’s Day, All Souls’ Day, and Christmas. The colonial authorities promulgated not only a simplified but also an ideal political and economic system in colonial America.¹⁸⁰ Nevertheless, “Catholicism monolithically dominated Spanish colonial religious and social life.” It also “encouraged corporative pluralism at all levels.”¹⁸¹

The Roman Catholic Indian mission is the stellar example of an idealized colonial institution invented in the American colonies to suit colonial conditions. There were no such missions on the Peninsula to serve as models for the colonies. Missions were historically invented in the colonies to deal with the cross ethnic contact situation. Missions were extremely

¹⁷⁵ Foster, *Culture of Conquest*, 4.

¹⁷⁶ Dillon, *Mexico on the Verge*, 72. We project Dillon’s analysis of Mexico back into colonial times.

¹⁷⁷ Foster, *Culture of Conquest*, 112.

¹⁷⁸ Foster, *Culture of Conquest*, 119.

¹⁷⁹ Foster, *Culture of Conquest*, 28.

¹⁸⁰ Foster, *Culture of Conquest*, 15-16.

¹⁸¹ Kathleen Deagan, “Comment,” 877-78 in *Current Anthropology*, 49:5 (October, 2008) 878.

important in the Culiacán-Sinaloa area as discussed in the previous chapter of the present analysis.

Participants in present day peasant societies derive great satisfaction from their religious beliefs and behaviors.¹⁸² We infer, therefore, that residents of Sonora in 1763-1775 did likewise.

There is something of a paradox built into this inference. During the twentieth century, overtly Roman Catholic Hispanic America suffered from a chronic shortage of Roman Catholic priests. Despite their formal Catholicism, Latin Americans failed to produce priests in numbers proportional to their population.¹⁸³ This situation maintained in provincial Sonora at least as long ago as 1846 when the United States went to war against Mexico.¹⁸⁴

During the 1763-1775 period, first Jesuit and then Franciscan missionaries to Native tribal people ministered part-time to newcomers and lived near their missions. "Without remuneration," each missionary "watched over the various garrisons and the *reales de minas* lying nearest his mission." As for parish life, however, the scarcity of secular priests was painfully prominent. "All these Spaniards were the parishioners of a single parson, whose usual place of residence was the presidio of San Miguel [de Horcasitas]." The only thing the parish priest did, the Jesuit missionary Ignaz Pfefferkorn criticized, was make an annual tour of the province visiting parishioners and collecting surplice fees which the missionaries had earned.¹⁸⁵ Roman Catholic mission churches became the tallest structures in provincial Sonora. Houses typically consisted of adobes laid up only one story high. Swiss Jesuit Philip Segesser von Brunegg, whose family apparently financed his atypical household, constructed a Mexico City style house at Mission San José de los Pimas. "Such fashionable buildings are often seen in Mexico City, but are unknown in this province where your reverence knows that all are flat roofed and crude."¹⁸⁶

4.3.11 Devotion of Our Lady of Guadalupe

Devotion to the image of the Virgin of Guadalupe preserved on a maguey, or palmetto fiber mantle, spread among Creoles in provincial Sonora,¹⁸⁷ as it did elsewhere in colonial New Spain and later Mexico. "Mexico City's Virgin of Guadalupe has become the major focus of pilgrim devotion, and the dominant symbol of corporate identity not only for all Mexico, but

¹⁸² Foster, *Tzintzuntzan*, 89.

¹⁸³ Henry F. Dobyns, "Do-It-Yourself Religion: The Diffusion of Folk Catholicism on Mexico's Northern Frontier 1821-46." Pp. 53-68 in *Pilgrimage in Latin America*, edited by N. Ross Crumrine and Alan Morinis. New York: Greenwood Press, 1991, 54, following Gustav Pérez Ramirez. e Yvan Laballa, *El problema Sacerdotal en America Latina*. Estudios Socio-Religiosos Latino-Americanos 16. Bogotá: Central de Investigaciones, 1964, 9. See John J. Considine, *Call for Forty Thousand*. Toronto: Longmans, Green & Co., 1946, 9 ["eighty million Catholics in Latin America are living today without adequate priestly care."]

¹⁸⁴ Dobyns, "Do-It-Yourself Religion," 54, following David J. Weber, "Failure of a Frontier Institution: The Secular Church in the Borderlands under Independent Mexico, 1821-1846," *Western Historical Quarterly* 12:2 (1981).

¹⁸⁵ Pfefferkorn, *Description of Sonora*, 283.

¹⁸⁶ Sheridan, *Empire of Sand*, 145.

¹⁸⁷ Sheridan, *Empire of Sand*, 185-86.

for the entire Western Hemisphere.”¹⁸⁸ Consequently, in contemporary Mexico reproductions of the “painting in the Basilica of Guadalupe are to be found everywhere...at all levels of devotion and cultures – from faded copies above domestic shrines in the huts of peasants, to small prints on the windshields of taxicabs, to transfers on the toolboxes of auto repairmen,” and buses, restaurants and houses of ill repute.”¹⁸⁹

At the same time, scholars continue to be more or less skeptical of the apparition’s origin legend. In 1774, Pedro A. O’Crouley cited two wills which he thought corroborated the “established tradition” of the 1531 Tepeyac apparitions by bequeathing land to Our Lady of Guadalupe. Written on *amatl*/paper in Nahuatl, one will of Juana Martín, a relative of Juan Diego, left land in Cuautitlán to the Virgin. O’Crouley failed to date that will; it was dictated on 11 March 1559. It stated with reference to the widowed Juan Diego that “it was by means of him that the miracle there on Tepeyac occurred.”¹⁹⁰ O’Crouley cited a second will by Esteban Tomelín drawn up in 1575.¹⁹¹

O’Crouley related the “established tradition.” Juan Diego, a devout convert to Roman Catholicism, walked across Tepeyecac hill heading to the Franciscan convent in Mexico City. Another version of the origin legend has Juan Diego searching none too successfully for sticks of firewood on a cactus covered hill.¹⁹² Collecting firewood seems a rather more likely activity for a poor peasant than visiting a Franciscan convent. Heavenly music drew Juan Diego’s gaze to the hill’s summit where he saw the Virgin encircled by a rainbow. Our Lady instructed Juan Diego to tell bishop Juan Zumárraga that she desired a church be constructed on the hill’s summit. (The Franciscans had already erected a small building on the hill.) Juan Diego delivered the message to the bishop, who quickly dismissed the man of the common people. Juan Diego reported to Our Lady, who comforted him and ordered him to return to the bishop the next day. Zumárraga told Juan Diego that he required more precise indications of Our Lady’s wishes. The bishop went with two attendants to observe Juan Diego, but he disappeared on the hill. They accused Juan Diego of sorcery.

When Juan Diego reported to Our Lady, according to the apparitionists, she ordered him to return the next Monday. He failed to keep the appointment because his uncle lay dying in his home. Tuesday Juan Diego set out to summon a priest to administer the last rites to his uncle. Our Lady intercepted him, assured him that his uncle was again healthy. Our Lady then sent Juan Diego to the top of the hill to cut the flowers of Castilian roses he found there to take to the bishop as a physical sign. Once the flowers were gathered, Our Lady herself packed them into his maguey fiber *tilma*, or cloak. She instructed Juan Diego to carry them to the bishop without showing them to anyone.

¹⁸⁸ Victor Turner and Edith Turner, *Image and Pilgrimage in Christian Culture: Anthropological Perspectives*. New York: Columbia University Press, 1978, 57; Eric R. Wolf, “The Virgin of Guadalupe: A Mexican National Symbols,” *Journal of American Folklore*, 71. (1958) 34-39, 34.

¹⁸⁹ Turner and Turner, *Image and Pilgrimage in Christian Culture*, 68.

¹⁹⁰ Mariano Cuevas, S. J., *Historia de la Iglesia en Mexico, Tomo Primero 1511-1548*. Mexico: Editorial Patria, 1947, 307.

¹⁹¹ O’Crouley, *A Description of the Kingdom of New Spain*, 101.

¹⁹² Ruth M. Morriss, “Virgin. . . with the Pagan Halo,” *Mentor* (Dec. 1929) 7-11, 52; 9.

The bishop's pages opened the cloak, and decided that the blossoms were woven into it. When the bishop opened the cloak, the beautiful fresh flowers indeed spilled out, but the likeness of Our Lady of Guadalupe appeared in the fibers of the cloak. While the nitre laden vapors of Mexico City tarnish iron, silver, and gold, the colors of the flowers woven into the cloak had not dulled in 1774.¹⁹³

Devotion spread to Querétaro in 1659-69, a Franciscan convent among the Manso in 1659, an altar in a Franciscan church in Tlaxcala, endowed masses in the Guadalajara cathedral in 1693, the Halona (Zuñi) mission church soon after 1700.¹⁹⁴

Jesuit missionaries began preaching to ethnic Mayos early in the seventeenth century. They introduced the Virgin of Guadalupe as well as the Holy Trinity, the Holy Family, and the Christian flood myth.¹⁹⁵ This message presumably reached the Tahue somewhat earlier than it reached the Mayos.

Devotion to Our Lady of Guadalupe had spread to at least some Lower Pimas prior to 1769. A rebel Zuaque on the Comcáac frontier venerated an image of the Guadalupana carried into territory held by hostile rebels by a brave but foolhardy priest.¹⁹⁶ Inasmuch as the Lower Pima lived north of the Río Culiacán-Río Sinaloa zone where Anza recruited most of the founders of San Francisco, their participation in this devotion virtually guaranteed that it had already spread to the founders or their ancestors.

So a detailed version of the "established tradition" would have been known to the population of Culiacán and Sonora when the founders of San Francisco were mustering and preparing to migrate to the shore of San Francisco Bay. This can be stated with complete assurance. On Friday, 29 September, 1775, Pedro Font, O.F.M., celebrated mass just before the colonizing expedition started from San Miguel de Horcasitas. Font exhorted his auditors to be patient during the journey and to set a Christian example for the heathen along the way. The Franciscan priest announced "that the principal patroness of all the expedition during the journey was the Most Holy Virgin, our Lady of Guadalupe, who was chosen with singular applause and affection by unanimous consent and with the approval of myself and the commander." Font asserted that he and Anza were of a single mind on this matter, even before they had spoken to each other about it. Font and Anza, "had already decided that our patroness must be the sovereign Virgin Mary, Mother of God, under the title of Guadalupe, as mother and patroness which she is of the Indians and of this America."

Moreover, a detail of the Guadalupe cloak identified a co-patron. St. Michael "being the holy prince whose picture is at the bottom of the image of our Lady of Guadalupe, we chose him as the copatron of the expedition." September 29 was, furthermore, the day of St. Michael.¹⁹⁷

¹⁹³ O'Crouley, *A Description of the Kingdom of New Spain*, 101-103. Wolf ("The Virgin of Guadalupe...") condensed the origin myth into a paragraph. (34-35).

¹⁹⁴ Poole, *Our Lady of Guadalupe*, 2; Louis R. Caywood, *Restoration of the Church of Our Lady of Guadalupe, Zuñi*.

¹⁹⁵ Crumrine, *The Mayo Indians of Sonora*, 10, 78.

¹⁹⁶ Sandomingo, *Historia de Sonora*, 123.

¹⁹⁷ Pedro Font, *Font's Complete Diary: A Chronicle of the Founding of San Francisco*, translated by Herbert Eugene Boston. Berkeley: University of California Press, 1931, 5.

Thus, there can be absolutely no doubt that devotion to Our Lady of Guadalupe was general in Sonora when the founders of San Francisco left home to colonize the shore of the great bay. There can likewise be no doubt that the founders of San Francisco assembled at San Miguel de Horcasitas were themselves devotees, although their enthusiasm may have varied more than Font indicated in his enthusiastic encomium.

Living far distant from Tepeyac and being poor, the founders of San Francisco were unlikely to have made the pilgrimage to Tepeyac which is a goal of many if not all Roman Catholics in New Spain cum Mexico. That concurrence of believers has been huge through the historic period since 1531. It has, as apparitions and saint's powerful statues generally do, its miraculous curing dimension. About a block from the Sanctuary is the Chapel of the Little Well. The well opened on the hill under the feet of Our Lady of Guadalupe during one of the apparitions. Pilgrims collect the water to pour over themselves or put into bottles to take with them. They dig out mud to carry home.¹⁹⁸

Devotion to Our Lady of Guadalupe spread far and wide through New Spain. Its great symbolic significance was readily evident in the titles Mexico's emperor bestowed upon himself. Agustín de Iturbide became "AGUSTIN, by divine Providence and by the National Congress, the first Constitutional Emperor of Mexico, and Grand Master of the Imperial Order of Guadalupe. . . ."¹⁹⁹ This event points to later scholars concluding that *guadalupanismo* and machismo perform similar functions in Mexican society. Both foster individual affirmation. Both protest against father figures. Both take refuge in an idealized mother image.²⁰⁰

The process by which devotion to Our Lady of Guadalupe diffused to Culiacán and Sinaloa may fairly safely be inferred to have been primarily an indigenous one. That is, Tahue and their descendants learned about Our Lady of Guadalupe and her championship of native peoples, and enthusiastically joined her devotion. That the handful of Spaniards constituting the tiny elite of Culiacán did not embrace Our Lady of Guadalupe seems evident from the very fact that she is the center of it. Spaniards had a different and competing patroness, Our Lady of Ransom. Her foot high statue was fashioned in Europe, and carried to America by one of Cortés' men. It was the only Roman Catholic statue available to replace Aztec images when the invading Spaniards destroyed the native religious statuary in Tenochtitlan. When Native troops chased the invaders out of Tenochtitlan on the "Sad Night" of 20 July, 1520, the Spaniards lost the statue. Twenty years later a native cacique (chief) repeated Juan Diego's encounter with the Virgin. During her initial apparition, Our Lady of Ransom told the cacique to look for the statue among his maguey plants. It took her three tries, but she finally led the man to the image. The cacique built a household shrine for the statue, but it again disappeared thrice. Each time it reappeared at the same maguey. Then the Native went to Tacuba to tell the Spanish clergy about the apparitions. The clergy concluded that Our Lady of Ransom had given clear instructions as to where a church should be built in her honor. The Spaniards preferred Our Lady of Ransom over dark skinned Our Lady of Guadalupe. The Spaniards gave their preferred statue the additional

¹⁹⁸ Frances Toor, *A Treasury of Mexican Folkways*. New York: Crown Publishers, 1947, 176; Morriss, "Virgin. . . with a Pagan Halo," 11.

¹⁹⁹ Ministerio de Guerra y Marina, Palacio de México, 9 de Noviembre de 1822. Circular, 1. Arizona Historical Society Microfilm, MCF 0.560.1.

²⁰⁰ Poole, *Our Lady of Guadalupe*, 6.

appellation of “La Conquistadora” the Conqueress.²⁰¹ Our Lady of Ransom is also known as “La Gachupina” – a Peninsular staunch and true. Our Lady of Guadalupe is dark skinned, often regarded as a Mestiza.²⁰²

Many devotees regarded blue as the Virgin of Guadalupe’s color, and believed that it afforded protection against witches. Consequently, after the transcontinental United States railway reached Albuquerque, carrying industrial paints, blue became the color of doors and windows in post colonial New Mexico.²⁰³ At the very least, the founders of San Francisco would have taken with them from Sonora-Sinaloa belief that blue was a special color because of its association with the Virgin of Guadalupe.

A regional pilgrimage to the statue of St. Francis at Magdalena developed during the early nineteenth century,²⁰⁴ decades after the founders of San Francisco left Sonora. Sonoran Spanish stay at homes and the Californios diverged, therefore, in terms of local/regional pilgrimage patterns.

Whatever religious beliefs individual founders of San Francisco may have held before 1775, the Roman Catholic Church loomed very large in their lives. The Church, which is to say its priests however few they were in the province, conducted the rites of passage: baptism, marriage, burial, which marked an individual’s progress through life.

In a disease environment which militated against long lives, fictive kinship associates with rites of passage bolstered each individual with backup ritual relatives when his or her own died. Godparents of baptism and marriage more or less insured continuity of enculturation when parents died young. Fictive kinship relations permeated the agrarian Sonoran rural society from which the founders of San Francisco came. Peninsulars and Creoles serving as godparents of Natives linked diverse ethnic groups. Elite godparents protected their godchildren and helped them in their careers. Juan Bautista de Anza himself set an example. Anza tried to keep his godson in the frontier armed forces despite that young officer’s glaring incompetence.²⁰⁵

4.3.12 Compadrazgo

Colonial Spaniards brought with them a fictive kinship system based on church rites of passage: baptism, first hair cutting, and marriage. Godparents who stepped in to rear children in the church when their parents died played a crucial role in the medieval and colonial disease environment. Parents who survived experienced a close personal relationship with their coparents. The bond between social equals was one of mutual trust, contrary to the numerous disintegrative influences in colonial society. Couples of relatively lower status typically sought godparents of baptism of their offspring of superior social status, hoping to improve their offspring’s chances of moving upward socially and economically. On the Native American

²⁰¹ Toor, *A Treasury of Mexican Folkways*. 186-87.

²⁰² Victor Turner and Edith Turner, *Image and Pilgrimage in Christian Culture*, 90.

²⁰³ Dickey, *New Mexico Village Arts*, 62

²⁰⁴ Dobyns, “Do-It-Yourself Religion,” 58-60, 64-65.

²⁰⁵ Dobyns, *Spanish Colonial Tucson*, 60. A clerical observer not integrated into the fictive kinship network charged that the man in question did nothing but dance, gamble, and sport fancy clothes.

frontiers, *compadrazgo* bridged the wide gap between Natives and Newcomers when the latter acted as godparents. For example, “Mayo officials and leaders always have tremendously wide *compadre* connections often both inside and outside Mayo society.”²⁰⁶ *Compadrazgo* reinforced the extended family or lineage.²⁰⁷

4.3.13 Death and Burial

Anglo-American historian Hubert H. Bancroft labeled funerals in colonial New Spain “pompous.”²⁰⁸ That is not only a foreign but also an urban perspective.

Foreign visitors have not infrequently perceived Mexicans as obsessed with death. In colonial New Spain, death rates rose so high that deaths occurred frequently, and mortality indeed shadowed everyone. Part of the Spanish colonial strategy for coping with high mortality rates was floral. Mesoamerican conditions encouraged the growth of plants flowering spectacularly. Flowers brightened everyday living, and special blossoms appeared at funerals. Certain blossoms became associated with the holy days constituting the Roman Catholic ceremonial calendar.

The observance of All Souls’ Day illustrates this pattern. We note first the twentieth century capital city pattern observed in 1913-1914. The population of Mexico City purchased bright yellow *cinco llamas* flowers to decorate the graves of their relatives. Native vendors flocked into the city from flower growing areas with the flowers appropriate to each holy day in the annual round, selling their blossoms from booths thrown up on the streets.²⁰⁹ Thus, holy days in the colonial and republican capital city exhibited a synthesis of preconquest Native valuation of blossoms and post conquest Newcomer Roman Catholicism.

The Sonoran Desert did not, of course, encourage flowering plants in the Mesoamerican pattern. Sonorans had and have yet to grow their flowering plants. In Sonora, women use the blossoms. Boys may accompany their mothers or aunts or cousins, but women are in charge and adult males are conspicuously absent. All Souls’ Day in Magdalena, Sonora, both resembles the Mexico City observance and also differs. Sonoran women decorate with flowers the graves of their relatives just like people in the metropolis. The flowers differ: Sonoran women carry white petaled chrysanthemums – *margaritas* – to decorate graves on All Souls’ Day. As in Mexico City, blossoms for All Souls’ Day were by mid-century commercialized. The small stores along the streets stocked white petaled chrysanthemums, and children peddled them from door to door. Two sisters cleaning and decorating graves of two families purchased washtubs full of white petaled chrysanthemums two or three days in advance.²¹⁰ We infer that adorning graves with

²⁰⁶ Crumrine, *The Mayo Indians of Sonora*, 69.

²⁰⁷ Foster, *Culture and Conquest*, 122. There is a large literature on *compadrazgo* in Hispanic America.

²⁰⁸ Bancroft, *History of Mexico*, Vol. III, 762.

²⁰⁹ Edith O’Shaughnessy, *A Diplomat’s Wife in Mexico*. New York: Harper & Brothers, 1915, 35. The period of observation was 1913-14.

²¹⁰ HFD field notes of observations at Magdalena, Sonora, Mexico, on All Souls’ Day in 1957, 1-4. [In 1957, stores charged P1.50 per kilo, door to door peddlers charged P1.00.]

white blossoms stems from a Peninsular cultural pattern (the center of the white petaled chrysanthemum is yellow like the *cinco llamas* flower²¹¹).

As for 1763-1775 Sonora, we can certainly rule out the modern washtub as a flower container. Wooden buckets would have been the flower containers. Commercialization of flowers for events in the Roman Catholic annual round seems inconsistent with the ubiquitous poverty of Sonorans and northern Sinaloa at that time. Arguably, Sonoran women grew their own flowering plants, carefully watering them as soil dried out in the arid atmosphere; that was part of riverine oasis life. The modern chrysanthemum probably developed after the time period of interest in this analysis,²¹² but we lack information identifying what flower or flowers Sonorans used in 1763-75. Arguably, again, whatever blossom Sonorans used then was white.

Excavation of the cemetery at the colonial military post at San Diego, California, has uncovered direct evidence of Spanish mortuary practice. During Mexican times, mourners nailed copper tacks into the coffin lid to spell the initials of the name of the interred individual.²¹³

4.3.14 Holy Days

Roman Catholic Holy Week behaviors differed from those observing other holy days in the annual round. Church bells remained silent during Holy Week. People substituted for bell tolls the disagreeable racket of hand-held wooden *matraca*. This noisemaker consisted of one to four wooden hammers striking one to four thin boards.²¹⁴

4.3.15 Dress

The Spanish monarch decreed sumptuary rules for colonial costume. Some male professions involved distinctive costumes. Ordained Roman Catholic priests wore clerical clothing, unless they belonged to one of the orders. Member of various religious orders wore black, gray, or brown robes. One of the Bourbon reforms after the Seven Years War was clothing troops, even the presidial garrisons on the Indian-fighting frontier. King Charles III's regulation of the frontier posts specified their uniforms. As implemented by Commanding Inspector Hugo O'Connor, the uniforms included a blue waistcoat with a scarlet collar and gilt buttons, blue plush breeches, blue wool cape, black cravat, hat, shoes and boots, leather cartridge case and chamois skin bandoleer.²¹⁵ The late-eighteenth-century Spanish cartridge box held 19.75 caliber paper cartridges.²¹⁶

²¹¹ Real Academia Española, *Diccionario Manual e Ilustrado de la Lengua Española*. Madrid: Espas-Calpe, 1950, 977 Margarita.

²¹² The contemporary Spanish label, *crisantema*, (Carlos Castillo and Otto F. Bond, compilers, *University of Chicago English-Spanish Dictionary*. New York: Washington Square Press, 1950, 36) is an obvious loan word from English.

²¹³ Ezell and Ezell, "Bread and Barbecue at San Diego Presidio," 86.

²¹⁴ Real Academia Española, *Diccionario Manual e Ilustrado de la Lengua Española*, 986; Crumrine, *The Mayo Indians of Sonora*, 74.

²¹⁵ O'Connor, *Informe de Hugo O'Connor sobre el Estado de las Provincias Internas del Norte 1771-76, System of Northern New Spain*. Phoenix: Arizona Historical Foundation, 1965, 20-21. The Brinckerhoff and Faulk translation omitted the cape.

²¹⁶ Brinckerhoff and Faulk, *Lancers for the King*, 69.

Bancroft significantly oversimplified his sketch of general colonial dress. He listed drawers, a hat, a square mantle or *serape* (poncho in the Andes) rebozo, jacket, beads, sashes, and jewelry.²¹⁷

The Viceroy approved Anza's choice of clothing for the volunteers recruited to found San Francisco. The clothing subsidy for the founders reflected to an unknown extent Anza's perception of ideal clothing for the founders and his perception of what the recruits and their spouses would need and want. Anza warned the Viceroy that the government would have to equip the volunteers from shoes to hair ribbons. Men received 4 yards of ribbon, women received 6 yards.²¹⁸

As for Sonora, the German Jesuit missionary Ignaz Pfefferkorn thought that Spaniards dressed poorly except for some of the wealthier of them. The Jesuit wrote that "the style is about the same for all classes." Men generally wore thigh-length coats of red or scarlet cloth, never buttoned up although decorated with copper or silver buttons. Men wore a long-sleeved blue cloth jacket under the coat, and blue or red plush pants. Those who could afford it trimmed their suits with silver. The preferred hat was small, round, and stiff. A blue mantle topped this ensemble. Footgear appears to have been a proto-huarache worn with footless stockings.²¹⁹ The government provided each founder with two cloth jackets, "lined and trimmed," two pairs of breeches, two pairs of hose, two pairs of buckskin boots, and a hat. In addition, each founder received three good linen shirts, three pairs of Puebla cotton underdrawers, and the 4 yards of ribbon already mentioned.²²⁰

Spanish women in Sonora wore gowns, pleated by nine rows of pleats. Above the waist, women wore a shirt closed at the neck by a collar "for the sake of modesty," according to German Jesuit Pfefferkorn. When women dressed up, for feast days, for example, their shirt waist was embroidered with silk, silver, or gold. "Jackets are worn only by those who especially wish to set themselves apart from the common crowd." Writing that "the desire for beauty is just as strong in the women of Sonora as it is in German women," Pfefferkorn observed that women either spent their household budgets or gave up their display and languished secretly.²²¹

The clothing that the government furnished wives of male founders of San Francisco reveals that Anza's perception, at least, clothed Sonoran women in broad spreading skirts supported by abundant petticoats – a style ubiquitous throughout Spanish America. It still survives in the heights of the Andes as Native American or cholo typical dress. Each founder's wife officially received a serge skirt, one baize skirt, one underskirt, and three white Puebla cotton petticoats. She also received 3 chemises, two linen jackets, two pairs of "fine Brussels stockings," two pairs of cheaper hose, two pairs of shoes and a hat.²²²

²¹⁷ Bancroft, *History of Mexico*, Vol. III, 765-67.

²¹⁸ Bolton, *Anza's California Expeditions, Vol. I. Outpost of Empire*, 221-22.

²¹⁹ Pfefferkorn, *Description of Sonora*, trans. Treutlein, 286.

²²⁰ Bolton, *Anza's California Expeditions, Vol. I. Outpost of Empire*, 221.

²²¹ Pfefferkorn, *Description of Sonora*, trans. Treutlein, 286.

²²² Bolton, *Anza's California Expeditions. Vol. I. Outpost of Empire*, 221.

“Whenever she leaves her house, the Spanish woman covers her head with a rebozo, . . . Rebozos are worn by all Spanish women in Sonora, and in New Spain generally. They serve both as a covering and as an adornment. These cloths are elaborately worked with all kinds of pretty vari-colored figures. Some rebozos are made of pure cotton, others of mixed cotton and silk, and still others of pure silk.”²²³

4.3.16 Needle and Thread

The government treated the children of the founders differently from their parents. The official clothing subsidy for adults consisted of garments. Aside from hats, shoes, and ribbons, however, the government provided only yard goods for children’s clothing. This differential treatment shows that colonial Spaniards expected married women to wield needle and thread at least well enough to sew clothing for their children.

4.3.17 Adornment

“This section is concerned with methods of adorning the body other than by the wearing of clothing.”²²⁴

4.3.18 Toilet

Most Spanish men in Sonora braided their hair in long plaits, or tied it close to the head. “The merchants, gachupines, and all those who consider themselves real Spaniards and who wish to hold themselves above the rabble, have their heads shaved and cover them with caps of fine muslin” edged with lace.²²⁵

4.3.19 Diet

The dietary staple of the lower classes in New Spain was beans and maize tortillas, seasoned by chili sauce. The maize and beans complemented each other, so this basic diet was nutritious. The upper classes and urbanites added chocolate, fruits, and cakes. Those who took a noon meal typically had rice soup. Only the well to do could afford Spanish wines.²²⁶

Pfefferkorn perceived little difference between the diet of the common Spaniard in Sonora and the Natives. Spaniards “get along with posole, pinole, atole, and tortillas” with a piece of beef or jerky. Only the wealthy enjoyed mutton or chicken.²²⁷ Among twentieth century Mayo, atole was festival food.²²⁸

An unseasoned maize tortilla has almost no flavor. When properly made, however, “they are true masterpieces of the culinary art.” At mid-twentieth century, Sonoran girls were still

²²³ Pfefferkom, *Description of Sonora*, trans. Treutlein, 288.

²²⁴ Murdock, et. al., *Outline of Cultural Materials*, 30, No. 30, toilet No. 302.

²²⁵ Pfefferkom, *Description of Sonora*, trans. Treutlein, 287.

²²⁶ Bancroft, *History of Mexico*, Vol. III, 763-4

²²⁷ Pfefferkorn, *Description of Sonora*, trans. Treutlein, 288.

²²⁸ Crumrine, *The Mayo Indians of Sonora*, 59.

being reared with the idea that making tortillas are to culinary art as is commercial mass-baked white bread. The initial step in preparing a proper tortilla is sorting—discarding imperfect or dark kernels that would spoil the flavor. Then the kernels are soaked in lime water. Overnight, the kernels soften and the skin comes loose. The maize is washed repeatedly. Then the hand-held *mano* crushes handfuls of *masa* on a *metate*. The perfectionist grinds the *masa* over and over until satisfied with its fine consistency. Taking a ball of *masa*, the tortilla maker hand shapes the tortilla until she drops it onto the hot *comal* over a fire of fragrant wood.²²⁹

The families of the founders of San Francisco may have lugged their own *comales* from Sonora to the Bay. Else the founders made do with frying pans to toast their tortillas. For Anza requisitioned 8 frying pans but no *comales*. [Dr. Dobyns had not seen the footnoted version of Appendix B which indicates that the iron frying pans were in fact *comales*]. He also asked for 10 copper camp kettles, and a dozen large chocolate pots. Four Vizcayan hand axes²³⁰ undoubtedly cut and chopped firewood for cooking.

The rations that Anza requisitioned for the founding expedition to San Francisco followed the general dietary pattern. Anza planned to barbeque one beef per day. Pack animals carried wheat flour for tortillas, pinole, beans, chocolate, sugar, and brandy. The officers' mess reflected the hierarchy present in any army. The expedition started off with a box of hams, an arroba of sausage, biscuits, "fine" chocolate, a barrel of wine, about 150 pounds of cheese, 4 pounds of pepper, saffron, cloves, cinnamon, one precious jar of olive oil and one of vinegar.²³¹

Daily fresh beef was a definite treat for the founders of San Francisco. Only rarely did enough people gather in their rural homeland to justify slaughtering a beef. For whatever meat could not be consumed within a day or two would spoil if it was not immediately processed into jerky. Prior to the Industrial Revolution, people simply had no way to store fresh meat.²³²

4.3.20 Seafood

Sun dried, salted, and split fish formed a significant portion of the diet of irrigation farmers along the Mayo, Fuerte, and Sinaloa Rivers from pre-conquest Native American times past mid-twentieth century. During the later period, the Roman Catholic ceremonial calendar concentrated the consumption of fish on Fridays, especially during Lent and every day during Holy Week.²³³

From aboriginal to modern times, fishing farmers moved dried, salted fish inland upstream so that all who desired fish could obtain it. The estuarine fishery at the mouths of the rivers listed above afforded shark, red snapper, halibut, mojarra, and sea turtles. Fishing farmers also collected oysters, clams, and crabs.²³⁴

²²⁹ Hilton, *Sonoran Sketch Book*, 262, 265.

²³⁰ Bolton, *Anza's California Expedition. Vol. I. Outpost of Empire*, 224.

²³¹ Bolton, *Anza's California Expedition. Vol. I. Outpost of Empire*, 223-24.

²³² Erasmus, *Man Takes Control*, 6.

²³³ N. Ross Crumrine and Lynne S. Crumrine, "Ancient and Modern Mayo Fishing Practices," *Kiva*, 33:1 (October, 1967) 25-33, 28-29.

²³⁴ Crumrine and Crumrine, "Ancient and Modern Mayo Fishing Practices," 27.

In this environmental context, the founders of San Francisco should have been accustomed to eating dried seafood. They should have known how to construct estuarine fish traps, and to weave dip nets, throw nets, and tidal trap nets. In other words, the founders of San Francisco should have been culturally prepared and qualified to colonize the shores of San Francisco Bay.

The Roman Catholic Church significantly influenced the role of seafoods and fresh water fish in the diet of the founders of San Francisco. Believers fasted insofar as they ate fish instead of beef, mutton, or goat, etc., on Fridays and on Sundays, Mondays, Tuesdays and Thursdays during Lent.²³⁵

4.3.21 Hot and Cold

Ubiquitous in contemporary Hispanic America is a classification of foods as either hot or cold. The classification does not depend upon the actual temperature of the food. It is a priori system related to the presumed relationship between human health and the innate coldness or heat of foods. Although Spanish colonial authorities presumably did not advocate classing foods as hot or cold, this perception of the world is a colonial phenomenon. Spaniards on the Peninsula do not so classify foods,²³⁶ and arguably have not done so historically. Mayo natives living immediately to the north of the zone where Anza recruited most of his colonist-soldiers classified fish, for example, as a “cold” food.²³⁷

4.3.22 Recreation

Despite their poverty, despite their distrust, despite their rural residence, Spanish Sonorans managed to relax on occasion and enjoy themselves to a certain extent.

Rodeo. Although Newcomers close herded their cattle, some animals evaded cowboy vigilance and escaped into the open range. Consequently livestock owners with adjacent ranches joined together, usually annually, for a rodeo in the classic sense – calf gathering and branding to establish ownership. Skill contests not infrequently accompanied rodeos – calf and steer roping, horse foreleg roping, etc. Bets went with the action. One early twentieth century vaquero bet a wealthy hacendado that he could break the necks of 50 mares by forefooting them. The hacendado conceded the wager after the vaquero broke the necks of five mares, risking his neck against theirs.²³⁸

Animal fighting. Many sixteenth-century Europeans enjoyed watching wild animals and birds fight to the death. In England, spectators scampered to bull and bear baiting matches. The first printed map of London, executed in 1574, showed the bull and bear baiting facilities in

²³⁵ Not until the end of the century did a Papal Indulgence exempt Catholics in the Diocese of Sonora from the traditional switch to fish during Lent (Francisco, Bishop of Sonora, Archivo de la Catedral de Culiacan, Dec. 6, 1797) Arizona Historical Society Microfilm, 0.560.2

²³⁶ Foster, *Culture and Conquest*, 6, 15.

²³⁷ Crumrine and Crumrine, “Ancient and Modern Mayo Fishing Practices,” 30.

²³⁸ Dobie, *Tongues of the Monte*, 42.

Southwark.²³⁹ The English metropolis set the example to the rest of the country, a pattern repeated in Spain and especially in Mexico City in New Spain.

Spaniards brought with them to the Americas a strong sentimental attachment to several sorts of conflict between animals, but especially the conflict between man and bull. In Chile, Spaniards constructed a *plaza de toros* in Santiago in mid-sixteenth century, when that settlement consisted of but few hundred inhabitants.²⁴⁰

The most elegant expression of commercialized bull fighting in New Spain was, of course, the huge bull ring in Mexico City, with its capacity of thousands of spectators.²⁴¹ Bull fighters in provincial Sonora lacked the professional polish of Mexico City matadors and picadors. Provincial amateur bull fighters presumably compensated for their lack of finesse by abundance of enthusiasm.

Like bull fights, urban dog and cock fights took place in special arenas. In provincial Sonora, cock and dog pits lacked the elegance of those in colonial cities. Indeed, provincial bull fights were not infrequently improvised affairs.

Colonial Spaniards had a “lurking love for such barbaric sports as bull and cock fighting.”²⁴² The predilection of the population of New Spain for cockfighting allowed the royal government to gain significant income from this sport. After 1727, the government sold monopolies of cockfighting to individuals in the various urban settlements. By that time, “cockfighting was characterized as an immemorial custom of the country.” Having failed to suppress cockfighting as a public vice, the King attempted to regulate it. Royal rules stipulated that fighting should not start before 1 p.m. Miners and slaves should not attend. Royal officials should preside (to discourage extravagant wagering).²⁴³

One aspect of Mexican cowboy subculture was roping bears.²⁴⁴ This practice may have traveled to Upper California with the founders of San Francisco. Trapper-trader James O. Pattie claimed to have witnessed there combined bull and bear baiting contests.²⁴⁵

Playing Cards. Novelist Isabel Allende identified card playing as one of the main pastimes of pioneer Spaniards in Chile at mid-sixteenth century. Bocce, squash, dog races, and cockfights were other amusements of the Chilean Spaniards.²⁴⁶

Arguably the most pervasive and important recreational activity in New Spain, including rural Sonora, was playing cards. So widespread was card playing that the crown monopolized the production of cards, and card sales provided a significant portion of the royal income. One of the

²³⁹ James Shapiro, *A Year in the Life of William Shakespeare. 1599*. New York: Harper, 2005, illustration following p. x170.

²⁴⁰ Isabel Allende, *Ines of my Soul*, 230.

²⁴¹ C. Reginald Enock, *Mexico*. London: T. Fisher Unwin, 1910, 194.

²⁴² Bancroft, *History of Mexico*, Vol. III

²⁴³ Priestley, *José de Gálvez*, 345.

²⁴⁴ Dobie, *Tongues of the Monte*, 000.

²⁴⁵ Pattie, Personal Narrative of..., 0000.

²⁴⁶ Allende, *Ines of my Soul*, 231.

reforms Inspector General José de Gálvez instituted in Mexico City was to expand the royal playing card monopoly like the tobacco monopoly.²⁴⁷ Gálvez fixed the price of playing cards at 12 *reales* per pack, and decreed measures to prevent counterfeiting.²⁴⁸

The colonial government paid military garrisons some cash, so that soldiers handled more coins than most Sonorans. They put coins in their pockets, “not in order to purchase provisions or clothing, but in order to wager on their card games, a recreation very common among them.”²⁴⁹

Late in the nineteenth century, Monte was “the favorite game throughout Mexico and Spanish America.” Played with a 40 card deck, Monte was ideal for wagering. The Faro deck contained 52 cards.²⁵⁰ Monte probably was the common card game among the founders of San Francisco.

Probably because card players typically gambled on the outcomes of each hand, the colonial clergy frowned on card playing. At the end of the eighteenth century, Pedro de Arriquibar, O.F.M., railed against the poor moral example provincial Spaniards set the Peaceful Apaches congregated at the Bacoachi military post. As a consequence of mistaken policy, Arriquibar wrote, “they are full of new vices learned among the very people who are called Christians.” The priest found it very difficult to “amend” the behavior of the Apaches because “the cause does not cease,” that cause being “the bad example set by Christians!” Arriquibar “witnessed them playing games of ‘*albures*’ to which they are addicted, principally the youths but even the women.” The Mescalero Apache card players told the priest “that this, like other games of cards that they play, is the first milk that they sucked from the Christians.” The Apaches clearly recognized that they had and were learning Spanish dances (with “a thousand iniquitous movements”), swearing, and obscenities.²⁵¹

During the few decades that Peaceful Apaches lived at frontier military posts watching Spaniards, Creoles, Mestizos, and Natives of other ethnic groups, they thoroughly integrated playing cards into their own culture. At some time, Apaches turned to making playing cards for themselves.²⁵² Some 3,000 cards produced by Apaches are known,²⁵³ and contemporary Apaches continue to play cards. Whatever modifications Apaches have made to their late colonial playing card model, they clearly adopted the card playing (with gambling) trait from the Sonoran Spanish model which constituted part of the cultural milieu of the founders of San Francisco.

²⁴⁷ Priestley, *José de Gálvez*, 210.

²⁴⁸ Priestley, *José de Gálvez*, 263. Leaf tobacco sold for 12 reales per pound, cigarettes at one real per box. Gunpowder, another royal monopoly, was also set at 12 reales per pound; Gálvez, Informe General.

²⁴⁹ Alberto Francisco Pradeau, *Sonora y sus cases de moneda*. Mexico: edición privada, 1959, 11.

²⁵⁰ Anonymous, “Viva St. Augustin,” *Arizona Weekly Star*, Tucson, Sept, 16, 1880

²⁵¹ Dobyns, *Spanish Colonial Tucson*, 44.

²⁵² Henry F. Dobyns, “Apache Playing Cards,” *Indian Trader* 5:6 (November, 1974) 14-15.

²⁵³ Virginia Wayland, Harold Wayland, and Alan Ferg. *Playing Cards of the Apaches: A Study in Cultural Adaptation*. Tucson: Screenfold Press, 2006; John R. Welch, review of V. Wayland, H. Wayland and A. Ferg, “Playing Cards of the Apaches: A Study in Cultural Adaptation,” *Journal of Arizona History* 49:1 (Spring 2008) 77-79.

4.3.23 Curios

Human beings are curious by nature. Consequently, “there are countless subvarieties of the collecting virus.”²⁵⁴ Colonial Spaniards were not immune.

The Columbian discovery in 1492 forced Europeans to revise drastically their previous perception of the world. Some later commentators have criticized the great explorer for enslaving Native Americans whom he took to Spain to exhibit to his patrons, King Ferdinand and Queen Isabella. The Admiral originally kidnapped most of his captives to use as interpreters. In more general terms, however, Columbus needed Native Americans to exhibit in Spain as proof that he had discovered human beings different from all of those in the Old World. The culture of these American humans being manifest in their artifacts, Columbus accumulated an assortment of things to accompany his human evidence. As Columbus traveled from Sevilla to Barcelona to report to the Catholic Monarchs, crowds of curious Spaniards slowed his progress. They gathered from far and near to “see him and the Indians and the strange things he brought.”²⁵⁵

From a slightly different perspective, collecting people and objects to show to the Catholic Monarchs can be considered logical military intelligence gathering. Whatever decisions the monarchs might make concerning future Spanish contact with the Americas and the Americans logically should be based on as accurate intelligence as possible. In any event, Columbus firmly established the pattern of Spanish colonial exploration and reporting.

4.3.24 The Cortesian Model

In 1519, Hernán Cortés and his companions took advantage of existing Peninsula law and precedents to establish a more or less self-governing municipality at the port of Vera Cruz. Acutely aware of the threat of competition from other greedy Spaniards in the Caribbean, the invaders appealed to the King for approval of their actions and for royal appointments for Cortés and other officials. The petition has come to be known as Cortés’ first letter to the King. At the end, the missive lists many precious art works the adventurers sent to the king as gifts, over and above the royal fifth of the bullion the invaders had already accumulated.

1. A large gold “wheel” showing “monsters” and foliage weighing 3,800 pesos de oro.
2. Two necklaces of gold and stone mosaic. One had 8 strings of 232 red jewels and 163 green jewels bordered with 27 small gold bells. The second necklace had four strings of 102 red jewels and 172 green surrounded by 26 gold bells. Ten large stones were inlaid with gold with hung 142 pendants.
3. Four pairs of circular earrings, two of fine gold leaf trimmed with yellow deerskin and two trimmed with white deerskin. Each earring had 16 small gold bells trimmed with red deerskin.
4. Boxed separately a large piece of feather work with a large disk of gold at its center, plus two stone mosaics, the whole lined with marten pelt.
5. A feather work fan with 37 small rods cased in gold.

²⁵⁴ Hilton, *Sonoran Sketch Book*, 23.

²⁵⁵ Ferdinand Columbus, *The Life of the Admiral Christopher Columbus*, translated by Benjamin Keen. New Brunswick, N.J.: Rutgers University Press, 1959, 185.

6. A colored feather work headdress encircled by 68 small pieces of gold, plus 20 gold towers.
7. A blue stone mosaic miter showing “monsters” at its center.
8. Four featherwork “harpoons” with stone heads and a jeweled scepter with rings of gold and featherwork.
9. A bracelet of blue jewels.
10. A large pair of leather sandals with white soles sewn by gold thread.
11. A mirror set in blue and gold jewelry with attached featherwork and leather.
12. A golden head, apparently of an alligator, with three pieces of featherwork. Two blue stone mosaic ear ornaments fit the alligator head.
13. Some blue stone mosaic earrings each with 15 pendant small gold bells.
14. A wolfskin mantle lined with marten furs.
15. Some colored feathers with white fibers.
16. Two stone mosaic helmets with featherwork.
17. Two gold headpieces shaped like shells with featherwork.
18. Two birds with green plumage and golden beaks, eyes, and feet.
19. A blue stone mosaic helmet encircled by 20 small gold bells.
20. Another blue stone mosaic helmet with 25 small gold bells circling it and two gold beads above each bell.
21. Two large pieces of gold in a reed container to be worn on the head, plus two birds with golden feet, beaks, and eyes.
22. 16 stone mosaic bucklers surrounded by featherwork.
23. A red stone mosaic scepter depicting a snake.
24. A featherwork fan in a reed adorned with animal skin and many long green feathers.
25. Two thread and featherwork birds with golden wings and tail quills, claws, eyes, and beak tips.
26. Four featherwork fish with golden tails, gills, eyes, and mouths, with featherwork.
27. Five featherwork fans with small quills covered with gold.
28. Four white flint harpoons with featherwork on the rods.
29. A large featherwork buckle with a gold plate at the center and four gold half plates around the edge, forming a cross.
30. A featherwork piece like a half chasuble.
31. A featherwork piece like a jousting helmet with ear ornaments of two golden bells and beads.
32. Four animal heads, two apparently wolves and two tigers, hung with bronze bells.
33. Two jaguar skins lined with cotton.
34. Three animal pelts.
35. Four small deer skins.
36. Two codices, 6 colored featherwork fans, and a colored featherwork perfume container.
37. A large silver “wheel,” some bracelets, some beaten silver leaves, and large and small silver buckler, 3 more buckles appearing to be silver.
38. Two large cotton pieces woven in black, white, and tawny.
39. Two cotton pieces woven with feathers.
40. A cotton textile woven in patterns with a wheel of black feathers at the center.
41. A pair of white cotton cloths woven with featherwork.
42. A peasant smock.
43. A white cotton textile with a wheel of white feathers at the center.

- 44. Two pieces of gray cord with featherwork.
- 45. Half a dozen pieces of painted cotton, another red textile with wheels, two pieces painted blue, two women's shirts.
- 47. Six bucklers, each covered with gold.
- 48. A half miter of gold.²⁵⁶

4.3.25 Collecting on the Northern Frontier

Military and economic intelligence gathering continued as Spaniards expanded New Spain northward, and explored beyond the colonial frontiers. Alvar Núñez Cabeza de Vaca and his fellow refugees became so angry at the Spanish slavers who wanted to enslave their Native American entourage that they forgot many bows, arrows, pouches, and five “emerald” ritual projectile points they had collected during their long transcontinental journey. Núñez and his companions did distribute among the Culiacán Spaniards a great many bison skin robes.²⁵⁷

When Francisco Vázquez de Coronado reached Hawikuh Pueblo, he excused himself to Viceroy Antonio de Mendoza for not sending him “many samples of the things which they have in this country” because the trip was so long and rough. “I send you twelve small mantles, such as the people of this country ordinarily wear.” Vázquez also sent one garment which impressed him as very well made. “And I send two cloths painted with the animals which they have in this country, although as I said, the painting is very poorly done, because the artist did not spend more than one day painting it.” Vázquez wrote that he had seen better quality paintings on Pueblo houses. “I send you a cow skin, some turquoises, and two earrings of the same, and fifteen of the Indian combs, and some plates decorated with these turquoises, and two baskets made of wicker...two rolls, such as the women usually wear on their heads when they bring water from the spring.”²⁵⁸

4.3.26 Sonoran Collectors

This curious dimension of interethnic interaction emerged in frontier Sonora. Some dominant group members collected Native curios – arts and crafts. Probably only members of the provincial elite – clerics and military officers – could afford to collect curios.

The outstanding collector during our period of concern was the missionary Phillip von Segesser von Brunegg, S. J. Stationed in upper Pimería at Mission San Francisco Xavier de W:k in 1732, Segesser moved in 1735 to Tecoripa Mission in Lower Pimería. In mid-November 1744 von Segesser moved to Ures in Lower Pimería far distant from the Great Plains aboriginal culture area. Segesser in 1758 sent home a spectacular pair of paintings on leather panels clearly made on the Plains. The sheer size of Segesser's painted leather scenes makes them much more

²⁵⁶ Hernán Cortés, *Letters from Mexico*, translated by Anthony Pagden. New Haven: Yale University Press, 1986, 40-46.

²⁵⁷ Alvar Núñez Cabeza de Vaca, *The Journey of ...* translated by Fanny Bandalier. New York: Williams-Barker, 1904, reprint New York: Allerton Book Co., 1922, 170.

²⁵⁸ Francisco Vázquez de Coronado, “Translation of the Letter from Coronado to Mendoza, August 3, 1540.” Pp. 552-63 in *Fourteenth Annual Report of the Bureau of Ethnology 1892-93 Part 1*. Washington, D.C.: Government Printing Office, 1896, 562.

than curiosities. The two surviving works measure 4 ½ feet high by more than 18 feet wide. The long width was achieved by sewing together with sinews three panels.²⁵⁹

Presumably these skins cost Segesser a small fortune, although he minimized their value in his correspondence. The priest's bad mouthing the paintings probably was part of an effort to mislead potential thieves along the long route from Ures Mission to Lucerne. The protective strategy seems not to have worked completely. Segesser actually acquired three painted scenes, but one failed to reach his brother back home in Lucerne, Switzerland. As a member of a noble Swiss family, Von Segesser evidently received significant financial support from his family that enabled him to acquire notable Native artistic artifacts. If the Segesser family did not subsidize Philip's curio purchases, he evidently tapped some of the profits from selling mission produce for personal purposes.

Segesser's correspondence indicates that he personally packed the leather paintings in a special box, which he dispatched from Ures Mission in 1758. Segesser's mission station among the Lower Pimas raises significant questions concerning the mode of acquisition of the paintings. How did what are manifestly southern Great Plains art works reach Ures Mission near the Gulf of California coast of Sonora? Was transmission from the southern Plains to Ures via Native American middlemen?

If Native American traders moved the paintings from the southern Plains to Ures, which ethnic groups were at mid-eighteenth century, were they linked in down-the-line trade and exchange routes? It appears barely possible that aboriginal trade routes reported by Alvar Núñez Cabeza de Vaca in 1536 still functioned beneath the horizon of usual Spanish colonial perception in mid-eighteenth century! Ures was known to members of the 1540 Vázquez de Coronado expedition as "Corazones" or Hearts, where Núñez and his companions were given hundreds of deer hearts, and witnessed the exchange of gaudy bird feathers, turquoise and other semiprecious stones, red coral or shell, cotton, etc.²⁶⁰

Ethnic Apaches were just beginning to harry the Sonoran missions during von Segesser's tenure at Ures. Conceivably the advance guard of Apaches offered trade as an alternative to being raided as they explored the economic efficiency of pressuring Sonoran settlements. The surprise and shock Sonorans expressed after Apache raids suggests, however, that the early Apache incursions were consistently hostile to colonial governance and production. Von Segesser wrote home that four Apache raids had left his mission in worse condition than it had been since being established. Converts resorted to hunting wild cattle for food.²⁶¹

Another Jesuit missionary, Jakob Sedelmayr collected O'odham baskets. Sedelmayr told residents at his mission who complained that he took their irrigation water to irrigate row crops sold for the benefit of the church to go out on the desert and eat cacti. Nonetheless, the authoritarian Sedelmayr decorated at least one wall of his church office with native baskets.²⁶²

²⁵⁹ Gottfried Hotz, *Indian Skin Paintings from the American Southwest: Two Representations of Border Conflicts between Mexico and the Missouri in the Early Eighteenth Century*, translated by Johannes Malthamer, Norman: University of Oklahoma Press, 1970, 1-7.

²⁶⁰ Núñez Cabeza de Vaca, *The Journey of . . .* 156-60.

²⁶¹ Hotz, *Indian Skin Paintings from the American Southwest*, 10.

²⁶² Oazk Picagigua, Deposition, 1752, AGI. A parallel case of basket collection was the U. S. Bureau of Indian Affairs superintendent of the Gila River Indian Reservation who amassed a huge basket collection at low cost (Bert Robinson, *Arizona Indian Basketry*. Tucson: University of Arizona Press.)

Both of these missionary collectors served in Sonora at mid-eighteenth century. This collection pattern persisted into the 1770s and extended to the military founders of San Francisco. When Juan Bautista de Anza and his command returned to Sonora in 1774, they brought with them Chumash native flint tools and steatite vessels, among other curios.²⁶³ The Chumash exploited stone deposits on the Santa Barbara Channel by means of sea going canoes. Their very fine quality basketry continued collectible until ethnic extinction.

4.4 The Culiacán Zone of San Francisco Founder Recruitment

Nuño Beltrán de Guzmán, a rival of Hernán Cortés, founded San Miguel de Culiacán in 1531, hard on the heels of the initial Spanish conquest of Mesoamerican empires and kingdoms. The Nahuatl place name attests Mesoamerican cultural influence in the young colony. Translations differ. One, “place of those who worship God,” arguably indicates a pre-conquest sacred site.

We begin our analysis of Culiacán by outlining the Native American foundation upon which Culiacán was built. “The high native culture of Mexico...reached as far north as the valley of the Culiacán River on the west coast.”²⁶⁴ Beltrán de Guzmán established Culiacán in the midst of the Tahue ethnic group. The Tahue were sufficiently Mesoamerican for colonial officials to assign Natives to initial settlers in *encomiendas* as occurred during the initial decade of colonization.²⁶⁵ The Tahue occupied the coastal plain north and south of the Río Culiacán, bordering the mountain Acaxée upstream toward the east. The Cáhitan speaking tribes lived to the northwest along rivers draining the western slope of the Sierra Madre Occidental and emptying into the Gulf of California.²⁶⁶ Culiacán is only 34 meters above the mean seal level on the coastal plain.

In 1531, invaders described Culiacán Valley Native markets as comparable to those in central Mexico. “These Indians’ greatest festivals are their market days.”²⁶⁷ Those markets imply “the needs of a large and dense population.”²⁶⁸ The Tahue cultivated multiple maize crops per year, beans, squash, pepper, and cotton for clothing, procured marine resources including fish and shellfish. The Tahue had apparently domesticated ducks, turkeys, and curassow as sources of animal protein. The Tahue gardened in the rainy season/dry season climate pattern. They planted crops around Christmas time to harvest just before St. John’s Day (24 June). From St. John to San Miguel, the rain fell so continuously that not a single day escaped. From noon on, two or

²⁶³ Juan B. Anza, “Return Diary,” translated by Herbert E. Bolton, in *Anza’s California Expeditions, Vol. II*. Berkeley University of California Press, 1930, 218 [flint tools, steatite vessels, hardwood vessels].

²⁶⁴ Carl Sauer, *The Road to Cibola*. Berkeley: University of California Press, Ibero-Americana: 3, 1932, 6.

²⁶⁵ OCV Culiacán: Historia (accessed 28 April 2008 via Yahoo).

²⁶⁶ Ralph L. Beals, *The Aboriginal Culture of the Cáhita Indians*. Berkeley: University of California Press, Ibero-Americana: 19, 1943, 4 map.

²⁶⁷ Pedro de Casteñeda, “Narrative of the Expedition to Cibola, Undertaken in 1540, in Which Are Described All Those Settlements, Ceremonies and Customs.” Pp. 191-283 in *Narratives of the Coronado Expedition*, translated by George P. Hammond and Agapito Rey. Albuquerque: University of New Mexico Press, 1940, 248.

²⁶⁸ Daniel T. Reff, *Disease, Depopulation, and Culture Change in Northwestern New Spain, 1518-1764*. Salt Lake City: University of Utah Press, 1991, 29, following Carl O. Sauer and Donald E. Brand, *Aztatlán Prehistoric Mexican Frontier on the Pacific Coast*. Berkeley: University of California Press, Ibero-Americana: 1, 1932, 51-56.

three thunderstorms filled the rivers and swamps.²⁶⁹ The Tahue agrarian production capacity arguably could support a relatively small number of Spaniards in the style to which they wanted to become accustomed. That meant seizing economic control of the Tahue polity.

In political terms, a Native American state organized numerous settlements lining both banks of the river. The Spanish invaders recognized Native rulers and nobles carried in hammocks and wearing abundant turquoise. The Culiacán state fielded a large army which the invaders readily defeated. More than a century later, a Jesuit historian claimed that the first colonists at Culiacán were very noble and valorous in war.²⁷⁰ After conquest, about 100 of Beltrán de Guzmán's troops settled in the Villa of San Miguel de Culiacán²⁷¹ after receiving *encomienda* grants of Native tributaries. The Spanish *encomenderos* displaced the Native Tahue royalty and nobility, just as approximately 500 Spanish conquerors replaced approximately 500 Inca royals and nobles in the central Andes at the same time.²⁷²

If the Tahue numbered 250,000 when conquered, then 100 Spaniards colonizing Culiacán exploited 2,500 Natives per capita. The population of Inca Tawantinsuyu at conquest being in dispute, we here use the figure of 16,000,000. Each of the 500 conquerors replacing the Inca elite exploited 32,000 Natives. Arguably, the 100 Spaniards founding Culiacán could have ruled considerably more than 2,500 Natives apiece.

The Spanish conquest followed by invader assumption of political and economic control disturbed the productive activities of the Tahue. Compounding the decrease in productivity, the newcomers ranged out slave raiding and plundering Native settlements rather than managing their *encomiendas*. In the fall of 1533, the Tahue reacted to conquest and colonial exploitation by taking up arms against the local Spaniards. Beltrán de Guzmán was absent until about Christmas time, so the Tahue succeeded in slaying a number of Spaniards in Culiacán²⁷³ before Beltrán de Guzmán suppressed the Native initiative.

4.4.1 Colonist Poverty: Pandemics and Tahue Depopulation

On the heels of Spanish conquest of the Tahue came the first measles pandemic of record in New Spain. The killer virus struck the Tahue during the winter of 1533-34. The new alcalde mayor of San Miguel de Culiacán reported visiting many deserted Native villages where he could not bear the stench of hundreds of rotting human corpses. A Franciscan historian estimated mortality at 130,000 Natives, leaving barely 20,000 alive. Two-thirds of the Spanish inhabitants

²⁶⁹ Francisco Javier Alegre, S.J., *Historia de la Provincia de la Compañía de Jesus de Nueva España. Tomo II Libros 4-6 (Años 1597-1639)*, edición por Ernest J. Burrus, S.J. y Félix Zubillaga, S.J. Rome: Institutum Historicum S.J., 1958, 76-77. St. John's Day is 24 June; St. Michael's Day is 29 September.

²⁷⁰ Andrés Pérez de Ribas, *Triunfos de nuestra santa fe entre gentes las más bárbaras y fieras del Nuevo Orbe*. Mexico: Editorial "Layac" 1944, 147; Alonso de la Mota y Escobar, *Descripción geográfica de los reinos de Nueva Galicia, Nueva Vizcaya y Nuevo Leon*, intro. Joaquín Ramírez Cabanas. Mexico: Editorial Pedro Robredo, 1940, 98..

²⁷¹ Reff, *Disease, Depopulation, and Culture Change in Northwestern New Spain*, 30; Mota y Escobar (*Descripción geográfica de los reinos*. . . 98) wrote that the histories of his time counted but 60 settlers.

²⁷² Henry F. Dobyns & Paul L. Doughty, *Peru, A Cultural History*. New York: Oxford University Press, 1976, 64-65.

²⁷³ Reff, *Disease, Depopulation, and Culture Change in Northwestern New Spain*, 43.

of Culiacán – however, few that may have been – abandoned it in favor of going to Mexico City or Peru.²⁷⁴ Such a reduction of Native population drastically altered the profitability of the *encomienda* grants just made in the area. The handful of *Encomenderos* who stayed in the Villa of Culiacán plunged from prosperity into poverty after the economically crippling impact of epidemic measles mortality.

A summation by historian Woodrow Borah of the Spanish economy can be reasonably extended to the Culiacán enclave. Spanish “townsfolk ate food raised by Indians, clothed themselves in materials produced by Indians and in most instances worked into cloth by them, lived in houses built by Indians and largely furnished by them.”²⁷⁵ As the Native population diminished both absolutely and relative to the immigrating Spanish population, Spanish consumption per capita necessarily diminished.

In 1536, Alvar Núñez Cabeza de Vaca, Andrés Dorantes, Bernardino Castillo Maldonado, and Estevan reached Culiacán at the end of their continent spanning flight from the Natives of Florida. The noble inhabitants of that Villa treated the four consummate survivors well, giving them horses to ride south through New Spain.²⁷⁶ The slave hunting captains Diego de Alcaraz and Cebreros did not treat the intrepid four exactly cordially. Culiacán Alcalde Melchor Díaz, on the other hand, treated them very well.²⁷⁷ Díaz also persuaded Núñez Cabeza de Vaca to send Native messengers into the zones of refuge where the Natives evaded the Spanish slave raiders. When the Native refugees came to confer with the Spaniards, Díaz promised to end slave raiding on those who resettled their fertile coastal plains lands and built churches. Núñez Cabeza de Vaca taught the Natives to make hand held crosses to display to whatever Spaniards approached them, to signify their pacification²⁷⁸ (and exemption from enslavement). Thus, Núñez Cabeza de Vaca persuaded many if not all of the Native refugees to patch up the ruptured colonial economy and caste system in the area around Culiacán and northward. Culiacán once again benefitted from an industrious and productive Native hinterland.

Before the end of the decade, the Culiacán economy took another serious blow. The Tahue assigned to local Spaniards in repartimiento refused to work for them. Even worse, a Native leader named Ayapín and most of the Tahue following him raided the Spaniards. Consequently, when Francisco Vázquez de Coronado arrived at Culiacán in mid-1539, he found most of the residents “on the point of abandoning the town” because of the Native hostilities and “because they were very poor.” Vázquez de Coronado diplomatically persuaded most of the hostile Tahue to submit peacefully. Ayapín fled into the mountains; Vázquez de Coronado pursued him, captured him, and executed him. Post pacification, the pacified Tahue still had to rebuild their

²⁷⁴ Reff, *Disease, Depopulation, and Culture Change in Northwestern New Spain*, 109.

²⁷⁵ Woodrow Borah, *New Spain's Century of Depression*. Berkeley: University of California Press, 1951, 19 [“and remitted to Europe specie mined and processed largely by Indians.”]; Mota y Escobar (Descripción geográfica de los reinos. . . 104) wrote specifically about Culiacán during the early seventeenth century that Spanish poverty resulted from the mortality of natives “whose sweat enriches the Spaniards.”

²⁷⁶ Pérez de Ribas, *Triunfos de nuestra santa fe*, 148.

²⁷⁷ Alvar Núñez Cabeza de Vaca, *The Journey of Alvar Núñez Cabeza de Vaca and his Companions from Florida to the Pacific 1528-1536*, translated by Fanny Bandelier, edited by Ad. F. Bandelier, New York: Allerton Book Co., 1922, 175.

²⁷⁸ Núñez Cabeza de Vaca, *The Journey of....*, 176-82.

dwellings and bring their irrigated fields under cultivation again.²⁷⁹ That process delayed economic recovery at Culiacán for an unknown period.

The Culiacán Spaniards benefitted materially from the big exploring expedition. In 1539, Culiacán had abundant food following a good harvest. The Vázquez de Coronado expeditionaries were good customers. Moreover, they abandoned at Culiacán their excess baggage and fancy raiment.²⁸⁰ The acquisition of the discarded equipment and clothing would have given Culiacán the same kind of boost that furniture and other excess baggage Forty-Niners abandoned in Salt Lake City in 1849 gave the Mormon economy a significant boost.

Pedro de Tovar, a burgher of Culiacán, became royal ensign of the Vázquez de Coronado expedition. In terms of later United States history, Tovar became noteworthy for learning about the Grand Canyon from the Hopis. Vázquez de Coronado then sent García López de Cárdenas with a detachment to explore the Colorado River; they thus became the first Europeans to see the gorge. (Northwestern Pai and Southern Paiutes already inhabited its steep slopes.) In terms of later Culiacán history, Tovar helped to reconstruct the economy by founding a large cattle ranch, and serve as local chief executive. A few of the other veterans of the expedition also settled in Culiacán to prospect for precious metal ores.²⁸¹

In 1541, Natives on the Central Plateau launched a nativistic movement against Spanish colonial rule. Viceroy Antonio de Mendoza personally led colonial forces which suppressed the Natives. Mendoza labeled it the “Mixton War.” Before the Natives quit fighting, violence spread to the Pacific coast and the surviving Tahue.²⁸²

4.4.2 An Exclave

A silver discovery near Culiacán in the 1540s altered its economy until miners exhausted the shallow lode. The impact of the Culiacán discovery was minimized by larger discoveries which occurred during the same decade at Compostela, Guachinango, Tepeque or Bolaños, and most spectacularly at Zacatecas.²⁸³ For many years thereafter, Culiacán was a notable example of what historical geographer Peter Gerhard called “exclaves.” These were pockets of Spanish power and population far distant from other exclaves and surrounded by Natives.²⁸⁴

After two earlier attempts to reject colonial rule, the Tahue apparently settled down to make the best of their lower caste status. According to chronicler Pedro de Castañeda “the

²⁷⁹ Francisco Vázquez de Coronado, “Letter from Francisco Vázquez de Coronado to the Emperor, July 15, 1539.” Pp. 45-49 in *Narratives of the Coronado expedition 1540-1542*, translated by George P. Hammond and Agapito Rey. Albuquerque: University of New Mexico Press, 1940, 45-46. Vázquez redistributed to Culiacán Spaniards repartimientos belonging to Nuño Beltrán de Guzmán, with the latter’s agreement.

²⁸⁰ Hammond and Rey, “Introduction.” Pp. 1-33 in *Narratives of the Coronado Expedition*, 15; Pedro de Castañeda, “History of the Expedition.” Pp. 191-283 in *Narratives of the Coronado Expedition*, 206.

²⁸¹ Pérez de Ribas, *Triunfos de nuestra santa fe*, 150-151; Hammond and Rey, *Narratives of the Coronado Expedition*, 18; Castañeda, *Narrative of the Expedition to Cibola*, 215-16.

²⁸² Reff, *Disease, Depopulation, and Culture Change in Northwestern New Spain*, 114.

²⁸³ Peter Gerhard, *The North Frontier of New Spain*. Princeton: Princeton University Press, 1982, 6.

²⁸⁴ Gerhard, *The North Frontier of New Spain*, 8.

Tahus, who were the best and most intelligent people, the ones who are at present more civilized and have acquired the most light of the faith.”²⁸⁵

In 1563, Governor Francisco de Ibarra recruited some residents of Culiacán to help found the town of Carapoa in the mountains. Hostile Natives soon forced its abandonment. Five survivors then established San Felipe y Santiago de Sinaloa. Other survivors returned to Culiacán,²⁸⁶ thus reinforcing its Spanish population. Because the tiny Sinaloa proto-settlement lacked a priest, its Spaniards necessarily traveled to Culiacán for Holy Week in order to observe the major Christian holy days and purchase provisions.²⁸⁷

In 1564, Francisco de Ibarra visited a town he called Matoen located on the eastern frontier of the Culiacán province. “The population is composed largely of refugees who had fled from the towns of Culiacán to avoid paying tribute and serving their encomenderos. They were opponents and enemies of the residents of Culiacán and of their encomenderos.”²⁸⁸ Culiacán *alcalde mayor* Pedro de Tovar rode out to Matoen to meet young Governor Ibarra. Tovar presented Ibarra with gifts and provisions, treating him with great cordiality. Tovar very diplomatically delivered the message that Ibarra was trespassing on claimed territory. Tovar advised Ibarra to go northward on the coastal plain and try to establish settlements in Sinaloa, or southward to Chiametla province.²⁸⁹ Ibarra did as Tovar demanded. Furthermore, “they agreed that the army should not enter the village of Culiacán in order to avoid the harm which might be caused by its inhabitants.”²⁹⁰ Ibarra also subjugated most of the rebellious Natives in the province.

The colonial process of Native congregation clearly had not far advanced in the Culiacán-Tahue province. Culiacán, for all its handful of Spaniards remained a mere village among numerous other settlements of Natives. The continued conflicts retarded economic development and social integration.

Culiacán was one of two regions in New Spain where the colonial apparatus included the suffragan corregimiento. That was “a sinecure dispensed to indigent Spanish vecinos.” The beneficiary might receive the tributes paid by one or more crown villages, as a temporary pension.²⁹¹ In other words, however early Spaniards colonized Culiacán, they and their descendants failed to achieve economic success. Poverty pervaded the settlement as it grew to be a city.

Pandemic influenza spread through the peoples of New Spain in 1576-1579. High mortality frightened survivors. Native Americans suffered disproportionately high mortality. The diminution in the Native labor force initiated what Borah labeled a “century of depression” in

²⁸⁵ Castañeda, “Narrative of the Expedition to Cibola,” 248.

²⁸⁶ Pérez de Ribas, *Triunfos de nuestra santa fe*, 152-53, 156.

²⁸⁷ Pérez de Ribas, *Triunfos de nuestra santa fe*, 157.

²⁸⁸ Baltasar de Obregón, *Obregón's History of 16th Century Explorations in Western America*, translated and edited by George P. Hammond and Agapito Rey. Los Angeles: Wetzel Pub. Co., 1928, 72.

²⁸⁹ Obregón, *Obregón's History of 16th Century Exploration in Western America*, 73.

²⁹⁰ Obregón, *Obregón's History of 16th Century Exploration in Western America*, 74.

²⁹¹ Gerhard, *The North Frontier of New Spain*, 14-15.

New Spain.²⁹² The pandemic, whether of influenza, or typhus, or dysentery, or plague, or some combination thereof, evidently reached the Tahue. The Culiacán Spaniards would necessarily have experienced the viceroyalty wide depression. By 1581, the Spanish population of the Villa had recovered to 50 households,²⁹³ participating in the general upward trend in Spanish numbers as Native depopulation continued.

As an ecomenderos' town, Culiacán "subsisted in picturesque isolation" during the seventeenth century.²⁹⁴ Administratively, royal officials in Guadalajara governed Culiacán until 1734. Then it came under the authority of the new province of Sinaloa.²⁹⁵

4.4.3 Roman Catholicism

Secular clergy arrived at Culiacán within a decade after its founding. Br. Alvaro Gutiérrez was one of the initial settlers in the Villa. Secular priests in Culiacán operated under supervision by the bishops of Mexico, then Micoacán, and then Guadalajara until 1621.²⁹⁶ By 1547, Franciscans had a monastery at San Miguel de Culiacán.²⁹⁷

In 1590, the governor of Nueva Vizcaya asked the Jesuit provincial to assign missionary priests to the Sierra Madre Occidental frontier. The provincial sent Gonzalo de Tapia, S.J., and Martín Pérez, S.J.²⁹⁸ When the Jesuit pair reached Culiacán in early June 1591, they stopped over in response to popular demand and preached.²⁹⁹ Spanish citizens and "a great number of Indians from the area" crowded into the Villa to listen to the priests.³⁰⁰ After Jesuits began in 1591 to found Native missions in northwestern New Spain, they activated the mission apparatus in Culiacán. When Jesuits reached Culiacán, however, they found that it consisted of but a "handful" of Spaniards. One of them, Antonio Ruiz, accompanied the pioneer Jesuit missionaries northward into "Indian Country."³⁰¹ Culiacán continued to be a tiny Spanish exclave in a mass of Native Americans.

Geographic mobility of Natives kept Culiacán a dangerous place to live. In 1591, three Tehueco chiefs escaped Spanish custody in Zacatecas on the Central Plateau. The fugitive chiefs traveled through Culiacán, where they murdered three individuals. In their own tribal territory, they then fomented rebellion.³⁰²

²⁹² Borah, *New Spain's Century of Depression*.

²⁹³ Reff, *Disease, Depopulation and Culture Change in Northwestern New Spain*, 124-26.

²⁹⁴ Francois Chevalier, *Land and Society in Colonial Mexico: The Great Hacienda*, translated by Alvin Eustis. Berkeley: University of California Press, 1963, 40.

²⁹⁵ Gerhard, *The North Frontier of New Spain*, 45.

²⁹⁶ Gerhard, *The North Frontier of New Spain*, 248.

²⁹⁷ Gerhard, *The North Frontier of New Spain*, 259.

²⁹⁸ Pérez de Ribas, *Triunfos de nuestra santa fe*, 161.

²⁹⁹ Tapia found and recruited a female interpreter who spoke Nahuatl as did the missionary (Decorme, *La Obra de los Jesuitas mexicanos durante la época colonial II Misiones*, 149). The presence of this woman in Culiacán attests that its Native population was to some degree transient.

³⁰⁰ Pérez de Ribas, *Triunfos de nuestra santa fe*, 162.

³⁰¹ Mariano Cuevas, S.J., *Historia de la Iglesia en Mexico Tomo Segundo 1548-1600*. Mexico: Editorial Patria, 1947, 404.

³⁰² Decorme, *La Obra de los Jesuitas mexicanos durante la época colonial II Misiones*, 176.

The Spanish slave raids northward from Culiacán arguably converted that settlement into a multi-ethnic society. When Jesuit missionaries in 1591 launched their evangelical effort among the Río Fuerte Zuaques, they discovered that those natives already understood some things about Roman Catholicism. They had learned “from some of their own who had come from Culiacán, fleeing the bad treatment of the Spaniards.”³⁰³

The missionary diet was arguably better than that of the poor local Spaniards. The everyday foods included maize, beans, pumpkins, fish from the river, game animals slain in the mountains—deer, hare, rabbit—and migratory waterfowl including ducks and cranes in the swamps—quail and doves, and lobsters. Early in the seventeenth century, “the common provision of the Spaniards of the Villa is fish, because it is very good and cheap; they raise Castillian chickens in quantity.” Cattle and sheep did not do well in the heat, but pigs flourished eating wild fruit and roots.³⁰⁴

In an earlier section, we discussed the general importance of ritual kinship in Spanish Roman Catholicism. Missionary histories confirm the great importance of such fictive kinship among the Natives of Sinaloa Province. As the pioneer Jesuit missionaries baptized infants and children, the handful of local Spaniards acted as godparents of baptism. “The which the Indians much esteem making a big thing out of the spiritual kinship which they contracted with the Spaniards.”³⁰⁵

Apparently in January of 1593, epidemic smallpox and measles struck the Natives of the Culiacán region. In fact, Gonzalo de Tapia, S.J., played some role in the transmission northward of the viruses. Late in 1592, Tapia visited Mexico City seeking viceregal approval for funding some new Jesuit missions. He took a group of young converts with him. On their return journey, all but one of these youths perished of smallpox at Valladolid (modern Morelia). The Culiacán episode of the pandemic began shortly after Tapia returned to the Villa.³⁰⁶ There followed a Nativistic movement, in accord with Russell Thorton’s theoretical generalization that such movements follow drastic reductions in population.³⁰⁷ Native traditionalists killed pioneer missionary Gonzalo de Tapia, S.J., on 10 July 1594. Culiacán alcalde Alonso de Galaraga led a dozen soldiers north to help suppress the nativistic movement.³⁰⁸

During this period of Jesuit pioneering north of Culiacán, provincials and bishops lacked priests to serve Culiacán. Consequently, the Jesuits periodically dropped back to the south to

³⁰³ Decorme, *La Obra de los Jesuitas mexicanos durante la epoca colonial II Misiones*, 156.

³⁰⁴ Pérez de Ribas, *Triunfos de nuestra santa fe*, 165; Mota y Escobar, *Descripcion geografico de los reinos . . .* 101, 103..

³⁰⁵ Pérez de Ribas, *Triunfos de nuestra santa fe*, 165.

³⁰⁶ Reff, *Disease, Depopulation and Culture Change in Northwestern New Spain*, 134-35.

³⁰⁷ Russell Thorton, “Demographic Antecedents of a Revitalization Movement: Population Size and the 1890 Ghost Dance,” *American Sociological Review* 46 (1981) 88-96; “Demographic Antecedents of Tribal Participation in the 1870 Ghost Dance Movement,” *American Indian Culture and Research Journal* 6 (1982) 79-91.

³⁰⁸ William E. Shiels, S.J., “Gonzalo de Tapia (1561-1594), Jesuit Pioneer in New Spain. Pp. 125-43 in *Greater America: Essays in Honor of Herbert Eugene Bolton*. edited by Adele Ogden. Berkeley: University of California Press, 1945, 141.

minister to the Tahue Natives. In 1597, Hernando de Santarén, S.J. closed the Jesuit Culiacán mission.³⁰⁹ Within a half decade, Jesuits would return to Culiacán.

After working four years (1594-1598) along the Río Sinaloa, Hernando de Santarén S.J., moved into the mountains to evangelize the Acaxée. During Lent, Santarén preached every week at the Veracruz de Topia mine camp and San Andrés in the mountains, and at Culiacán at the edge of the coastal plain.³¹⁰ Santarén preached at Culiacán on Wednesday. Traveling 70 miles to Topia, on Friday he preached to Spaniards in Spanish, to Mesoamerican immigrants in Nahuatl, and to local Acaxée in their idiom. On Sunday, Santarén repeated that performance at San Andrés. He again preached sermons in Spanish, Nahuatl, and Acaxée. In other words, at the beginning of the seventeenth century, Culiacán still stood on the northwestern frontier of New Spain, still very much a Spanish exclave.

Merchants carried merchandise on pack trains from Culiacán to the San Andrés mine camp. A half dozen encomenderos scraped by on scant proceeds early in the seventeenth century. The rest of the burghers engaged in commerce to survive. Some gathered sea salt from coastal salines and packed it to the mines of Nueva Vizcaya on mules. Some caught, dried, and salted fish they distributed the same way. “The rest of the burghers are merchants who import clothing from Castille, China, and the colony itself, and wines oils . . . and sell them from their stores of which there used to be five or six.” The stores were not impressive: Culiacán was built of adobes and only a single story high,³¹¹ and almost certainly Veracruz de Topia as well. Such merchants were prime targets for patriotic natives just like the carts on the roads north from Mesoamerica to Central Plateau mine camps drew Chichimeca attacks.

Despite its small population, Culiacán contributed Creole priests to the Jesuit missionary effort. Hernando de Tovar, son of Luís de los Ríos Proaño and Isabel de Guzmán y Tovar, entered the Society of Jesus in 1598. Sent to Mexico City to study, Hernando asked at age 17 to become a Jesuit. At age 35 Hernando became one of 10 Jesuit martyrs during a Tepehuan nativistic movement.³¹²

Jesuits such as Santarén influenced young Hernando de Tovar when they visited Culiacán. Traveling toward Sinaloa in 1594, Santarén preached for a while in Culiacán. Falling ill in his Mocorito mission, Santarén returned late that same year of 1594 to Culiacán to recover. He stayed with the Tovar family; their home was where Jesuit missionaries stayed in Culiacán. The only son did not want anyone else to wait upon the ailing missionary. The Tovar son,

³⁰⁹ Peter Masten Dunne, S.J., *Pioneer Jesuits in Northern Mexico*. Berkeley: University of California Press, 1944, 18, 50.

³¹⁰ Peter M. Dunne, S.J., “Pioneer Jesuit Missionaries on the Central Plateau of New Spain.” Pp. 163-80 in *Greater America: Essays in Honor of Herbert Eugene Bolton*. edited by Adele Ogden. Berkeley: University of California Press, 1945, 169; Dunne, *Pioneer Jesuits in Northern Mexico*, 54; Decorme, *La Obra de los Jesuitas mexicanos durante la epoca colonial, II Las Misiones*, 98.

³¹¹ Naylor & Polzer, *The Presidio and Militia on the Northern Frontier of New Spain*, 175, 178; Alegre, *Historia de la Provincia de la Compañía de Jesus de Nueva España II*, 272; Mota y Escobar, Descripción geográfica de los reinos . . . 99-100..

³¹² Mariano Cuevas, S.J., *Historia de la iglesia en Mexico Tomo Tercero 1600-1699*. Mexico: Editorial Patria, 1947, 564-65.

“Hernando, did not leave his side for a moment until he recovered.” Then Santarén preached to the local Tahues.³¹³

Gonzalo de Tapia, S.J., was another probable influence on the future Jesuit. At his mission, Tapia usually subsisted on maize, in the form of tortillas or atole. He feasted from time to time on strips of jerked (sun dried) beef sent to him as alms from Culiacán.³¹⁴ This relationship is another sign of significant personal relationship between the Jesuit missionaries laboring in northern Sinaloa toward the end of the sixteenth century and the Spanish population of Culiacán.

Lorenzo de Cárdenas, S.J., also was born in Culiacán. Born in 1596, Cárdenas began mission work no later than age 30. In 1629, he was in the Mátape area, and during the next decade advanced north to Ures and beyond.³¹⁵

By 1594, Tahue entrepreneurs ran cattle ranches on the Central Plateau near mine camps or other markets. Half a league from Cuéncame, a Native from Culiacán raised both beef and milk cows. This native evidently was a convert to Catholicism, inasmuch as he provided the first Jesuit missionary at Cuéncame with meat and milk. Cuéncame also attracted Tarascan Natives, although the great mineral deposits were then still unknown.³¹⁶

Native mobility arguably helped spread the devotion to Our Lady of Guadalupe to the Tahue and Culiacán. Tepehuan converts at the Mission of Santiago de Papasquiari by 1596 had a chapel of Our Lady of Ransom (Nuestra Señora de los Remedios). Its *cofradía* (sodality) of Spaniards as well as Natives was the first such allowed in the missions. A few Native members solicited funds in Culiacán as well as Chihuahua and Parras. An apparition of the Virgin was patroness of the visitation station of San Nicolás and another of the visitation station of San Andrés de Atotonilco.³¹⁷

On 8 September, 1601, the Acaxée resorted to violence to eject from their holy land arrogant mine owners who illegally forced natives to work their mines. After failing to negotiate peace, Hernando de Santarén, S.J., took refuge in Culiacán. That Villa’s trade routes east were effectively cut, crippling its commerce.³¹⁸ Miners needing supplies had to form armed expeditions to travel the road between the mines and Culiacán.³¹⁹ In the spring of 1602, royal authorities assigned the Jesuits to the entire Acaxée area of the Sierra Madre Occidental, plus “the province of Culiacán.”³²⁰

³¹³ Gerard Decorme, S.J., *La obra de los Jesuitas mexicanos durante la época colonial 1572-1767. II Misiones*. Mexico: Antigua Librería Robredo de José Porrua e Hijos, ‘94, ‘96. [HFD translation] 31.

³¹⁴ Andrés Pérez de Ribas, *Triunfos de nuestra santa fe entre gentes las más bárbaras y fieras del Nuevo Orbe. Tomo I*. Mexico: Editorial “Layac” 1944, 269.

³¹⁵ Paul M. Roca, *Paths of the Padres Through Sonora: An Illustrated History & Guide to Its Spanish Churches*. Tucson: Arizona Pioneers’ Historical Society 1967, 351, n.9.

³¹⁶ Decorme, *La obra de los Jesuitas mexicanos durante la época colonial 1572-1767. II Misiones*, 44.

³¹⁷ Decorme, *La obra de los Jesuitas mexicanos durante la época colonial 1572-1767. II Misiones*, 81.

³¹⁸ Dunne, *Pioneer Jesuits in Northern Mexico*, 56-60, 63.

³¹⁹ Thomas H. Naylor & Charles W. Polzer, S.J., *The Presidio and Militia on the Northern Frontier of New Spain, 1570-1700*. Tucson: University of Arizona Press, 1986, 179-80.

³²⁰ Naylor & Polzer, S.J., *The Presidio and Militia on the Northern Frontier of New Spain*, 163.

New provincial governor Francisco de Urdiñola and Santarén negotiated peace during 1603. Then the authorities hung the miter of Bishop Mota y Escobar in the Culiacán church “a lasting memorial of the peace”³²¹ – and of the interethnic violence which preceded peace.

When Diego Martínez de Hurdaide took a delegation of Native leaders to Mexico City in 1604, several of them rebelled on their return, killing Culiacán Natives.³²² A gold strike in 1604 in the Carantapa Mountains northwest of Topia set off a gold rush from Culiacán.³²³ In contrast, in 1607, drought so diminished crop yields at Culiacán that its population had to import supplies.³²⁴ It was a reminder that local crop production at Culiacán depended on adequate and timely precipitation. Smallpox and measles recurred in the Sinaloa missions that same year of 1607.³²⁵

As late as 1611, the Natives of 16 towns held in encomienda in the Culiacán Valley lacked secular or regular clergy. A Jesuit missionary backtracked from the Villa of Sinaloa on the colonial frontier to minister to these Natives during Lent. The priest heard confessions from converts who had never before confessed. The missionary also talked to the Natives who received with “reverence” the priest’s gifts of “images, stories, Agnus, and rosaries.”³²⁶ We would like to know how many of those images represented Our Lady of Guadalupe but more the source saith not.

The handful of Spaniards living in Culiacán apparently was not satisfied with the liturgical services of the local clergy. For Spaniards went from Culiacán to Las Vegas for Holy Week. Else the Spaniards were tourists attracted to see the bloody penance paid by the Natives of Las Vegas.³²⁷

On 16 November 1616, the Tepehuan ethnic group took up arms against Newcomers. Culiacán native Hernando de Tovar died of a spear thrust on the trail between Topia and Tepehuanes.³²⁸ The Culiacán Jesuit mission was secularized in 1753. In 1800, a new bishop made Culiacán diocesan headquarters.³²⁹

Colonial inhabitants of Culiacán, the Native Tahues included, shared in the devotion to Our Lady of Guadalupe general through New Spain. After colonial forces suppressed the costly Tepehuan Revolt, the Culiacán Tahues were “old Christians” and quite ardent believers in Roman Catholicism. They possessed “a statue of Blessed Mary the Virgin” which they

³²¹ Dunne, *Pioneer Jesuits in Northern Mexico*, 64.

³²² Harry P., Johnson, “Diego Martínez de Hurdaide, Defender of Spain’s Pacific Coast Frontier.” Pp. 199-218 in *Greater America: Essays in Honor of Herbert Eugene Bolton*. edited by Adele Ogden. Berkeley: University of California Press, 1945, 205.

³²³ Dunne, *Pioneer Jesuits in Northern Mexico*, 65. The ore soon gave out.

³²⁴ Dunne, *Pioneer Jesuits in Northern Mexico*, 73.

³²⁵ Decorme, *La Obra de los Jesuitas mexicanos durante la epoca colonial, II Misiones*, 119.

³²⁶ Naylor & Polzer, *The Presidio and Militia on the Northern Frontier of New Spain*, 206. The encomienda institution persisted in the Culiacán area until 1670, despite much earlier royal edicts against it.

³²⁷ Decorme, *La Obra de los Jesuitas mexicanos durante la epoca colonial, II Misiones*, 108. Native women lashed the backs of the men until they were bloody (119).

³²⁸ Dunne, *Pioneer Jesuits in Northern Mexico*, 126-27.

³²⁹ Gerhard, *The North Frontier of New Spain*, 249.

considered to be miraculous. In the wake of the Tepehuan pacification, the devout Tahues carried their statue of Our Lady over the mountains and through Tepehuan pueblo after pueblo. The defeated rebels appeared happy enough to join in the Culiacán Tahue devotion.³³⁰ The Culiacán Tahue's statue of Our Lady almost certainly was a representation of Our Lady of Guadalupe. Arguably, the devotion of Our Lady of Guadalupe had spread to Culiacán by the early seventeenth century prior to the Tepehuan Revolt, and arguably even earlier sometime during the sixteenth century.

In 1636, a new viceroy of New Spain recommended secularizing numerous Jesuit missions on and near the frontier. Secularization would mean the Natives paid tithes and royal tribute. A Jesuit committee composed of veteran Pacific coast missionaries replied on 12 September 1638. That Jesuit missionaries became wealthy operating mines was a falsehood. The Society of Jesus in Sinaloa did not own 100,000 head of cattle. Rather, the Colegio de Sinaloa ran barely 8,000 head to furnish beef to the Natives, troops, and new missions. The more than two dozen missions in the province had small herds, of course. Although the area was fertile, Spaniards immigrated there only to seek wealth in the mines. Neither Culiacán nor Sinaloa possessed proper streets, nor a residence appropriate for a bishop. The Natives still grew their aboriginal staple crops – maize, beans, and pumpkins. They did not use plows nor oxen nor metal tools. They no longer grew wheat; flour for making hosts for communion had to be imported from Parral. They no longer grew cotton. Native men wanting clothes had to go to work in the mines or ranches where they were paid with clothing. The priests considered women's dress nothing short of scandalous.³³¹ At conquest, the modest dress of Native women in this region had impressed the invaders. Colonial subjugation had diminished Tahue ability to subsist themselves and greatly impoverished them.

By mid-seventeenth century, one or more “push” factors generated emigration from Culiacán. On 17 August 1646, Roque de Olivas enlisted in the Cerro Gordo military garrison. This Culiacán native gave his age as 26, and could sign his name. That same day, Francisco Vázquez transferred from the Santa Catalina garrison to the new Cerro Gordo garrison. He was 40. Both were dark complexioned,³³² probably evidence of Mestizo heritage.

At mid-seventeenth century, Culiacán merchants named Valenzuela exported commodities to the Parral mines on the Central Plateau. They took a trail north to Sonora, then turned eastward through the Sierra Madre Occidental to the Plateau and Parral. They were prepared to defend themselves against Tarahumara rebels during periods of violence.³³³

4.4.4 Basque Brigade

An earlier section in this analysis discussed the military skills of frontier military post commanders Juan Bautista de Anza and Bernardo de Urrea. They were arguably the most

³³⁰ Dunne, *Pioneer Jesuits in Northern Mexico*, 174-75.

³³¹ Decorme, *La obra de los Jesuitas mexicanos durante la epoca colonial II Misiones*, 209.

³³² Naylor & Polzer, *The Presidion and Militia on the Northern Frontier of New Spain*, 355. Enlistees ranged from Indian to Castilian.

³³³ Naylor & Polzer, *The Presidion and Militia on the Northern Frontier of New Spain*, 431.

effective field officers during Spain's Comcaac Conflict. It seems appropriate, therefore, to note that Urrea was a native of Culiacán, born there around 1710.³³⁴

By the early-eighteenth century, at least, the Peninsular population of Culiacán included Basques as well as Andalusians and Castilians. When Juan Bautista de Anza the elder migrated in 1712, he traveled to relatives already established in Culiacán. Two of his aunts – mother's sisters Francisca and María Josefa – resided there.³³⁵ In the twentieth century, rural-urban migration in Hispanic America followed this pattern of later migrants going to their related pioneers.

During the initial decades of the eighteenth century, however impoverished Culiacán may have been, conditions were much worse in many frontier settlements in Sonora. Ethnic Apache raiders inflicted such high mortality on frontier towns that their inhabitants fled south to older settlements. The Nacozari mine camp on the upper Río Moctezuma was nearly deserted by 1742. Apaches killed the parish priest at the edge of town in 1754. His successor fled to Culiacán, where he still resided in 1760.³³⁶

The balance of human migration had tipped; despite its handicaps, Culiacán was far enough from the hostile Native frontier to offer safety. Thus, Anza had a growing population from which to recruit founders of San Francisco, but that portion of the populace fleeing dangerous frontier settlements would not have been particularly motivated to venture to the edge of Apache country to reach coastal California.

In 1737, authorities proclaimed Our Lady of Guadalupe, Patrona Principal de Nueva España, after this apparition was credited with terminating a typhoid fever epidemic in Mexico City.³³⁷ So pervasive is this devotion today that pilgrims from the entire country make the pilgrimage to the Basilica at Tepeyac.³³⁸

No later than the time authorities proclaimed Our Lady of Guadalupe principal patron of the viceroyalty, farmers around Culiacán were exporting maize and wheat to mountain mine camps. They had to compete with Jesuit missionaries who also sold to the mine camps grains produced on Indian mission lands with free – forced – native labor.³³⁹ Wheat export itself represented a major improvement in the regional economy, compared to the situation a century earlier. During that century, the native populations of the Sinaloa missions north of Culiacán declined precipitously.³⁴⁰

³³⁴ Roca, *Paths of the Padres Through Sonora*, 381, n. 149.

³³⁵ Don T. Garate, *Juan Bautista de Anza: Basque Explorer in the New World 1693-1740*. Reno: University of Nevada Press, 2003, xiii, 52.

³³⁶ Roca, *Paths of the Padres Through Sonora*, 188, 398 n. 7.

³³⁷ John Noble, et. al., *Mexico*. Melbourne: Lonely Planet, 2002, 194.

³³⁸ Erna Fergusson, *Fiesta in Mexico*, New York: Alfred A. Knopf, 1942, 253, 262.

³³⁹ Garate, *Juan Bautista de Anza*, 180.

³⁴⁰ Decorme, *La Obra de los Jesuitas mexicanos durante la epoca colonial II Misiones*, 137-42. In 1738 San Pedro Obayan consisted of two families, three widows, one widower, and one girl because "smallpox had killed all of the adults" (141-42).

We can be quite certain that the devotion to Our Lady of Guadalupe was firmly established at Culiacán and its hinterland before 1775. In an earlier section we quote diarist Pedro Font's report that the colonists whom Anza recruited between Sinaloa and Culiacán unanimously chose Our Lady of Guadalupe as patroness of the Anza colonizing expedition.³⁴¹

Later, the Culiacán devotees intensified that widespread devotion centered on a church which ranks as a sanctuary in modern times. An important chapel for Our Lady of Guadalupe was constructed at the beginning of the nineteenth Century. By that time, Culiacán had reportedly grown to more than 10,000 inhabitants.³⁴²

Culiacán reconstructed its early-nineteenth -century chapel of Guadalupe between 1958 and 1967 with spectacular glass domes, and magnificent stained glass scenes, four showing aspects of the legend of Our Lady of Guadalupe. Don Basco de Quiroga, Fray Bartolomé de las Casas, and Fray Bernardino de Sahagún represent pioneer missionaries in New Spain.³⁴³ Local residents refer to the Sanctuary as "La Lomita" from its location on a hill.

We are uncertain of the detailed chronology of diffusion of this devotion northwest up the Pacific Coast of New Spain. The first Spanish version of the Virgin's apparition to Juan Diego at Tepeyac in 1531 was not published until 1648, and the first Nahuatl version until 1649.³⁴⁴ The very historicity of the origin legend for this devotion remains a matter of considerable controversy.³⁴⁵

4.4.5 Persisting Poverty

Apparently the chapel of Our Lady of Guadalupe at Culiacán was constructed early in the nineteenth century because the population of the zone was too poverty stricken during the eighteenth century to erect such an edifice. After Juan Bautista de Anza obtained permission to recruit forty families to colonize San Francisco, he identified to the Viceroy "the people whom I consider best suited for the purpose and most easy to get...." They were inhabitants of the *alcaldía* of Culiacán in Sinaloa and Fuerte in Sonora. "Most of their inhabitants I have just seen submerged in the direst poverty," Anza wrote. Thus Anza revealed at least a major component of his theory of whom to recruit and how to recruit them for the colonizing expedition. Anza counted very much on the "push" factor in internal migration, considering dire poverty a clear motivation to migrate.

The poverty Anza witnessed and reported to the viceroy was not new, as this section has already been well documented. In temporal perspective, except for the mine camps, poverty

³⁴¹ Font, *Font's Complete Diary*, 5.

³⁴² Alejandro de Humboldt, *Ensayo Político Sobre el Reino de la Nueva España*, revised by Juan A. Ortega y Medina. Mexico: Editorial Porrúa, 1966, 193, reported 10,800 population. Sinaloa followed with 9,500, Villa de Fuerte and los Alamos with 7,900 each, Arizpe (classified as a city) with 7,600, Horcasitas with 6,400, Rosario with 5,600.

³⁴³ OCV Culiacán: Noticias, Eventos y Reportajes (accessed 28 April via Yahoo).

³⁴⁴ Barry D. Sell, review of *The Guadalupe Controversies in Mexico* by Stafford Poole. Stanford: Stanford University Press, 2006, *Ethnohistory* 55:2 [Spring 2008] 352.

³⁴⁵ Stafford Poole, *Our Lady of Guadalupe: The Origin and Symbols of a Mexican National Symbol, 1531-1797* [Tucson: University of Arizona Press, 1995.]

prevailed throughout Sinaloa and Sonora during the eighteenth century. The consolidation of the colonial governance of Rosario, Culiacán, Sinaloa, Ostimuri (Alamos), and Sonora³⁴⁶ under a governor did little or nothing to improve the regional economy. On the eve of Anza's colonizing expedition, a natural disaster further exacerbated conditions. A tremendous regional flood in 1770 destroyed material endowment that Natives and Newcomers had spent decades accumulating. For example, the Sinaloa church constructed of adobe beginning in 1635 collapsed, save for the fired brick bell tower.³⁴⁷

Anza coupled dire poverty that pushed potential migrants, with royal subsidies as a “pull” factor in his theory of recruitment. The poverty stricken people in the *alcaldías* of Culiacán and Fuerte would “willingly and gladly” accept whatever subsidies the Viceroy might grant them, Anza assured him.³⁴⁸

While Anza emphasized the dire poverty of potential colonists in the *alcaldías* of Culiacán and Fuerte, he also identified horse raisers in those areas well enough off to reserve their best horses for use on their own haciendas. Consequently, Anza asked the Viceroy to order the *alcaldías* of the two jurisdictions to order the horsemen to show and sell their best animals, which they preferred to keep for their own use.³⁴⁹

One factor in the obvious poverty of the Culiacán region was tribute. As late as 1772, royal officials were collecting tribute at Culiacán – we infer from surviving Tahue Natives – although they did not collect tribute at Rosario, Copala, or Maloya. The Bourbon monarchy being desperate for American revenue, officials in New Spain decided to expand the collection of tribute.³⁵⁰

Anza could not recruit colonists from a particularly large population at Culiacán. In 1774, Pedro A. O'Crouley reported but 100 Spanish families residing in the Villa of Culiacán.³⁵¹ After two and a half centuries, the Spanish population of Culiacán had recovered to its original 1531 strength. That demographic trend sums up accurately the nature of the Culiacán exclave – an economic backwater still plagued by poverty. Taking Juan Bautista de Anza's assessment that Culiacán's poverty was “dire,” there is little reason to doubt that his perception of migration push factors at Culiacán accurately assessed the anguish motivating emigration.

³⁴⁶ Decorme, *La Obra de los Jesuitas mexicanos durante la epoca colonial II Misiones*, 332-33.

³⁴⁷ Decorme, *La Obra de los Jesuitas mexicanos durante la epoca colonial II Misiones*, 211, [flood n. 70].

³⁴⁸ Juan B. de Anza, “PREPARING THE EXPEDITION LX ANZA TO BUCCARELI, Mexico, November 17, 1774.” Pp. 209-13 in *Anza's California Expeditions Vol. 5 CORRESPONDENCE*, translated by Herbert Eugene Colton. Berkeley: University of California Press, 1930, 209.

³⁴⁹ Anza, “PREPARING THE EXPEDITION LX ANZA TO BUCCARELI, Nov. 17, 1774.”

³⁵⁰ Bernard E. Bobb, *The Viceroyalty of Antonio María Bucareli in New Spain, 1771-1779*. Austin: University of Texas Press, 1962, 232-33.

³⁵¹ Pedro Alonso O'Crouley, *A Description of the Kingdom of New Spain*, translated by Seán Galvin. n.p.: John Howell – Books, 1972, 128. At the beginning of the twenty first century, the population exceeded 500,000 (Noble, Mexico, 369).

CHAPTER FIVE FAMILY STORIES

This chapter is divided into two sections. The first section focuses on interviews conducted in the Tucson area with people who are either originally from San Miguel de Horcasitas or whose families originated there. These participants include people who have moved from San Miguel de Horcasitas relatively recently, to people whose parents, grandparents, and even great-grandparents left San Miguel de Horcasitas. What is remarkable across the range of interviews is the continuity that remains even after several generations in some cases.

These oral history interviews provided the information needed to write a story from each individual's or each family's perspective about life in San Miguel de Horcasitas and their family's connection to the community. These stories document cultural continuity over several generations and indicate that this is likely the case in San Francisco as well. Much of the knowledge and traits that the Founders brought with them to California was incorporated into the creation of the city and has likely remained with the descendants of the expedition members. The family stories collected in the Tucson area present an overview of life in San Miguel de Horcasitas through both insider and outsider perspectives.

The United States section of this chapter provides four family stories based on thirteen interviews with seven participants. Some families consented to have their names and pictures included in the report and have reviewed and commented on their individual family story. These comments and/or changes were then incorporated into the text, along with any additional pictures that they wanted to include.

The second section of this chapter constitutes a series of comments from different community members that reflect the community of San Miguel de Horcasitas as a whole. Rather than creating individual family stories for those interviewed in Mexico, this section provides interesting snapshots into the life of the community to avoid redundancy. It provides community responses about their heritage and what life was like when they, their parents, or their grandparents were growing up in San Miguel de Horcasitas. This addresses some information that was not included in our activity complex analyses but was deemed important and likely to have persisted since the time of the expedition.

These two sections come together to provide a general overview of life in San Miguel de Horcasitas during the mid-1700s. This creates a baseline from which specific aspects of community life are examined in depth in the following chapter of this report.

5.1 Dora Coleman and Cecilia Angulo Family Story

Dora Coleman and Cecilia Angulo are sisters who shared stories about their family and the times they spent in San Miguel de Horcasitas. Dora and Cecilia's father, Salomon de la Riva Ramirez, was a miner born in a mining town called Clarksdale, Arizona. Dora assumes her great grandfather was a miner as well. Though their father was born in the United States, he was deported during the Great Depression and found himself in Hermosillo. Unfortunately, there was no work in Hermosillo at the time, so their father was forced to search for employment in other towns/villages like La Fábrica. La Fábrica is the closest town to San Miguel de Horcasitas and it is within walking distance. Even in La Fábrica, it was hard for him to find a job so he turned to selling things such as bread on the street to survive.



Figure 5.1 Cecilia Angulo (L) and Dora Coleman (R)

While living in La Fábrica, their father met Angelita Acuña. They married in 1938 while they were still teenagers and, two years later, Dora was born. When Dora was just a year old, her father left to find work in Nogales, Arizona while Dora and her mother stayed behind in La Fábrica. In Nogales, her father found a job at La Ville de Paris, where he worked as a salesman for forty years. After a year had passed, her father was still working in the United States and her mother finally decided to move closer. They packed up and moved to Nogales but decided to stay on the Mexican side of the border because of her mother's love for Mexico. In 1953, their family finally moved across the border into the United States to take advantage of better

education for Dora, now a teenager, and her younger siblings. Dora is the oldest child of six and the only sibling born in La Fábrica. The rest of her siblings, including the youngest child Cecilia, were born in Nogales, Mexico.

Dora's mother, Angelita Acuña, was born in Sinoquipe, Mexico, located Southeast of San Miguel de Horcasitas. Dora and Cecilia both visited La Fábrica and San Miguel de Horcasitas with their mother during the summers when they were children. Cecilia explained, "What struck me most is that everyone remembered my mom. But they always said Acuña because that was her maiden name." Both Dora and Cecilia recall how visiting with their family vehicle was seen as an important event by the community. Very few people in San Miguel had vehicles and, if they did, they were not used often. As Cecilia pointed out, "I'm sure maybe someone had a truck that did something, but when my dad, when he'd pull up in a car, it was such a big deal for everyone and everyone wanted to see the car."

Dora visited San Miguel de Horcasitas every summer until she turned fifteen but when she began to work, she and her mother could no longer make the trip. Since Dora is thirteen years older than her sister Cecilia, the two were not able to make the trips together before Dora began working. Cecilia does not remember visiting San Miguel de Horcasitas with Dora, but does remember going with their other siblings.

During the summers of their childhood, Dora and Cecilia, along with their siblings, would visit their grandparents' home in San Miguel de Horcasitas. They both said that, at that time, San Miguel de Horcasitas was so different to them. It was like another world. Now they recognize that it was a typical Mexican town with a plaza and a church. Their grandparents' house was made of adobe that had an ocotillo fence and a dirt floor that their grandmother would sprinkle with water before sweeping. The ceiling was also made with ocotillo, which Cecilia hated sleeping under as a child. She described putting the sheet over her head as she slept because she was afraid of spiders or scorpions falling on her. The front door was a tall, wide, double door that wagons would have been able to fit through. Additionally, the house had a wood burning stove, an outhouse, and a well. The kitchen was just beyond the well, on the other side of the atrium where they would sit in the evenings. The windows were big with no screens, just wooden shutters and wrought iron bars to keep intruders out. In the hot summer months, the windows and doors were always open to let the breeze through. The house did not have running water, so they took baths in galvanized tin pots, or *tinas*, with water from the well. The *tinas* provided a little privacy, but not much. The well had a fascinating rock wall around it. Dora explained, "They always told us not to peek too far into the well. We loved watching it, the bucket coming up and down in the well."

Cecilia also remembered the furniture that their step-grandfather, Don Aviano, used to make. She noted, "He used to make furniture from tree stumps, very interesting furniture, but I don't know if that was his living. I don't know if he did it as a hobby, but he did make furniture, I remember. He would make chairs and tables from the trunks of trees."

At the time, San Miguel was primarily a farming community but Dora remembers a rich family that lived kitty-corner to their grandmother's house and maintained large orchards, or *sembradillos*, and owned cattle. Dora and Cecilia remember everyone in town being warm and

welcoming when they came to town. Dora described the atmosphere in San Miguel de Horcasitas as a good life, no matter where you went. She remembered that everyone was always singing and cheerful while doing their work. She could hear the neighbors because the houses did not have windows or screens and the doors were always open. Cecilia added that everyone always visited each other, especially during *el café* which was usually after *siesta* in the mid-afternoon. She explained that “everyone would have their coffee, after their siesta, of course, because after lunch it was, *let’s take a little nap.*” The Ramirez sisters said that, in the evenings, people would sit outside and anyone that walked by was greeted with “*buenas tardes.*” Cecilia explained, “You never ignored them. If twenty people walked by, then you would say *buenas tardes* twenty times. That’s just the way it was.”

Dora and Cecilia’s parents were very generous to the town, which added to their welcome every time they visited. Dora told us that her mom would start saving things like clothes and trinkets for the children, groceries and even a variety of toiletries. They remember taking bags full of things to share with the whole community. Their mom would even bring toilet paper for their grandmother. Cecilia recalled, one time they had brought her toilet paper and about a year later it was still there. Cecilia asked her grandmother, “Why aren’t you using this?” and she replied, “Oh no, no, no mijita, this is for when you come.” Their grandmother viewed toilet paper as a luxury item and saved it for when her grandchildren would visit.

Cecilia remembered a terrible storm while visiting her grandmother Julia’s house in San Miguel de Horcasitas. This story was particularly noteworthy to her because it was the last time she had visited her grandmother’s house and, as a result of the storm, it was unfortunately only for a very short stay:

“There, of course the flash flood would occur, and actually the last time that I was at my grandmother’s house, I was a young adult and I remember going to visit her and we were so excited and I was sleeping and my mom came to wake me, she said, “Get up” because we had just gotten there and I had fallen asleep, she says “Get up, we’re leaving.” I said, “What do you mean we’re leaving, we just got here?” And she said, “Allí viene la lluvia.” [The rain’s coming.] You know, there was this huge storm coming and they wanted to get out before it hit, because if we didn’t, then we’d get stuck there, and we didn’t have time. So I remember, God, it was the middle of the night. We were driving in the storm and getting out and that was the last time I was at my grandmother’s house, and then she had her stroke and then after that I never went back.”

Cecilia knew they were smart to leave San Miguel de Horcasitas when they did because they would have been flooded in by the river. When it floods like that in San Miguel de Horcasitas it is too dangerous to cross the river. They would have had to wait a couple of days until the river reached a passible level again. Even though the river had passageways for vehicles to cross, they got stuck many times and had to be pulled out even when it was not storming. Dora remembers that every year it never failed; “Every time we went, we got stuck in the river, in the water.” When this happened, the mules would have to pull them out. Cecilia also pointed out that these passageways were always very rocky. She thought the rocks may have been placed there strategically in order to make it easier for vehicles to cross the river.

While visiting San Miguel de Horcasitas and La Fábrica as kids, Dora and Cecilia remember eating more traditional, regional foods that they did not normally eat at home. Traveling to San Miguel de Horcasitas was always an adventure for them and each time, a new impression was left in their memory. One specific memory that the Ramirez sisters discussed was of the *pitayas*, or Organ Pipe fruit, that they consumed frequently. Dora explained how their mother and others would go out with buckets and a pole that might have had a knife on the end to gather the pitayas. “They were just the experts,” she confessed. Cecilia remembered eating them fresh out of the basket and how sweet and juicy they were. They also ate *tunas*, or prickly pear fruit, and drank *pinole*.

Most of the time they would stop in La Fábrica on the way to San Miguel de Horcasitas and visit their maternal aunt, Tía María. They remembered the pinole because Tía María always had some made when they arrived. Dora explained that, “she would toast some wheat, grind it and made the pinole.” They would drink warm milk with it. Their aunt also had cattle and pigs and, sometimes, they would kill a cow or a pig when they would visit. Dora remembers that they once killed a cow and a pig and she had to help wash out the *tripas*, the intestines, in the river. Dora would imitate her elders and utilize the current of the river to do most of the work. The water rushed through the intestines and cleaned them out, “The job wasn’t so bad.” Once clean, the tripas were used as a casing and stuffed with food like *chorizo*. Then, for the cow, they would cut the meat and then hang it on the fence outside to dry and cure. They always traded or shared the food with others in the town because it was too much for one family to consume.

Cecilia remembered a small church near her grandmother’s house and close to a little *abarrote*, or grocery store. Her grandmother and mother always sent her to the abarrote to get milk. Cecilia would get excited because she loved cold milk as a little girl. However, she did not expect fresh milk that was still warm because it was recently milked from the cow. She remembered this well because she hated warm milk. Her sister Dora loved the skin that formed on the top of the fresh milk, *la nata* they called it, while Cecilia only liked the cream. As for meals, Dora and Cecilia remember the popular chicken soup their grandmother would prepare for them.

Both Dora and Cecilia remember eating their grandmother’s chicken soup. It was the best chicken soup they had ever eaten. Cecilia recounted that she did not know at the time that it was so good because her grandmother used a fresh chicken. She said, “It was a fresh chicken, which I didn’t know and no one told me, and I was glad no one told me because I saw the chickens in the back and I never saw her kill one.” Dora, however, knew how her grandmother killed the chicken by swinging it over her head to break its neck. They remember having eggs for breakfast and chicken soup for lunch. They did not remember anything special that their grandmother made besides the chicken soup. Dora said, “I’m like my grandma. She didn’t like to cook.” However, their grandmother would make flour tortillas. Her tortillas were different from their mother’s tortillas because their grandmother made Chihuahua style tortillas, which are thicker and made with a roller, while their mother made them Sonoran style, which are thin and flattened with the hands.

Dora and Cecilia's grandmother, Julia, played many roles in the community. Dora described her grandmother as being *aventada*, or daring, because of all the skills she had acquired in her lifetime. Dora said, "Yeah, she wasn't afraid to do things because you know, she was the midwife," or *partera* of the town and "she ran the post office." Dora's grandmother was also la *curandera*, or healer.

Dora and Cecilia remembered the different techniques and plants Mama Julia would use to cure the babies and children of the town. *Empacho*, a stomach ailment involving impaction, was a common illness among infants and children that Julia cured by rubbing lard over their body with a spoon. The lard would crack where the empacho was. She would use *mollera*, or a fallen fontanelle, to cure the babies as well. Mama Julia used *Manzanilla* (chamomile) during pre-childbirth and to cure upset stomachs. Cecilia explained, "When the woman was close to childbirth they would give her Manzanilla and they claimed it would help bring it, help the baby come."

The sisters also recalled a type of medicine called *el añil*, or Indigo, that their grandmother and mother used to give them for stomach problems. However, now it is considered to be a poison. Cecilia said, "It's a good thing we didn't die." Both Dora and Cecilia remembered that it was very blue, chalk-like and came in *bolitas* (little balls). They would scrape just a little into olive oil and then drink it. Cecilia commented "we burped, horribly. You don't even want to know about our burps after that. But that was supposed to take care of our ailments." The Indigo was also used as a dye by dissolving it in water and then soaking clothes in it. Dora and Cecilia also mentioned *Yerba Buena*, or mint, which also aided in stomach problems and *Sauco*, a yellowish flower from a tree, which helped with sleeping problems and stomach aches.

Both Dora and Cecilia also remember their grandmother piercing their ears with a needle and no ice when they were little. As Cecilia tells it, "We had straw brooms back then. She would pierce our ears with a needle and then put a piece of straw from the broom in the piercing, instead of a piece of string. Naturally, it always got infected."

There was a church in San Miguel de Horcasitas but neither Dora nor Cecilia remember ever going to church when they visited. Their mother and aunt always prayed when they rose in the morning and before they went to bed at night. They would also pray the rosary with their grandmother, Julia. Dora remembers her mother telling her, "Every time, every town you visit, the first place you should go to is the church." Their mother and aunts were very religious and had a lot of faith, but their father and grandmother were skeptic.

Dora explained that her mother made hábitos de San Francisco. These were made of a brown *manta* (calico, course cloth) and adorned with a white knotted belt made of yarn. Dora and her mother wore them together around town for a month and then they would make *mandas* (religious promises) if they needed a miracle. Dora remembered her mother telling her, "You have a religious promise my little daughter, you have to go out in the habit." She knew that the religious tradition associated with the remembrance of Saint Francis was very important to her mother.

Dora remembered that they never went to church because there was rarely a priest. Once a month, a priest would come for baptisms and other ceremonies. During this rare occasion, the town would go to church. Dora explained that a lot of the churches in the area had been vandalized and some priests lost their lives because of the revolution, so permanent priests in small towns like San Miguel de Horcasitas were hard to come by. Because they did not live in San Miguel de Horcasitas all year long, Dora's family was not around for many religious ceremonies, festivals, and activities. However, Dora remembered being in San Miguel de Horcasitas during Dia de San Juan.

There was always a priest present for the Dia de San Juan. A mass would be held, followed by a fiesta and dancing. Dora was eight or nine years old when she first experienced Dia de San Juan and she thought, "Oh my god, it's like the movies!" All the girls would ride on horses in the plaza, there were races and all kinds of food. Dora did not remember any specific foods they had during the festival. They just ate, danced, and were happy. It was "a typical Mexican life." The dance was held at a nearby school with a patio set up for dancing and chairs all around. This was the first time Dora saw her parents dance together.

Cecilia only knew what her mother told her about Dia de San Juan. Her mother said all the girls, in honor of St. John the Baptist, had to go down to the river and "completely drench themselves as if they were being baptized again." Dia de San Juan was a tradition meant to bring the rain necessary for upcoming harvests.

5.2 Vicente Lopez Family Story

Vicente Lopez's great-grandparents, the Padillas, moved from San Miguel de Horcasitas to Florence around 1865. When Vicente went to visit San Miguel de Horcasitas in the 1980s, a shop owner remembered that the Padillas use to bring in oranges to the store from Santa Maria de Populo to exchange for goods. Vicente believed that his family moved to Florence, Arizona because the Gila River allowed them to use farming practices similar to those that were used when they farmed off of the San Miguel de Horcasitas River. Vicente reflected an old family story to aid him in forming his conjecture.



Figure 5. 2 Antonio Garcia, San Miguel de Horcasitas, Vicente's Great-Uncle

“There's a great story of my great-aunt, Catalina Padilla, having a huge table. I think she had thirteen kids or sixteen kids, and they said there was always food and she was making tortillas, the flour tortilla, and a pot of beans, so I'm sure that the flour for the tortillas and the beans for the table were their own local produce.” Vicente believed his family had corn as well as other vegetables and cattle on their land. Because Vicente's other relatives grow cotton in Dudleyville, Arizona today, Lopez believes his great-grandparents might have grown cotton as well.

Vicente Lopez described what he ate as a child, providing a glimpse of what types of foods were consumed in 1775. “We were predominately a beef oriented family.” A favorite family meal was Chili Colorado. Some other family staples included beans, flour tortillas, plenty of mariscos (seafood) from the Sea of Cortez, and vegetables such as calabazas (squash), spinach, camote (sweet potato) and zucchini. Corn was used in several dishes, including cream of corn and tamales. He considered tamales to be a seasonal food because red meat tamales were reserved for Christmas time and green corn tamales were for the summer. The Lopez family also took advantage of resources that grew in the wild, like nopales, quelites, verdolagas, and watercress.



Figure 5.3 Vicente Lopez c. 1944

Vicente’s grandmother kept a garden where she would grow herbs such as rosemary. When she needed to bring a family member back to health, she would send out the children to collect *Sauco* (*Sambucus Mexicana*) or *Hierba Colorado* (*Potentilla thurberi*). They would use the red root of Hierba Colorado, found close to the San Pedro River, to cure dental and gum

infections. Sauco, a type of elderberry, was used to remedy flu symptoms. For medicinal plants like Sauco, there was a particular method in which the plant had to be harvested in order to be effective. For example, Sauco had to be picked in May while it was blooming and it could not dry in direct sunlight.

Fruits played a huge role in his family's daily diet. His aunt would always stress the importance of the potassium bananas provided and always included them as a part of the kitchen table. Other fruits he consumed were oranges, limes, lemons, grapefruit, dates, nuts, figs, watermelons, and pomegranates. He remembered that his grandmother would use lemon leaves to make *limon de castilla* - a healthy, refreshing, sweet lemon tea. Vicente also ate different types of cajeta (caramelized milk) such as cajeta de leche and cajeta de membrillo, and Vizona, a candy derived from cacti.

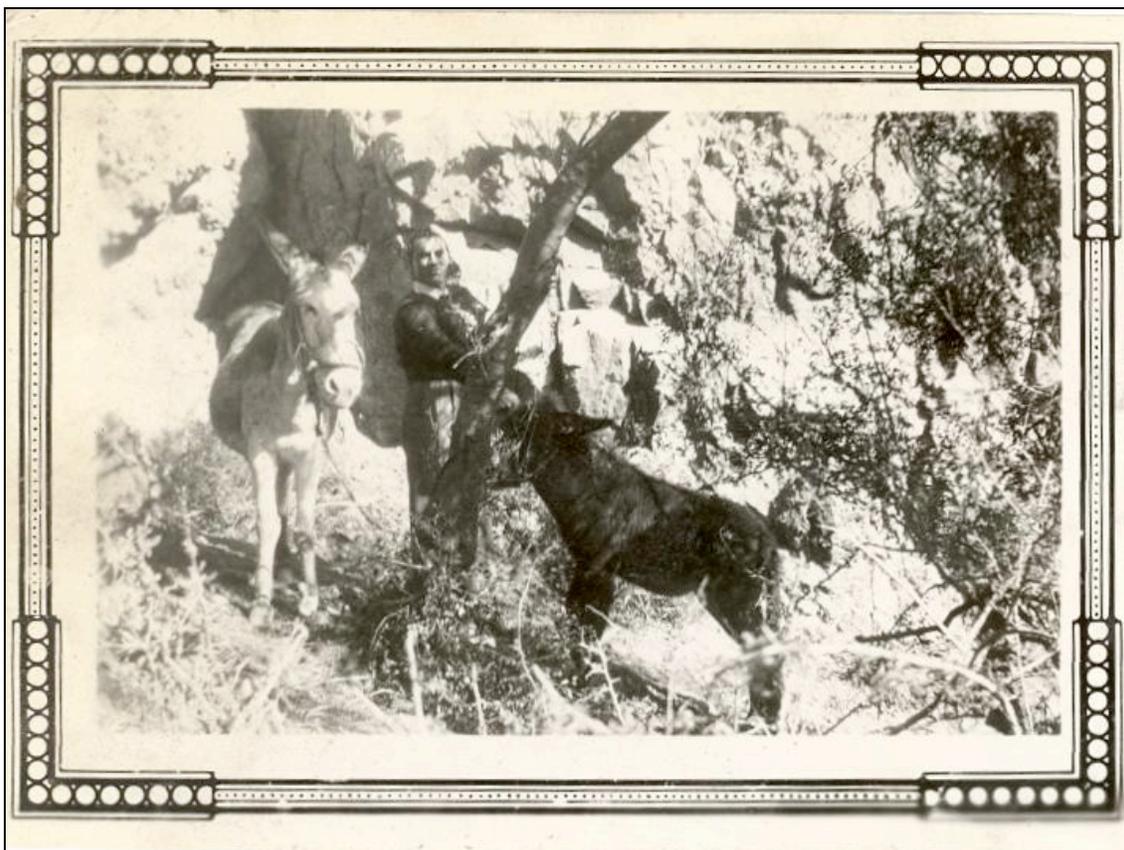


Figure 5.4 Vicente's Great-Uncle Tending Their Family's Burros

Vicente described the “peculiar characteristic of the Sonorense.” He explained that they were a people with a rugged frontier type of personality that were very religious and family oriented. They were “hard working, independent, and somewhat of what we would call in our attitude here as, you know, the “wild wild west” or “the western spirit.”

In Vicente's family, they learned to ride horses early on. He considered his family to be a part of a great horse/cattle tradition. One of their close family friends, Gobeya, would lead the Fiesta de Vaqueros on his palomino horse during the parade in February, carrying the Mexican

flag. Vicente's immediate family was more oriented towards city life, but his other relatives continued to farm, mine, and raise cattle. The older generation used to make the *riatas* (bridles) out of leather. The younger generations compete in tournaments and win saddles and buckles.

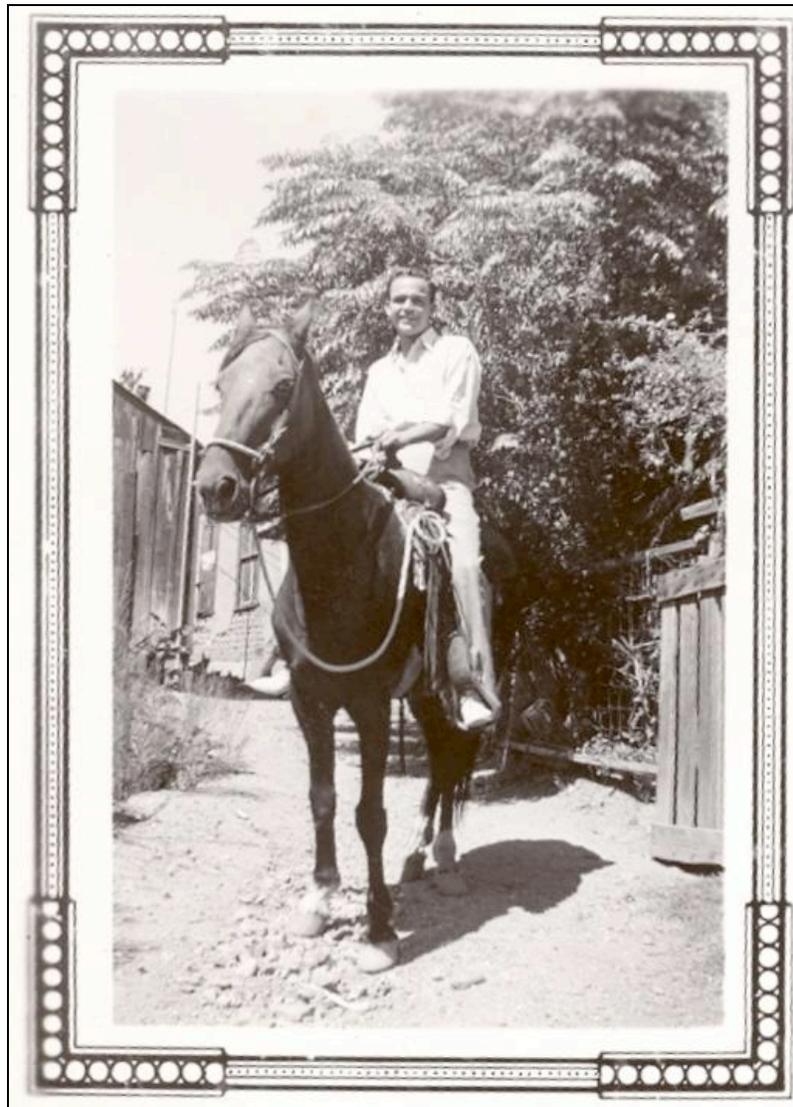


Figure 5.5 Osvaldo G. Lopez Riding His Grandfather's Horse, c. 1893

Vicente noted that his family had a great amount of respect for the land and, as a result, their faith grew from within. Since priests were not readily available, religion became more domestic and a "family church" was formed. This church could be visited during holidays or when events such as baptisms and marriages took place. The family unit used these times to deepen their faith and their relationships through celebration, food, and the Padrinos(as). Vicente credited Father Eusebio Kino for establishing this legacy of faith and community into the people of the Southwest. He believes these were some of the character traits that were taken with the people from San Miguel to San Francisco, California in the De Anza expedition.

Being a priest himself, Vicente Lopez had much to say on the Virgin of Guadalupe and religion in general. During his visit in the 1980s, he was actually called on to lead a mass during Holy Week. Since San Miguel de Horcasitas was such a small town during the 1980s, they did not have a resident priest. As a result, families had to have their own church. “Most homes would have their altars, their small altars, with their choice of saints. Most of them would have our Lady of Guadalupe and then whatever patron saint... San Miguel de Horcasitas, Saint Michael the Archangel, and so there ... would be candles and images [on these alters].” Vicente explained that the town folk had their own popular religiosity or popular piety that was depicted through their church decoration, particular types of ceremonies, and ways of “inculcating” the faith. Everyone would participate in spreading the faith, from aunts and uncles, to members of the town. There were no nuns or Catholic schools so they had to rely on themselves. When the Bishop or the priest would arrive in town, there would be confirmations, weddings, and first holy communions; “the whole kit and caboodle.” “People had been prepared by the whole community itself and there was tremendous community reverence and support for the importance of these celebrations. Gifts were given and candles displayed and special dresses worn.” These relationships created strong family ties. Some other religious celebrations include Dia de Guadalupe and the San Francisco pilgrimage to Magdalena.



5.6 Vicente Lopez and UofA Ethnographer

On December 12th, every house has a shrine and all of these shrines have to be blessed. The kids dress up like Juan de Diego and the Virgen de Guadalupe and the story of the apparition of the Virgen is told and acted out. Dia de Guadalupe is one of many days that celebrate the Christmas season. Christmas starts on the 8th of December with the celebration of the Immaculate

Conception. It is a psalm day and all the ladies are called Concepción, Maria, Maria de la Concepción, or Concha. A *novena* is held throughout the nine days, from the 8th to the 16th of December. The *Posadas* are held from the 16th to the 24th of December and are considered Christmas for many people, especially the poor. This is a festive time when children break piñatas and eat candy while the adults enjoy tamales and their family's company. The meal on Christmas Eve is the main event. There are fireworks and a whole assortment of foods such as menudo and tamales. "Traditionally, it was oranges and peanuts that were distributed. Now they have sweets and candies and the rest of it." The following day is Christmas and, generally, gifts are not the center of focus. For many, Christmas starts on the 8th of December and Christmas day is set aside for family reunification. After New Year's, the Peace of the Kings celebration arrives. During this time, many people decide to give gifts and a special cake called a *rosca* is prepared for the party. The cake has a miniature figurine of Jesus inside. Whoever takes the slice of cake that contains the figurine must hold next year's *rosca*. Mexico celebrates the coming of Jesus from December 8th until January 6th, but the celebration that is held to honor San Francisco is even longer.



5.7 A Community Member Portraying the Virgen de Guadalupe in a Parade

Honoring Saint Francis of Assisi is a month long celebration that lasts from September 15th to October 15th in Magdalena de Kino, Sonora. There is a procession that circles the town and the participants carry pictures and statues. Visiting priests attend ceremonies and a special mass is held. Community members participate in the festivities by sponsoring activities. Leaders of the activities are called *padrinos*. There are the *padrinos* of fireworks, flowers, musicians, food, and

art. This allows the whole community to get involved. This is also a time to donate. Food baskets are taken to the poor. Pilgrimages from all points of the compass begin around this time. People walking to pay their *mandas* (thanksgiving for favors received) to el Santo Francisco Xavier and kiss, talk to, and sing to his statue. His head is then lifted by the pilgrims as a sign of their deep faith.

5.3 Manuel Velez Family Story

Manuel Velez's mother, Julia Islas de Vélez, was born in San Miguel de Horcasitas on Cinco de Mayo, 1910. Their family was one of the more prominent families in the area. Julia's grandfather was from Spain and opened up a soap factory when he arrived in San Miguel de Horcasita. Her grandmother's brother owned the biggest store in town and he ordered much of his merchandise from Europe. Julia's father, Antonio Islas, was from Ures, Sonora and he owned a farm on the outskirts of San Miguel de Horcasitas. They lived a simple life.

Antonio, Julia's father, would butcher one cow a week for his family and he would give any parts he did not use to his neighbors. Her mother would wake up at three in the morning to milk the cows. She would use the milk to make cheese. She also ground all her wheat using a metate. They slept on mattresses called *petates* that were made out of grass. In order to cook their food, their family would use an *estrado* (a grill made out of adobe). Julia's mother would use fine clay found by the river to make dishes. Overall, life was good but things changed after Julia's two brothers were kidnapped by Yaquis.

Antonio, the comandante of San Miguel, and the Yaquis shared a special animosity towards one another. But on this day, the Yaquis were trying to capture some new interpreters and rode into San Miguel de Horcasitas to find some. The Yaquis snatched up two boys and an Indian that had been tending the fields that day. They killed the Indian boy to make an example of those who befriended the enemy. As the boys were being taken down the river, they were ordered to only step on top of rocks to prevent footprints. However, every so often the boys would leave a piece of clothing or skip a rock and leave their footprint. Soon, Antonio caught wind that it was his boys that were taken and quickly rounded up a search party. Luckily, he found their trail near the river and headed to cut the Yaquis off. Once he caught up, he started firing his weapon in the air producing confusion and scattering amongst the Yaquis. He yelled out to his sons, "Pancho! Fernando! Rush to me!" They did. The leader of the kidnapping party realized they were Antonio's sons and shouted, "If I had known they were your kids, I would have burned them using 'leña verde' (green wood)." This affair was enough for Julia's mom to order that the family relocate to a different region. The family took their cattle, household goods, and money and left their home.

In 1916, when Julia was six years old, they headed to Nogales where Antonio's brother lived. He eventually ended up in the railroad town of Sasco near present day Red Rock, Arizona. With so much conflict and change in the family's history, the story of Anza did not have much of a conscious affect on the Islas family. As Manuel Velez had mentioned in his interview, his family knew of the expedition but did not realize its importance. His attitude changed when he experienced the bicentennial Anza Trail Ride. Manuel stated, "The 200th anniversary was good, it was involved with things today that are more relevant to our lives..." One way Manuel felt more connected was through his family traditions with food.

Manuel spoke of many stories dealing with food. Popular drinks were Jamaica (hibiscus), horchata (rice and cinnamon), limonada (key lime), granada (pomegranate), teswín (fermented fruit), tea, café de olla (toasted ground up), champuro (chocolate and cinnamon, a Christmas favorite), biscochitos with sprinkled sugar, and café con leche. There was also bacanora

(maguey), tequila, mescal, and different wines. He explained that his family preferred flour tortillas to corn. One of the main reasons they enjoyed them so much was because of their size, some of which were up to an arms length, but corn tortillas were still popular. Pinole, figs, apricots, avocados, apples, oranges, quince, and prunes were some other foods he remembered. Manuel recalled a fruit called pitaya, also known as the organ pipe fruit, which was picked by locals and sold by the bucket-full for one peso. Some delicacies were pinto beans cooked with verdolagas, nopalitos in red chili (sometimes with meat or pork), huevos rancheros (eggs sunny-side up on corn tortillas with fresh salsa), and machaca (type of jerky) with vegetables and scrambled eggs. Green corn tamales and red chili meat tamales are also very popular.

During the interview, Manuel stressed the importance of the crops. He believed most families in 1776 would have had some sort of crop system they relied on for their dietary needs. As for his family, the fields were right next to the house and gave them access to all things grown. A cooperative relationship was created with the natives because the natives would usually help in the fields. Manuel emphasized the importance of land for both farming and ranching.

His grandfather, Antonio Islas, owned a ranch with horses and cattle. Not much was spoken about horses but, overall, his interview expressed that horses played an integral part in the lives of his family members. Antonio eventually became a forest ranger when they moved north. Manuel's other grandfather built wagons and eventually became a mechanic. Women would sigh with they saw Manuel's uncles ride into town. They would be wearing classic attire: white long sleeve shirts, jeans, boots and spurs. Julia's sister continued milking cows after their mother had passed and eventually owned her own private dairy. The cows were milked every afternoon and the milk was known as the best in the area. During times when milk collections were low, she was known to add water to stretch out her supply. Additional evidence of their resourcefulness included their utilization of wild plants.

There is a huge complex associated with the gathering and use of wild plants. Manuel explained that wild herbs and plants were used for food, medicinal purposes, and ceremonies. Once, Manuel's friend thought he was hexed and went to a *curandera*, a traditional folk healer. Manuel went with his friend to the curandera and saw the rituals first-hand. The curandera used a raw egg, wild plants, herbs, and prayers to try and free the friend from his curse. The *parteras*, or mid-wives, were also very fond of using wild plants during child birth to ease labor pains. Because medicinal plants held such a high value, they could be used in trade and bartering

Religion was a major part of Manuel's life. After graduating from Salpointe Catholic High School, Manuel entered the seminary for two years of college. He left because he realized that becoming a priest was not his vocation. His mother was very influential when it came to following the faith. Manuel explained, "My mother took us to mass every Sunday." He described his mother as living the faith. His aunts were also very religious. When a family member had died, the family would mourn for a year by wearing black clothing and not attending parties. "*Esta de luto*" (He/she is mourning) was a common saying during this time.

The month of May was dedicated to the Virgin Mary. Children would wear white and offer flowers during the service. Manuel's family saw Our Lady of Guadalupe as a religious icon

rather than a cultural symbol. His family also celebrated All Saints' Day and All Souls Day, November 1st and 2nd. All Souls Day, also known as Dia de los Muertos, is traditionally celebrated by people attending loved one's gravesites. People place favorite items of the deceased like pies, Christmas ornaments, dolls, and tequila on their graves or an altar. In Catholicism, almost every day celebrates a particular Saint. To Manuel's family, a Saint's day is special, almost like a birthday. Manuel's day is on August 15, the King Day, because he was named after Emmanuel, meaning God with us. His parents chose to name him Manuel because of his time of birth. Manuel was born December 25th 1942. His mother declared to her husband, "Emilio it's time!" in the middle of midnight mass at Santá Cruz church in Tucson, Arizona.

Manuel's mother, Julia Islas de Vélez was empathetic about education. She graduated from Tucson High School in 1936 and was the only one of her siblings to receive a high school diploma. Manuel, Josephine, William, and Gilbert Vélez were the offspring of Julia and Emilio. Although Julia was a widow, she still wanted all three of her sons to graduate from a university. Josephine got married when she was fourteen and will be celebrating her 54th anniversary this year, Gilbert teaches the Mariachi Apache at Nogales High School, and William is an Assistant Dean of Math at the University of Arizona. Manuel ended the interview with a summary of his family. "Religion, customs, sayings, honor, work ethic, and long-lasting deep roots is what we are all about."

5.4 Frank, Trini and Queta Family Story

With three different generations of the Tapia family at hand, we collected a wealth of information about San Miguel de Horcasitas from each person's perspective. Their family ties to San Miguel de Horcasitas go back many generations. Trinidad Tapia's great-aunt was born in La Fábrica, a town within walking distance from San Miguel de Horcasitas, in 1900. Trinidad moved to San Miguel de Horcasitas when she was a year old with one of her aunts. Her dad owned a plot of land there and to this day the people of the town still refer to it as his land, even though he passed in 1985.



Figure 5.8 Trinidad Tapia (L) with UofA Ethnographer (R)

As far as Anza history, the knowledge found its way into their home. Trinidad felt that the story of Anza was very important for the community members and for history in general. She remembers the re-enactment that was held in San Miguel de Horcasitas in 1978, and stated, "They did a re-enactment of de Anza's arrival and of his departure with the people who joined him from here." This re-enactment was very important for the people and re-invigorated the Anza spirit in the area.

In addition to Anza, the subject of food brought back many memories and a variety of foods and drinks were discussed. *Tortillas* were particularly noted as an important food. Frank remembers his mother, Trinidad, making tortillas from both corn and wheat, but he especially liked the ones made from wheat flour. They also sent tortillas to family members in Mexico City because they had no flour tortillas, only corn, and because, as they noted, the tortillas in Mexico City were not as good as the ones made in San Miguel de Horcasitas.

Many other foods were traditional as well. Some of these other foods included dishes like *gallina pinta* (which is made from beans, corn, and beef), *caldo de queso*, *carne machaca*, *caldo de pollo*, *calabacitas*, and *birria*. In addition to these dishes, some of the sweets that were made were also mentioned, such as *empanadas de higo*, *dulce de pitaya*, and *dulce de calabaza*. Trinidad also talked about how one of her neighbors would bake bread in a wood oven. She recalled that the bread was so delicious that the whole town would go her neighbor's house in the morning to buy bread to eat with their coffee.

Their family grew several types of food crops in their *milpa* back when there was water, including corn. They also mentioned that there was only white corn, not yellow. Two types of the white corn were *maiz dulce* and *maiz reventador*. *Maiz dulce* is sweet corn and is eaten as is, or just with coffee. *Maiz reventador* is used to make popcorn. In order to propagate the next year's harvest, Queta's father would use seeds from the previous year's crop. He would hand pick the best looking ears of corn and would set them aside for the next year's growing period. Her father also planted wheat, watermelons, other melons, potatoes, sugar cane, yams, tomatoes, onions, chiles, cilantro, and squash. Frank's grandfather was also known for growing beans. Some of the types he planted included pinto, yellow, *urimón*, *tepari*, and white beans. Traps were set to protect their crops from pests. They would catch raccoons and jackrabbits and the family would then make *chorizo* and *albondigas*.

They also used the wheat that they grew to make one of their favorite beverages, *pinole*. It is similar to *champurro*. Although pinole was a sought after beverage, it took a great amount of time and energy to produce. They begin by cleaning the wheat grain, then toasting it, and finally taking it to the mill in order to be ground. Once they collected the grounded wheat grain, they would add milk or water with some brown sugar. The family specifically remembers using a *picara*, or a cleaned out gourd, for drinking pinole.

Wild plants were also an important part of their diet. *Quelites*, *verdolagas*, and *choales* were wild greens that were prominent in their diet. *Nopales*, *pitayas*, *tunas*, and *sinas*, which is a variant of the pitaya, are the cactus foods that they remember. However, it was specifically pointed out they did not have any saguaros in San Miguel de Horcasitas. *Garambullo* is a small fruit that is very sweet and is often used to feed birds. *Bachata* was another type of black fruit they used to eat as kids and used for medicinal purposes. In fact, they noted that recently, scientists have found the roots to have cancer fighting properties. Another fruit that grew was a wild version of *tomatillo*, which was most commonly found in the corn field. Their family would produce *bacanora*, an alcoholic beverage known distilled from *maguey*, also known as the agave plant.

For Trinidad's family, wild plants and herbs also were used for their medicinal properties. They made a red colored tea from *Cosahui* roots, which were used to purify one's blood. The drink was very sweet, so it was a desired treat as well. This tea followed a traditional Yaqui recipe. Another plant they recalled using for its medicinal properties was *Hierba del Indio*, or Indian herb. It was very bitter tasting, but was useful in getting rid of a stomach ache because, as they noted, the more bitter a plant is, the more medicine it contains. Indian herb was also used in conjunction with *garambullo* leaves by mid-wives when children got sick. The root of the plant was so commonly used that they had some growing in their house, along with *Hierba*

Buena, or mint, another important medicinal plant. According to Frank, plants are considered mystical:

Plants are still very important to these people whether it's because their beautiful flowers or because they're medicinal or because they're for eating. I remember my aunt telling the story that my mom had a really bad fever and they said go to this plant and tie a red piece of cloth on it and her fever will break. And they did and they said the fever broke. So there is this, there's this, you know, plants are mystical. Plants have powers beyond just looking at or eating them.

Teas are used for curing ailments. As Frank explained, "it's more than just what goes into the tea; it is more about when you drink the tea and how you make it."



Figure 5.9 Trinidad Tapia Riding Horse-Back

In addition to wild plant use for medicine, most families in San Miguel de Horcasitas also had crops and livestock. Queta noted that in the old days, all of the cattle ran wild. Owners of the

cattle would hire *vaqueros*, or cowboys, to round them up and bring them back to their ranch. The vaqueros were particularly needed when there was a calf being born. When a cow was in labor, it was necessary to have vaqueros on the ranch in order for the calf to be branded and, if it was male, also to be castrated. Queta recalled when they didn't have fencing, that it was much easier to steal someone's cow. The cattle would just wander in search of water and never return. Now, they fence their land. Even with the threat of bandits taking away cattle, the weather and water always posed the greatest threats to the herd. Every year cows would die, especially in July, due to the lack of water, unless their owner had a well.

Queta Fontes, the eldest family member interviewed, noted that in addition to livestock, her mother also raised chickens. When there was no money, she would use the chickens to barter for other necessities, such as clothing and food. As Queta explained, "When there was no money, okay for example there was a man that sold things from a cart. My mom had a lot of chickens. So she said I have no money and my mom would say, do you want chicks or chickens? And she would do it that way. She would trade eggs or chickens or little roosters. My mom had a lot of chickens. Sometimes clothes...he would bring whatever he could bring. Little sandals, and that's how she would buy and then she would go sell it to someone else." When Queta was young this is how trade was conducted in San Miguel de Horcasitas.

Later she specifically remembers her mother bartering with the *pajareros*, "they're like Gypsies. In those times they were pajareros, they'd trap birds and then sell them." No one knew much about them, but they would always come with trinkets, chains, and various other things to trade with. Queta remembered one incident involving them:

They would sell for whatever. You could exchange wheat and corn for anything you wanted. We lived outside of town. By the wash, they would camp there by our house and they would make many things, they could make chairs and things like that. One day, they made these cute little chairs like for dolls. They were breaking camp and they were going to forget five little chairs, and I run and said sir, sir, you're forgetting the chairs and my sister said shush, shush, we can keep them for ourselves. The woman came back and she took the little chairs and my sister beat me up in the wash because I told the lady about the chairs.

This was one of the methods that the community used, along with subsistence agriculture and livestock raising before the use of money was common in the town.

The family also discussed some special events throughout the year. Some of the particular days noted were All Saint's day, Day of the Dead, the *Día de San Miguel*, *Día de Sonora de Lourdes*, Mexican Independence Day, Christmas, and *Semana Santa*. Each would have special events, like dances, horse races, or church, and special foods that were eaten, such as *menudo*, *pozole*, and *tamales*.

Regardless of talking about special occasions or everyday life, Trinidad remembers growing up in San Miguel de Horcasitas as the most wonderful time in her life. She remembers playing along the river and in the hills with the boys her age. Even now she says that her visits to San Miguel de Horcasitas are the times when she feels most relaxed and at home. Overall, the family was excited about other people's interest in both "their little town" and the Anza story.

5.5 San Miguel de Horcasitas Reflects

In order to enrich this chapter, we wanted to include segments of family stories from the people we interviewed in Mexico. Our original intention was to create a series of family stories in Mexico, but the lifeways described in San Miguel de Horcasitas matched those described in interviews in the United States. These lifeways were used to compile the previous family stories and activity complexes presented in the next chapter; therefore it was believed that additional family stories would have become redundant. We have assembled a snapshot of community member's comments on their own lives, their families, and their community in order to provide a reflection of life during the Anza Era.

When discussing the heritage of San Miguel de Horcasitas, one community member declared, “ya todos somos mestizos pues, por ejemplo aquí mi sobrino, tiene mas tipo de Español de que indígena. Pero, aquí estamos todos Mexicanos, una nación pluricultural, que se ve un mestizaje muy bonito donde todo mundo debemos de verlos bien” [we are all mestizos now. For example, my nephew here has more Spanish in him than Indian. But we are all Mexican, a multicultural nation that displays a very beautiful mix of races that should all be looked at well. FHT] Another community member remembered that “a lot, here there were a lot of Spaniards, crossed with Mayos BP” and that his grandfather was a Spanish Mestizo.

When asked what life was like for them, their parents or grandparents growing up in San Miguel de Horcasitas, community members responded:

- » “Mucha agua había, mucho trabajo, era muy bonito, pero la gente ganaba dos pesos no mas, antes, y les alcanzaba para todo, la comida y todo, como lo ven, y ahora no alcanza ni miles.”
[There was a lot of water, a lot of work, it was great, but the people only earned two pesos, before, and that covered everything, food and everything, what do you think? and now not even thousands are enough! CP]
- » “Si dios me digiera que etapa de tu vida quieres regresar? Yo regresaría a esa. Muy suave, nos íbamos Cesar y otros muchachos al río, nos bañábamos, jugábamos, nos íbamos en los caballos... Yo me la quería llevar arriba de los caballos, y en el río. Yo me iba, abecés sola. Muy bonita para mí esa época. Hacían un pan ahí, una señora hacia un pan, que nunca en tu vida haz probado algo tan sabroso, un pan chiquito de harina de trigo de un horno de leña. Ahí tome café por la primera vez en esa casa. El pan mas rico que he comido en mi vida, ahora lo hacen muy bueno también pero ese pan. Yo me podía comer hasta veinte.”
[If god asked me what time period of your life do you want to return to? I would return to that one. It was great, me and Cesar with some other kids would go to the river, we'd bathe, play, we'd ride horses...I always wanted to be riding horses and at the river. I'd go alone sometimes. It was a very beautiful time period. They made a bread there, a woman would make bread, that never in your life will you taste something so good, a small bread made from wheat flour baked in a mesquite oven. I drank coffee for the first time there. The best bread that I've eaten in my life, they still make a very good bread, but that bread, I could eat like twenty. TT]

- » “Me crió una tía y me crió a mí, me llevó a los ranchos, yo no tuve escuela casi, un poquito. Y a pesar de no tener escuela, yo sé hacer muchas cosas.”

[An aunt raised me and I raised myself. She took me to the ranches, I basically didn't go to school, a little. And despite not going to school, I know how to do many things. CP]

- » Era una vida muy pobre, no había comodidad, andábamos descalzos. No había luz, sacando agua en pozos. VI Vivíamos en ranchos también. Pero con lámparas, no había luz. DC Lámparas y velas. VE Casi no se usaba el pantalón antes. Pura falda ancha. DC Y sentadas de lado. VE Y que más antes los muchachos eran muy decentes y muy amables. Y ahora esta la juventud muy cambiada. Muy rebeldes y muy irrespetuosas y malcriadas. Y luego nos platica mi mama que en sus fiestas que hacían, muy atentos. VI Pues eso de espanto, nos decía mi mama que pues ya antes no había luz, y que teníamos un primo y siempre nos asustaba en la noche y de repente estábamos sentados y nos asustaban. VE Con luz en todas las calles, en ese tiempo no. Estábamos impuestas pues. Y ahorra nomás se corta la luz y traemos un grito. DC Y luego también antes no había tanto animal y alacrán y ciempiés como ahora y mi mama nos dice que mas antes dormían en el piso o en el patio. Y ahora pues ya no puedes dormir tanto afuera con una gente extraña con una gente que no conoces y que te puede hacer daño y muchas horita se salen de la cárcel y se andan escondiendo. Pero antes dormían con las puertas abiertas más antes. VE

[It was a very poor life, there were no commodities, we'd be barefoot. There was no electricity, we'd get water from wells. VI We lived on ranches too. But with lamps, there was no electricity. DC Lamps and candles. VE Jeans would rarely be used before, just wide skirts. DC And sitting sideways. VE And before, boys would be very respectable and kind. And now the youth is very different. Rebellious, disrespectful, and bad mannered. My mom would talk to us how the men would be very attentive during their parties. VI Well of fright, my mom would tell us that before when there was no electricity, that we had a cousin who would always scare us at night and that'd we'd be sitting down and he's scare us. VE With light on all the streets in those times, no. We were used to it. But now whenever the electricity goes out we scream. DC And before there weren't as many animals and scorpions and centipedes like there are now, and my mom tell us that we'd sleep on the floor or on the patio before. And now you can't sleep outside with strangers, people that you don't know who can harm you, and now there are many who escape from jail who hide around here. But before we'd sleep with our doors open. VE] [See chapter three for additional information on candles and lamps]

- » “Pues antes en esos tiempos, nosotros no teníamos la televisión, el radio, menos los celulares, y deste pues no teníamos nada como ahora. Ahora los niños tienen muchas comodidades que nosotros no tenemos. Menos mis papas quienes son de mas atrás.”

[Well in those times, we did not possess televisions, radios, or cell phones, and well we didn't have anything like we do today. Now, children have many commodities that we don't have. Even more so many parents who are from further back. GP]

CHAPTER SIX ACTIVITY COMPLEXES IN SAN MIGUEL DE HORCASITAS

The BARA team was tasked to document the cultural characteristics of the founders of San Francisco. In order to accomplish this research, BARA ethnographers worked closely with people from one of the original Anza communities in Sonora, Mexico. Ethnographic interviews focused on identifying key cultural aspects that have persisted since the time of the expedition.

As a way to discuss and analyze these cultural aspects, the BARA team focused on activity complexes which emphasize links among resources, with people, and with the local environment. This method was originally developed and used during the *Traditional Ojibway Resources in the Western Great Lakes* study (Zedeño et al 2001: 8). Activity complexes are being used in this study to aid in reconstructing the Founders' lifeways in San Miguel de Horcasitas and San Francisco. The BARA team worked with local people to identify several important activity complexes that were likely to have been maintained for more than two hundred years by the people of San Miguel de Horcasitas.

Based on initial meetings with knowledgeable individuals, several activities were determined to be important for both understanding the community and understanding what types of knowledge and resources Anza expedition members had likely brought with them to San Francisco. The selected activity complexes are: 1) agricultural practices, 2) wild plant use, 3) food and its preparation, 4) livestock raising, and 5) religious practices. In addition to activity complexes that community members believe have persisted since the time of the Anza expedition, the event itself and its salience to the community today, was an additional aspect of the community that was explored. Community members believe that these complexes have persisted since the time of the Anza expedition and continue to play important cultural roles today.

Community members of San Miguel de Horcasitas believed that these activity complexes accurately reflected the cultural aspects felt to be particularly important to the community based on their long standing continuity. These traits are central to the analysis of this report. It is important to note, however, that as in any community, variation exists within San Miguel de Horcasitas. Knowledge about these complexes is not shared evenly throughout the community. For example some community members may know more about wild plant use than livestock raise or vice versa. These complexes serve as a guide for understanding continuity and change within San Miguel de Horcasitas, and what the Anza expedition brought forth to San Francisco.

6.1 Saliency of Juan Bautista de Anza and the Founding Expedition

Juan Bautista de Anza, Jr. was born to Don Juan Bautista de Anza, Sr. and Doña Maria Rafaela Bezerra Nieto in 1736. He was born on the frontier of New Spain. The exact location of Anza's birth has been debated; some believe he was born in Cuquiarachi, Sonora, Mexico, and others believe he was born at the presidio of Fronteras. His family was part of the presidial aristocracy because his maternal grandfather and father both served the Spanish royal Crown in the new frontier. Following in his family's footsteps, Anza dedicated his life to serving Spain by serving in the military. Juan Bautista's inspiration for crossing the Sonoran frontier to the western frontier of New Spain was influenced by his father who suggested that the Spanish carry out this mission in 1737.



Figure 6.1 Town Meeting at the Municipality

After years of exchange and negotiating with the Spanish throne, Anza was granted permission to make an exploratory trip in 1773. When Anza completed this expedition, the King was impressed with Anza's findings. This resulted in Anza being promoted to lieutenant-colonel of cavalry, but the King also requested that he lead another expedition to establish a presidio in

Alta California. After a year of coordinating, Anza again left San Miguel de Horcasitas for San Francisco on September 29th, 1775 with 240 colonists and a myriad of horses, pack animals and cattle in convoy (Garate 2003b). In our study, San Miguel de Horcasitas played a pivotal role as the location for the interviewees.

In San Miguel de Horcasitas, it was uniformly believed that Juan Bautista de Anza and the expedition he led to found San Francisco were important to the community and to history in general. The community holds extensive knowledge of the Anza expedition, and all community members interviewed excitedly discussed the two reenactments. The Presidente Municipal (the mayor) discussed the importance of Anza for the community and particularly noted that the image of Anza serves as a symbol used by the municipality for official business. Anza's image is found on their letterhead and shirts. In addition, the municipal government is building an Anza archway where the road now leads into San Miguel de Horcasitas to commemorate the expedition. San Miguel de Horcasitas community members felt that commemorations of the expedition, and particularly the reenactments, provided important opportunities for people from both Mexico and the United States to remember and celebrate their common heritage.

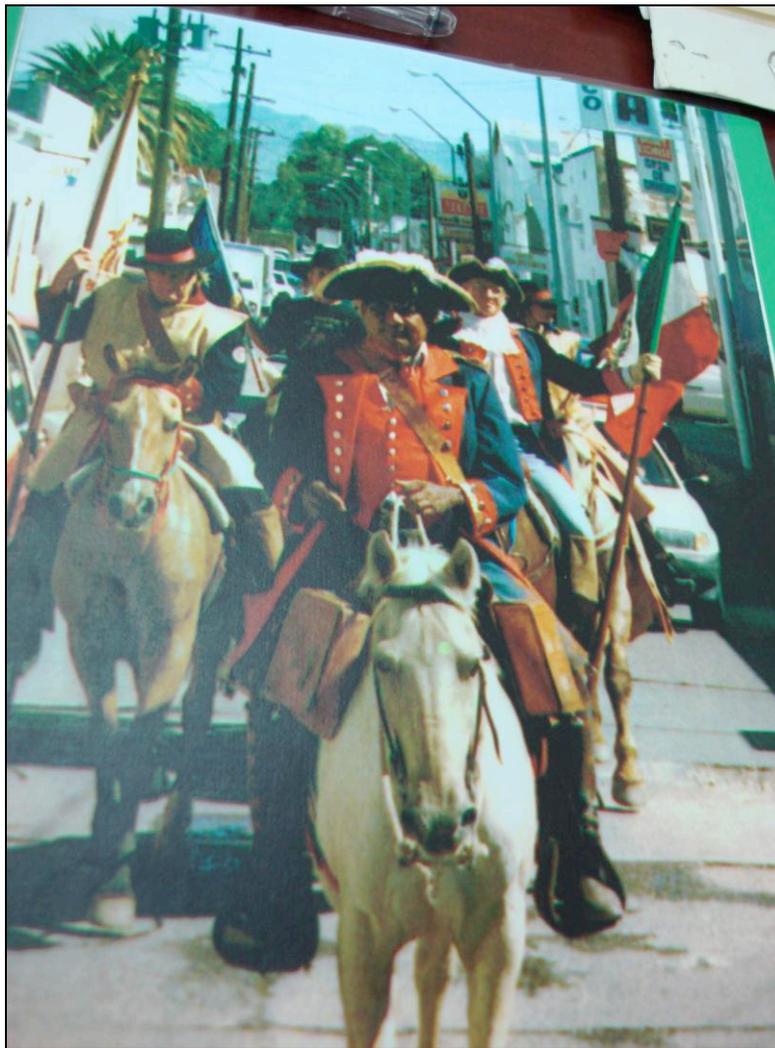


Figure 6.2 Community Member's Photo of the Reenactment

6.1.1 The Cultural Importance of Juan Bautista de Anza

When asked if Juan Bautista de Anza and the expedition to found San Francisco were important to them, their family, or their community, community members responded:

- » “Juan Bautista de Anza, el lo finjo con gente de aquí, de Sonora. Llevo mucha gente para allá Juan Bautista de Anza, y ellos lo recuerdan pues y vienen a los pueblos todavía la gente por allá. Vienen a vernos aquí, a dar la vuelta a ver si hay costumbres todavía por-” [Juan Bautista de Anza, he built it with people from here, from Sonora. Juan Bautista de Anza took many people there, and they remember it and they came to the towns still with people from there. They came to see us here, they come back to see if there are customs that still exist. BP]
- » “A friend of ours when he found out about you, he was very excited, he said really wanted somebody to look into that. FHT”
- » “Sí, sí. Muy importante.” [Yes, yes. Very important. TT]
- » “Pues sí es bueno... [When asked if community members would like to do something to commemorate Anza] Pues sí. Pues sí, este sería bueno, pues tener eso. Recordar todo eso.” [Well yes it’s good... (When asked if community members would like to do something to commemorate Anza) Well yes, this would be good, it would be great and to be able to remember all of that. GCA]
- » “The history of Anza is vitally important to the community and to the region. JAO”
- » “I am interested in the history of Anza. MT”
- » “Yes, yes yes yes. It’s part of the living memory. VL”
- » “Sí. [Yes.] RA”
- » “Sí porque si se comenta que por aquí pasó y sería muy importante para nosotros y para los futuros que vienen, para el futuro, porque es un hecho este. Que si y sucedió que pasó por aquí.”
[Yes, because they do mention how he passed through here, and it’d be very important to us and the future people to come, for our future, because it is quite an accomplishment. That it did happen through here. GP]
- » “Sí porque pues, siempre es, historia- VE” “De los grandes hombres. DC”
[Yes because, it always will be, history. VE] [Of the great men. DC]
- » “Como cultura, entiendo que nos hemos quedado atrás los San Migueleños y debemos conocer más de una figura tan extraordinaria como lo fue el Capitán de Anza. Las nuevas generaciones deben de conocer bien bien de lo que fue esa persona... Ya la gente del Capitán que fue gente de Sinaloa y gente de aquí, pero como era la capital aquí porque en

los tiempos de la Nueva España, México no se llamaba así, se llamaba Nueva España, en los tiempos de la colonización, entonces esa cuestión esta en que procuraban juntar gente que fueran a colonizar, la trajeron de San Felipe, era gente de San Felipe y de aquí que fueron allá a colonizar. Ó sea la intención era que se ayudaran en aquellas partes. Por eso hay un parque en San Francisco, que le llaman creo Parque de los Pioneros... El Capitán de Anza era nacido de frontera Española, hijo de Españoles, incluso después fue gobernador de Nuevo México en los tiempos de los Españoles. Y aquí vivió pues, porque aquí era la capital.”

[As a culture, I understand that we are falling behind as San Miguelians, and we must learn more about the extraordinary figure that Captain de Anza was. The new generations should learn very well about whom this person was...and about the Captain's people who were people from Sinaloa and people from here, but because it was the capital in the times of New Spain, Mexico wasn't called that, it was called New Spain in the times of colonization. So they sought to gather people who would go colonize, they brought them from San Felipe, and it was people from San Felipe and from here who went over there to colonize. So their purpose was to help in those parts. That's why there's a park in San Francisco that they call the Park of the Pioneers... Captain de Anza was born of Spanish descent, he was the son of Spaniards. And he lived here because it was the capital. FLT]

- » Fue grande lo que hizo el capitán de Anza, fue grande... El padre nace el '36 y mire nada mas que 38 o 39 años después hace realidad el asunto, una cosa, muy persistente, mucha categoría hacia el respeto que le tenia y admiración a la idea de su padre en abriendo el camino hacia California. Entonces para mi es muy grande ese hombre que le dedico tanto esfuerzo y tanta idea y tanta pionerilla para llegar a detener a los rusos que los estaban amenazando por el lado norte.”

[What Captain de Anza did was great, it was great... His father was born in '36 and look how 38 or 39 years after it became a reality, he was very persistent and I have great esteem towards the respect and admiration that he had for his fathers idea of opening up a road towards California. For me, he was a very great man who dedicated such great effort and such pioneering to stop the Russians who were threatening them in the north. CBC]

- » Si, estamos muy orgullosos de los principios que persiguió, continuo la idea de su padre, fue luchador y convenció al virrey. Tuvo muchos problemas, y por eso es importante acreditarle, esto es un símbolo para nosotros el Capitan de Anza.

[Yes, we are very proud of the principles that he pursued, he continued the idea of his father, he was a fighter and he convinced the viceroy. He had a lot of problems, and that is why it is important to accredit this to him, he is a symbol for us, Captain de Anza. CBC]

- » La jornada para llegar a San Francisco duro únicamente cuatro meses. En cuatro meses ya estaba el en el río arriba, ya estaba haciendo el informe completo para regresarse. Y manifiesta que en esta parte va a hacer el presidio. La primera plantación como ciudad en San Francisco fue un presidio militar.

[The journey to reach San Francisco only lasted four months. In four months he was already above the river, he was making the complete report for his return. And he

manifests that in this place he was going to build the presidio. The first establishment in the city of San Francisco was a military garrison. CBC]

- » “We are interested in the traditions that remain from the times of De Anza, as well as the history associated with the trail and his time here in Horcasitas and the Río San Miguel. We are very interested in this history and preserving it for the future generations. JB”
- » “En San Francisco por allá hay una plaza dedicada a las familias que poblaron San Miguel y por allá con De Anza.”
[In San Francisco there’s a plaza dedicated to the families who settled San Miguel and over there with De Anza. MT]

6.1.2 Learning About the Anza Expedition

When asked how they learned about Juan Bautista de Anza and the expedition, community members responded:

- » “Yes, well, there are people that know. CP”
- » “Me hablaban (mis padres, abuelos, bisabuelos) de esa historia.” [They (parents, grandparents, great-grandparents) would tell me about this story. BP]
- » “Pues, sí, pues se entera uno por los mismos papas que le platica a uno, sí, cosas de antes, sí sí, hablamos mucho de historias.” [Well, yes, one learns from their own parents that tells one, yes, things from before. Yes, yes, we talked about a lot of stories.]
- » (If people talk about it) “Pues esa historia pues si, si” “Bueno pues cuando nos platica Cesar.” “Si Cesar, porque lee mucho, es historiador el, le gusta mucho leer. Es el que cuenta.” [Well that story yes, yes. DC] [Well whenever Cesar talks to us about it. VI] [Yes Cesar, because he reads a lot, he is a historian, he likes reading a lot. He’s the one who tells us. DC]
- » “Pues no hablaban mucho, realmente no fue eso pero como tuvo mucha importancia San Miguel, a mi me nació esa curiosidad, tengo que saber exactamente que fue lo que paso... Porque como me gusta la historia quise saber con exactitud que es lo que verdaderamente paso leyendo libros, para tener una cosa exacta de lo que verdaderamente sucedió con historiadores reconocidos y además pues de lo que se va aprendiendo con las mismas personas que nos antecedieron aquí.”
[Well they didn’t talk a lot, it wasn’t really that, but since it was very important to San Miguel, I developed a curiosity for this, I have to know exactly what happened... Because I like history, I wanted to know what truly happened by reading books, and to have an exact idea of what truly occurred through recognized historians and also learning about the people who lived here before. FLT]
- » “De mi abuelo, esto que me nace a mí. Nosotros somos 14 hermanos, son genes. Eso lo trae en la sangre. Por el lado de mi abuelo le importaba mucho la historia, tenia muchos

libros, adquiriría libros. Siempre estaban en constante contacto con los acontecimientos de aquellos tiempos. Cuando el se ponía a platicar o dar lectura, yo de pequeño me animaba y me interesaba de lo que hablaba mi abuelo. Y tenía un parecido a mí.”
 [From my grandfather, I was born into it. We are 14 siblings, it’s the genes. We have that in our blood. But on my grandfathers side he really liked history, he had many books, he’d acquire books. They were always in constant contact with the events of those times. When he’d talk or lecture, as a young boy I’d be livened up and I’d be interested in what my grandfather would talk about. We were very alike. CBC]

In addition to the importance of Anza, the reenactments arose as a particular topic of interest during our fieldwork. One family showed us the route of the reenactments on a map and several others pointed out where the reenactments went through the town. One community member came with articles and pictures from the reenactments.

6.1.3 Anza Reenactments

When discussing the Anza expedition reenactments, community members said:

- » “Ahhh si, Juan Bautista de Anza. Por aquí, hace como unos veinte años, yo creo, vino un caravana reconociendo no? Vinieron de Tejas, de Nueva México, de California en ese día pues. Vinieron, y aquí hicieron unos ensayos con caballos y todo eso y explicaron a los otros, se llevo gente de San Miguel para fincar allá por el pueblo ese, en los Estados Unidos.” [Ahhh yes, Juan Bautista de Anza. A caravan (the reenactment) to commemorate it came through here about twenty years ago I think. They came from Texas, New Mexico, California on that day. They came, and here they did some rehearsals with horses and all of this and they explained to the others that he took people from San Miguel to build a town in the United States. BP]
- » “Sí, sí. In 1978 in San Miguel. They did a reenactment of de Anza’s entrance and his exit with the people that accompanied him. Very important. TT”
- » “The 200th anniversary was good, it involved things today that are more relevant to our lives today. MV”
- » “Oh yeah, Mhh hmm. In fact when we went in 80, 80 81, it was because the Anza Trail had just been done in 96? or 1976...and then they had a monument, and so we were well aware that we were relating to the Anza trail. VL”
- » “Aquí estuvo una, como una caravana, pero ya hace mucho, estaba chiquita esa...Nosotros si hemos visto que pasa gente, esta, en el corrido, el camino de Juan de Anza.”
 [There was a reenactment here, but a long time ago, it was a small one...We have seen people pass through here, through Juan De Anza’s road. RA]
- » “Sí sí. Las dos... hay que vivir esto.”
 [Yes yes. Both...it must be lived. GP]

- » “Han hecho dos caravanas aquí, me toco con un señor que lo conocen mucho en California que se llama Enrique Salgado, entonces el y yo organizamos aquí en San Miguel de conmemorar la fecha en la que salio el Capitán De Anza hacia San Francisco. Si, iba la gente a caballo.”

[They’ve done two reenactments here, one was with a man that is very known in California named Enrique Salgado, so me and him organized it here in San Miguel, the day to commemorate the day when Captain De Anza left for San Francisco. Yes, they left on horse. FL T]

6.1.4 Expedition Members

Community members discussed some of the different kinds of people that went with Anza on the expedition to found San Francisco. One community member explained why people from San Miguel de Horcasitas might have been targeted for recruitment and why they might have agreed to go:

Lo que sé es que de aquí salieron las expediciones... Pues a lo mejor, aquí vio gente con interés o con ganas de trabajar o con ganas de seguir adelante o de conocer otras tierras. Talvez la gente coincidió con el, eso es lo que puedo pensar yo... Pues si, aquí encontró gente que le gustaba el campo, y alo mejor esa gente, si el traía dinero y si empezó a decir que quería hacer esta expedición, puede ser que si. Porque todo el tiempo, la gente se mueve por alguna razón, es muy raro ver que por costumbre se mueve... Les debe de haber ofrecido algo, no creo que nomás porque sí la gente lo debe de haber seguido.

[What I know is that the expeditions left from here... Perhaps he saw people from here with an interest and will to work, or with will to carry on and to see new lands. Maybe the people coincided with him, that’s what I think... Well yes, he found people here who liked the fields, and maybe those people, if he had money and if he began to tell them that he wanted to go through with this expedition, it may be. Because all the time, people move due to a certain reason, it’s very rare to see someone who does it without a reason... He must’ve offered them something, I don’t think people followed him without a reason. MT]

Anza would have chosen people from San Miguel de Horcasitas based on their ambition, hardworking nature, and interest, while Anza must have offered something that would have enticed them to join the expedition.

Community members also discussed what types of people went on the expedition. They noted that some of the members that took part in the expedition included a number of the captains or other military personnel, as well as people that he picked up along the way, including pregnant women. “En el camino parieron mujeres, iban mujeres embarazadas, y había muchas vicisitudes en el camino, muchas cosas hubo.” [On the trail women gave birth, there were pregnant women, and there were many ups and downs on the trail, many things happened. CBC] For additional discussion on childbirth on the expedition, see the wild plant section of this chapter. One community member (CBC) thought that it was likely that many people on the

expedition were not well established in the community and that they were moving to San Francisco for the opportunity to have land and more economic mobility. This community member explained the recruitment of expedition members and the start of the expedition like this:

Ya cuando el regresa, ya estamos hablando de 1775, el llega en Febrero de vuelta a Culiacán y ahí empieza ahí a recavar personal que estaba muy escaso en ese tiempo, no había habitantes. Eran demasiado pequeñas las poblaciones de los colonizadores. Entonces en El Fuerte se adhiere un contingente de 29 personas. Con 29 personas llega a San Miguel de Horcasitas un 24 de marzo de 1775. Y desde aquí de San Miguel inicia la recolecta de personal en rancherías pequeñas, invitando a la exploración y el riesgo que representaba ir a partes desconocidas. El llamaba trazando la vereda, no el camino. Pues no había camino, era vereda nomás. Y aquí se ubica en San Miguel seis meses, y oficialmente hasta el día del patrón del pueblo, un 29 de septiembre sale con el contingente rumbo a Tubac, directamente al presidio de Tubac.

[When he returns, and we are talking about 1775, he arrives in February back in Culiacán and here he begins to recruit people, which were very scarce in those times, there were no inhabitants. The settlements of the colonizers were way too small. So in El Fuerte he gathers a contingency of 29 people. With 29 people he arrives in San Miguel de Horcasitas on March 24th, 1775. And from here he initiates the recruitment of personnel from small settlements, encouraging exploration and explaining the risk represented when going to an unknown place. He called it tracing the path, not the road. Because there was no road, it was only a path. And he finds himself in San Miguel for six months, and officially until the day of the towns Saint, a 29th of September, he leaves with his contingency towards Tubac, directly to the Tubac presidio. C B C]

This community member emphasized the difficulty of recruiting people to go to San Francisco and the length of stay in San Miguel de Horcasitas. This community member stressed the importance of leaving on the Día de San Miguel, which was noted by several community members and is referenced in the religion section of the chapter. It was also noted that when Anza returned to San Miguel de Horcasitas from Culiacán, Anza had to travel through Yaqui and Mayo territories.

In addition to the aforementioned people, different community members discussed that some indigenous people, who had baptized first names, but no other documented names, also formed part of the expedition. One community member commented on their role in the expedition, saying:

Deben de haber ido indígenas que ya estaban civilizados por Kino y entonces servían de guías para no errar el camino porque ellos eran, inclusive en ese tiempo cuando salió De Anza los Apaches daban una guerra terrible, era una tribu muy peleonera, todavía en los 1900's habían miembros que daban mucha guerra. [Indians who had already been civilized by Kino must have been with them, so they served as guides to avoid missing the path because they were, in those times

when De Anza left, the Apaches were waging a terrible war, it was a very dangerous tribe, even in the 1900's some members were still waging a lot of war. FLT]

It is known that the Apaches gave Anza difficulties during his expedition preparations. One community member noted that, “Y ellos iban ahorrando todo lo que podían, y luego el momento que cuando le roban al capitán los Apaches cuarenta mulas, le roban caballos, le roban armas, unas lanzas.” [And they were saving up everything they could, and there came a time when the Apaches robbed the captain of forty mules, they robbed horses, they robbed weapons, some spears. CBC]



Figure 6.3 Community Member and UofA Ethnographer

Although they discussed the difficulties caused by the Apaches, community members described other tribes as being cooperative and that they likely served as the guides to help the expedition and prevent further difficulties with other tribes. According to one community member:

Hubo un indio muy noble en nuestra región, el Pima, el Pima fue muy colaborador con nosotros. Ellos vivían errantes pero fueron mucho más colaboradores y nunca estuvieron en guerra directa con los Españoles. Sino que colaboraban y se acercaban un poco. Y poco a poco esos indios a través de ellos se fueron arrimando otras tribus. [There were also very noble Indians who used to live in this region, the Pima, the Pima who were very collaborative with us. They wandered around the region, but they were very collaborative and they were never in direct warfare with the Spanish. They would approach the Spanish and

collaborate with them. And little by little, other tribes approached the Spanish through the Pima tribe. CBC]

Working with cooperative tribes to bring over other tribes is a skill that Anza could have learned in Sonora that would have been useful in the settling of San Francisco.

The community believed that both indigenous and non-indigenous peoples were participants in the Anza expedition and contributed to the formation of the original community of San Francisco. As one community member explained, Anza, “El no es el fundador de San Francisco. El trazó el camino. Pero dejó el contingente que llevaba.” [He isn’t the founder of San Francisco. He just traced the path. But he left the contingency that he brought there. CBC] See the Livestock Raising section of this chapter and Appendix D regarding how few “españoles” Anza brought with him and why this might have been intentional.

6.1.5 Connections to Expedition Members

Community members in San Miguel de Horcasitas felt a connection to the expedition members. One of the strongest ways that community members felt connected to the expedition was based on *apellidos*, or last names. The following comments expressed the community’s feelings of connection to the expedition members and San Francisco.

- » “Mi madre sobre todo, ella se llamo Rosa Tapia y iba una niña que se llamaba igual cuando salio el Capitán de Anza a fundar San Francisco de aquí y iba una niña de quince años que se llamaba Rosa Tapia. O sea era la coincidencia de apellidos de todo eso de la gente que participo en todo eso.”
[My mother in fact, was named Rosa Tapia and there was a girl named the same who went with Captain de Anza when he left to found San Francisco from here, and there was a 15 year old girl who was named Rosa Tapia. So it was the coincidence of last names of all the people who participated in all of that. FL T]
- » “Y ahí están muchos de los apellidos de personas que todavía permanecen aquí, que los Tapia, que los Valdez, y todo eso allá. Porque era gente que se llevo De Anza de aquí. FL T”
[And many of the last names that are there still remain here, the Tapia’s, Valdez, and all that. Because it was people who De Anza took from here. FL T]
- » “En San Francisco por allá hay una plaza dedicada a las familias que poblaron San Miguel y por allá con De Anza, que Salazar Tapia y Limón, Gutiérrez, Valdez, bueno todos estos apellidos de acá son Españoles. Mestizos. Hijos Españoles.”
[In San Francisco there’s a plaza dedicated to the families who settled San Miguel and over there with De Anza, the Salazar Tapia, Limón, Gutiérrez, Valdez, well all of the last names from here are Spanish. Mestizos. Sons of Spaniards. MT]
- » “Porque en un listado que tengo por ahí dice el nombre de la persona, el que tiene apellido lleva apellido, si era adulto, si era niño, si era indígena, es claro saber que si no tenia apellido, que era de extracción indígena. Si aquí vemos estos apellidos, los

Bojórquez son aquí de San Miguel, esta gente es de San Miguel, Grijalva, es de Rayón, de Nacameri, Meza, había en San Miguel, siguen los Bojorquez, los Romero eran de Culiacán, Bojorquez de San Miguel. Arvizu, estos eran de San Miguel.”

[Because on a list that I have around here it says the name of the person, whoever had a last name has it there, if it was an adult, if it was a child, if he was an Indian, it's clear to assume that if he didn't have a last name that he was of indigenous descent. If we look at the last names, the Bojorquez are from San Miguel, these people are from San Miguel, Grijalva is from Rayon, from Nacameri, Meza, from San Miguel, and the Bojórquez remain here, the Romero were from Culiacán, Bojórquez from San Miguel. Arvizu were also from San Miguel. C B C]

6.1.6 Anza's Skills

Community members discussed some of the skills that Anza needed in order to successfully complete his undertaking and fulfill the dream of his father. One community member pondered how men like Anza and Padre Kino were able to communicate successfully with indigenous peoples who had little or no contact with non-native peoples when many others before them were killed during their attempts:

Si. Llevaba gente de Sinaloa y de Sonora... Me ha puesto a pensar de cómo le habrá hecho el padre Kino para llegar y llegar a decirles a los indígenas, yo quiero que tú, indígena, me jures tu vida y que aprendas sobre el verdadero dios. Pensando sobre el detalle de cómo llegarían a entenderse. Después ya hubo interpretes de los mismos indígenas que aprendieron el Español y que se lo comunicaban en su lengua nativa, pero los primeros meses cómo le habrán hecho? Qué lenguaje o qué manera habrán usado para conquistar al indígena? Tuvo el Padre Kino que haber abierto brecha la para que se entendieran de que era un hombre de paz y que venía por las buenas a hacer las cosas. Tiene que ser una protección divina o no sé, o un lenguaje corporal que los atraía, yo creo que sabía sonreír, o la mirada bonita que habrá tenido, yo no sé pero son instrumentos de dios a mi manera de ver para poder catequizar y a civilizar a esa gente. Por eso los primeros sacerdotes tienen un merito muy grande e inclusive en Caborca mataron al Padre Zaeta con flecha los indígenas, también hubo gente que perdió la vida porque no les parecía pero que sepa, al Padre Kino nunca le pasó nada. Debe de haber sido un hombre fuera de serie... Y entonces esa gente que iba de Sinaloa y de Sonora que salió de aquí pues ya iban en un plan de colonizadores. Eso si me queda muy claro a mi, qué la calabaza, frijol, sandía, y todo esos detalles, trigo, se los enseñó Kino. O sea que aparte de ser sacerdote, fue un gran colonizador que extendió las fronteras inclusive de la Nueva España hasta allá lejísimos. Fronteras que él hizo, tierras que él civilizó.

[Yes, he had people from Sinaloa and Sonora... I've wondered about how Father Kino managed to arrive and tell the Indians to swear their lives to him and to learn about the true god. I've been thinking about how they came to understand each other. Later, there were translators of those same Indians who learned Spanish and would communicate it in their native tongue, but how did they do it in those first months? What language or what method did they use to conquer the Indians?

Father Kino was able to open a gap and make them understand that he was a man of peace and he came here to do things peacefully. It must have been divine protection or something, or a specific language that they were attracted to, he must've known how to smile or had a pretty stare, I don't know but in my opinion it was an instrument of God that allowed them catechize and civilize these people. That's why the first priests had a great accomplishment, in Caborca they killed Father Zaeta with arrows because there were people who did not agree but that I am aware of, nothing ever happened to Father Kino. He must have been an exceptional man... So those people who were from Sinaloa and Sonora who left from here left with a plan of colonizing. That's something that is very clear to me, that squash, beans, watermelon, and all that, wheat, was taught by Kino. Apart from being a priest, he was a great colonizer who extended the frontiers of New Spain to very far away. Frontiers that he made and territories that he civilized.
FLT]

Anza knew that his group would be outnumbered when they reached San Francisco. He needed to establish amiable relations quickly with the local indigenous groups in order to prevent hostilities that the fledging community could not successfully overcome. This is also obvious based on the cost of estimated supplies, which includes a good amount of gifts for Indigenous groups that he would encounter (see Appendix B for more detail).

He had a great deal of experience and knowledge of the indigenous peoples he would encounter. Based on the first expedition, he knew whether to include specific colors. He learned that he should provide the highest quality tobacco to distribute as gifts for groups they encountered along the way. Novel gifts like clothing would have been distributed to Chief Palma specifically and not be distributed on a large scale. Anza's knowledge of the importance of gifts, along with the specific gifts themselves would have been critical for creating necessary good relations with local indigenous groups.

In addition to being able to successfully avoid hostilities with the Indigenous peoples in San Francisco, Anza was also well adept at defending the expedition members and soldiers from any hostility that might be encountered along the route. This is the result of his experience and knowledge he acquired during previous conflicts with the indigenous peoples in Sonora. One community member emphasized how Anza learned from fighting local indigenous peoples and then was able to use it later to his advantage:

El español adaptó muchas cosas del indio, lo que más le convino como vice versa también. El indio del Español. El Español aprendió mucho más del indio del indio al Español. El indio era desconfiado. No aceptaba al blanco y el Español si aprendió mucho del indio. Por ejemplo el estilo de pelear de guerra, no era igual como combatía un Español, y tuvieron muchos problemas al principio como combatir a una tribu. La guerra de guerrilla, ellos siempre tenían que pelear de frente con todas las guerras de un militar. La guerra de guerrilla nace de un indio, el indio nunca se enfrenta y peleaba en núcleos... Entonces es una de las cosas más importantes que aprendió el guerrero Español, aquí lo dice muy bien Juan de Anza. Divide mi gente en cuatro tropas, representando 10 soldados por cada

grupo, porque era mas fácil que los mataran a todos juntos que en diversas partes y se llevaban una distancia de una legua, ósea cuatro kilómetros cada grupo. Yo me imagino que el que dividió a cada grupo, si eran 200 pues en 50. [The Spanish adapted many things from the Indian, and vice versa, the Indian from the Spanish. However, the Spanish learned much more from the Indian. The Indian is very distrustful, so they would not accept the white man; however, the Spanish did learn many things from them. For example, the war tactics utilized by the Indian was very different than those of the Spanish which initially created a lot of problems when fighting these different tribes. They would always have to fight facing each other with all military rules in place. Guerrilla warfare was created by the Indians, Indians never fight face to face and they function in squads... This is one of the most important things that the Spanish soldier learned, which can be reflected in the way Juan de Anza functioned. He divided his people into four troops with 10 soldiers in each troop, because it was much easier to be ambushed as a whole than in different groups who were separated by around 4 kilometers. I imagine he divided each group into 50 people if there were 200. CBC]

Anza used his knowledge of Sonoran indigenous fighting tactics in order to make his soldiers more effective and to protect the remaining members of the expedition. This contrasted with the native peoples of Alta California because in Alta California, indigenous fighting practices minimized direct conflict on a large scale. Voss (2008a: 155) contends that, “The willingness of colonial soldiers to kill large numbers of people was overwhelming to indigenous communities whose traditional combat strategies minimized casualties.” The fighting tactics learned from and used against the Sonoran indigenous groups provided an undeniable advantage to the founders of San Francisco. It allowed not only for the founding of the presidio and missions, but also an ample supply of neophytes for labor to supply the founders.

In addition to the protection provided by the soldiers and their Sonoran techniques, Anza also understood that he would need the expedition to have members with all the various needed skills in order to accomplish his mission in San Francisco. One community member explained it this way:

Bueno ellos levaban un herrero, precisamente hablan del herrero, hablan bastante que estuvo muy ocupado durante el camino. Llevaban un herrero ellos porque iban siendo muchos kilómetros que gastaban las herraduras de las bestias. [Entonces fue a propósito que fueron buscando gente que tenían-] Habilidades, sí. Fueron muchos kilómetros, estamos hablando de aproximadamente 1670 millas, casi 2000 millas desde aquí de San Miguel creo que 2000, de Culiacán 2400 millas. De Culiacán a San Francisco. Bueno pues es tremendo, estamos hablando de aquí a México DF. Donde está la capital. Tenían que llevar medicinas, tenían que llevar a alguien que sabía sobre la medicina que eran los padres. Llevaban un herrero ellos porque iban siendo muchos kilómetros que gastaban las herraduras de las bestias. [Well they had a blacksmith with them, they talk precisely about the blacksmith and how he was very occupied throughout the trip. They had a blacksmith with them because the many kilometers wore down the horseshoes of the beasts. (So it

was on purpose that they were looking for people who had abilities, yes. It was many kilometers, we are talking about approximately 1670 miles, almost 2000 miles from here from San Miguel I think, and from Culiacán 2400 miles. From Culiacán to San Francisco. It's tremendous, we are talking about from here to Mexico City. Where the capital is. They had to carry medicine, they had to have someone who knew about medicine who were the priests. They had a blacksmith because it was a lot of kilometers that wore down the horseshoes of the beasts. [CBC]

Anza would have made sure he had people that could accomplish all the necessary tasks, not only to ensure their arrival at San Francisco and settlement survival.

6.1.7 Historic Locations

Community members said that Anza's house (see Figure 6.4), as well as two other captain's homes were still being used and/or lived in by other community members. They remarked that the Governor's house was once in good shape, but it is currently in need of repair. One community member commented the selling of historic houses and the preservation of these places:



Figure 6.4 Anza's House

Todavía yo la conocí, yo conocí la casa del gobernador, preciosa, tremenda. El gobierno político del país las adquiere esos bienes y se las vende a particulares. Por ejemplo esa casa la que está en pie y en muy buenas condiciones, la adquirieron unos Españoles de apellido Curilla... Compraron dos los Curilla, la que esta al entrar y la que esta atrás de la iglesia. La otra la compraron unas familias que son de Arizpe, esas familias... y se las vendieron a diversas gentes.

Venden una a mi abuela, la madre de mi papa, la casa esta en ruinas aquí pero pues está en venta, se quedaron unos primos míos con ella... Así paso al poder de ellos, porque fueron capitanes de la nación que se pusieron al mejor postor, como subasta o como preferencia y te la venden. Lo mismo con la casa del gobernador. La compraron unos familiares míos, los Badilla López. Y vivieron muchos años ahí... En fin, ya a San Miguel le queda muy poco de todo eso. CBC

[I was able to see it, I saw the house of the governor, it was precious, tremendous. The political government of the country acquired these properties and sold them to private individuals. For example that house that is still intact and in good condition was acquired by some Spaniards with the last name of Curilla... The Curilla bought two, the one that is at the entrance and the one behind the church. The other one was bought by some families from Arizpe, those families...and they sold them to several people. They sold one to my grandma, the mother of my father, the house is in ruins but it's still for sale, some cousins kept it... That's how they passed it on to them, because they were captains of the nation, they were given to the best bidders, through auctions or preference, they sell them to you. The same with the governor's house. Some of my family members bought it, the Badilla Lopez. They lived there for many years... In conclusion, San Miguel has very little remaining of all that. CBC]

This community member, along with others, believes that these important historical places need to be protected. They commented that the Anza descendents have helped them to maintain Anza's house, and that they would like more assistance in maintaining, getting protection for, or even restoring the others as well. Arizpe, another historic Sonoran town, where Anza was buried, was pointed out as a model for how preservation should be conducted.

In addition to the restoration of historic buildings, encouraging eco-historical tourism, including marking the trail and additional Anza commemorations, was another very popular concept within the community. Community members stated that they would be willing to serve as guides for horseback excursions along the trail itself and serve as facilitators to include tourists in selected community experiences.

6.2 Agricultural Practices

Agriculture, along with horses and livestock, was a recurring theme when discussing livelihoods in San Miguel de Horcasitas. The community members of San Miguel de Horcasitas continuously discussed the important role agriculture played in the livelihood of the town since the time of Anza. Although upstream water usage and drought have caused difficulties in the maintenance of this lifestyle, community members are eagerly anticipating the government's construction of a dam that would allow them to continue their lifestyle of choice.



Figure 6.6 Field of Sorghum

Although San Francisco would require the founders to quickly adapt their agricultural systems, much of their knowledge about crops, droughts, irrigation, planting techniques, and pest control would have carried over and increased the success of the community after the expedition. Because the community worked with the indigenous community in the field and shared their food in San Miguel de Horcasitas, it is likely that this relationship of coexistence was recreated during the settlement of California. The finite amount of land, along with the primogenital system of inheritance, encouraged people to join the expedition in 1775.

6.2.1 Water Concerns

In San Miguel de Horcasitas, community members discussed the effects that the current lack of water has had on their agricultural traditions. One member of the community explained, “No, se secó el río pues, no. Hay poquita, poquita, poquita, pero no alcanza para darles de allá, son como catorce kilómetros, donde tenemos la toma, no alcanza llegar el agua, no podemos regar todos.” [No, the river dried up. There's very little, but it doesn't reach them over there, it's around 14 kilometers, from where we have the source, the water doesn't reach, we can't all irrigate. BP] The community is well adapted to fluctuations in the local ecology, such as water levels. They continue to use several subsistence strategies for agriculture, wild plants, and

livestock in order to maintain food security despite ecological and/or social perturbations. One community member emphasized how previously the community was completely self sufficient, saying “Era autosuficiente todo. Había los frutos de la tierra, bueno no había necesidad de salir de aquí.” [Everything was auto sufficient. There was what was given by the ground, there was no real need to leave here. CBC]

The current long-term drought and social pressures have had a greater effect on the community than previous perturbations. It is likely that their heirloom crops will completely disappear. Even with these lifestyle threats, the community remains resilient based on their multiple livelihood strategy that has been developed and has succeeded for hundreds of years. However, the large impact of consistently low water levels and increased pressure from the market economy are pushing the limits of their resilience. Community members feel that their knowledge of agriculture, wild plants, and agriculture need to be passed down to the next generation if there is any hope for their traditional livelihoods and community ways to continue sustainably.



Figure 6.7 Marker Indicating Water Depth of the San Miguel River

Presently, the water level of the San Miguel River has decreased so much that community members can no longer effectively irrigate using only the river (see figure 6.7). If they want to grow crops, they need to have a well in order to obtain enough water for irrigation. Without a well, the community members practice what is referred to as “la agricultura de la ganadería,” or agriculture focused on maintaining their livestock. A former community member in Tucson puts this agricultural struggle into perspective by stating, “But if you have your own well, then you can grow crops. If you don’t have your own well, you just try to do as much as you can for your cattle because, come the summer months, a lot of cattle die. FHT” A current community member explains how most people in San Miguel make their living when they don’t have wells, “Alfalfa.

Sorgo, forrajero, de cualquier marca. Y hay que siembra un pedazo de frijol, pedazo de maíz. Un hectárea, dos. Esto es la siembra, que se da más aquí en el pueblo. Lo ganadero lo hacen por sus ganados, siembran trigo cuando hay agua en el canal, lo cosechan y le dan el rastro, separa la paja, se le da ganado. Eso es de la agricultura de la ganadería, más o menos”. [Alfalfa, sorghum, forage of whatever make. And you have to plant a bit of beans, bit of corn. One hectare, two. This is the planting that produces the most here in the town. Ranchers do it for their livestock, they plant wheat when there’s water in the canal, they harvest it and they rake it, separate the straw, they give it to the livestock. This is the agriculture of livestock, more or less. BP] The drought has forced many community members into focusing on only cattle ranching without emphasis on agriculture. This has made them less able to contribute to their own home consumption and vulnerable to both the market economy and local weather fluctuations.

As noted, there is a resistance by community members to completely switch over to livestock agriculture as their sole economic activity. Many still preserve even just a hectare or two for corn, beans and, if water is available, wheat to continue subsistence agriculture that maintains a minimal amount of food security. When asked about whether people practice agriculture or graze cattle, one community member responded, “They are all mixed. It is hard to find one that is not mixed. FHT” The use of several subsistence methods is likely a trait that the founders brought to San Francisco to increase their resiliency.

6.2.2 Heirloom Crops

Community members mention that they use to pass down seeds through the families instead of buying new seeds. The best seeds of each year’s crops would be saved for planting the following year until the crops developed into what are known as heirloom crops or heritage seeds. One former community member noted, “My dad had handpicked them [the corn ears] for the seed. QPF” Today, the majority, if not all, of the seeds are used up because of the drought. It is likely that some of these seeds have been passed down since the time of Juan Bautista de Anza and, by handpicking the most robust seeds each successive year, the resulting heirloom seeds would be highly adapted to the local ecology.

Community members noted that lime (the mineral) was often used to conserve seeds, especially beans. The lime would protect the seeds from weevils, or snout beetles, from one season to the next. As one community member explained:

La ponían en recipientes de barro, y ese recipiente estaba rodeado para que no le cayera una plaga que se llama gorgojo en una fosa que tuviera cal cruda, el indio sabia elaborar la cal porque aprendió del español, era cal hirviendo, si le echaban agua de inmediato explotaba y ahí no entraban las plagas. Y así conservaban tanto el maíz, tanto el trigo.

[They’d put it inside clay recipients, and this recipient would be surrounded, in order for it to not be affected by weevil (snout beetle) plagues, in a pit with lime, the Indian had learned how to elaborate lime from the Spanish, it was boiling lime. If they added water there’d be an immediate explosion and this would keep plagues out. And this is how they would preserve corn, as well as wheat. CBC]

In addition to lime, one community member emphasized that corn should be kept unhusked for later sale, cooking, and planting. In chapter four, Dr. Dobyns discusses preserving seeds or grains, flours, and water in clay, and other material vessels.

6.2.3 Irrigation

Irrigation is a fundamental aspect of agriculture in San Miguel de Horcasitas (see figure 6.8). This was particularly emphasized by one community member who argued, “Pues aquí se tienen que regar todas, si no se riegan no hay cultivo. Dicen, ah pues ahora en el temporal vamos a sembrar calabazas, pero se tienen que regar porque hace un calor espantoso que te quema la planta.” [Well here, everything has to be watered, if there is no irrigation there are no crops. They say that this upcoming season we’re going to plant squash, but they have to be watered because there’s a dreadful heat that kills the plant. TT] Community members noted that irrigation has been used for centuries in the region. One community member noted that irrigation was brought to El Pópulo, a Seri mission a few kilometers upriver from the presidio of San Miguel de Horcasitas, by the Spanish in the 17th century:

En los tiempos de 1642 si iniciaron los primeros riegos en la región, del 38 al 42. Que se funda El Pópulo. Ahí eran los primeros pioneros de la agricultura... Los Españoles construyeron la idea del riego. Aquí no se conocía el riego. Se construyeron canales y se abrieron tierras de cultivo.

[Around the times of 1642, the first irrigation systems were initiated in the region, from 38 to 42. Which is when El Populo was founded. The first pioneers of agriculture were from there... The Spanish constructed the idea of irrigation. Irrigation didn’t exist here. Canals were built and crop fields were opened. CBC]

Since the time the Spanish brought irrigation to El Pópulo, irrigation has converted into an essential aspect of community life. For additional information on the history of irrigation in El Pópulo and San Miguel de Horcasitas, see chapter four of this report.

Community members irrigated their fields using the river. Cement canals built by the state government in 1945 and some of the older earthen canals are still used today. There seemed to be a clear preference for river-fed irrigation, however, the drought and the recent addition of gasoline powered wells have eliminated this canal based “sequia” system’s viability for large scale irrigation. When asked if these canals are still used at all, one community member responded, “Sí, sí, todavía lo usa, este sistema usa, el sistema de sequias se usa porque rinde más el riego, saque, eche el agua uno por la melga que le dicen así, luego que ya ha aminorada se eche al canal y se mete adelante y a horita riega más terreno este sistema.” [Yes, yes, they still use it. They use this system because it produces more irrigation, it takes out, one takes out the water by *melga*, as they say here, later it has already slowed the water down, they put it in the canal and move it forward and now they irrigate more water with this system. BP] Another community member [FT] explained that some of the ditches have fallen into disrepair and are no longer being used. This community member is upset at the waste of resources. He feels that the ditches were functional, but now that they’ve fallen into disrepair it would require a lot of work to repair them.



Figure 6.8 Irrigation Canal

In San Miguel de Horcasitas, the irrigation unit to which each landowning person belongs is called “vacahusari, es palabra Yaqui. Significa lugar de las vacas gordas.” [vacahusari, it’s a Yaqui word which means place of the fat cows. CBC] The ditches were made or repaired by a *cunerado*, or ditch digger, while a *canalero* controlled the distribution of the water. One community member explained how the community used the system of canals:

Sí, había un canelero, pues, sí. Nosotros éramos los usuarios y nombran un canelero que venía al que le venía tocando el agua le daba pues. Si era una sequia, sí había cuatro sequias, el canal, le daba uno a ese, otros en seguido, y otros salía aquel y le cambia pa’ adelante y así andaba y nosotros le pagamos a él. Cobran por hora y nos ponían por hora, pues, el agua ha tanto la hora. Y de allí, de esa se agarraba para pegarle limpiaditas donde se empuerca el canal y para pagarle al canelero. Ese se usaba. Necesitamos un sistema ahora que esta escasa el agua, yo he platicado con unos... [Yes, there was a canalero. We were the users and they name a canalero that would come to distribute the water. If there was a drought, if there were four canal systems, he gave one canal to that one, others after the other, and others came out of that one and he moved people forward and that’s how it went and we would pay him... They charge by the hour and they’d give it to us by the hour, the water at a certain time. And from there, from that water, it would be taken to use to clean the canal where it would become dirty and to pay the man in charge of doing this. That was used. We need a system now that water is scarce, I’ve spoken with others...BP]

Another community member noted that there were two shifts for irrigators, day and night, and the canal controller would open and close the wooden gates to distribute the water. The money collected went back into maintaining the canals, however, it is likely that anyone who received water contributed to the maintenance of the canals personally. This has been the case in other communities along the San Miguel River, as of 1976 (Felger, Nabhan, and Sheridan 1976).

Community members felt that the earthen canal system has not caused long term damage to the ecosystem. The people of San Miguel de Horcasitas made these canals without the aid of heavy machinery. One former community member emphasized, “So these ways of watering that they do with earth mounds and moving the water from here to there, it’s not like they have machinery. It’s just their sweat FHT”. These techniques could have been replicated in San Francisco with manual labor, rather than technology. For additional information on irrigation, see chapter four.

It is clear that irrigation was not just important to San Miguel de Horcasitas. Based on the archaeological record, it is likely that they replicated such sequia systems upon arrival in what is now San Francisco. Voss (2008a: 58) states that: “Archaeological investigations in the hinterlands surrounding El Presidio de San Francisco’s main quadrangle¹ have uncovered evidence of substantial waterworks, perhaps intended to supply water to the quadrangle and to irrigate the colony’s fields”. Their knowledge of irrigation systems in San Miguel de Horcasitas clearly would have informed whatever water system they constructed upon arrival in the San Francisco Bay area.

Unlike other communities on the Rio San Miguel, as discussed in Felger, Nabhan, Sheridan 1976, and Nabhan and Sheridan 1977, farmers in San Miguel de Horcasitas did not plant trees along the river or the canals. Although this system of erosion prevention is used elsewhere, it is not needed along this stretch of the river. Community members did note that trees are planted along the edges of the fields in order to prevent wind erosion and to provide shade and firewood for the farmer. Nabhan (1993) explains that “Papago” (currently referred to as Tohono O’odham) farmers would not clear mesquites from inside and around the edges of their fields, likely due to the high nitrogen load found in the surrounding soil and in the litter that the tree would scatter into the field (see figures 6.6 and 6.9).

6.2.4 Cultigens

Today, much of what is grown is used as forage to prevent cattle death (see figure 6.10). Halvorson (1992) noted that oats and a species of alfalfa were among the earliest alien plants introduced into California. It is possible that Anza and/or the other expedition members brought seeds for forage growth with them, either intentionally or unintentionally. In addition to raising livestock forage, many community members try to maintain some corn and beans, and if they are lucky, wheat, to supplement their cattle. Voss (2008a: 234) emphasizes that, in addition to the cattle brought on the Anza Expedition, “the colonists and missionaries brought seeds and cuttings to establish cereal, bean, and vegetable crops.” Community members noted that in the past, corn, beans, and wheat, were staples and were included in all discussions between community members and Arizona participants.

¹ A series of buildings lined up one deep to form a rectangle around a central plaza. (Voss 2008a)

White corn “blanco, puro blanco”, rather than yellow, was locally grown along with sweet corn “maíz dulce”, and popping corn “maíz reventador”, which is yellow. A former community member said, “Entonces, éste, el maíz dulce nomás ponían cafecito, así lo comían.” [So this sweet corn, they wouldn’t put anything more (on the table) than coffee and they ate it like that. QPF]



Figure 6.9 UofA Ethnographers Interviewing a Community Member

Beans are also an essential part of the local diet. Several varieties of beans are grown in San Miguel, including pinto or garapata, yellow, yorimun, tepary, or white beans, and garbanzo.

Like beans, squash were also seen as an important staple with many varieties. One community member noted that there were, “muchos tipos de calabazas, hay las grandotas, redondas, chuecas, y de muchas clases... Las más chiquitas, y las amarillitas.” [There are many types of squash, there’s large ones, round ones, crooked ones, there’s many varieties. The smaller ones and the yellow ones. TT] while another said, “Pues sí, calabaza italiana, había una calabaza negra-” [Well yes, Italian squash, there was also black squash-]. The various food uses for squash are noted in the food section of this chapter.

After corn, beans, wheat, and squash, sugar cane and potatoes were the next two most noted plants in the community. One community member said, “My dad was an agriculturalist, a good one. He planted a lot of sugar cane, a lot of everything. He had a *panocheria* (place where they made panocha; brown sugar bricks) and everything. CP” Watermelon, several melons, and cucumbers are also consistently discussed.

Grapes, along with fruit and nut trees, are common. Only certain varieties, such as bitter orange, apple, and quince, grow well in San Miguel de Horcasitas because of freezing temperatures. People take seeds and plant these fruit trees where they want, often on the sides or to the back of their house. One community member expressed his pride that “aquí era región de horticultura, de aquí se llevaron la primer, horticultura de árboles frutales pues para las baja Californias y las altas.” [This region was a region of horticulture, from here is where they took the first horticulture of fruit trees towards Baja California and California. CBC] Voss (2008a) notes that fruit and nut trees, along with garden plants, were grown in the San Francisco Bay area by Anza expedition members and their descendents. The fruits in particular will be discussed more in detail in the food section of this chapter.



Figure 6.10 Cattle Grazing in a Field

Many people still have gardens today, but the practice was much more common in the past. One community member felt that this was still prevalent, commenting, “Huertas. Sí aquí la mayoría de la gente siembra su cilantro, cebolla, rabanitos, zanahorias. Huerta familiar.” [Vegetable gardens. Yes, the majority of the people here grow their own coriander, onions, radishes, carrots. Family vegetable gardens. GP], while another community member noted that they are still present, but less common, “Ahhh, no no, eso era mas antes, eso ya no se ve. Bueno, hay gente en su casa que hay pedacitos que tienen en el patio que tienen su cebollita verde, tomate, calabaza. Hay gente que si siembra.” [Ahh, no no, that was before, it isn’t really seen anymore. Well, there are people who have small areas in their patios where they grow green onions, tomatoes, and squash. There are some people who do grow. VE] In these gardens, people grow many of the same crops as in the milpas. Other vegetables, herbs, and flowers are grown for home use. Community members noted that flowers are planted for use on graves on Día de Todos los Almas (or All’s Souls Day) as well. Further discussion of this tradition is included in

Chapter Four. Others have potted herbs in the house for food and/or medicinal usage. Yerba Buena (or mint) is a common example of an herb kept in the house. Voss (2008a: 234) notes that, in addition to cattle raising and agricultural fields, gardens were an important form of sustenance for the presidios.

6.2.5 Planting and Harvesting Techniques

“My uncle’s, they’ve been farming since forever. You could ask them a lot of the questions like, how do you know it’s going to rain, and they’ll tell you, you know, how do you know if it’s going to be a dry season or how do you know it’s going to be a good season. You know they know all the lore that comes with that, with that job of feeding your family because you know how to manage your lifestyle. They’re just some very hard workers.” FHT

This former community member’s child points out the vast amount of community knowledge about farming. Community members explained that in the past, they practiced the basics like plowing the fields using horses or mules. People of San Miguel de Horcasitas used to use animal labor in order to prepare the land to lay fallow. They also used shovels or spades in their farm work that required a great deal of manual labor. One community member remembered planting with their father, “Pues yo me acuerdo cuando estaba chiquita y yo le ayudaba a mi papa a sembrar maíz y frijol...Pues iba mi papa atrás con el arado, y pues un macho jalándolo, y pues iba mi papa y yo iba atrás, echándole a los hoyitos.” [Well I remember that when I was young I’d help my father plant corn and beans...My dad would be behind the plow while a bull would pull it, so I’d go behind my dad laying the seeds in the holes. TT] This community member remembered that the same process was used to plant separate crops.

Although cultigens are planted separately, useful wild plants are allowed to grow within their fields. One community member explained, “Sí, los quelites, esos siempre dejaban... Sacaban las otras las que no servían para nada.” [Yes, pigweed, those were always left there...They’d pull out the ones that weren’t good for anything. TT] The wild greens that community members allowed to grow in their field were consumed and at least one was used medicinally as well. Furthermore, wild greens, including species related to those found in the fields in San Miguel de Horcasitas, have been shown to have a positive effect on surrounding corn crops (Kahl 1987: 57).

Animals, however, provided more of a challenge. One former community member said that they would have to protect the crops from raccoons and jackrabbits because, “En las milpas, donde habían los elotes. Le gustaban mucho comer elotes. Mi papá ponía las trampas.” [In the corn fields, where there was young sweet corn. They liked eating the young sweet corn a lot. My dad used to put out traps QPF] and that they would eat them after they caught them “en chorizo con albóndigas!” [in sausage with meatballs! QPF]. This protected their corn and provided an additional meat source.

After protecting the corn from animal pests, one community member explained to us the process of selecting and harvesting the corn:

Well, when my dad did it he would take one corn, a big piece. Cut the corn. He would cut the rings and he would leave just the...just the corn by itself. My dad had handpicked them for the seed and then you had to save the leaves for tamales. So they would wait until it was dry to harvest the seeds from the ones he had already cut.

The uses of the harvested corn will be further discussed in the food section of this chapter.

Traditional wheat and squash harvesting are other topics that arose. In the past, community members would separate the wheat from the chaff by pouring the grain between baskets and letting the wind blow the chaff or straw away from the grains. Unlike corn, wheat is only grown when there is a good amount of rain that year. Squash, on the other hand, was harvested by cutting at the stem, one community member explained, “Pues cuando ya esta grande así, cuando ya sazona, la cortan un poco arriba de la cabeza, para que sazone más y que no se pudra.” [Well when it’s big like this, when it ripens, they cut it a bit above the head to make it ripen more and keep it from rotting. MBB] Harvesting of corn, wheat, and squash requires little more than the knowledge that has been passed down through the generations.

6.2.6 Planting Seasons

The community members of San Miguel have two planting seasons, a summer and a winter season. They noted that planting occurs when there is water in the canals. These planting seasons coincide with the bimodal precipitation system of the area, where the rainfall is focused both in the late summer and winter months. One community member explained the two harvest system as follows:

Se seleccionaba una semilla y se seleccionaba otra de otra temporada porque son ciclos. Hay ciclos de verano y ciclos de invierno. La semilla de invierno no se da en el verano. Esta adaptaba con la naturaleza de invierno. Por ejemplo, el trigo pues no se da en verano, se da en invierno. De una temporada a otra se tenía que guardar la cantidad de semilla que se iba utilizar en esa hectárea. [A seed was selected and another seed for another cycle was selected since there’s cycles. There’s summer cycles and winter cycles. The winter seed will not grow during summer. It is adapted to the nature of winter. For example, wheat will not grow during summer, it only grows during winter. From one season to another, a certain amount of seeds had to be kept that were going to be used on that hectare. CBC]

Most, if not all, of the winter cultigens are of Old World origin, while many of the summer cultigens were developed in the New World.

The community members plant their summer crops in July, “durante tiempo de agua”, or the monsoons, and then they harvest in October before the first frost of the year. Their summer cultigens are corn, beans, watermelon, and squash. As one community member emphasized, “pero siempre se ha sembrado la sandía aquí, melones, y se sembraba en el verano, que era la siembra de la sandía.” [but watermelon has always been grown here, melons, and it would be planted during summer which was the season of harvest for the watermelon. FLT] During our

October visit, one community member noted that unlike most years when the first frost is in late November, this year the frost came unusually early and killed off his bean crop.

The winter crops, such as alfalfa, sorghum, barley, and wheat, are then planted in October or November and then harvested in early summer. During our research trip to San Miguel in late October, community members noted winter crops had already been planted for the year.

6.2.7 Relationship Building with Indigenous People

Several community members noted that agriculture and food were points that connected the people of San Miguel de Horcasitas to indigenous groups and helped to ameliorate and prevent conflict between the two groups. One community member particularly remembered her father's relations with the Yaquis and how it kept their family safe:

There were many here, yes, many, they killed people. They killed them, they didn't leave any. And they never did anything to my dad, not even one Yaqui, because my dad had a lot of sugarcane planted, a lot, he had a great amount of agriculture. And he kept them busy in the night in his milpa, he paid them, and this way they went to the mountains. And he paid them and gave them panocha, he gave them all he had. And they never hurt him, never, and here they killed thousands of people, and they never hurt him. And later he took a liking to their language, he knew it, they didn't do anything to him, and I, well, I learned, I liked it a lot. CP

One reason this community member's father taught her the Yaqui language was to keep her safe. The Yaqui killed thousands of people in San Miguel de Horcasitas. This proved to be useful in another story this community member recounted:

Él me enseñó. Una vez andaba él me decía en el monte, cuidando unas vacas y oyó que dijeron, pero mataban gente en su tierra por allá y dijeron, [Yaqui] 'atájalo, no le deja seguir, mávalo' y él sabía y arengó en cuanto yo eso, arengó en un caballo, y no hicieron nada, se fue y luego se vinieron para acá, para San Miguel, porque había muchos allá y mataban gente aquellos, pero los que se alzaron, y se vinieron para acá porque se alzaron porque les quitaron las tierras y todo, el gobierno y ellos se alzaron a matar gente y a mi papa no le hacía nada porque les daba trabajo, él allí en la milpa, en la noche, trabajando de noche ellos, y de día se iban al monte. [He taught me. One time he was walking, he told me, in the mountains, taking care of some cows and he heard what they said, but they killed people in their land over there and they said (Yaqui) "stop him, don't let him leave, kill him" and he knew and he warned me of that, he warned them on a horse, and they didn't do anything, he left and later they came here, to San Miguel, because there were a lot there and they killed people, but those that rose up, and they came here because they took their lands and everything, the government, and they rose up to kill people and they didn't do anything to my dad because he gave them work, there in his milpa, they worked at night, and during the day they went to the mountain.]

This community member emphasized that cooperation in agriculture and learning the indigenous language helped her family to avoid conflict with local indigenous groups. McDonnell (2008: 31) discusses the life of Juana Briones, whose mother was on the Anza expedition, and notes that “Juana’s career as a successful farmer at San Francisco may have had a foundation in a childhood opportunity to become familiar with native languages, Spanish, Catalan, and possibly even Basque”.

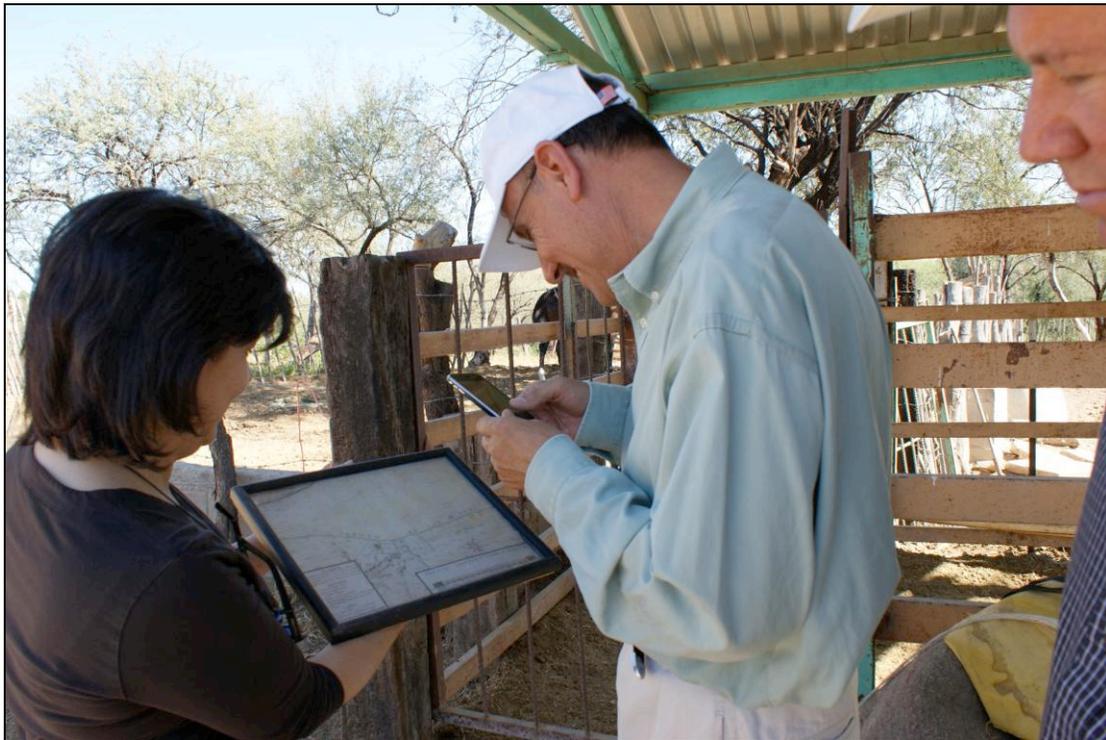


Figure 6.11 Ethnographers Examining an Old Map of the Area

Another community member remembers his grandfather discussing cooperation with indigenous people, saying “they told me how they had lived, what they lived off of, there had been many people working, a land given to the Pópulo. Pópulo means group of Indians that lived there. They worked with my grandfather. They were people that more or less had enough to live off of, they planted a lot of sugarcane and sold the panocha (brown sugar bricks) and they’d go to Guaymas, to the port. BP”

6.2.8 Inheritance

When it comes to land, primogeniture is the usual practice in San Miguel de Horcasitas. Community members noted that there have been cases where land has been shared or where another son inherits the family land, but traditionally the oldest male son gains control of the land. Sometimes the first born son hires male relatives to work for him or to work the land in his absence. Other children are economically forced to find other livelihoods, most often outside of San Miguel de Horcasitas. One community member (CBC) argued that the need for more land and economic mobility encouraged some of the founders to choose to go to San Francisco.

6.3 Wild Plant Use

Knowledge about wild plants and their uses has been passed down in San Miguel de Horcasitas since before the time of Anza and wild plant use continues to be central in their daily lives. People have used wild plants for many purposes such as medicine, construction materials, firewood, and other household items. For a detailed discussion on the importance of firewood and furniture made from local trees, please see Chapter Four. It is believed that wild plants were essential in maintaining self-sufficiency upon arrival in San Francisco. Most of the wild plants that the Founders encountered in San Francisco were different from the local flora in San Miguel de Horcasitas; however, their knowledge of how to find, collect, and use wild plants would have been applicable.



Figure 6.12 The San Miguel de Horcasitas Countryside

Wild plant knowledge has always been important to the people of San Miguel de Horcasitas. One community member noted that in the time of Anza, wild plants were crucial for medicine, “No había una industria farmacéutica. Se había que utilizar plantas apropiadas, por eso les digo que usaban mucho el álamo, y el sauz. La corteza de los árboles la utilizaban mucho.” [There wasn’t a pharmaceutical industry then. They had to use appropriate plants, which is why they used cottonwood and willow a lot. They also used the bark of trees. CBC] Other community members recalled that their grandparents would make homemade medicines from plants. While the practice is becoming less common due to increased access to Western medicine, people in San Miguel de Horcasitas still use wild plants for medicinal uses. When one community member was asked about medicinal plant use and curanderas, or healers, they responded, “Y todavía lo usamos. Pues, no, están desapareciendo esas cosas [curanderas], pero yo estoy muy chapado a la antigua y así me curo todavía con hierbas. [And we still use it. Well, no, these things [curanderas] are disappearing, but I’m very old fashioned so I still cure myself with herbs. BP]

As wild plant use has remained to this day, this knowledge was undoubtedly also carried with the founders on their journey to San Francisco and important to their later success in becoming established.



Figure 6.13 Recently Chopped Firewood

6.3.1 Discovering Medicinal Plants

One community member noted that in San Miguel de Horcasitas, “There’s everything, everything that cures, certainly. Well a lot, mesquite, there are a lot of medicinal plants that we don’t know which they are, but there are some that we do know. CP” The people of San Miguel de Horcasitas possess a large body of knowledge in regards to medicinal plants, however during the time this study took place, only some of these plants were able to be documented.

Identifying and using medicinal plants sometimes involved experimentation in order to find the right amounts and combinations of plant parts for curing. Community members explained that there have been times when medicines do not work and they had to experiment with different plants to find solutions for particular ailments. One community member’s story clearly illustrates this process:

Fíjese, mi esposa esta enferma, tuvo incontinencia urinaria, no sentía, y yo buscando por la cura con la doctora de aquí. Iba de Hermosillo y no aventajaba nada, buscando, buscando plantas a ver no, tome de diferentes plantas, poquito primero yo de los que yo creía que eran toxicas, no? Porque un enfermedad no se va a curar con panocha ni con azúcar. Tiene que tener veneno, el veneno es

curativo, en dosis que son para el cuerpo pues. Pues tome hasta que di con uno que se llama tabaco coyote, ahí tengo una mata allí donde quiera sale. Entonces yo le daba tres litros en la noche, pero en el día era normal. Entonces tome yo, primero tome yo, después de que tome tanta ya no me hicieron efecto, tome dos cucharadas soperas, y no me hizo nada y me deje caer toda la tarde. Mi esposa como estaba allí en la casa del hijo, vino a preparar una comida aquí, para comer yo y ella. Y que milagro que estas acostado? Porque estaba bien intoxicado ya, cuando me tome la taza así me sentí mal luego. Me sentí mal, me sentí turbido y caminaba y parecía que iba pisando hoyos con la cara y el corazón intoxicado así, sí, sí, muy acelerado así el corazón y la vista muy mal de por si estaba la vista mal pues así mal. Entonces, levántate mijo a comer y me levante y me dijo “hombre, tan malo que andas, vamos te voy llevar con la doctora pues, termino, y no le decía, me va a pasar. Tome tabaco coyote. Y quieres que tome yo? sabes me anda buscando, me quieres matar? Pero de eso hace meses y no volvió el urinario, tantito así no más en la noche. Si sirve, pero ella tuvo miedo. Ahorita está un poquito aliviadita, muy poco, no ya siente y dura dos horas, una hora y media por Paulita, pero siente ya, pero no quiso, si hubiera tomado, sana [with emphasis], pero no quiso tomar. [Look, my wife was sick, she had urinary incontinence, I felt bad, and I was searching for a cure with the female doctor from here (probably referring to Manuela, the curandera). I’d go to Hermosillo and it didn’t help at all, searching and searching for plants that we see. I took from different plants, a little at first from those that I thought were toxic, because a disease isn’t going to be cured with brown sugar nor sugar. It has to have poison, poison is curative, well, in doses that are for the body. Well I took them until I found one that is called Coyote Tobacco, okay I have a plant there, it grows abundantly. So I gave her three liters at night, but in the day she was normal. So I took it, first she took it, after I took so much it didn’t have an effect on me, I took two big spoonfuls, and I let myself fall asleep. My wife, since she was there at our son’s house, came to prepare a meal here for me and her to eat and she said what a miracle that he’s lying down. It was because I was very intoxicated when I took the cup, I felt bad. I felt bad, I felt disoriented and I walked as if there were holes in the ground, with my face and my heart intoxicated like this, yes, yes, my heart was very accelerated and my vision was very bad, it was bad as it is so it was very bad. So, she said get up to eat my dear, and I got up, and she said you’re doing very bad, come on I’m going to take you to the doctor. It’s done, no, I told her, it’ll pass. I took coyote tabacco and you wanted me to take it, you know, you’re searching for me, you want to kill me? But that was months ago and the urinary problem didn’t come back, a little tiny bit like this just in the night. It works, but she was afraid. Now she is a little relieved, very little, already doesn’t feel it and it takes two hours, an hour and a half for Paulita, but she still feels it, but she didn’t want to take it, if she had taken it, she’d be healthy (with emphasis) but she didn’t want to take it. BP]

Other community members pointed out that the toxins found in plants are used for medicine and the toxin levels are linked to the bitterness of the plant. They noted that the medicine is better if it is really bitter. To test the curing properties of a plant, the people from San Miguel de Horcasitas

would assess the bitterness of a plant for likely medicinal properties first. Then they would test very small amounts to see if it had any effect.



Figure 6.14 Community Members

Once a plant was found that had the desired effect, the next step in the process was to determine quantities. While discussing Bachata (Graythorn), an important medicinal plant, one community member stressed the importance of medicine being in the proper quantities:

Que por cierto hoy en día, anda muy de moda aquí en México, está siendo mucha usada para la cuestión del diabetes y está dando muy buenos resultados. Lo que falta es perfeccionar las cantidades. Porque si también una planta de esas está adquiriendo en medidas no perfeccionadas pues también puede afectar otros órganos. Los riñones, el hígado, etc.

[Certainly today, it's very popular here in Mexico, it's being used a lot with the issue of diabetes and it's showing good results. What's still needed is to perfect the quantities. Because if one of these plants is consumed in incorrect measurements, well, it can also affect other organs. The kidneys, the liver, etc.

CB] In attempts to find the proper quantities, there would have been a fine balance between not taking too much, as to harm other parts of their body, but also to take enough to assure that the medicine worked. This is an important technique that the founders would have found invaluable for success.

Community members explained that they have learned and used these techniques before the time of Anza. They said that their ancestors learned about medicine plants by watching the local indigenous populations search to find cures for the new diseases that were deeply impacting their communities.

Y fijese que simplemente los indios de América no daba gripe, no existía el virus de la gripe, el virus de la gripe vino de Europa, y murió mucho indio por esto. No

había las defensas necesarias para combatir el virus. En América no había sífilis, no había la gonorrea, enfermedades que adquirieron las mujeres y las distribuyeron a los hombres y hubo mortalidades tremendas. Bueno, pues para esto el indio buscó el remedio también. Cocer una pitaya también, como una manera de desesperación decían esa es pitaya córtale un pedazo de pitaya y ponla a hervir y vámonos, a ver qué efecto. Mataban zopilotes, esa era una medicina que dio mucho resultado el zopilote cocido para la cuestión de la gonorrea, de la infección. [And look the American Indians simply didn't get colds, the cold virus didn't exist, the cold virus came from Europe, and a lot of Indians died from this. They didn't have the immune system defenses to combat the virus. In the Americas, there wasn't syphilis, there wasn't gonorrhea, diseases that the women contracted and that they passed on to the men and there were a tremendous number of mortalities. Well, because of this Indians also sought cures. Cooking an organ pipe cactus also, as an act of desperation, they would say this is an organ pipe cactus, cut a piece of organ pipe cactus and boil it and let's go, see what effect it has. They killed turkey vultures, this was a medicine that proved to be effective, cooked turkey vulture, for gonorrhea, for the infection.]

Anza expedition members took the knowledge they gained from watching the local indigenous people combat illness with them to California. The Founders of San Francisco would have needed to be able to effectively engage with local Indigenous groups in California in order to exchange medicinal knowledge, along with the knowledge of how to find their own remedies. Juana Briones, a known curandera and midwife was the daughter of the midwife and traditional healer who accompanied Anza to San Francisco. Juana's descendents believe that the location for her home was chosen due to the impressive variety of wild medicinal plant species, such as plants in the mustard family and a *Rumex* species possibly similar to those listed below. Furthermore, "Family history recounts that she worked closely with Native Californians to adapt Mexican remedies to the plants available in San Francisco" (Voss 2008a: 166).

There was also a sharing of medicinal knowledge between the European settlers and the indigenous peoples. "El Español adaptó muchas cosas del indio, lo que más le convino como vice versa también. El indio del Español. El Español aprendió mucho más del Indio del Indio al Español." [The Spanish adapted many things from the Indian, and vice versa, the Indian from the Spanish. However, the Spanish learned much more from the Indian than the Indian from the Spanish. CBC] As is also noted in other sections of this report, the Europeans learned more from the local Indigenous populations than vice-versa. For example, some believe that that Anza was born in Cuquiarachi because the family preferred an Indian midwife living there (Garate 2003). Many community members recognized that much of their local wild plant knowledge came from Indigenous origins.

One community member emphasizes how both Western and Indigenous knowledge were brought on the Anza Expedition. First he emphasized how the priests on the expedition would have known about Western medicine, "Los padres, que tenían más conocimiento. En aquellos tiempos el que entraba a un colegio para prepararse para cura tenían todos los conocimientos, de geografía, de astronomía, de medicina, de literatura, de muchos básicos conocimientos." [The Fathers, who were the ones who had the most knowledge. In those times, those who attended

college to prepare themselves to be a priest had knowledge of all aspects, geography, astronomy, medicine, literature, of all basic knowledge. CBC] He emphasizes here the Western medicinal knowledge of the priests, but then later when asked about medicines that were used on the expedition, he added, “Se usaban, había mucho conocimiento porque iban indios también”. [It was used, there was a lot of knowledge because there were Indians with them too.] Both Western and Indigenous medicinal knowledge was brought on the expedition and possibly helped account for the extremely low mortality rate, even with four childbirths throughout the course of the Founding expedition.

Once a medicine was incorporated into use by community members, it was then passed down through the generations. When one community member was asked how they learned about medicinal plants, she responded, “pues la abuelita, y la hija a la hija y así.” [well the grandma, and the daughter to the daughter and so]. Family members would take the younger generations out onto the land and pass down this plant knowledge. One community member recalled his grandmother teaching him to pick Hierba Colorado, or Scarlet Cinquefoil:

So we would go to the river and pull out these red roots and this big green leaf, so we would have to go to the river and bring it in, Hierba Colorado, and she would help us identify it you know, God knows what we brang home and she said no with the big green leaves and then you dig and you see the big red root and “oh ok that’s what we are looking for,” and she would guide us to select the- Also she didn’t want tiny red root or great big old red root, it had to be a somewhat fresh red root, or tender. VL

This community member learned how to identify medicine plants, how to harvest them, and how to use them. This learning experience also taught this community how to prevent over use of this resource by avoiding the smaller roots of the plant. People from San Miguel de Horcasitas believed that knowledge was shared in this manner when the Anza expedition settled San Francisco.

6.3.2 Collection and Preservation

Community members noted that medicinal plants generally are picked as needed, but there were exceptions. When asked if plants are picked as needed, one community member responded, “No no, la gente las tiene. Las tiene secas, por ejemplo si se dio la hierba del coyote, la agarras y la pones a secar y ya la tienes lista para cuando se ofrezca” [No no, the people have them. They have them dried, for example, if there’s Hierba del Coyote, you pick it and you set it out to dry and you have it ready for whenever it is needed. TT]

Community members also discussed that some plants are only available during certain seasons and can only be harvested during those times. Certain plants are only collected when they flower or bear fruit. Elderberry, for example, could only be picked while in bloom, while Pitaya fruit, can only be picked when it is ripe in the summer. One community member added, “Y luego además esa fruta que es la pitaya, que es una fruta deliciosa que se da en el verano, tiene que ser tiempo de calor, pero ya empiezan las lluvias del mes de julio, entonces se acaba la producción que empieza en junio, dura como los dos meses.” [And furthermore, this fruit that is

the pitaya, which is a delicious fruit that is ripe in the summer. It has to be hot weather, but the July rains are already beginning, thus ends the production that starts in June, it lasts like two months. FHT] In addition to plants that need to be collected in a certain season, other hard to find plants or animals are collected when they are come across. Rattlesnakes, for one, are collected for their fat when encountered.

Once the plants are ready to be harvested, the people of San Miguel de Horcasitas have developed specific methods to pick them. A community member discussed the harvesting process by emphasizing the importance of not taking the whole plant when collecting medicinal plants:

Ni la flora tampoco, pues ir a trozar por ejemplo esas plantas curativas que hay que se le trozan y se secan. Hay que arrancarles un pedacito. Necesitamos esa cultura para ser más ordenado. No hacer lo que nos da la gana. Que lo castiguen. Es malo eso, es mal. Mañana pasado y hay una crisis grande y allí hay de comer pues, pero si la matamos poco va a ser.
[The flora also, going and ripping those curative plants that are ripped out and dried. They must be ripped off in little pieces. We need a culture that is more orderly. Not doing what we wish to do. To be punished. That is bad, it's bad. In the future if there is a large food crisis, there is food out there, but if we kill it, it will be very little. BP]

Another community member discussed the harvesting process for an important traditional use plant known as Golondrina, “La cortan y la ponen a secar ahí en el sol, en un traste o una bolsa de papel.” [They cut it and lay it out for the sun to dry, in a container or a paper bag. TT] The process of collecting the plant itself, like the method of use, is considered important.

The conservation based knowledge of the Founders brought with them to San Francisco was not always relevant when applied to the northern coastal ecosystem. As a result, the Founders quickly began to encounter problems in obtaining enough firewood and had to resort to less sustainable and less effective methods. Voss (2008a: 159) documented that in the archaeological record, firewood was a scarce resource so the Founders had to use other fuel sources such as small trees, scrub brush, grasses, and animal dung. As fuel sources near the community were depleted, the Founders had to travel increasingly longer distances to collect fuel sources.

6.3.3 Curanderas

The people of San Miguel de Horcasitas mentioned to BARA ethnographers that there used to be many traditional healers or curanderas in their community. In San Miguel de Horcasitas, there were several different kinds of curanderas. *Sobaderas*, or massagers, were mentioned, while *parteras*, or midwives, and *hierberos*, or herbalists were focused on more extensively.

Hierberos were described as people who know about or sell herbs or plants. As one former community member described, “They know plants and medicines and they have a lot of

faith in teas.” To some extent everyone in San Miguel de Horcasitas, especially the women, were considered hierberos because everyone had at least some plant knowledge. This knowledge, however, was not distributed evenly and some hierberos were more noted than others. See Chapter Four for additional discussion on herbalists.

In addition to hierberos, there also used to be midwives in San Miguel de Horcasitas. Community members still remember the last midwife in San Miguel de Horcasitas, but noted that currently the women go to Hermosillo to give birth. Parteras, like hierberos, used plants for doctoring. Parteras were involved in prenatal, labor and delivery, and postnatal care for both the mother and the child. One community member remembered how the local midwife’s plant use and doctoring skills were effective, “Sí, usaban plantas. Aquí había una que todavía la conocemos nosotros, Manuela, pero la partera aquí casi no se le morían” [Yes, they used plants. Here there was one that we still know ourselves, Manuela, but for the midwife here they almost never died on her BP]. This community member further emphasized that when the medical center was opened in San Miguel de Horcasitas, “le llamaron a ella y tomaron datos y la llevaron con la enfermera, iba a dar la vuelta con la enfermera, le enseñaba cosas, sí, sí sabía. Sí sabía.” [They called her and took information from her and they took her with the nurse, she’d go around with the nurse, teaching her things, yes, she did know. She did know. BP]

The role of partera was not rigidly defined, and women’s roles often overlapped with those of a partera. Although their knowledge may have been less specific and focused, women knew generally how to take care of themselves, their children, and other female community members. As one community member stated, “Pues todas las mujeres, era algo general. Según yo, iba creciendo la gente y se iba aprendiendo. Sí, yo hasta la fecha. Que tengo hierba buena, que se enfermo el niño de el oído, le voy a poner.” [Well all women, it was something that was general. According to me, the people grew and learned. Myself, to this date, if I have mint and if the child gets an ear infection, im gonna put some on there. TT] and when asked who helped women give birth another responded, “Ah! Cualesquiera atrevida, cualesquiera.” [Ah! Whichever daring girl, whichever. CP] Parteras were always present in the community though in case of complications or unusual problems.

Another female community member also emphasized the community’s self-reliance by adding that, “There wasn’t a doctor in San Miguel de Horcasitas. The ladies, the midwives, when the kids would get sick they would give them the Indian Root. QPF” For the founders of San Francisco, this self-reliance and women’s general knowledge of giving birth even when a partera was not present would have been useful on both the expedition itself and later at the presidio settlement.

Women had important roles in assisting in childbirth and their assistance would have been critical, especially during the Anza period. As one community member explained, “Iban personas adultas ahí, no explican ni dan nombres de quien hacia la función directa de hacer nacer a un niño. Todos colaboraban, me imagino que las que más participaban ahí en higiene y cuidados eran las mujeres.” [Adult people went there. They don’t explain nor give names of who exactly brought children into the world. Everyone collaborated, I imagine that those that most participated in hygiene and care were the women. CBC]

It is important to understand that ethnobotanical knowledge was not restricted to women. Men also possessed broad plant knowledge. One community member emphatically expressed when asked if only women knew about medicinal plants, “no no, mi papa también sabía de esas cosas. Él iba y traía plantas.” [No no, my dad also knew about those things. He would go out and bring plants back. T T] Men had and have plant use and medicinal knowledge as well, which may reflect once again, the community’s focus on self-reliance.

6.3.4 Use Plants

In the following portion of this section on wild use plants, we will be listing the wild plants that had uses that included non-food purposes. This list additionally includes a few planted herbs in addition to the wild plants due to their important medicinal nature. Non-native or cultivated plants are not included in this list. Manzanilla, for example, though noted to be important, is bought in tea bags and therefore would not have likely been present at the time of the Anza expedition. Plants with food uses are listed in the food section of this report. Plants with both food and other uses are listed in both sections. This non-food use plant section includes thirty-nine plants, while overall 104 plants have been identified as being used by the community. These include both wild and domesticated plants, such as agricultural crops, fruit and nut trees, and garden plants.

Although the following information is sorted by plant, it is still important to note that many remedies require a mixture of different plants, or plants and animals. As one participant whose family lived in San Miguel de Horcasitas before he was born commented, “My mom isn’t that big of a witch, but if you want to know what plants are, my grandma can tell you. This leaf with this leaf is for this, but this leaf with that is for this, but three of these leaves and one of these leaves, all that kind of stuff... the bark of this tree. FHT” In addition to mixing various plants and/or animals, community members also noted that the preparations and uses were often as important as what exact plants to use. One participant whose family came from San Miguel de Horcasitas, expressed this concept by saying, “It’s not so much the plant, it’s the how. It’s also how you make the tea, and when you drink the tea, before your food, after your food, is it with? There’s a lot of that talk. Some teas are just for refreshment, but a lot of them are medicinal FHT”.

When multiple plants are listed for one remedy, they will all be included under the first plant listed alphabetically and references to the plant with the complete information will be included in the other plants of that remedy’s listing. For example, if Batamote, Cholla, and Garambullo were all listed together as part of a remedy, all of the information would be included in Batamote and Cholla and Garambullo would both say “See Batamote”. This list does not represent all of the plant knowledge in San Miguel de Horcasitas about local wild plants, or even just about these listed plants. The two field visits to San Miguel de Horcasitas has demonstrated that there is an enormous amount of plant use knowledge present in San Miguel de Horcasitas and that this study has only begun to document this knowledge base. It is likely that the Founders carried substantially more detailed plant knowledge with them. Even if the plants were different, it would have provided them clues about how to utilize the flora they would have encountered in San Francisco.

The thirty-nine plants are listed alphabetically by common names. Included are their scientific names which were determined using Estudillo and Garcia's *Catalogo de Plantas Medicinales Sonorenses*, Felger, Nabhan, and Sheridan's *Ethnobotany of the Rio San Miguel*, and Yetman and Van Devender's *Mayo Ethnobotany*. These names were then compared against the Integrated Taxonomic Information System (<http://www.itis.gov/>) or the USDA Plants Database (<http://plants.usda.gov/>) to ensure current scientific nomenclature where possible. After the name of the plant, a brief description of community member's comments is included.

Álamo- *Populus sp.*

Cottonwoods were used medicinally.

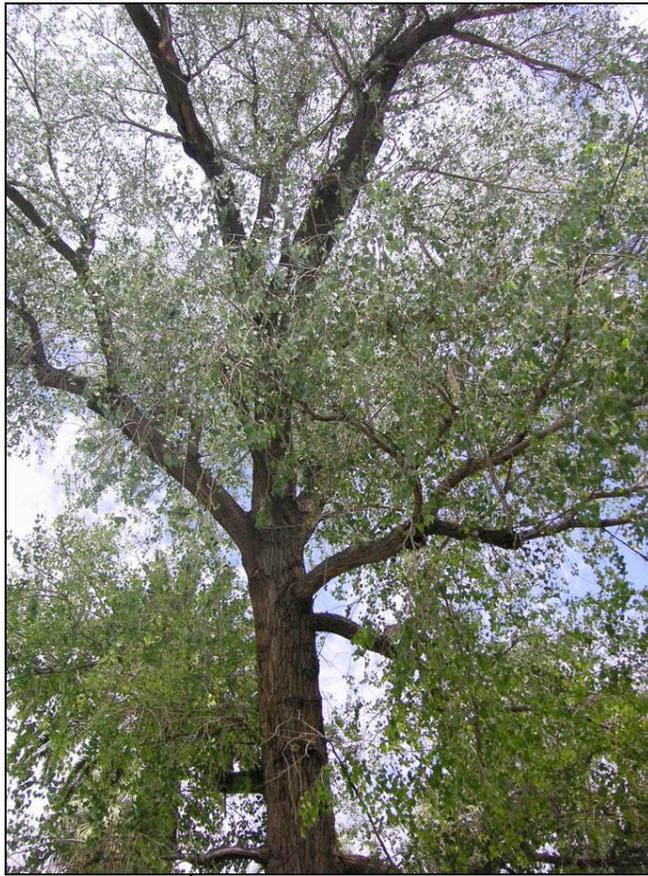


Figure 6.15 Álamo (Courtesy of UofA Arboretum)

- » Se había que utilizar plantas apropiadas, por eso les digo que usaban mucho el álamo, y el sauz. La corteza de los árboles la utilizaban mucho. [They had to use appropriate plants, because of this I tell you all that they used cottonwood and bonpland willow a lot. They also used the bark of the trees they used a lot. CBC]

Bachata- *Lycium berlandieri*

Wolfberry is a medicinal plant used for treating various ailments, such as cancer, tension, and diabetes.

- » “Hay una mata que le decimos nosotros bachata, son unas frutitas negras, ahora dicen que la raíz de esta rama, es buena para el cáncer.” [There’s a shrub that we call bachata, they’re little black fruits, now they’re saying that the root, is good for cancer. QPF]
- » Y llevaban otros medicamentos por ejemplo, la bachata. La bachata es un tranquilizante y a la vez ayuda al ritmo cardiaco. Una persona nerviosa o en estado de shock, pues un vaso de bachata. Para una tensión si la utilizaban. Que por cierto hoy en día, anda muy de moda aquí en México esta siendo mucha usada para la cuestión del diabetes y esta dando muy buenos resultados. Lo que falta es perfeccionar las cantidades.
[They had other medicines, for example, wolfberry. Wolfberry is a tranquilizer and at the same time it helps your cardiac rhythm. A nervous person or someone in a state of shock, would drink a glass of wolfberry. It was also utilized to reduce tension. Incidentally, in our current time it is being used a lot here in Mexico for diabetes and is giving very good results. What is missing is perfecting the quantity. CBC]



Figure 6.16 Bachata

- » Y ese es bachata para las cuestiones de la circulación les decían para el diabetes, purifica la sangre. [And that is wolfberry for matters of blood circulation, they said for diabetes; it purifies the blood. CBC]

Batamote - *Baccharis glutinosan*

Seepwillow was used for several different medicinal purposes. It was used for treating stomach problems, gastritis pain, and kidney stones. Seepwillow was used as an antiseptic and anti-inflammatory agent. The women of the community also used it to make their hair grow long and shiny. For additional uses in Sonora, see Chapter Four. MC

- » “Entonces utilizaban mucho el batamote. Eso se da en los ríos mucho donde hay agua. Ese era antiséptico, quitaba el dolor y secaba las heridas. Antiséptico y antiinflamatorio.” [So they used seepwillow a lot. That grows in rivers a lot where there’s water. That was an antiseptic, took away the pain and dried out the wounds. Antiseptic and anti-inflammatory. CBC]
- » “Pues plantas medicinales, por ejemplo el batamote, es el que se da en el río, unos se lo toman para el estomago, como la manzanilla. También dice que para que se te ponga bonito el cabello, ya sea la manzanilla o el batamote.” [Well medicinal plants, for example seepwillow, it’s the one that grows in the river, some take it for the stomach, like chamomile. They also say that it’s for making the hair pretty, whether it’s the chamomile or the seepwillow. VE]



Figure 6.17 Batamote (Courtesy Texas Agriculture Experiment Station)

- » “Y el batamote también lo usan para lavarse el pelo para que les crezca el pelo.” [And the seepwillow they also use it for washing hair so that the hair grows. VI]
- » “Dicen que el batamote, con sábila, la sábila también es muy buena, es para el cabello. Para que crezca el cabello, y le de, aquí una señora lo acostumbra mucho, y para que le de brillo al cabello.” [They say that the seepwillow, with aloe, aloe is also very good, is

for the hair. So that the hair grows, here a woman is in the habit of it, and so that it gives shine to the hair. GP]

Brasil- *Haematoxylum brasiletto*

The Brasil tree is used to treat blood pressure issues. BP



Figure 6.18 Brasil (Courtesy of UofA Arboretum)

Choya- *Opuntia bigelovii* or *reflexispina*

Cholla roots are used for treating cancer and for kidney stones. VI, VE, DC

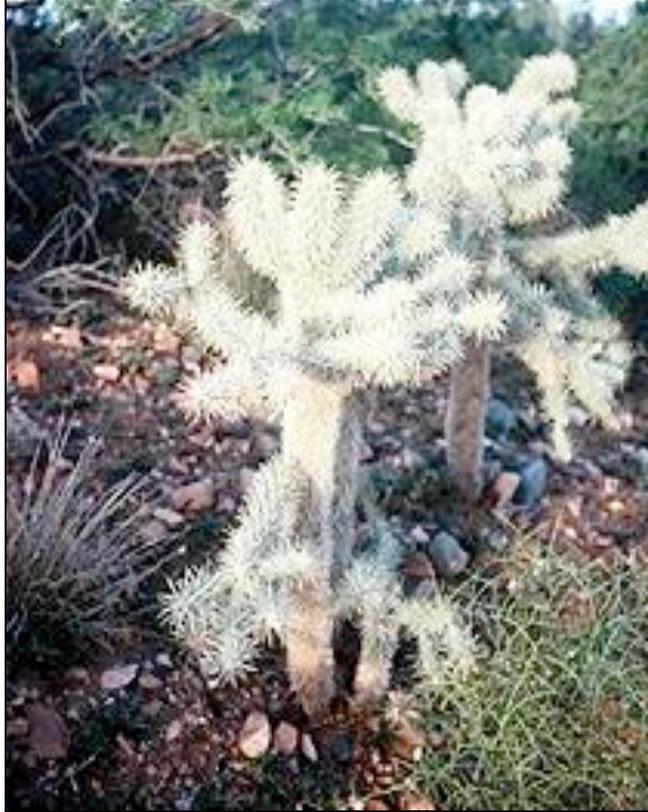


Figure 6.19 Cholla (Courtesy of USDA)

Copalquin- *Coutarea latiflora*

The bark of the Copalquin tree was noted to be very bitter and is used for a variety of purposes. Former community members living in the Tucson area still use copalquin for blood issues. FHT

- » “Para las calenturas, para las fiebres, para que se ponga más gruesa la sangre, claro más fuerza, ah eso sí. Lo vendían como tónico aquí curanderas que había más.” [For temperatures, for fevers, as a blood thickener, of course for strength, ah that yes. Curanderas here sold it as a tonic when there were more. BP]



Figure 6.20 Copalquin (Courtesy of the Arizona-Sonoran Desert Museum)

Cósahui- *Krameria parvifolia* or *pausifolia*

Sonoran ratany was used in a tea for the blood. RA

- » “There’s a plant that you take it’s a root and you cook it and you drink it. It’s so good. TT” “Cósahui. QPF” “See these are Yaqui things; they have to be. **FHT**” “Se dice la rama tambien. La raíz se pone colorada” [They say the branch too. The root turns red. QPF] “Muy rica, deliciosa, deliciosa [very tasty, delicious, delicious], you’ll love it. TT” “In those old days it was good to purify your blood. QPF” “But it’s very good. My dad would go find it for me TT”. I don’t like the ones that grow in Puerto Peñasco because they’re not as good as the ones that grow in San Miguel. I tried them over there and they are salty or something to do with the dew that messes up the plant in Puerto Peñasco. QPF”
- » “El cósahui también es para ayudar a la sangre.” [Sonoran ratany is also used for helping the blood. MC]



Figure 6.21 Cósahui (Courtesy of USDA)

Epazote- *Chenopodium ambrosioides*

Mexican tea is used to treat sinusitis, stomach problems, and intestinal worms. People also cook this plant in with their beans to reduce flatulence. Logan et al. (2004) notes that Epazote prevents bean spoilage and it provides protein, vitamins, and minerals. The plant also benefits nearby agricultural crops, along with its medicinal uses. TT MC

- » “Also so the beans won’t make you gassy. They have a plant that they cook with the beans that will supposedly make you less gassy. FHT”
- » “Para cuando tienes animales en el estomago tomas epazote” [For when you have animals in your stomach, you take Mexican tea. RA]
- » “También el epazote con infundía de pollo es muy buena para el sinusitis. Si, para el sinusitis santo remedio el epazote con infundía.” [Also Mexican tea with chicken fat is very good for sinusitis. Yes, for sinusitis Mexican tea with chicken fat is a miracle drug. GP]
- » “Cuando te dió, una vez te enfermaste el estomago-“ [When she gave you, one time your stomach got sick- TT] “Creo que era, cáscaras de granada, ruda. Ruda y cáscara de granada.” [I think it was pomegranate peel, rue. Rue and pomegranate peel. FHT] “Y cáscara de granada y epazote.” [and pomegranate peel and mexican tea. TT]
- » Sí sí, un día mi mama le hizo a mi hijo, andaba muy enfermo del estomago, y le puso epazote, le puso yerbabuena, le puso cáscaras de granada. TT



Figure 6.22 Epazote (Courtesy of USDA)

Eucalyptus- *Eucalyptus globulus*

Eucalyptus is used for coughs. VE, DC

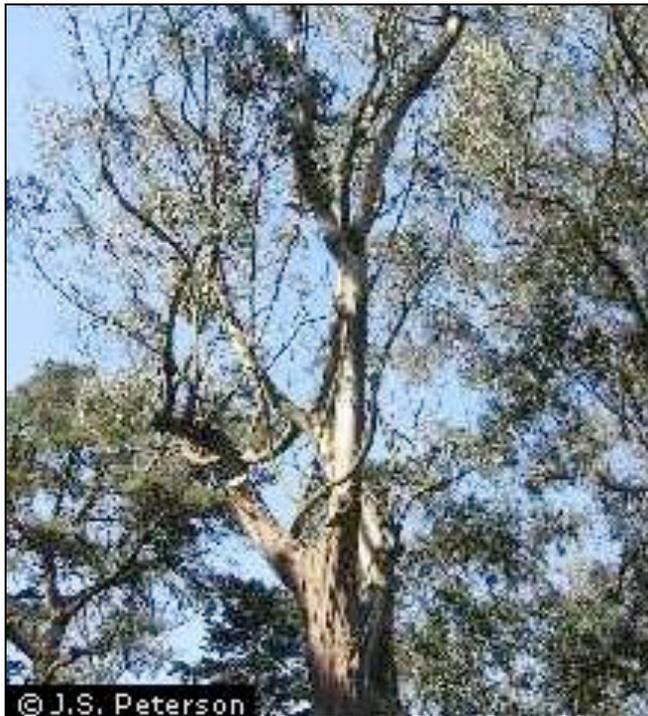


Figure 6.23 Eucalyptus (Courtesy of USDA)

Garambullo- *Pisonia capitata*

Mexican Devil's Claw was a medicinal plant. It was also used to feed the birds many families kept as pets.



Figure 6.24 Garambullo (Courtesy of Arizona-Sonoran Desert Museum)

- » “When the kids would get sick they would give them the Indian Grass. They’d dry it and then they would grind it up! With Mexican Devil’s Claw leaves. QPF”
- » “Bueno para los pajaros.” [Good for the birds. TT]

Golondrina- *Euphorbia petrina or prostrata*

Prostrate Sandmat is a medicinal plant. In Chapter Four, Dr. Dobyns notes that *Euphorbia prostrata* was used to doctor open wounds.

- » Sí sí. Hay una planta que se llama golondrina que crece así, pegadita al suelo, y te haces una cortada y esa te la cura. [Yes yes. There’s a plant named Prostrate Sandmat that grows very close to the ground, and if you cut yourself, it will cure the wound. TT]

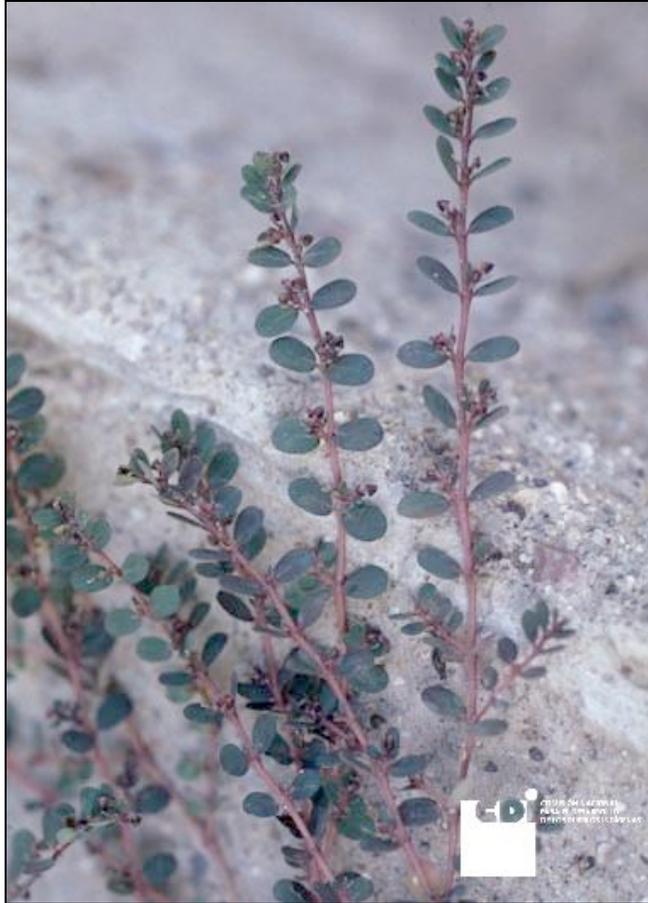


Figure 6.25 Golondrina
(Courtesy of Comisión Nacional para el Desarrollo de los Pueblos Indígenas)

Guayacán- *Guaiacum coulteri*

Guayacán was used for cleaning the eyes. CBC



Figure 6.26 Guayacán (Courtesy of UBC Botanical Garden)

Guarequi- *Ibervillea sonora* (*Maximowiczia sonora*)

Choya's brother is used for preventing and treating cancer.



Figure 6.27 Guarequi (Courtesy of US Botanic Garden)

- » “El guarequi también, no sé si conozcan el guarequi, es una bola muy amarga que se da debajo de la tierra.” [Choya’s brother too, I don’t know if you know choya’s brother, it’s a very bitter ball that is produced below the soil. GP]
- » “La usan mucho para hacer cápsulas. Cuando tienen cáncer, para prevenir el cáncer. Mucha gente lo toma para eso.” [They use it a lot to make capsules. When people have cancer, to prevent the cancer. Many people take it for that. RA]
- » Cuando va por arriba se llama, es igual, tiene un defecto, se llama trepadora, trepadora sí. [La medicina está] en la allí, en el mismo tallo, en la hoja y el tallo y todo esta estructura se hecha a hervir y ese es tomado, es muy venonoso. Sabe a tierra, a tierrita sabe. [When it goes up it is called, it the same, it has a defect, it’s called a vine, a vine, yes. (The medicine is) in right there, in its own stem, in the leaf and the stem and all of this structure they boil and you drink. It is very poisonous. It tastes like earth, like earth it tastes. CBC]

Hediondilla- *Larrea Tridentata*

Creosote bush was used to heal to be used for many things, including gastritis, kidney stones, intestinal infection, and Typhoid. This medicine was used as an anti-inflammatory and a disinfectant. See Chapter Four for additional uses in Sonora. SS MT



Figure 6.28 Hediodillo (Courtesy of UofA Arboretum)

- » “Creosote is good. For a lot of things, the creosote, it’s a branch that they have in the mountains and they use it for many things. CP”
- » “La hediondilla también. La hediondilla la usan para el gastritis.” [Creosote bush too. Creosote bush is used for gastritis. GP]
- » “También lo usan para las piedras del riñón.” [It is also used for kidney stones. RA]
- » “Y para desinfectante había una planta, yendo para Tucson le llaman la gobernadora, nosotros le llamamos hediondilla, es una planta muy verde con una flor amarilla. Bueno llevaban mucho para eso. Y sirve como antiinflamatorio también en caso de mordida de cascabel, porque había mucha víbora de cascabel.” [And for disinfectant, there was a plant, going to Tucson they call it gobernadora, we call it Creosote, it is a very green plant with a yellow flower. They carried it a lot for this purpose. And it serves as an anti-inflammatory in case of a rattlesnake bite, because there was a lot of rattlesnake. CBC]
- » “Los problemas de infecciones intestinales. Pero había con que curarse, con polvo de víbora de cascabel, con hediondilla, con toluache, etc.” [Intestinal infections. But there were things to cure yourself with, with rattlesnake powder, with creosote, with datura, etc. CBC]

- » “Esa es la hediondilla, es maravillosa. Es muy amarga, si hay un cólico o una tifoidea por haber ingerido un alimento en estado de descomposición. Pues si no hay mas, ese es el tratamiento apropiado. Porque actúa, no actúa tan rápidamente como lo de hoy nuevo pero actúa, o sea no se deshidrata la persona por tanta diarrea y perdida de electrolitos. Entonces hidrata y se adquieren electrolitos y ayuda a matar el bicho. Entonces lo utilizaron mucho, y lo mismo actuaba en los intestinos como en los golpes y en inflamaciones y mordidas de cascabel y en todo eso” [That is Creosote, it is wonderful. It’s very sour, if there’s colic or typhoid due to the ingestion of a food that is in a state of decomposition. If there’s nothing else, that is the appropriate treatment. Because it acts, not as rapidly as what exists today, but it acts, so the person doesn’t dehydrate because of diarrhea and the loss of electrolytes. So it hydrates and it helps acquire electrolytes and helps kill the parasite. So it was utilized a lot, and the same way it acted in the intestines it acted from bruises and inflammation from rattlesnake bites and all that. CBC]

Hierba Colorado- *Potentilla thurberi*

Scarlet Cinquefoil had a red root that was used for curing dental and gum infections. VL

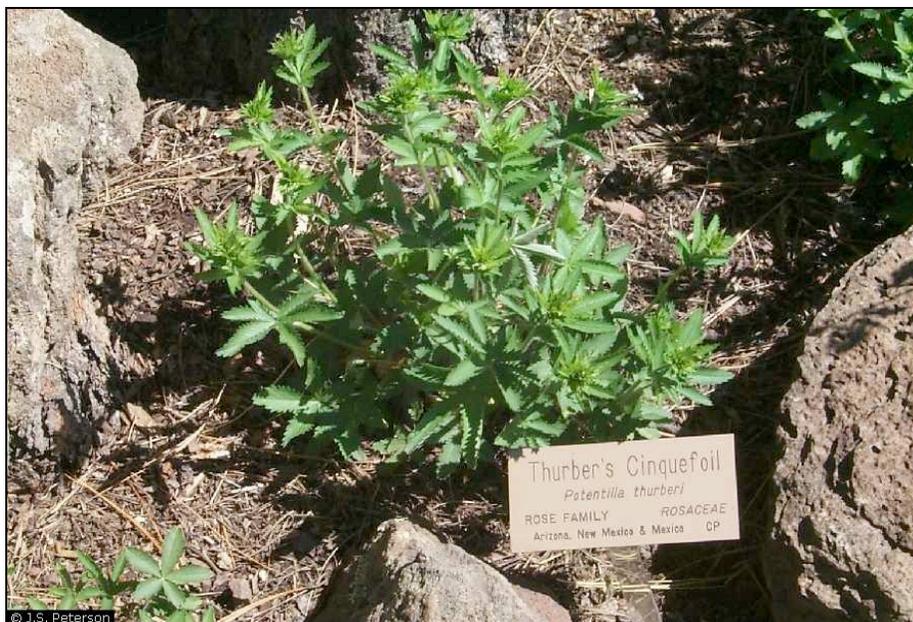


Figure 6.29 Hierba Colorado (Courtesy of USDA)

Hierba del Coyote- *Euphorbia furcillata*

Hierba del Coyote is a medicinal plant.

- » “No no, la gente las tiene. Las tiene secas, por ejemplo si se dio la hierba del coyote, la agarras y la pones a secar y ya la tienes lista para cuando se ofrezca. TT”



Figure 6.30 Hierba del Coyote (Biblioteca Digital de La Medicina Tradicional Mexicana)

Higuerilla- *Ricinus communis*

Castorbean was used for oil.



© Smithsonian Institution

Figure 6.31 Higuerilla (Courtesy of USDA)

- » “Esas se llaman higuierillas. Esas no se comen. Esas la utilizaban para engranes. Ósea las usaban como aceite, le rompían el fruto y se le pone en un recipiente y llora, es uno de los aceites mas apreciados para la luz y para engranajes. Es venenoso el aceite de higuierilla, no se puede comer. Se diluía con un poco de aceite de higuierilla y aceite de ballena y eran los faros que utilizaban para dar luz.”
[Those are called Castorbeans. Those aren’t eaten. They are utilized for gears. So it was used as lubricating oil, they would break the fruit off and place it in a recipient and the oil would drain. It is one of the most common oils used for light and for lubricating gears. Castorbean oil is poisonous, it cannot be eaten. The Castorbean oil would be diluted with whale oil and they would use it as a lamp to provide light. CBC]

Huevito- *Vallesia glabra*

Pearlberry fruit was used for addressing vision problems.



Figure 6.32 Huevito (Courtesy of Instituto de Biología – UNAM)

- » “Ese es huevito. Huevito, da un fruto, ahorita no tiene porque le pasó la temporada, echa un como tipo de huevito chiquito y sirve para los costeos de la vista, para limpiar la vista.” [That is pearlberry, it gives a fruit. Right now it doesn’t have it because it’s past

it's season. It puts out like a type of little egg and it works for the costs of the sight, to clean the vision. CBC]

Jícara- *Lagenaria siceraria*

Bottle gourds were used to make cups.



Figure 6.33 Jícara (Courtesy of USDA)

- » “They made cups out of the gourds. My dad would scrape them and they’d make a jícara, which is a gourd, and that’s how they would drink the pinole.” FHT

Melquíades

Melquíades is a medicinal plant with several uses.

- » “Esta planta se llama melquiades, esta planta es como para la frotacion, artritis, dolencia, golpes.” [This plant is called melquiades, this plant is for rubbing on, arthritis, pain, bumps and bruises. CBC]

Mesquite- *Prosopis juliflora*

Mesquite was used for a variety of purposes. The people of San Miguel de Horcasitas used it for medicine, construction, and firewood. Mesquite pods were used to make several food items. The wood or charcoal was used to give foods like tortillas more flavor. The importance of firewood to life in Sonora during the Anza period and the importance of mesquite being used to treat sores are also noted in Chapter Four. CP DC VI

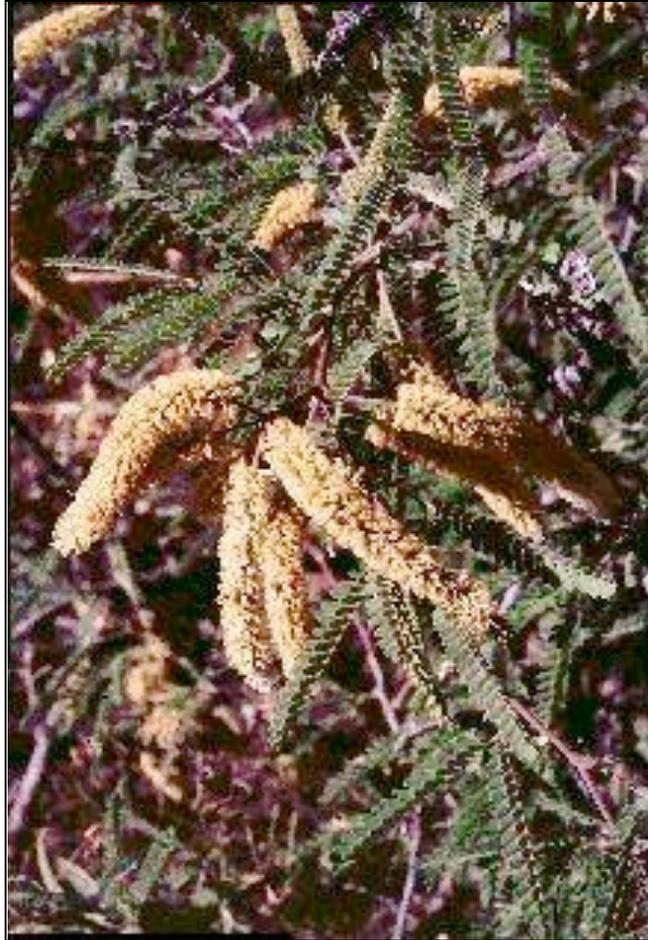


Figure 6.34 Mesquite (Courtesy of USDA)

- » “Se aprovecha también para el carbon, el mesquite... Todavía, si. Y para la leña. Para la tortilla, para el uso diario de la tortilla.” [It is used also for the charcoal, mesquite... yes still. And for firewood. For tortillas, for the daily use of tortillas. RA]
- » “Y también tenemos el calentón, no es de gas, es de leña, para bañarnos, no usamos gas. Pura leña.” [And we also have the heater, it’s not gas, it’s wood, to bathe ourselves, we don’t use gas. Just firewood. RA]
- » “Para construcción pues las ramadas les llaman, se hacen de mesquite, se cortan los palos.” [For construction, well, ramadas they’re called, they make them from mesquite, they cut the branches. GP]

Mostaza- *Brassica campestris*

Community members allow mustard to grow in the fields with their crops for its food and medicinal uses. Even though water is such a limiting factor on local agriculture, they allow mustard plants to use some of the water allocated for crops, instead of picking them as weeds. This demonstrates the plant’s value as a medicine and food source. The seed of the mustard plant was used for alleviating stomach pain. Hochman (as cited in Halvorson 1992: 73) notes that “one

story has it that Father Serra and other priests scattered seeds of wild mustard (*Brassica rapa* and *B. nigra*) along El Camino Real so that a trail of gold would guide travelers from mission to mission”. Considering its importance in San Miguel de Horcasitas, it seems unlikely that the priests scattered wild mustard for purely aesthetic purposes. Regardless, the Founders of San Francisco would have had access to one of their well known plants in San Francisco, even though it was clearly not native to the area.



Figure 6.35 Mostaza (Courtesy of Invasive and Exotic Species)

- » “Y la semilla la utilizan como medicinal. Para dolor de estomago pero pues ya casi no. Sino va con el doctor uno, pero es lo que hacía mi ama.” [And the seed they use as medicine. For stomach pain but now hardly at all. One goes with the doctor instead, but it’s what my mom used to do. RA]

Ocotillo- *Fouquieria splendens*

Ocotillo was used as a construction material for walls, roofs, armadas, and fences. People also used this plant as a firestarter. In order to gather ocotillo, people cut them down with a machete, and carried them while wearing gloves due to the spines. RA

- » “The ceiling inside her house, was made from ocotillo. CA”
- » “Sí, se prende la lumbre con el y se hacen las ramadas y cercos.” [Yes, fires are started with it and it is also used to make shelters and fences. RA]



Figure 6.36 Ocotillo (Courtesy of USDA)

Palo Fierro- *Olneya tesota*

Ironwood is used to make chiltepin crushers and decorations.

- » “Sí hay como de lo que es enseñé del palo fierro que hacen por ejemplo muchas cosas, adornos, de lo que sea, pájaros. Para moler, le pregunte a Cesar, porque cuando me preguntaron como se llama, y me dijo chiltepinero.” [Yes there are like the ones that I showed you of ironwood that they make, for example, many things, decorations, of whatever, birds. To grind, I asked Cesar, because you asked me what it is called, and he told me chiltepinero (chiltepin crusher). VE]



Figure 6.37 Palo Fierro (Courtesy of UofA Arboretum)

Pelos de Elote- *Zea mays*

Although not a wild plant, corn silk is used for urinary tract infections.



Fig 6.38 Pelos de Elote (Courtesy of AgroAtlas)

- » “For bladder infections or UTI’s, they’d boil the corn, the corn of the hair, the hair of the corn, the silk, corn silk, you do that every morning and at night, twice a day and that is a cure. That’s old. And of course they don’t call it UTI, they call it malurine (bad urine).”
FHT

Pitaya- *Stenocereus thurberi*

A dead fibrous Organ pipe cactus was used to create a smoke torch that made it possible to approach a bee hive to collect honey. The smoke torch is used to keep the bees away from the harvester and away from the hive. The organ pipe makes a good torch because it is hollow and smokes easily. The woody core, or “rib”, of a pitaya is also used as a construction material. JC, CBC, RA



Figure 6.39 Pitaya

Ruda- *Ruta graveolens* or *chalepensis*

Rue was used for treating ear infections in children and in combination with other plants for curing stomach problems.



Figure 6.40 Ruda (Courtesy of Nature Serve Explorer)

» Se enfermó el niño de el oído, le voy a poner ruda. TT

For Rue, see Epazote.

Sábila- *Aloe Vera L.*

Aloe was used on burns. MV



Figure 6.41 Sábila (Courtesy of USDA)

See Batamote.

Sauco- *Sambucus mexicana* or *caerulea*

The Elderberry flower was used as a sleep aid and for treating stomachaches. A specimen of a *Sambucus* species plant was found in the Building 13 midden of the Presidio of San Francisco (Voss 2008a: 243). DC



Figure 6.42 Sauco (Courtesy of USDA)

- » “That was for upset stomachs, sauco, and you’re only supposed to pick it in May because that’s when it’s blooming and you’re not suppose to dry it in the sun, in the direct sun, because it damages the, burns the vitamins or whatever it is, so you have to dry it in the shade.” VL

Sauz- *Salix triandra*

Bonpland willow was used for alleviating fevers.



Figure 6.43 Sauz (Courtesy of Encyclopedia of Life)

- » Había mucho conocimiento porque iban indios también, se usaba mucho para las cuestiones de la fiebre, antipiréticos era el sauz. [There was a lot of knowledge because Indians went too (on the expedition), what they used a lot for fever issues, as an antipyretic was Bonpland willow. CBC]

See Álamo.

Tabaco del Coyote- *Nicotiana glauca* or *trigonophylla*

Coyote Tobacco (Desert Tobacco or Tree Tobacco) has been used for urinary incontinence. BP



Figure 6.44 Tabaco del Coyote (Courtesy of USDA)

Toboso- *Cenchrus echinatus*

Southern sandbur was used as a medicine in teas.

- » “And they do stuff with thistles, I mean these teas are complex teas. Of the spines and the thistles and of this, of all this. Of what do we make teas? Twigs of this and twigs of that. I remember that a lot. They boil the whole thing just a, they’re little, like little marshmallows that hurt. FHT”



Figure 6.45 Toboso (Courtesy of EOL)

Toloache- *Datura meteloides* or *inoxia*

Additional information about *Datura* is listed in Chapter Four.



Figure 6.46 Toloache

For *Datura*, see Hediondillo.

Torote- *Bursera hindsiana* or *inopinata*

Limberbush is used for easing coughs, and more specifically children's coughs. GP, MC



Figure 6.47 Torote (Courtesy UofA Arboretum)

Tullidora- *Karwinskia humboldtiana*

Tullidora was used as an arrow poison by indigenous people. One person noted that this is what killed Juan Bautista de Anza senior.

- » “Mata a las personas y las va matando poco a poco, lentamente, quince días de no ser humano...” [It kills people and it kills them little by little, slowly, fifteen days not being human ... JC] “Sí, se mueren.” [Yes, they die. CBC] “Les profesaban los indios- Con, con, echándolos a perder con agua caliente y mataban viboras.” [The Indians professed-with, with, spoiling them with hot water and they killed snakes. JC] “De cascabel.” [Rattlesnakes. CBC] “Y le echaban el veneno y metían las flechas, traían una, un forro de escroto se llama... En la funda de los huevos de un venado por ejemplo, cerrado, y al momento de guerrillear, le metían el punto de la flecha y ffffft y el enemigo [sound signals he died] porque daba infestado, moría al tiempo, así murió el papa de Juan de Anza. Porque es veneno, el torrente sanguíneo, invade el torrente sanguíneo. Este es Tullidora, es venenosa, es una planta nociva.” [And they took out the venom and put in the arrows, they brought a, a scrotum lining it is called. In the cover of the balls of a deer for example, closed, and at the moment of doing guerrilla warfare, they would dip the point

of the arrow and ffff and the enemy [sound signals he died] because it became infected. They would die shortly, that's how the father of Juan de Anza died. Because it's poison in the bloodstream, it invades the bloodstream. This is Tullidora, it is poisonous, it is a harmful plant. JC]



Figure 6.48 Tullidora (Courtesy of Texas Agricultural Experiment Station)

Yerbabuena- *Mentha viridis*

Although spearmint is grown rather than being a wild plant, it was noted to be an important medicinal plant to merit inclusion in the wild plant section.

- » “And mint is very- you’d be hard pressed to find a house that doesn’t have a little mint plant growing. FHT”
- » “La yerbabuena, eso sí se siembra aquí, pues se da no todo eso.” [Mint, yes, it is planted here. It yields all of this. GCA]
- » “It’s good for anything. MV”
- » “Para el estomago.” [For the Stomach TT]

See Epazote

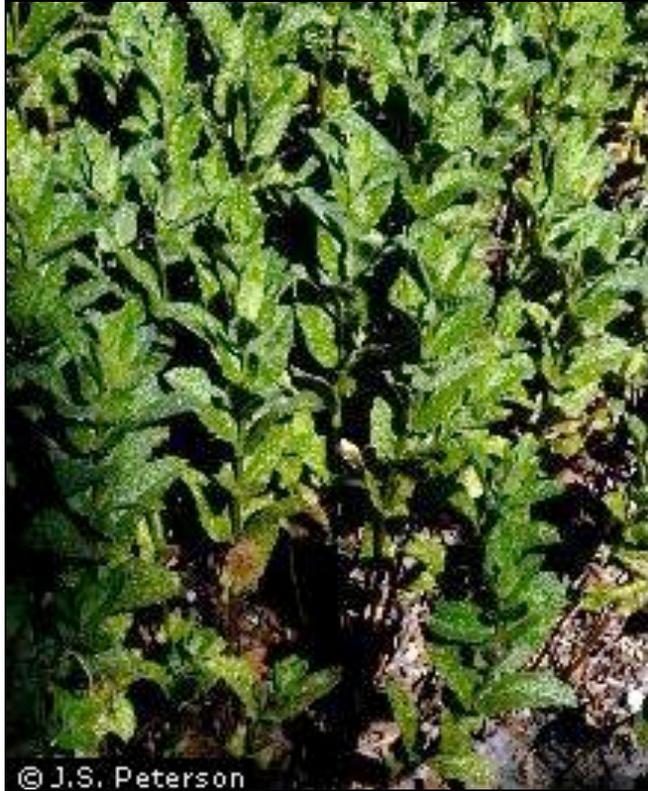


Figure 6.49 Yerbabuena (Courtesy of USDA)

Yerba del Indio- *Aristolochia brevipes*

Indian Grass was noted to be a very bitter herb that was taken to treat stomach problems and pains, as well as toothaches (referring to teething or wisdom tooth problems in particular). One former community member now living in the Tucson area still keeps Indian Grass roots in his home for stomach pains QPF, TT.



Figure 6.50 Yerba del Indio (Courtesy of Vascular Plant Image Library)

- » “Nos curamos con otra hierba tan estomacal, ley dicen yerba del indio, yerba del indio, es una raíz que se desarraigar la matita.” [We cure ourselves with another stomach herb, they call it Yerba del Indio (Indian Grass), Yerba del Indio, it’s a root. They uproot the little plant. BP]
- » “Según ese es muy bueno para dolor de la muela. Es muy linda sí. Por ejemplo cuando le sale una encía se hace gargar con eso si de liquida.” [Well, supposedly that one is very good for molar pain. It’s very lovely yes. For example when you are having gum problems, you gargle with it in liquid form. G C A]

See Garambullo.

Yerba Mansa- *Rumex violascens*

The root of the Violet Dock plant is used for dressing wounds or bruises. See Chapter Four for additional information on Yerba Mansa.



Figure 6.51 Yerba Mansa (Courtesy of the University of New Mexico)

- » Está en muchas de las casas, pero se da en el río. [It’s in many of the houses, but it comes from the river. QPF] “It’s an old root. FHT” “It’s good for wounds, it’s good for bruises. QPF”
- » “La hierba del manso es una raíz colorada que se da en los márgenes de los ríos donde hay mucha humedad, para curar heridas, alguna cortada. Tiene un aromita muy agradable.” [Violet dock is a red root that grows on the margins of the river where there is a lot of humidity, to cure wounds, a cut. It has a very pleasant smell. MT]

Zinnia- *Zinnia acerosa*

Desert zinnia was used as a remedy for gastritis pain.



Figure 6.52 Zinnia (Courtesy of USDA)

- » “La zinnia, la zinnia también. Nosotros la acostumbramos cuando tenemos dolor de gastritis. Con una tomadita de zinnia, y santo remedio.” [Desert zinnia, desert zinnia too. We are accustomed to it when we have gastritis pain. With a little amount of desert zinnia taken. It’s a miracle drug. GP]

6.3.5 Non-Specified Plant Use

Trunks and branches of non-specified trees were also used to make furniture and toys. Dr. Dobyans notes trees being used to make furniture in chapter four.

- » “Because my step grandfather’s, Don Aviano, he used to make furniture from tree stumps and from, very interesting furniture, but I don’t know if that was his living I don’t know if he did it as a hobby, but he did make furniture, I remember. He would make chairs and tables from the trunks of trees. CA”
- » “No tenía ni muñecas, juguetes, nada, jugando con palos, jugábamos a los inditos.” [I didn’t have dolls, nor toys, nothing, playing with sticks, we played like we were Indians. DC]

6.3.6 Animal Medicine

In addition to plants, the people of San Miguel de Horcasitas, would also use animals for medicinal purposes. Turkey vultures were noted by several community members to be effective in fighting gonorrhoea and other infections when cooked. One community member explained,

“No lo comían, lo cocían, y el producto, el líquido, es explicable porque simplemente que lo adquiere descompuesto el zopilote, pues todo lo que come es descompuesto. [They didn’t eat it, they cooked it, and the product, the liquid, it’s explainable because simply everything that the turkey vulture ingests is decomposed, well everything it eats is decomposed C B.]

Another community member agreed about the effectiveness of this medicine when he discussed how his uncle’s life was saved by this remedy:

Para curarse? Allí si esta lo bueno... Lo curo una enfermera que había aquí, doctora, decía aquí en estos años y le daba zopilote cocido, llenaban un bote de agua de fierro así. Mataron el zopilote y lo echaban hasta que lo reducía a una taza. Se le caía el pelo a la gente que tomaba esto, como con la quimioterapia y sanó.”

[To cure themselves? There’s the good stuff... A nurse that was here cured him, a doctor, they said here in those years and they gave him cooked turkey vulture, they filled an iron canister with water like this. They killed the turkey vulture and they poured it until it reduced to a cup. The people who take this their hair falls out, like with chemotherapy, but he got healthy.]

Although cooked turkey vulture was considered effective, it was also known to have such adverse side effects, as evidenced by his uncle’s hair loss, which prevented more extensive use.

Other animals were used more commonly for medicine. For example, Chicken fat was combined with Epazote (wormseed) to make a *santo remedio*, or miracle drug for sinusitis. Also, rattlesnake fat was made into drops to treat throat problems, allergies and earaches. One community member discussed how it was used:

Ahh si, la víbora, es muy importante. La víbora de cascabel. El aceite dicen que si tienes una herida, una cicatriz, que te la quita si te pones el aceite. Y dicen que las varices, que te las quitan también. Y para el oído, eso si, a nosotros siempre sufrimos del oído, y le decía a mi papa que si como nos íbamos a aliviar si no era antibiótico, y me decía ‘tu ponteelo y te vas a aliviar’ me decía, y pues ya no tengo para ponerles a los niños... Pues la víbora tiene grasita así, no mucha pero tiene, se saca y ya se fríe y ese aceitito se agarra con un gotero y ya los vas echando así, así lo hacia el.

[Ahh yes, the snake, it’s very important. The rattlesnake. The oil, they say that if you have a wound, a scar, that it removes it if you put it on there. And they say that for varicose veins, that it removes them as well. And for the ear, we’ve always suffered from ear problems, and I’d ask my dad how we’d feel better if it wasn’t an antibiotic, and he’d tell me ‘you put it on and you’ll feel better’ and well now I don’t have any to use on the kids... Well the snake has fat, not much but it has some, you pull it out and fry it and that oil is absorbed with a dropper and you apply it like that, that’s how he’d do it. T T]

Rattlesnake meat was made into a powder that would be injected to cure intestinal infections. Community members emphasized that it had to be rattlesnake (*Crotalus sp.*) because other snakes lacked the curing power.

The meat of the Desert Iguana, *Dipsosaurus dorsalis*, was also used medicinally. As one community member said, “La iguana también. La matas la iguana, y frías la carnita, y se la dan a los niños cuando están asmáticos. Bronquitis, que tengan así. Asma bronquial.” [Iguana also. You kill the iguana and fry the little meat and they give it to kids when they’re asthmatic. Bronchitis, that they have like that. Bronchial asthma. GP] Another community member emphasized their importance, “Que dice que nos crió con puras iguanas” [He says that he raised us with iguanas. TT] and comments on their medicinal use, “Sí, el aceite, la grasa, para la garganta.” [Yes, the oil, the fat, for the throat. TT] Animals were important sources of medicine in addition to the abundance of medicine plants.

6.4 Food and Food Preparation

Food is an important aspect of any culture and community. In fact, throughout history there has always been a close relationship between food and social identity (Voss 2008:233). The BARA team conducted interviews and utilized historical sources in an attempt to reconstruct the kinds of foodways Juan Bautista de Anza would have acquired and brought with him on his expedition from Sonora, Mexico to San Francisco, California.



Figure 6.53 UofA Ethnographer Making Tortillas with a Community Member

First, it is important to understand the kind of community Anza consolidated before leaving for California. He united a group of Spanish soldiers, indigenous people, and civilians from San Miguel de Horcasitas and other surrounding towns. This group of people contributed all the necessary skills and knowledge needed to establish the foundation of a successful community in San Francisco. These different groups also contributed their own different foodways. This exchanging of foodways may have served to further unite the founders.

All of our interviews include discussions/stories of one or more of the following essential food items. Some of the principal foods in San Miguel de Horcasitas include beef, beans, corn and flour tortillas, *pitayas* (organ pipe fruit), *pinole* (a wheat drink), *tunas* (prickly pear fruit), a variety of other fruits, squash, soups and stews. These interviews also provided us with different stories of how they gathered, prepared and in what context they ate these foods.

6.4.1 Meat and Dairy

One community member emphasized the importance of food in the community and described it as an amalgamation of a variety of influences; from the Europeans and local indigenous groups, to the local flora itself. For example, the European introduction of cattle into this region had a huge impact on foodways in the community and is still a prominent food source today. “We were predominantly a beef oriented family”, one community member remembered (VL). Voss (2008a: 238) confirms that this was maintained by the Anza expedition members after their arrival in what is today San Francisco, stating, “Zooarchaeological analyses of animal bone and shell from the building 13 midden confirm the centrality of beef in the colonial diet”.



Figure 6.54 Metate Used for Tenderizing Meat

Several community members talked about how to prepare the beef to be eaten. They would pound the meat with rounded stones first to tenderize it. Community members explained that their own meat pounding stones (see figure 6.54) were either passed down from their great-great-grandparents and/or received from the Yaquis. After the meat was tenderized it would be set out on a fence in the sun to be dried which is what they called *carne seca*. They also grilled the meat which is called *carne asada* or made *chile con carne*, which is meat smothered in a red chili sauce (*chile colorado*) (for a more detailed description of this dish see chapter four). Some other dishes made with beef were *machaca*, which is dried beef simmered with the bones of the cow or potatoes, and *barbacoa*, a type of barbeque beef. *Birria* is beef with garlic, onion, salt, and chili powder. One community member emphasized the difference between barbacoa and birria saying that for birria you add, “polvito de chile pero para que no salga como barbacoa que tiene chile colorado, y esta no, queda como blanquita.” [Powdered chili, it’s not like barbacoa that has red chili, this beef turns out sort of whitish VE]. The lard of the cow was also saved and

used for cooking. One community member remembers her father fervently defending the use of lard in cooking:

Todavía mi papa hacía la manteca él, y yo le decía ‘para no hagas eso por favor’ y nos decía que así no nos enfermaríamos, mi papa nunca tuvo colesterol nunca tuvo nada. Y le decía ‘papa aquí este el aceite’ y nos decía tú no sabes que cochinas tiene el aceite y la manteca si se lo que le pongo’ y se murió a los 86 años y nunca estuvo en el hospital.

[My dad still made the lard himself, and I would ask him “stop, please don’t do that” and he would tell us that this way, we’d never get sick, he never had cholesterol or anything else. And I would tell him “here’s the oil” and he would tell us “you don’t know what filthy things that oil has, and with lard, I know what it has” and he died at 86 and he was never in the hospital. T T]

Usually there was too much meat for one family, so they would make either carne seca or machaca, and then share with family, neighbors, and friends. This pattern was also noted by Dr. Dobyns in Chapter Four. One community member thought that expedition members probably followed this same pattern:

Para hacer una travesía en carolas y a paso de bestias, o sea caballos, mulas, hasta San Francisco, pues toma mucho tiempo, entonces como se alimentaba, está bien la pregunta de usted pues yo creo que era carne seca lo que ahora se conoce como machaca, sin duda debe de haber sido una cosa sí muy interesante de llevar las alforjas con esas provisiones.

[In order to make a trip in wagons and at an animal’s pace, with horses and mules, all the way to San Francisco, well it takes a very long time, so to ask how they fed themselves is a very good question. I think that it was by eating dried meat that is now known as machaca, without a doubt it must’ve been something very interesting to take saddlebags with these provisions. F L T]

Another community member explained an alternative strategy the expedition could have used with regards to the cattle they brought with them. These cattle were not only used for consumption along the trail but also provided a base for raising a herd upon the expedition’s arrival in San Francisco. As the community member explained:

Como se alimentaban? En primer lugar, llevaban mulas y salieron ellos con 80 animales adultos, pero era para el fin de alimentarse y el animal que se cansaba lo sacrificaban para la alimentación y el que estaba mas fuerte lo iban avanzando.

[How would they eat? Firstly, they had mules and they left with 80 adult animals, but they were there to serve as food. Whichever animal got tired was sacrificed and eaten and whichever one was stronger would continue the journey. C B C]

At that time, the importance of beef, particularly dried beef for longer term use, was important both to the people of San Miguel de Horcasitas and the expedition members.

Most families in San Miguel de Horcasitas had their own cattle. The cattle not only provided meat and lard, but were used for their milk. People turned the milk into cream, butter, and cheese. One community member remembers that his grandparents owned cattle and in order to produce cheese his grandmother would wake up at three in the morning to milk the cows. Other community members remember going as kids to buy milk at the store or little *abarrotos* because their grandmother did not own any cattle. Even so, the milk was as fresh from the cow as if they had milked it themselves. The kids remembered that the milk was always warm, a sign that it had just come fresh from the cow. A skin would form on top of the milk, also known as *la manata*, which was considered a treat to eat before drinking the cream. Some community members still make cheese for domestic consumption, for example in *caldo de queso*, and for sale.



Figure 6.55 Typical Beef Dish in San Miguel de Horcasitas

Pork products, though not as popular as beef, were also consumed as some community members described. *Chicharrones*, the fried skin of a pig (pork rinds), was a tasty dish to have on occasion, as well as roasted pork. When a cow or pig was killed, the intestines or *tripas* of the animal was used, not only in soups like *menudo* as mentioned later, but also as casings to make *chorizo*. Two community members described how their job as kids was to wash the tripas in the river so they could use them for foods like chorizo. Chorizo is a type of spicy sausage with garlic and red chili that was cured and easily stored. One community member remembers her parents making chorizo to preserve the pork:

Pues yo veía a mis papas que ellos mataban puercos y así como esta esto, ahí ponían el chorizo y eso y se conservaba. Y ahora no, es que los animales tienen muchos químicos, mucho cochinerito. Ahora el chorizo que se compra se hace

malo muy rápido, y antes no, me acuerdo que antes conservaban lo que era el chorizo y la carne.

[Well I'd see my parents kill the pigs, and just how this is, they'd put the chorizo in there and that's how it would be preserved. And now it doesn't, because animals have too many chemicals, a lot of filth. The chorizo that is bought now goes bad very fast, and before it wouldn't, I remember that before they'd preserve chorizo and meat. RA]

She notes that the quality of the meat has decreased and that now the meat does not last as long as it used to in the form of chorizo. Another community emphasized how the tripas were used to store food for the Anza expedition in order to assure that it did not spoil and emphasized chorizo as one of the foods, along with other foods like beans, carried in the tripas:

Sí, dura un año y ya se va cortando en partes lo que sea necesario nada mas y eso se guisa, pero lo que tiende más a perderse es la carne de puerco, el frijol pues se puede cocer en el día y en el mismo día se consume, y otro día podían volverlo a hacer, sucesivamente todos los días. Pero en cuanto a la carne de puerco, el chorizo lleva un condimento especial que es el chile colorado y el ajo pues tiende a perder por la grasa que tiene el animal que se contaminaba pronto. Entonces pues llevaban mucha tripa gorda.

[Yes, it lasts a year and whatever is needed is cut and is cooked, but what tends to go bad the most often is pork meat, beans can be boiled and consumed in the same day, and the next day they could do it again. But in regards to pork meat, chorizo had a special condiment which is red chili and garlic but it tends to go bad very quickly because of the fat that the animal has. Because of this, they carried a lot of large intestine. CBC]

Intestinal casings were also an important factor in keeping food both in the community itself, as well as on the Anza expedition. Upon arriving in San Francisco, it is likely that cattle, and possibly sheep or goats were used instead of pigs for their intestinal casing, since Voss (2008a: 238) notes that in the Building 13 midden, “sheep and goats are represented by only nine specimens, and no pig remains have been identified”.

Wild animals from the region supplemented the beef and pork diet of the people of San Miguel de Horcasitas. This seems to have remained consistent with the archaeological record at the Presidio which provides “substantial evidence that the colonists were supplementing their beef-based diet with wild game such as deer, hares and rabbits, waterfowl, turtles, and fish” (Voss 2008a: 238). In San Miguel de Horcasitas, animals like deer, quail, desert iguana, desert tortoise, javelinas, and rattlesnake were common food staples in regional dishes. Other regional animals they ate were rabbits and raccoons, which are further discussed in section 6.2. Quails were skinned and then cooked in the oven according to one community member, who also laughed explaining that her father joked “Que dice que nos crió con puras iguanas” [He says he raised us only with iguanas. TT] This same woman remembered hunting javelina, rabbits, and hares with her father in order to feed their dogs as well.

In the mornings, community members would go out with their burros to hunt for deer, or *venado*. The venado was easy to prepare because it was very tender meat so it could be made into machaca, carne seca, carne asada and stew. They were able to apply the same cooking techniques on the deer meat that were used on beef. One man in the community believed that this was a tradition that would have been common in San Miguel de Horcasitas during the time of the Anza expedition, “Sí sí, sin duda, ellos eran cazadores con flecha y yo creo que mataban venados y yo pienso que la carne de venado debe de haber sido un producto que lo llevaban seco durante el camino a San Francisco.” [Yes, yes, they were bow hunters without a doubt and I think they’d kill deer, and I believe that deer meat must’ve been a product that they dried and carried with them throughout the road to San Francisco. FLT] Carne seca or machaca made of deer was likely something expedition members carried with them. This practiced has remained as a part of San Miguel de Horcasitas’ culture.

Tortuga, or desert tortoise was another interesting meat that was discussed by community members. This animal is no longer eaten by the community because it is a protected species and illegal to kill. In the past however, as one family remembered, they would eat the meat from the tortoise with rice and *chile verde* which was made in a small pot. Another community member remembers eating tortuga made with potatoes, cilantro and onion. However, she also reiterated that “now they don’t let us eat them or kill them. They would punish you. It’s prohibited. The hunting of turtles, they don’t like it no more” QPF.

Rattlesnakes were considered important wild animals and were often hunted by community members. The father of one woman in the community taught her how to cook rattlesnakes and she told the story of preparing it for her grandchildren now that they are living in Tucson:

Ahh si, la víbora, es muy importante. La víbora de cascabel. Mi papa me enseñó a mi como hacerlo, y aquí en Arizona me traían las víboras de allá. Y le quita la carnita, y pique chile, cebolla, y cilantro, y la aplaste, y la hice la víbora. Y ese día había hecho tortillas chiquitas y vinieron y se la comieron. Y ya que terminaron de comer me preguntaron de que si de que era que estaba tan blanca y que? Víbora! Entonces ya lo demás lo dejas en sal muera, porque me dijo, la haces así y luego la mueles y haces albóndigas. Pero no era mucho y no era suficiente para hacer albóndigas. Entonces la saque de la sal muera y la metí al horno, oliendo a ajo y a pimienta y orégano. ‘Ay mama que rico huele! Que estas haciendo?’, ‘Ay que es eso?’, asustadas me decían porque estaba la víbora ahí. Entonces ya tostada y todo, la corte en pedacitos así, y la licue, y la hice en polvo.
[Ahh yes, the snake is very important, the rattlesnake. My dad taught me how to do it, and here in Arizona they would bring me the snakes from over there. I cut off the meat and chop up chili, onions, and cilantro, and cook the snake. That day I had made small tortillas and they came and ate the meat with them. Once they finished they asked me why the meat was so white and I told them it was snake. So you leave the meat in brine, my father had told me to crush it and make meatballs out of it but it wasn’t enough meat to make them. So I removed it from the brine and put it in the oven with garlic, pepper, and oregano. They’d say, “Mom what smells so good? What are you making? What is it?” and once they

saw the snake in the oven they got scared. So once it's toasted I cut it into small pieces and blend it and make it into powder. T T]

Whale was another animal used for its resources. A community member discussed how whales were hunted in Guaymas and how their fat was used in lamps in San Miguel de Horcasitas:

Se diluía con un poco de aceite de higuera y aceite de ballena y eran los faros que utilizaban para dar luz... Los primeros lugares poblados por los Españoles, fueron las playas. Los pueblos antiguos de Sonora pues vienen siendo Guaymas. Y siempre trataban de tener embarcaciones con productos del mar porque la carne de tiburón, la carne seca con sal es muy duradera. La utilizaba mucho el ejercito y el producto del mar, cazaban ballenas para el aceite, era la grasa que se utilizaba para dar luz, la ballena tiene una mas grasa que nada, entonces mataban una ballena en alguna embarcación y hacían un comercio en vender aceite.

[It would be diluted with a bit of castor bean oil and whale oil and it would serve as the lamps used to provide them with light... The first places populated by the Spanish were the beaches. Old towns in Sonora like Guaymas. They would try to receive as many products as they could from the sea because shark meat, dry meat with salt will last very long. It would be consumed a lot by the military, they would hunt whales for oil, it was the fat that would be utilized to provide them with light, the whale has more fat than anything else, so they'd kill whales and make a profit from selling the oil.]

Because of this practice in Sonora, it is not surprising that Voss (2008a: 313) discovered baleen whale remains in the Building 13 midden of the Presidio.

6.4.2 Wheat/Tortillas/Beans

In the past, community members grew their own wheat in San Miguel de Horcasitas and would grind it with the *mano* and metate to make flour for the tortillas. A community family member remembers having to help his grandmother by grinding the wheat as a kid “I’d hate it when she made those! Hate it!...I remember, I was so little, I would stand on a chair at the mill post and then I would get tired with this hand so I’d have to go with the other one... FHT” The flour was mixed with water, lard, and salt to make dough (see Figure 6.56). The tortillas were then cooked on a round, flat piece of metal called a *comal* (see Figure 6.57).

The comal was set over a fire in order for it to become hot, charcoal or wood was used for the fire, and it was noted that the mesquite wood made the most flavorful tortillas. Comales are still used to this day and eight were bought by Anza to carry on the expedition to San Francisco (see Appendix B). Voss (2008a: 248) notes her surprise at finding only four possible ceramic comales in the Building 13 midden, even though “many historical accounts indicate that military personnel of all ranks and their families consumed tortillas as a daily staple”. Anza included eight iron comales on his list of supplies to be bought for the expedition, along with the possibility that some expedition members brought their own iron comales. It is believed that there was at least one blacksmith on the expedition and in the presidio (see section 6.5), so it’s a possibility that the iron comales were also repaired by the blacksmith as necessary and when not

repairable, melted down for the creation of a new comal or other item. These few ceramic comales found in the archaeological record may represent an attempt to make comales more accessible or cheaper.

Many if not most families prefer flour tortillas to corn, but the women all knew how to prepare different kinds of tortillas including corn ones. One community member remembered very well that his mother made tortillas, he said, “sometimes big ones, but a lot of times the small... She knows how to make lots of different kinds of tortillas FHT” because, his mother interjected “Porque soy de San Miguel!” [Because I’m from San Miguel! TT] The corn tortillas were made smaller and thicker than the flour and used for dishes like tacos. Another family clarified the different types of tortillas; there are *chiquitas*, *grandes* and *gorditas*, the little ones, big ones and thick tortillas respectively.



Figure 6.56 Balls of Flour Ready to be Made into Tortillas

One reason why flour tortillas were preferred over corn tortillas was because of their size. Community members described them as thin and some were even up to an arms length in diameter. Two siblings remembered how tortillas were such a treat when their grandmother or mother made them when they used to visit San Miguel de Horcasitas as children. The large flour tortillas were great for folding and slathering with butter to eat. Community members also described making *coyotas*, which are small tortillas shaped into *empanadas* with one of the following: *piloncillo* (unrefined brown sugar), *jamoncillo* (continuously stirred boiled milk and sugar) or figs. It was emphasized though that.

Piloncillo, as mentioned above, is a form of raw brown sugar. In the past, sugar cane was grown in San Miguel de Horcasitas and one of the oldest persons in the community remembered their father making panocha, or piloncillo in packed blocks. Voss (2008a: 235) notes that small amounts of panocha were imported to the Alta California presidios.

The most common way, however, to have the flour tortillas or *tortillas de trigo*, was to serve it with beans. Tortillas and beans seemed to be a common duet at the dinner table. One community member stated:

There's a great story of my great aunt having a huge table... and they said there was always food and she was making tortillas, the flour tortilla, and a pot of beans, so I'm sure that the flour for the tortillas and the beans for the table were their own local produce. VL



Figure 6.57 A Community Member's Comal

Voss (2008a: 239) emphasizes that the importance of corn, wheat, and beans remained after the Anza expedition's founding of the Presidio, "Historical accounts of colonial foodways emphasize that cereal and bean dishes were central to every meal".

Beans or *frijoles*, played a larger role than just accompanying tortillas at the dinner table. They were used in a variety of dishes and held in the highest esteem in regards to nutrition and diet in the community. Community members emphasized what an important food source beans were/are to the community, especially considering that they still plant them today even with so little water available:

- » "y para todo tiene que haber el traste de frijolitos." [and for everything there has to be a plate of beans. VE]
- » Pues yo creo que la cuestión de los frijoles no ha cambiado. Yo creo que sigue siendo una formación que todos traemos en nuestro organismo, como que después de probarlos de niños nos exige toda la vida el comer frijoles. Es una

característica muy Mexicana, como en otros países se dan otros productos, pero nosotros son los frijoles.

[Well I believe that the matter in regards to beans has not changed. I think that it still remains as something that we all carry in our organisms, and that after having them as children, our bodies demand to eat beans all the time. It's a very Mexican characteristic, each country having their own different products, but with us it's beans. FL T]

- » “Y los frijoles que no le falta, porque aquí quien no come, no se llena.” [And beans which can't be excluded, because here who doesn't eat them, doesn't get full. GP]
- » “Mi hijo dice que se el viviera a pura base de frijoles y tortillas que fuera feliz, que a el no le importa nada.” [My son says that if he lived solely off beans and tortillas that he'd be happy, that he doesn't care about anything else. TT]
- » “Pero ya antes, eran las comidas originales como el frijol.” [But before, it was only original foods like beans. MT]

In order to prepare beans, first they must be boiled for a long period of time so they are soft enough to work with in any dish. Two of the dishes mentioned were *frijoles de fiesta*, which were served with cheese and chile and *taquitos de frijoles* (bean tacos), although most often they are simply served as is. Community members argued that beans would have been good to take on the expedition to found San Francisco and emphasized all the different ways to keep them from going bad:

- » “Pues los frijoles los teníamos que estar hirviendo cada rato para que no se fueran a perder” [Well for beans we'd have to be constantly boiling them in order for them to not go bad. DC]
- » “El fríjol pues se puede cocer en el día y en el mismo día se consume, y otro día podían volverlo a hacer, sucesivamente todos los días.” [Beans can be boiled and consumed in the same day, and the next day they could do it again. CBC]
- » “Chorizo en la tripa gorda, era como una manera de conservación y también en la tripa gorda llevaban algunos de San Miguel ya preparados con frijoles, frijoles ya refritos con manteca de res se guardaban en la tripa y duraban.”
[Chorizo in the large intestine, it was a way to preserve food, some people from San Miguel also had large intestines filled with prepared beans, refried beans with lard and they'd keep them inside the intestine and it'd last. CBC]
- » “No, se mantienen jugosos. Igualmente el chorizo. Tiene esa cualidad la tripa. Es como un empaque al vacío, que se sella y si no entra un germen patógeno no hay ningún virus que la eche a perder. Bueno, pues ese es un sellador que es impenetrable y se le hace un ligamento arriba que se corta y se le deja un espacio y que se vuelve a amarrar pero tiene que ser rápido para que no le entre gérmenes que contaminen el alimento. Eso vino de Europa, del desierto de Arabia, de Egipto, ellos lo trajeron de España y España nos

transmitió todo eso a nosotros. Pues no había refrigeradores ni luz eléctrica entonces fueron cosas muy ingeniosas.”

[No, they remain juicy. Same with chorizo. The intestine has that quality. It’s like an empty packing that seals and if there’s no germs that enter, there’s no virus that will make it go bad. Well, it’s a seal that is impenetrable and it is tied up at the top, but this has to be fast in order for no germs to enter and contaminate the food. This came from Europe, from the Arabian Desert, from Egypt, they brought it to Spain and Spain transmitted all of this to us. Since there was no refrigerators or electricity, they were very ingenious things. C B C]

Wheat was also used to make a well known traditional drink called pinole which is still made today, however, a community member clarified that it is sometimes made of corn now instead of wheat. To prepare pinole, first the wheat must be cleaned. To do this the wheat is cooked in the fire and once dry, it is rubbed between the hands to get the skins off. The wheat is then toasted and ground. It is then mixed with milk from cows or water to make pinole. The pinole was served in gourds (as cups) and with brown sugar. One community member mentioned how milk was the best way to have it with.

6.4.3 Corn

Corn, a critical food source for the community is used in diverse ways to create foods that have been consumed and passed down for generations. The knowledge and process of preserving seeds to be used for the next planting season was and still is an important technique used to ensure a successful harvest. This process of preserving the most robust seeds and passing them through generations has resulted in what is known as heritage seeds or heirloom crops, which are discussed more thoroughly in section 6.2.

One community member remembered that white corn was the most prominent kind of corn grown and used in the community. She also mentioned a number of other kinds that were harvested as well:

“There was a type of corn that used to be called maíz dulce [sweet corn]. Then there was another one called maíz reventador [popping corn], and you can make popcorn out of that. I mean that’s what they sell now probably. QPF”

The sweet corn or *maíz dulce*, was so soft and delicious that it was just eaten as is. Community members also described the use of *elote* which is sweet corn that has been picked before it has matured resulting in a very tender kernel. The elote is then dried, at which point it is called *masorca*. The dried corn is taken off the cob and then boiled, it is then called *nixtamal*. The nixtamal is used in a variety of ways. It can be used whole in dishes such as menudo and pozole or it can be ground up and used as *masa* (dough) for foods such as tamales and tortillas. A mano and metate is utilized to grind the nixtamal (see figure 6.58). One community member noted that she had never ground corn with a mano and metate, but she showed us her grandmother’s and how it was used to grind corn, wheat, and coffee. Another kind of stone was used to mash chiles and tomato in order to make salsa. For more information on manos and metates and the process of making corn tortilla, see Dr. Dobyns’ discussion of both in Chapter Four.

Additionally, Voss (2008a: 244 and 339) recovered a piece of a mano from the San Francisco Presidio. However, the lack of mano's and metate's, and the sharp decline of kernels in the archaeological record at the Presidio, may have resulted from women at the local missions being assigned the task of grinding grain for those who were living in the presidio.



Figure 6.58 Mano and Matate

Additionally, Voss (2008a: 244 and 339) recovered a piece of a mano from the San Francisco Presidio. However, the lack of mano's and metate's, and the sharp decline of kernels in the archaeological record at the Presidio, may have resulted from women at the local missions being assigned the task of grinding grain for those who were living in the presidio.

Chicos were also made from corn. To make these, the corn would be dried and scraped off the cob and then crushed. These were then eaten during Semana Santa (Holy Week). To make tortillas, the ground nixtamal is used with lard, water, and salt to make the masa which is then formed into the shape of a ball and then hand shaped tossed until extended into the preferred size of a tortilla and cooked on a comal, preferably over mesquite wood, which was described in the subsection 6.4.2. Another corn dish staple was tamales. Tamales were made with different kinds of fillings besides the corn masa and could be considered seasonal. One community member remembers having red and green tamales. Red tamales were normally eaten at Christmas and the green ones were common in the summer. Another community member remembers having tamales with beef, garlic and chile.

Corn, in the form of meal, along with the other major staples such as beans, beef, and wheat flour, were listed in Anza's list of expected supplies and included in the cost for the founding expedition (see Appendix B). Clearly, these foods were deemed incredibly important and still are today. Sugar and *aguardiente* (a strong alcoholic beverage), although taken on the

expedition, are not common in modern day San Miguel de Horcasitas. However, their equivalents, piloncillo and bacanora are still prevalent. Chocolate was the only other food item that was provided to most of the members of the expedition and is not reflected in the community today. Meals described at the Presidio included beef, beans, bread, tortillas, other corn and wheat dishes, soups, and cheeses. Other forms of alcohol and chocolate were once again, drinks not currently found in San Miguel de Horcasitas, but which were included in the diet of the wealthy at the Presidio (Voss 2008a).

Apparently against Anza's will, additional food sources of a finer quality and likely of Spanish origin were also included in the anticipated supplies for the expedition. Anza possibly opposed the inclusion of these special foods because of the unnecessary cost and/or space used. The more probable conclusion for Anza's opposition to carrying luxury provisions was that it was an effort to minimize a hierarchical scheme among the expedition members that would have hindered necessary cohesion.

6.4.4 Fruit

Fruit and nut trees were also prevalent among the homes of community members and they felt that it was significant that Padre Kino first brought fruit trees into the area. Most had some variety of fruit trees growing at their home (see figure 6.59). Juana Briones, the daughter of an Anza expedition member who was previously discussed in the section 6.3, had a fruit tree orchard at her home at El Polín (Voss 2008a). The most common fruits grown today and in the past included lemon, lime, quince, orange, grapefruit, peach, apple, fig, pomegranate, and pear. There were two kinds of lemon trees, *limón real* and *limón chiquito* (or *colima*), which was used for *limonada*, or lemonade. One family described how lemons were used to make lemonade. The juice was squeezed from the lemon and mixed with water and sugar then left to sit for three days. A sweet lemon tea was also made called *limón de castilla*.



Figure 6.59 An Orange Tree in a Community Member's Yard

A community member remembers his grandmother making this “healthy, refreshing tea” using the lemon leaves. Sweets were also made from lemons, quinces, figs, peaches, and other fruits. White and purple varieties of figs and peaches were used as empanada fillings. One community member mentioned that there were Valencia oranges, while another simply stated that there were sweet ones and bitter ones. One community member joked about bitter oranges saying, “Los chamacos son los unicos que se las comen, le hechan y chile asi se la comen.” [the kids are the only ones who eat them, they put chili on there and eat it that way. MC] Walnuts, *nogal* or *nuez de castilla*, were also present. In addition to local fruit, one family described a drink made from pineapple called *tesquin*. They would take the pineapple skin and soak it in water with *piloncillo* or raw brown sugar and it tasted something like wine but was non-alcoholic.

6.4.5 Soups/Stews

A variety of other dishes, like soups and stews, were popular as well. As community members remember, people cooked everything in clay pots, on comales, or in wood ovens before there were pans. Voss (2008a: 221) notes that a substantial percentage of the ceramics used in food preparation were made locally in the San Francisco Bay area, but that the, “Native Californians indigenous to these central California coastal regions used baskets instead of pottery to store, prepare, and cook food.” She contends rather that, “Most likely, these potters were individual colonists at the Presidio who drew on their knowledge of vernacular pottery production in northwest Mexico to fashion makeshift pots from local clays” (Voss 2008a: 230).

Voss (2008a) emphasizes that the archaeological record demonstrates that the residents of the Presidio de San Francisco were cooking and eating mainly liquid-based foods, including cereal, bean, meat dishes, along with other soups and stews. She argues that the emphasis on liquid-based foods was a time saving measure for the colonial women, who were needed to serve in a wide variety of roles, as discussed in section 6.5, and also because of their positive connotations in both Mexican and African diaspora communities. Based on the prevalence of liquid-based foods cooked in clay pots in the history of San Miguel de Horcasitas, it seems likely that the founders of San Francisco were simply continuing the food practices that had sustained them in their communities of origin. With the exception of the few foods cooked on the comal or baked in the oven, all other cooked foods were made in clay pots as liquid-based foods. In addition to the meat and bean dishes already listed, community members in San Miguel de Horcasitas mentioned several other liquid-based dishes. *Pozole*, one of the most common dishes, is made of corn that has been soaked in lime which makes it easier to digest. It can be made with a variety of additional ingredients depending on the individual or family. Two ways of preparing it were described: one with either pork or beef and another with animal bone, and sometimes meat, corn, and tepary beans. Another form of pozole they called *pozole milpero*, milpero meaning it has something of everything from the *milpa*. In this case, the family described it using wheat, milk and tepary beans. *Menudo* was another type of soup which is made with the intestines of a cow or pig. *Caldo de queso* was made with freshly made cheese, tomatoes, potatoes, and green chile. Chicken soup was made with fresh chicken, and there was also noodle soup and vegetable soup, both of which were a common meal for some families.

6.4.6 Wild Foods

Pitayas, also known as the organ pipe fruit, is a popular food in San Miguel de Horcasitas that has been gathered and consumed since the time of Anza. The growth cycle of the pitaya starts in June and usually lasts two months after July when the summer rains begin. All of the community members remember eating pitayas and many still collect them to this day. It was explained that people would go out with buckets to gather the fruit and, using a *pitayero*, or long stick with a crossbar, they would knock the fruit off of the cactus. One community member explained the *pitayero* like this, “Con un pitayero. Se hace con un palo largo. Y se le hace una paletita de madera y se le hace un pico. Con el pico y la misma paletita le quitan la fruta.” [With a *pitayero*. A large stick is made. And then a wooden edged side is made with a sharp point. With the edged side and the point they take off the fruit GP]. Another community member preferred another method, “Pues nosotros como somos mas altos, los vaqueros cuando andan en caballo nomas se suben arriba de la montura y la sacan.” [And well us who are taller, the ranchers who are horseback just stand on top of the mount and take them off. MC] The pitayas were cleaned and then eaten fresh, right from the cactus. Community members described them as very sweet and juicy with fewer spines than prickly pear fruit that can be removed with a stick. They also used the pitaya to make a sweet candy by continuously boiling and stirring, but this was considerably less common than eating them fresh.



Figure 6.60 Field of Prickly Pear Cacti

Tuna is the name for the prickly pear cactus, as well as its fruit (see figure 6.60). The prickly pear pads, or *nopales*, can be eaten raw or cooked when they are in season, which is between April and May. One community member remembers attempting to conserve *nopales* like other community members did, but said that it never worked for her. And although she had no luck conserving the *nopales*, she did enjoy collecting and eating them and explained the process, “Si pues, agarras el nopal, lo cortas, yo uso unos guantes, lo corto y luego ya lo pongo aquí y con un tenedor y con el cuchillo le hago así, y le quito las estinas y lo volteo, y luego ya le

corto al alrededor, y lo lavo. Lo comemos crudo o con limón, o con chile y con carne.” [Yes well, you grab the prickly pear pad and cut it, I use some gloves, I cut it and then...I scrape them off and do the same on the other side, and then you cut the edges off and wash it. We eat it either raw or with lemon, or with carne con chile. T T] Prickly pear pads were also eaten with eggs. Another community member remembered watching girls collect prickly pear fruit and pads when he was living in San Miguel de Horcasitas as a child, “Las tunas, los nopales, aquí en mi niñez había mucha tuna, y yo veía pasar a las muchachas por enfrente de aquí del cerro, y llevaban tenedores y cuchillos y comiendo tunas.” [Prickly pear fruit, pads, during my childhood here there was a lot of prickly pear fruit, and I’d see girls walking by here in front of the hills who were carrying forks and knives and eating the fruit. F L T] Most community members mentioned how they enjoyed both prickly pear pads and fruit in most of their diet.

Saguaros, though not in the immediate area of town, were sometimes used for their fruit. One family explained how they used a device called the *pitayero* to pick the fruit, named like this because of its similarity to the tool used to pick pitayas. The *pitayero* was longer because of the height of *saguaros*. The fruit would then be cleaned and juicy flesh scooped out with a spoon.

The fruit of the *sinas* (*Stenocereus alamosensis*) and *senitas* (*Lophocereus schottii*) were also eaten, but it was mentioned how they are smaller and do not have the same taste.

Honey was another wild food gathered by community members. It was gathered straight from the beehive with careful technique. Two community members described the method (C B C, J C):

Using a dead fibrous organ pipe cactus to create a smoke torch it is possible to approach a hive to collect the honey. The smoke torch is used to keep the bees away from the harvester and away from the hive. It would not be possible to get close to the hive without the smoke torch. The organ pipe makes a good torch because it is hollow and smokes easily.

Bacanora, a common alcoholic beverage consumed in San Miguel de Horcasitas, is made from the maguey plant that is native to the region (see figure 6.61). All community members knew about this drink and one explained the process of harvesting and fermentation. He explained the importance of harvesting the plant before it begins to sprout out the main shoot and not over harvesting. In order to not over harvest the maguey, it is best to only take a few of the mature plants and then leave behind the younger growth so that it has a chance to develop. This community member explained that many other maguey harvesters take too many plants and kill off whole patches, which is why this knowledge is so important for the sustainability of the plant. During fermentation, he explained that there are a few ways to distill the maguey which makes the alcohol stronger or weaker depending on the sugar levels. Another community member remembered that her uncle used to make *bacanora* at the distillery in town. She would accompany him to the distillery but was not allowed inside. Another community member told a story of one experience she had with *bacanora* as a kid while hanging around the outside of the distillery:

So when the sun goes down they said okay kids go home and we left but instead of getting the path to the house, I grabbed the path to the other house. And I went to the house and there was a big box where the grinder was and that's where I laid down and fell asleep...I was drunk. I was little!

Bacanora is a traditional alcoholic beverage that would have very likely been present at the time of the Anza expedition.



Figure 6.61 Music and a Glass of Bacanora

The founders of San Francisco would have quickly come to the realization upon arrival that maguey does not grow even relatively close to San Francisco. The inventiveness of the founders would have likely left them with possibilities for alcoholic beverages, despite the lack of the maguey plant. As one male community member commented:

Les decía un vino se puede elaborar de cualquier fruta en estado de descomposición. Se fermente. Por ejemplo la cáscara de la papa, bueno le quitamos la cáscara a la papa y la metemos en recipiente con agua hirviendo y se tapa. Se le da de acuerdo a los grados en invierno y pues mas tiempo y en verano menos, y sale un vino, del maíz también sale un vino.

[Well any wine can be made from any fruit in a state of decomposition. It ferments. For example, with potato peels, well, we peel the potato and place the peels in a recipient with boiling water and cover it. You leave it in there depending on the temperature, more time in winter and less in the summer, and from there you get the wine. You can also make a wine from corn. CBC]

It seems unlikely therefore, that the founders of San Francisco would have simply remained alcohol free due to the lack of maguey, but rather that they would have found other appropriate local plant species and been able to adjust their methods to their new location.



Figure 6.62 Community Members

A variety of greens that grow wild in this region were frequently used and talked about. These greens include *mostaza* (mustard leaves), *berro* (watercress), *verdolagas* (purslane), *quelites* (pigweed), and *choales* (fish goosefoot). Berro grows in the river, while verdolagas, quelites, choales and mostaza all grow in the fields. Berro, quelites and choales were commonly used as salad greens, while the mustard leaves were cooked down with salt to taste. One community member described a salad made with berro, “Los berros se dan en el agua, en el río. Es muy bueno en la ensalada. Es una ramita verde, y la pica bien y se le hecha tomate y limón y riquísima. La ensalada de berros. Es lo que sale del río.” [Watercress grows in the water, in the river. It’s very good in salads. It’s a green twig, and you chop it up well and mix it with tomatoes and lemon and it’s really good. GP] Another community member emphasized that quelites need to be picked when the plant was young and that it was used like spinach with elderberry. Choales were usually in season in March and April and so they were a staple food during Lent and Semana Santa. One community member emphasized verdolagas as being one of the original foods that people ate in the past, along with squash, beans, and watermelon.

The founders experience with wild greens in Sonora and Sinaloa would have influenced their interaction with wild greens in San Francisco. This is seen by the wild greens that were consumed in the Presidio. For example, during the 2010 Annual International Conference of the Anza Society, one of the descendents of the founders of San Francisco talked about how her family used to eat a plant in California called *malpica*. According to Strehl (2003: 205), malpica: is an undefined herb that is commonly used in salads, along with chervil, tarragon, and green onions.

In addition to wild greens, non-cactus wild fruits were also eaten. Chiltipin is popularly used as a spice due to its intense flavor, as discussed in chapter four. A wild version of tomatillo was also found in the fields and could be consumed. Garambullo (Mexican Devil's claw) was a popular fruit because of its natural sweetness. Garambullo and bachata (wolfberry) fruit were both used as food but also had additional purposes as discussed in section 6.3.

The pods from mesquite trees were used in several ways, including making bread called *pan de viejo*. The mesquite pods would be crushed with a mano and metate until it was a flour-like consistency. The flour would then be made into bread dough and baked in the oven. This bread was usually shaped into long rolls. Crackers/cookies, or *galletas*, are also made from the crushed mesquite pods. A drink is also made out of the mesquite pods, called *atole*, but it is noted that only certain people in the community make it. The mesquite pods were cooked, crushed finely, and then cooked again. To make the drink, the crushed cooked mesquite pods were dissolved with piloncillo and it was noted to be "muy bueno en tiempo de calor" [very good in times of heat. RA] Tabachín (*Caesalpinia pulcherrima*) pods were also eaten.

As previously mentioned in section 6.3, community members recognized that much of the local knowledge about wild plants came from indigenous sources. One community member particularly emphasized how wild food sources were learned from local indigenous people who gathered them:

Vivían de las plantas, por temporadas. En verano por ejemplo, hay una planta que se llama bachata que da una vaina muy sabrosa y muy dulce, la pitaya, el tabachin, y etc. Hay muchos productos que ellos recolectaban, y hacían masas, en el monte se encuentran piedras con hendiduras, donde con otra piedra hacían masas. Y eran alimentos para los niños y para ellos también. Bueno pues eso también lo aprendió del indio. Así como aprendió a subsistir, si se te acaban las provisiones en el campo, y había pitaya, pues se alimentaban de pitaya, eran recolectores. Y agarraban una bolsa de tabachines, es una vaina muy sabrosa, antes de madurar. En los meses de agosto, septiembre y principios de octubre es un alimento muy nutritivo, muy fuerte, muy bueno. Es como la nuez pero más chiquito, dan ejotes.

[They lived off plants, by seasons. In summer for example, there's a plant called bachata that gives a very delicious and sweet pod, the pitaya, tabachin, and etc. There's a lot of products that they would gather, and they would make mixtures, out in the woods you can still find rocks with fissures, where they would use another rock to crush the food and make a mixture. And this would provide them and their children with food. This they also learned from the Indians. This is how they learned how to subsist, if they ran out of provisions out in the field, and there was pitaya, then they'd feed off pitayas, they were gatherers. They would also have bags full of tabachines, it's a very delicious pod, right before ripening. In the months of August, September, and beginning of October, it's a very nutritious and very tasty source of food. It's like a walnut but smaller, they produce green pods. CBC]

The community members in San Miguel de Horcasitas learned how to use local wild food species from local indigenous people in order to ensure a level of food security above what their crops could provide (see chapter three for additional discussion of this topic). The founders of San Francisco would have also likely watched and learned from the local indigenous population which plants were edible and how to use them in order to guarantee a level of food security. This would have been necessary while adapting their agricultural and livestock systems to their new environment. That being said, in San Miguel de Horcasitas community members only eat wild fruit fresh off the plants and only the crushed pods, cactus pads, or leaves were cooked, and therefore wild plant use in San Miguel de Horcasitas would have left virtually no archaeological record just as Voss (2008a) found virtually no wild plant record at the Presidio. The Anza expedition members may have preferred wild fresh fruits and leafy greens found in the San Francisco area due to their similarity to wild plant uses in Mexico, even though they were not the local indigenous staples. Dr. Dobyns notes in chapter three that acorns in Sonora were simply used as livestock feed; despite the fact that on the Founding expedition “Soldiers described native foods in familiar terms- cakes of acorn flour and deer meat resembled tamales, and gruels of ground seeds were similar to the corn-based atole¹ (porridge) that was a staple of the colonial diet,” the Founders apparently maintained their cultural preference for cereal based staples with the likely inclusion of nuts, berries, and wild greens (Voss 2008a: 43).

6.4.7 Squash

A very common food staple in San Miguel de Horcasitas was *calabaza*, or squash (see Figure 6.63). Several varieties of squash were grown by community members and one of the most popular dishes using calabazas was called *bichicorris*. The process of making bichicorris is described by one community member:



Figure 6.63 Several Types of Squash

¹ In San Miguel de Horcasitas, what is called atole is made with mesquite flour and pinole is made with wheat. These are Northern Mexico varieties of these two traditionally corn based drinks.

Y la calabaza la agarrabamos y la pelábamos. Eran calabazas grandes y tiernas, y se trozaban en rueditas y se metían en un palo y se ponían a secar y de ahí ya la guardábamos para la cuaresma y se les llamaban bichicorris... Sí, duraban lo ponían para que se secase la calabaza y así y esto servía para cuando no había calabaza.

[So we take the squash and peel it. They were large and tender squash, and they'd be cut into circles and placed through a stick, and then they'd be set out to dry and stored for Lent, those are what we call bichicorris... Yes, they would last, they'd put them out to dry, the squash, and this would help in times where there was no squash. GP]

One community member said that there were many different kinds of calabazas grown and each were used for different dishes. They also made a sweetened dessert dish with squash similar to *dulce de cajeta*, and it was noted that, “Esa es tradición.” [This is a tradition. VE]. It was made into a paste with piloncillo and then served with bread, tortillas and/or milk. Another type of larger squash was used for making empanadas, galletas, and sometimes stews.

6.4.8 Green Chili

Green chili was used in several dishes, such as caldo de queso and *tortas de huevo*. One community member commented on how they would be preserved for later use:

Pues dice mi mamá, que cuando cocinaban el chile verde, los metían en unos costales, en unos sacos y hacían unos hoyos, y ahí los echaban los sacos. Y de ahí los estaban sacando y que no se podrían. Y el tomate lo secaban también, y el chile verde lo tatemaban y lo colgaban también y así se conservaba pues.

[Well my mom says that when they'd cook green chiles, they'd put them inside sacks, in sacks and they'd make holes in the ground and they'd place these sacks inside. And they'd pull them out from there and they wouldn't rot. They would also dry tomatoes, and they'd cook the green chiles and hang them up to dry and that's how they would preserve them. TT]

6.4.9 Holiday Foods

Holiday Foods	
CHRISTMAS	SEMANA SANTA (Holy Week)
<i>Buñuelos</i> (doughnut/fritter)	Quelites (wild spinach)
Menudo (soup)	Chicos (corn dish)
Red Tamales	Fish and/or Seafood
Pozole (soup)	<i>Tortas de huevo</i> with chile (Egg Sandwich)
<i>Pierna</i> (leg of animal)	<i>Capirotada</i> (bread pudding)
Turkey	Calamari
Champurro	<i>Lisas</i> (a type of fish)

Table 6.1 Foods and Their Corresponding Holidays

Many dishes were also associated with specific holidays. Some of these foods and dishes have already been discussed earlier in the section. Ones that have not include, capirotada, buñuelos, pierna, tortas de huevo, and lisas. Capirotada is a common yet interesting dish traditionally served during Semana Santa (Holy Week). It is a dish similar to bread pudding but it can be made with many different ingredients. One version of this dish provided by a community member included toasted bread, cheese, butter, apple, banana, plums, and raisins. These ingredients were all soaked in water with piloncillo. Cinnamon, green onion and cilantro were added to give it even more flavor. Other examples of food associated with Semana Santa are buñuelos (fried dough similar to a doughnut or fritter); pierna (the cooked leg of an animal like beef or pork); and tortas de huevo (Egg Sandwich). During the week of Lent, seafood such as lisa, a type of fish, is fried in oil with mustard and vegetables and eaten. Fish from Guaymas was remembered as a common food in San Miguel de Horcasitas.

General celebrations included many of the same foods enjoyed during everyday life. One community member stated that, “Pues yo digo que es lo mismo porque pues para fiestas siempre hay menudo y la barbacoa, carne con chile, carne asada, gallina pinta. Esa es la comida mexicana.” [Well I’d say it’s the same, because for parties there’s always menudo, barbacoa, carne con chile, carne asada, and gallina pinta. This is Mexican food. VI] Gallina pinta was describes as corn and beans cooked with bone. Another community member added meat, green corn tamales, baked bread, cheese, toasted coffee (as opposed to instant), and cold soup to the common celebration food items. Cold soup is made with mayonnaise, yellow cheese, and green corn.

6.5 Livestock Raising

Livestock and livestock raising have long played important roles in the lives of the community members of San Miguel de Horcasitas. It was said that Padre Kino brought livestock to El Pópulo even before San Miguel de Horcasitas was in existence. One community member emphasized:

Todas esas cosas las trajo el Padre Kino, y por aquí enfrente pasaba porque todavía cuando el Padre Kino hacia sus travesías arriba de una mula todavía no estaba San Miguel, pero estaba un lugar aquí que llama con el nombre del Pópulo, y ahí si llegaban y entonces todas esas cosas estaban, y habían este Seris que los habían traído para acá para que no anduvieran haciendo daños por allá donde andaban y aquí andaban en el Pópulo, esta a ocho kilómetros de aquí. Y ahí era el lugar donde el Padre Kino llegaba. [All these things were brought here by Father Kino, who would pass through here during his travels on mule, during his time San Miguel had yet to be founded, but there was a place here called ‘El Pópulo’, where they would stop. There would also be Seris here who had been brought there to prevent them from doing damage around the region so they’d be brought to ‘El Pópulo’, which is around 8 kilometers from here. This is where Father Kino would stop at. FLT]

Since the time of Kino, community members have continued to raise and maintain both horses and other kinds of livestock. One community member noted, “Antes sin caballo no podían existir, el caballo fue el que conquistó el mundo.”[Before without horses, they couldn’t live, the horse was what conquered the world. CBC] In order to maintain the horses and other livestock, community members were flexible with the tasks that need to be done on the ranches and in the households. They did not allow gender roles or the difficulty of the tasks to interfere. These values would have been essential not only to the founding of the presidio, but to successful maintenance of the developing community in San Francisco.

6.5.1 Role of Cowboys/Cowgirls

Almost every family in San Miguel de Horcasitas maintains at least some amount of cattle. Most of the men wear cowboy boots and hats, along with jeans and a button up shirt as both work and formal clothes. This *charro* style is both functional and fashionable. One community member said, “Nothing is more elegant than a charro! MV” (see Figure 6.64).

Although most of the women do not follow suit when it comes to clothing, it is notable that women were and often are called upon to do cowboy work and other traditional male-dominated tasks. When asked if agriculture and cattle ranching were men’s tasks, one community member responded, “Eso sí es mas los hombres, pero te puedo decir que mi mama era como un hombre en el rancho, porque mi mama era la que ordeñaba, la que mataba las gallinas, la que hacía todo. Mi tía también. [That is more for men, but I can tell you that my mother was like a man at the ranch, because my mom is the one that would milk the cows, the one that would kill the chickens, the one that would do everything. My aunt too. TT] Community members explained that, with ranching and agriculture, tasks had certain time

constraints. Therefore, whoever is available is responsible for doing necessary tasks. As we saw in San Miguel de Horcasitas, there are no days off when working with livestock and crops. One of the oldest women in the community told us, “I have worked a lot on horseback, as a cowgirl. I’ve worked on horseback two months, what do you think about that, with the livestock CP.” She explained that her husband died when they were young, so she took over all of the household and ranch duties. She was proud that she could do this work on her own and explained:

There was a policeman, and he said, I was signaling calves and cows, eh? And he said “you don’t have children that help you, you don’t have a husband?” No, my husband died and I have my children and none of them help me and I work here with my animals and I was left single very young, well like this, no more. Not too old, nor too young- CP



Map 6.1 Map of San Miguel de Horcasitas and Surrounding Communities

Other community members concurred. Daily tasks needed to be done and it did not matter who completed them. Due to this mentality, boys and the girls growing up on the ranches learn to work with livestock, grow crops, use wild plants, and other household tasks.



Figure 6.64 Typical Charro Clothing

The fact that everyone comes together to make sure all of the household tasks are completed, regardless of gender, is a trait that would have served the founders well. Without established settlements and trade, the founders would have been even more reliant on each other to ensure that everything was completed. Voss (2008a: 93) noted that “colonial women’s labor-farming, animal husbandry, food preparation, craft and textile production, healing and teaching- was necessary to the survival of colonial settlements”. Voss argued that, since all the adult men engaged in military service, the role of women was essential. They were needed to fill roles that were traditionally designated as male. Everyone would have been required to contribute in order to ensure the safety and well being of the community.

The community continuously emphasized the value of hard work in the maintenance of traditional lifeways. The son of a community member living in the

Tucson area recalled an incident that demonstrated how hard the community members of San Miguel de Horcasitas worked:

They're just some very hard workers. I went there and we had to take water to a couple of cows he was going to sell and he went from an elevation to get the water and hiked up this half a hill. And I went up there once with him and I was like ugh! I am dying! So I went down again and he saw me huffing and puffing and he said you know, just sit here and I'll do it. And he went up the hill, 6 times up when he came down again because I sat by the water and he was not huffing at all. He's younger than me, a couple of years and I'm like man you guys just... he did it without any problem, that's his day job. That was a small- and I just focused on that because that was you know, a 10 minute job and his days are 12 hours long and that 10 minute job made me tired, I wasn't even carrying a bucket and he's in cowboy boots walking up this treacherous path with two 5 gallon buckets FHT.

The value of hard work is something that was emphasized and passed on to the younger generations.



Figure 6.65 The Peak Referred to in the Story Below

As noted by Dr. Dobyns in Chapter Four, Spaniards in Sonora during the Anza Era did not value hard work because it was seen as peasant work. As a result, nearly two-thirds of the founders of San Francisco were not “español”. There is a story in San Miguel de Horcasitas that talks about a “greedy” Spaniard who climbed to the top of a nearby peak (see figure 6.65) and died because he could not find his way back down. Stories such as this may have served as

leveling mechanisms to prevent fissures and greed within a community. Anza may have noticed this discouragement of greed in San Miguel de Horcasitas and other founder communities, causing him to be attracted to these cohesive settlements during his recruitment efforts. Anza chose the founders of San Francisco based both on their work ethic and their emphasis on the humble life.



Figure 6.66 Community Member on Horse-Back

Community members also taught the younger generations that horses and other types of livestock are not playthings, but rather, large animals that need to be respected. One community member remembers learning this lesson the hard way:

Un día me robé un caballo de mi tío, “no te subas en ese caballo porque te va a tumbar” me decía, y dije yo “no me va a tumbar”, yo era experta porque mi papa me enseñó, entonces nos fuimos a donde corren carreras los caballos, se llama Tasque, y nos fuimos Cesar y yo, nos paramos a ver quien ganaban. Pues mire, Dios estaba con nosotros ahí, porque mi caballo que me había dicho mi tío que no agarrara, se fue tan rápido que no lo podía parar, y terminó la parte donde los caballos ya tienen que parar y no hallaba como pararlo y llegó Miguel y me dijo agárrate bien de la silla, y me quitó las riendas del caballo y lo jaló y no me tumbó. Pero por un pelito así, me matan los árboles. [One day I stole a horse from my uncle, “Don’t get on that horse because it’ll knock you off” he would tell me, and I said “It’s not going to knock me off”. I was an expert because my dad taught me, so we went to where they have horse races, it’s called Tasque, and Cesar and

I, we went, we stopped to see who would win. Well look, G-d was with us there, because my horse that my uncle had told me not to take, it went so fast that I couldn't stop it and the section where the horses have to stop already ended and I couldn't figure out how to stop it and Miguel arrived and told me to hold on tight to the saddle, and took the reins and he pulled and it didn't knock me off. But only by a hair the trees didn't kill me. TT]

Although community members were taught how to ride horses, they still had to learn how to respect them and their power. This would have been a very important lesson in establishing San Francisco due to the limited number of livestock and limited access to medical care.

6.5.2 Livestock Raised

Horses and cattle are by far the two most important types of livestock in San Miguel de Horcasitas. When it comes to cattle today, they have mostly mixed breed cattle. As noted in the food section, beef held a virtually unchallenged role as the staple meat. Horses were the unchallenged pack, transportation, and ranch work animal. A community member explained this importance when asked what horses are used for, “Pues mira, el caballo de todo. De medio de transporte, un medio de transporte que se uso en aquellos tiempos hasta ahorita, que todavía se sigue usando... para la cuestión de arrear ganado, los que tienen ganado.” [Well look, the horse for everything. As a means of transportation, a mean of transportation that was used in those times until now, that is still being used...for the question of herding cattle, the ones who have cattle. MT] This may not, however, have always been the case. One community member (GCA) notes that there used to be more mules before, but now it is mostly horses with hardly any mules. It is clear that Anza bought horses, mules, and cattle for use on the expedition and in San Francisco through the examination of his estimated expedition costs (Appendix B). Either Anza, or someone with him, would have had to know which animals could manage the entire journey and ensure that the “six Indian cowboys” were skilled at their task.

In addition to horses and cattle, community members noted that they have or have had mules, chickens, pigs, sheep, and goats. One community member discussed how some of the different types of livestock were introduced into the area:

Si, aquí se pobló de ganado acuno. Vacas y toros. Aquí se trajo la burra y el garañón. Ese es el animal que se procrea una mula o un macho. Dan animales de carga que son mas resistentes que retienen más líquidos que la bestia caballar, entonces también se trajo la oveja, la oveja de carne y la oveja de lana a la región. [Yes, this area was populated with cattle. Cows and bulls. The donkey and the stallion were brought here. From these animals is where the mule is procreated. They make pack animals that are much more resistant, who retain more liquids than horses, sheep was also brought to the region, sheep utilized for meat and sheep used for wool. CBC]



Figure 6.67 UofA Ethnographer and Community Member

6.5.3 Providing for Livestock

Although cattle held a privileged position among livestock in San Miguel de Horcasitas, there are many challenges to their maintenance. Some community members said that there are springs that are used to maintain livestock. One community member commented on this by stating, “There are five places that water naturally comes out of the ground. Ojo de agua it is called. It’s a place where the water just comes out of the ground. TT” This community member remembered that their cousins have a natural spring like this. Although there are natural springs in the area, community members explained that every year, cows die from the July heat and drought.

A circular reservoir that collects water when it rains, called a *vacahusari*, provides another method to maintain cattle. Today, machines are used to make vacahusaris, but shovels were used to construct the reservoirs in the past.

With the current long term water shortage, people have had to adjust their strategies in order to maintain their herds. As is further explained in the agriculture section, community members have been practicing what they call “agricultura de la ganadería” or growing forage in an attempt to secure a food supply for their livestock. Community members stated that, in addition to the forage they grow and the wild plants on their land, the cattle also graze up on the hillsides. Although, it is emphasized, “the cows can eat there but you don’t raise your flock there. FHT” Another community member explained the importance of having various places for the cattle to graze along with growing forage, emphasizing that:

Ah sí, se dedican más a la ganadería entonces en las tierras las aprovechan para sembrarle pastura al Ganado. Aparte de que andan en el monte, en su rancho, pero luego hay una cosa que se necesita cuando se está ordeñando, porque tienen un lugar donde la pastura no les falta. [Ah yes, they focus more on the livestock work, so on the lands they take advantage to grow fodder for the livestock. Besides grazing on the hillsides, on their ranch, but later there's something that they need when they're being milked, that's why they have a place where the fodder isn't lacking.]



Figure 6.68 Roaming cattle

Once again, the community members demonstrated the importance of livestock and their flexibility in methods to maintain their propagation. We know that Anza and the founders of San Francisco brought cattle with them and it is likely that their flexibility in managing livestock served to ensure the cattles' success, even in an unknown environment.

6.5.4 Fencing and Branding

Currently, each person has their land fenced off so the rest of the community knows that the enclosed land is for their cattle's grazing only. However, many community members remember a time when there were no fences and branding was the only way to show who owned which cattle.



Figure 6.69 Ranchers at a Fence in San Miguel de Horcasitas (Courtesy of Vicente Lopez)

One community member explained the process of branding the cattle:

1934, I heard the talk that all the cattle wild. The owners they would hire *vaqueros* to get their cattle. Then they would bring it when the baby calves would be born we would put them in the corral, they would brand them and then they would castrate the males and they would put the mark and then that way they would know... QPF

Bulls were castrated since the cattle ran free. Some wild cattle were present and some still remain today. Cattle would manage to get away, be killed, or stolen. A community member explained, "It was easier to steal then because there were no fences, the cattle would just wander. Some would go looking for water in the river... QPF" One community member told a story about the theft of an unbranded calf:

My dad and one of my uncles they couldn't go across the river [because it was flooded]. We had nothing to eat, well we had, little beans and stuff like that, so my dad and uncle stole the calf, a small one, but it wasn't from San Miguel. It didn't have a brand on it or nothing. So my sister and I were playing and we heard these noises. We looked and there was the calf running with a rope around its neck, my uncle with a gun because he was scared. We were there and the animal went by us and here comes my dad on a horse, faster, faster... He was running to the hill. They lift it and they grabbed it and they hide it. They killed it. At night though. They brought the meat on another horse. So then they tied it, the quarters

of the cow on the saddle they tied it. He would smack the horse and the horse would go home to bring the meat to us. And then my sister would say, Pancho, to my brother the horse is there, get up, the horse is there, get up. We would wake up in the night open the door to the horse with these mounds of meat on the horse. And then he would untie it, and that same night, let me tell you, there was a big fire. People would come with the ribs, they would cook the ribs in the fire. Before sunset sometimes they would hear them and sometimes they wouldn't hear them. They would wake us up. The meat is here the meat is here. The meat at night... We got all, but they had to eat meat at night, and in the morning they had grease all over them and all over everything because they're eating in the dark. They were scared to be caught. My dad he would dress the meat. He would say sit at the door, and if someone's is coming if you see someone, especially someone important, whatever, I don't know, guard the door. There is a family they used to call conejos, rabbits. And I saw the Rabbits and papá said did anyone go by and I said No just the rabbits! He didn't know, I told you, I told you and I'm sorry, what am I going to say and you should see him work, you know very tiny, tiny lamps, very tiny lamps and then the next day, they'd give us a slingshot so we could shoot the buzzard because the buzzard would take our meat! T T

6.5.5 Uses

In San Miguel de Horcasitas today, cattle are sold to traveling buyers and buyers located in Hermosillo. They are then transported to the United States to be sold as beef. Cattle used to be used for household consumption. This practice is re-emerging today due to the current market situation. Community members use cattle to provide cheese and other dairy products for their household as well.

Cattle and other livestock are slaughtered and used for home consumption. Community members stress that all parts of the cow were used and that nothing went to waste. One community member discussed slaughtering pigs for sale: “Sí sí. Cada rato matan, un muchacho que cría puercos ahí los mata para vender. Cuando matan puerco hacen fiesta. RA” [Yes yes. They kill them all the time, a man who breeds pigs kills them there to sell. When they kill a pig there's always a party. RA] Other community members noted that meat was shared. Based on Dr. Dobyns' discussion in chapter four, a celebration often occurred after an animal was slaughtered. For information on how meat and lard were eaten and used in cooking, refer the food section of this chapter.

Community members discussed the different uses of leather. One of the oldest community members commented, “Well yea, they tanned with things, with herbs, they tanned the hides and they made things from them, they made saddles, they made a lot of things. CP” Don Garate (1994: 6) noted, “Regulations at Tubac in 1772 required the ‘soldado de Cuera,’ or armed horse soldier, to use a ‘vaquero’ (cowboy or western) saddle. The ancient European war saddles had been abandoned for the more practical saddles developed by cattle ranchers on the frontier”, so it is likely that saddles made in San Miguel de Horcasitas were similar to those taken on the expedition. Additional saddles were made to replace saddles that wore out during the journey.

A former community member knows people who still make their own saddle blankets. Several other community members remember that they used to make *reatas*, or ropes and lassos, out of the leather and noted that they were a much finer quality than what they buy from suppliers today (see figure 6.70). Two community members emphasized this by stating:

Le daban vueltas al cuero y de ahí salían las reatas, que era mucho mas resistente pero ahora todo el progreso y estando en estos tiempos se acaba todo eso pero yo vi a mis padres y a mis tíos hacer eso... Pero yo creo que esas reatas de cuero yo creo que no tienen comparación, eran mejores esas.

[They would twist the leather and from here, the ropes would be made, which were much more resistant, but in these times with all this progress all of these practices end, but I saw my parents and uncles do this...but I think that these leather ropes are beyond comparison, these were much better. FLT]



Figure 6.70 Handmade Reata

En tiempo de mi infancia, esas costumbres se quedan con la gente, descendientes de la gente grande que vivió aquí. Yo admiraba mucho por la manera tan elegante de cómo hacían los tejidos del cuero para hacer reatas para lazar y para hacer riendas. Y la cerda de los animales que servía para lo mismo. Y luego se daban el

lujo de por ejemplo los colores que mezclaban que hacían unos tejidos tan elegantes y lujosos que ya no se hacen. Es muy bonita la indumentaria del pelo de la bestia. [During my childhood times, these customs were left with the people, descendents of the great people who lived here. I admired the elegance in the way they would weave leather, and how they would use it to make rope for lassoing and to make reins. And the bristle from the animals served for the same purpose. They would also give themselves the luxury of using colors that they would mix to make very elegant and luxurious fabrics that aren't made any more. Dress made from the hair of animals is very beautiful. CBC]

One community member explained the type of mount that Anza would have packed for the expedition:

Es de madera con cruces, como una montura de montar pero es de madera con cruces atrás y adelante. Y va rodeado de argollas. Argollas son como esas. Son de fiero fundido, de cobre no porque se rompe, tiene que llevar mucho fiero, y de ahí se hacían los enlaces, en aquel tiempo se usaba mucho la piel cruda de las reses, no había la industria que hoy conocemos como el textil y todo eso ni el petróleo. No había. Bueno se utilizaba para hacer cuerda la cerda y la crin de las bestias para hacer cabestros y las pieles crudas se decía el liaje le llamaban ellos. Que eran tres cortes pero torcidos y hacían una fuerza bastante considerable que andaba con todo y pelo y al final le ponían una pajuela que le llamaban de la misma piel pero ya curtida, ya trabajada, que era blanda. Entonces toda la indumentaria que ellos utilizaban era natural, era de la naturaleza propia... Es como una montura de madera que llevaba argollas y se utilizaba los cueros tejidos, y los mismos tejidos eran como maletas. Pero antes ellos los construían con la piel del toro que era más fuerte y le ponían un tejido y abría y cerraba con la misma piel. Y esa argena la perfeccionaban también para conducir agua. [It's made out of wood with crosses, like a riding saddle with crosses at the front and rear. It's surrounded by rings. These rings are made from cast iron, not copper because those would break easily, so it needed a lot of iron, and from there you would make the binding, in those times the raw hide of cattle was used a lot, the industries that we know today such as textile and all that did not exist, not even petroleum. There was none. To make the rope, boar bristle and horse mane was utilized to make saddle horns, as well as the raw hide of cattle, they would call it liaje. These three cuts would be then twisted, which would then make for a very strong rope, and at the end they would cover it with stirrup from the same skin, but already worked, which was soft. All of the dress that they utilized was natural, it was from nature itself... it is like a mount made out of wood that has rings and woven leather, and the weavings themselves would serve as suitcases. But before they would make these with the skin of the bull which was much stronger, and they would make a weaving that would open and close with the same skin. And this mount was perfected to be able to carry water. CBC]

This community member explained that they still have one of these types of mounts. This community member also emphasized that, “tenían que llevar la indumentaria de los caballos, para hacer riendas y cabezadas, frenos,” [They had to carry the equipment for the horse, to make reins, the headstall of the bridle, bits. CBC]. Blacksmiths were also needed during the expedition. “Bueno ellos levaban un herrero, precisamente hablan del herrero habla bastante que estuvo muy ocupado durante el camino. Llevaban un herrero ellos porque iban siendo muchos kilómetros que gastaban las herraduras de las bestias.” [Smelting metal is what we call it. Well, they had a blacksmith. They precisely talked about how the blacksmith was quite busy throughout the trip. They had a blacksmith with them because of the many kilometers of travel that were wearing down the horseshoes of the beasts. CBC]

Another community member noted that people continue to work metals in the community:

“Pues si hay aquí, pero como no hay mucha chamba en herrería. Antes cuando usaban fraguas, usaban este aparato muy antiguo que le daban vuelta y todos los fierros los forjaban con la fragua. Aquí tienen todavía fraguas. Pegan el fierro con la misma lumbre, esa le echaba viento al carbón la fragua y ablandaba el metal.” [Well there are some here, but since there’s not much work here for blacksmiths. Before when they’d forge, they used this machine that they’d spin and all the steel would be forged with it. There are still some here. They forge the steel with the same fire, it blows wind towards the coal and softens up the steel.]

Various craftsmen were needed to make and fix supplies during the expedition and after the establishment of San Francisco. Voss (2008a: 158) commented, “Although the data are not conclusive, there is also limited evidence that other kinds of craft production (low-fired pottery, lead shot, and possibly blacksmithing) occurred within buildings in the quadrangle as well.”

Flexibility was a necessity in the management of supplies. One community member reasoned that, since the horse was relatively new to the area when Anza was recruiting, “probablemente hayan ido como los indígenas, sin montura” [they probably went like the indigenous people, bareback]. The expedition had to carry all the necessary supplies and be creative to maintain and adapt their equipment throughout their travels.

Leather was used to make horse equipment and balsa boats to cross the Colorado River (see figure 6.71). The process used to cross the Colorado River was explained as follows:

Y también hacían balsas hechas de carrizo, y de otro material que se llama tule. Si como una base, tejido con cuero de res. O sea el cuero de res uncido, bien amarrado porque llevan unos estantes al centro y cada palito va amarrado al centro. Es una lanchita que flota. Pero ahí tuve que haber sido jalado por hombres y así estuvieron trabajando hasta hacer los pasar el río, que era tremendo. Era muy grande en ese entonces. [And they also made balsa boats out of hollowed out reeds, and from another material that is called tule (likely bulrush, *Scirpus americanus* or cattail, *Typha domingensis*) Yes, it was like a base, hand-woven with cow hide. It was the fastened cow hide, which was very well tied down, because there were these shelves at the center and each stick was tied towards the

center. It was a small raft that would float. But it must have been pulled by men, and this way, they must've worked in order to get everyone across the river, which was tremendous. It was very large in those times. C B C]



Figure 6.71 Colorado River Near Yuma (Courtesy of NPS)

A mix of leather goods and local reeds were used by the Mayos for roofing, mats, and walls. The Seri's made the boats that allowed all of the Anza expedition members and their supplies to cross the Colorado River (Yetman and Van Devender 2002 and Felger and Moser 1985).

Hermenegildo Sal, in a report to Governor José Antonio Romeu in 1792, wrote about the condition of the Presidio de San Francisco, noting, "All the roofs in what is built in the Presidio are of straw [zacate] and tule and are very much exposed to fire, as far as the authorities can realize it" (Sal 1976 (in Voss 2008a: 180)). Voss further notes that "The first quadrangle was constructed of a variety of materials and techniques, all of them endemic to the northwest Mexican provinces from which the Presidio settlers had been recruited" (Voss 2008a: 190). The settlers' knowledge of tule and construction techniques helped them both to cross the Colorado River and then to later construct housing and other buildings upon arrival in the San Francisco Bay area.

The Anza expedition knew how to make these boats through Yuman knowledge of the Colorado River and their previous knowledge about rivers. Their experiences in communities like San Miguel de Horcasitas taught them about the power of rivers. As one community member explained:

No era necesario nadar, porque si nadaban se los llevaba la corriente. Nosotros aquí tenemos un río que no es conveniente tratar de nadar, no es como en el mar. Tienes que ir sobre la corriente, por ejemplo si tu meta es donde está la yegua,

donde esta la potranca aquella tienes que tirarte a unos 120 grados y venir a salir a tu propósito. Ellos también se tiraban y no trataban de nadar, sino de flotar sin tocar fondo. Y en partes si logras llegar a fondo y en partes no. La misma corriente te va acomodando. Y se necesita habilidad para eso, y corriente. Si buscas la manera de nadar en un río, es muy violento un río. Te lleva la corriente. Adiós, y luego hace mucho remolino.

[It wasn't necessary to swim, because if they swam the current would pull them. We have a river here that is not convenient to try and swim in, it's not like the sea. You have to be on top of the current, for example, if your goal is by where that mare is, you have to throw yourself at about some 120 degrees and emerge facing your destination. They would also throw themselves and wouldn't try to swim, but to float without touching the bottom. In some places you'll manage to touch the bottom but not in others. The current itself will adjust you. And you need skill for this, and a current. If you find a way to swim in a river, the river is very violent. The current will pull you. Goodbye, and then there's a lot of whirlpools. CBC]

Expedition members knew that it was important to use their supplies, creativity, and relations with the local people to tackle challenges they encountered on the expedition. Their experiences in San Miguel de Horcasitas and other towns of origin would have taught them the skills needed to care for the livestock during the expedition. Voss (2008a) suggested that the safety of human members and adequate pasture for the cattle were major factors discussed in the planning of the expedition. One community member emphasizes the strategy of camping where there was sufficient water and pasture:

En un lugar donde no había un paraje o un pasto para alimentarse no acampaban. Podían hacerseles noche y si no encontraban un lugar había un guía adelante, y ahí donde encontraban al atardecer, un aguaje y pasto suficiente para los animales ahí descansaban. Ahí le daban descanso suficiente a las bestias de monta y de carga y el ganado para continuar. [In a place there was no grass to feed on they would not camp. It could get dark on them, and if they didn't find a place there would be a guide ahead, and where they'd find a spot with water and enough grass for the animals, they'd rest. There they would give enough rest to the load animals and the cattle for them to continue. CBC]

The expedition made sure that the livestock were secure by tying them up. One community member explained, “Los maniaban. Se les llama maniar, ósea se amarra una cuerda de una mano y de otra y se suelta y ya no caminan lejos, andan cercas. [They would tie them up. You tie a rope from one hand and from another one and you let it go and they don't walk far away, they're close.” CBC] Anza selected recruits from places like San Miguel de Horcasitas because community members had experience with cattle. The inventiveness of the expedition members and their effective use of supplies, based on what they had learned in their communities of origin, allowed the expedition to overcome problems that could have ended the entire enterprise.

6.6 Religious Practices

The central organizational system in the lives of many humans is their religion, therefore it is almost assured that the religious customs of Mexico were carried with those who left for San Francisco. As discussed earlier in chapter four, the Catholic religion was flourishing in Mexico during the time of departure to California in 1776, especially after the apparition of the *Virgen de Guadalupe* appeared to Juan Diego. As one of our interviewees, FLT, phrases it, “We can say we are more than Catholic, we are Guadalupeños.” With devout followers present today, we can postulate that the settlers of San Francisco were as passionate about the Virgin as well.



Figure 6.72 Cross on Top of a Hill in San Miguel de Horcasitas

6.6.1 Virgen de Guadalupe

As the story goes, on December 12th of 1531, Juan de Diego witnessed the apparition of the Virgen de Guadalupe atop Mount Tepeyac. The day that goes down in history occurs a few days later when the Virgin tells Juan Diego to take roses from the top of the hill to the bishop as a physical sign of her presence (see chapter four). When Diego arrives, he opens his cloak to deliver the roses. As the roses fall to the ground, the bishop notices that the image of the Virgen de Guadalupe is imprinted on Diego’s tilma.

This was not the first time Mount Tepeyac was used as a place for worship. In pre-Hispanic times, Mount Tepeyac was the same place a temple stood in honor of Tonzatzin, the Aztec mother goddess (Wolf 1958, 34). Today, December 12th is the day that the Virgin is commemorated and millions living in Mexico make the pilgrimage to Mexico City to honor Juan de Diego’s tilma at the Basilica of the Virgen de Guadalupe.



Figure 6.73 Altar of Virgen de Guadalupe Atop of a Hill Across From La Fabrica de Los Angeles

Not much has changed from the maguery or palmetto fiber mantle spread of the Virgen de Guadalupe (see Chapter Four). Throughout several of our interviews, residents explained that they have an area of their home dedicated to the devotion of the Virgin. One community member explained,

You would find that most homes would have their altars, their small altars, with their choice of saints. Most of them would have our Lady Guadalupe and then whatever patron saint... San Miguel de Horcasitas, Saint Michael the Archangel, and so therefore there would be candles and image (VL).

During our field work in San Miguel de Horcasitas, we had the chance to see some of the displays first hand. Candles, statues, beads, and shrines are dedicated to the Virgin. The iconography of the Virgin did not stop inside the home. We witnessed an image of the Virgin of Guadalupe painted along side the highway on a hundred foot cliff, on top of gravesites, and outside of homes as decorative pieces (see figure 6.73). We can expect that the settlers of San Francisco alongside the Native American population experienced a strong presence of the image as well, since the Virgin represents the amalgamation of the two cultures, the Spanish Europeans and the Native Americans. Pedro Font also mentions this unification of cultures in his journal entry of September 29th, 1775:

I told them that the principal patroness of all the expedition during the journey was the Most Holy Virgin, our Lady of Guadalupe, who was chosen with singular applause and affection by unanimous consent and with the approval of myself and the commander. For we were as one in the thought, and even before speaking about it we both had already decided that our patroness must be the sovereign Virgin Mary, Mother of God, under the title of Guadalupe, as mother and patroness which she is of the InDians and of this America.

The spirit in which devotion to the Virgin of Guadalupe is experienced at its height occurs on December 12th, the day many believe to be the first time the Virgin of Guadalupe presented herself to Juan de Diego.

As discussed by a community member, VL, this is one of the days that marks the beginning to the Christmas season; a time to inculcate the story of the apparition of the Virgen de Guadalupe to younger generations and refresh it for everyone else. MV explained that during the church service, many people offer flowers to the Virgin and people are dressed in white suits. Both community members see the Virgin of Guadalupe as a centerpiece of their religiosity.

6.6.2 No Priest Present—Folk Religion, Popular Piety, Popular Religiosity

In San Miguel de Horcasitas, not having an ordained priest in the community has emphasized their community bond by teaching and spreading the faith amongst themselves. Similar community settings would have been shared by the settlers of San Francisco. In early New Spain, missionaries were far outnumbered by the people. A religious system that would spread the faith and keep the faith was needed, due to a lack of manpower. Since having a priest in every town or village was not possible, a more organic type of folk religion was in order. This type of religious resilience is instrumental in communities with no resident priest. The ability for a community to stay united through religious practice probably played a key role in the persistence of the frontier community of San Francisco.

Two ways to describe a religion that is practiced outside of the official church are popular piety and popular religiosity. From childhood and on, it is up to the community members to teach and spread the faith to one another. The only time official ceremonies are held is when the priest comes to town. VL explained that when a priest or bishop is present baptisms, first holy communions, confirmations, and weddings are observed. A couple of community members [DC and CA] admitted that a priest would be present roughly once a month and when he was in town sacraments would be performed such as baptisms and weddings. These events are highly revered in the community; they are often accompanied by gifts and celebrations. VL continued to describe practices that go on in the community:

They have a sense of drama, and they re-enact the sacred moments and they take over the place and the priest cooperates, and is, what would I call it, host to the communities direction. I think that's part of the Sonoran experience of church, that they're very strong sense of their own Catholic identity and their own sense of church and so therefore they can operate on their own if and when until a priest might come. These communities are pretty self-standing. Even today San Ignacio

doesn't have a resident priest and they manage the operation of the community, as far as [faith goes]. VL



Figure 6.74 The Plaza and Church in San Miguel de Horcasitas

6.6.3 Religious Events/Traditions

Community members use the following religious events and traditions to strengthen their faith and maintain close family and community members' relationships. These traditions/celebrations have been explained to us by community members and may be some of the events the settlers of San Francisco practiced to keep normalcy and familiarity in a strange new land.

6.6.4 Lent—February to April (Includes Holy Week)

The Constitution on the Sacred Liturgy of Vatican Council II stated that Lent has a “twofold character”. According to the Vatican Council the two essential features that characterize Lent are the recalling of baptism or the preparation for it and penance.

Lent originated from the Anglo-Saxon word *lencten*, meaning Spring, the season in which Lent occurs. Today's Lent last for 40 days, beginning on Ash Wednesday and ending on Easter Sunday. Throughout history, Lent has been practiced in different ways. In its earlier years, the practice of Lent was more strict, especially during fasting. During the forty days, excluding Sundays, a person was only allowed one meal per day and meat or any other animal product could not be eaten. Now, the fast has been restricted to Ash Wednesday and Good Friday and

foods such as fish have been allowed. We know Lent was known to those on the Anza expedition from Font's journal. One of Font's entries describes their arrival to a creek on the Friday of Sorrows, the Friday before Palm Sunday. "When we arrived at a lovely creek, which because it was the Friday of Sorrows we called the [creek] Arroyo de los Dolores." The following quotes are what community members had to say about Lent:



Figure 6.75 Hill Where the Town's Stations of the Cross Ends

- » Then you have all of Lent and Lent has its own food. You have *tortas de camaron*, *nopalitos con chile*, and *capirotada*, bread pudding. Lent goes for 40 days and then Holy Week all things are suppose to be somewhat serious. I remember my grandmother wouldn't let us play the radio or the T.V. and we had to keep silence in the house and she would cover the statues with a purple cloth or a black cloth because we were in morning and it was very serious... and very silent the whole town was quiet and usually the little village of Sonora was boisterous. V L
- » They decorated the church for Holy Week. There was a particular time where they created the Garden of Yosemite in the church and then they have metal and so they create thunder because of the storm or the tragedy of Christ deliverance into the hands of the early Roman authorities. It's acted out and the churches, the freedom of which they operate is they take over the church for the garden scene and they also wake with the Virgin. They hold a velorio, a wake, and they accompany the Virgin all night and so that's another stage. It's a series of, there out there in the mountain on the way of the cross, they come into the town after

they create the Yosemite scene and then they have a crucifixion, and then, of a, you know, of a person, and then they have a wake with the Virgin, the sorrowing mother. It's sort of like the freedom to take over the church. Children are walking and sleeping and families are praying and rosaries are being said. Very devout, very respectful, but basically they re-domed the church to suit the theme and they bring in bows of branches of trees and then of course it's done up beautifully with flowers for Easter Sunday. VL

- » Sobre la pasión? Si, ósea que aquí en el vía crucis que le llamamos porque son como 12 o 13, no se, se va rezando el rosario con cantos, y ahí van jóvenes donde va cristo o en la cruz a cuestras y lo van golpeando los judíos, los malos pues, y lo van golpeando y ahí detrás de el va Maria Magdalena, quienes son muchachas de aquí mismo, se visten pues de los personajes estos y el termino de vía crucis es en el cerro, el que esta aya enfrente y ahí ya lo crucifican, lo suben a la cruz como puedan, lo amarran y lo llenan de chamoy no se que le echarán para que simule la sangre de cristo pues, lo llenan de pintura roja y ahí termina el vía crucis, el viernes santo se llama esto. Y el jueves santo se hace el lavatorio de los pies, donde Jesús les lava los pies a los apóstoles, el jueves santo. Y el viernes se hace el vía crucis, y el sábado a meDía noche se celebra la misa de gloria. El sábado de gloria. [About the passion? Yes, during the Stations of the Cross, the rosary is prayed through songs and chants. During this re-enactment of Christ's suffering and death, there are young men who represent the Jews who follow Christ and beat him throughout the procession. Behind them is Mary Magdalene who is usually played by young girls from here who dress up as the different characters, and the end of the Stations of the Cross is at the top of hill that is over there (see figure 6.75), where he is crucified. They tie him to the cross and hoist him up on the hill where he is covered with chamoy to simulate blood and this is when the Stations of the Cross comes to an end, which is what we call Holy Friday. And on Holy Thursday we do the Mandatum Ceremony (where Christ washes the feet of his Apostles). On Friday we do the Stations of the Cross, and on Saturday at midnight we celebrate the Mass of Glory. GP]
- » [Everything that was done to Christ. People dress up as the Jews and Christ who is carrying the cross while being beaten. And then Palm Sunday. VI]
- » Es cuando vamos a misa y la palma bendita no. Hacen la cruz, y esta bendita y la tienes en tu casa, y el día de 3 de mayo, de la Santa Cruz se quema. Y ya para el siguiente ano lo hacen de nuevo. [It's when we go to mass and receive palm leaves tied into crosses. They make the palm crosses which are blessed, and on the 3rd of May we burn it. This is done every year. VE]
- » Pues en Semana Santa hay un Día que bajan al cristo que esta arriba de la iglesia y lo quitan de la cruz, y apagan todas las luces en la iglesia y empiezan así como truenos, se escucha la iglesia como, no se golpean cosas o algo, y bajan al señor Jesús Cristo, y le bajan los brazos y lo acuestan... Es el viernes santo. El Jueves santo se toma prisionero y el otro día, el Jueves y Viernes se azota por las calles,

por ahí andas los chamacos haciéndole daño. Hacen este rituo.[Well during Holy Week there's a day where they lower the Christ that is on top of the church and they lower him from the cross, and they turn off all the lights in the church and they bang things together or something to make sounds of thunder inside the church. They then lower Jesus Christ and they lower his arms and lay him down. It's on Holy Friday. On Holy Thursday, he is taken prisoner and on Thursday and Friday he is beaten throughout the streets, the kids are the ones that beat him. They do this ritual. MT]

6.6.5 Día de San Juan—June 24th

Día de San Juan is the celebration of Saint John the Baptist's birthday. This is a festive time marked by dancing, music and food. Dancing, along with music, plays a large role in several of the community's celebrations and is considered to be a defining characteristic of themselves. One community member even noted that the Anza expedition brought along a fiddler and a dancer, he knew these arts were very important to morale along the journey to San Francisco.



Figure 6.76 San Miguel River

Saint John is the patron saint of water and is called on to help bring the rains for plentiful crops. Legend says that on June 24, 1540, Spanish explorer Francisco Vasquez Coronado stood on the banks of the Santa Cruz riverbed and prayed for rain. Because his prayers were answered, Coronado deemed, in declaration of faith, that from that day forward, the summer rains would come on the 24th day of June (City of Tucson, 2010). As Hank Dobyns previously noted in

chapter four (p.114), the celebration of Saint John had strong Mayo InDian support and was probably celebrated in the communities of the founders as well. The tradition of praying to Saint John for water may not have been as practical in water rich California as it was in the Sonoran Desert, but the practice may have persisted as it did when it moved from Mesoamerica to the Sonoran Desert. In both cases, each community shared two very distinct and separate climates.

- » I don't know because we weren't there all the time, but I know that once in a while. Like we were there once, Día de San Juan, I don't know if you remember that, but there was a priest because it was Día de San Juan and they had the mass, then they had a fiesta. They had the girls riding in the horses in the placita [the plaza]. I remember that because I thought, "Oh my God, it's like the movies!" You know, and I was already maybe, 8, 9, or something because I remember. And then at night they had, I guess in a school, a dance! Because I remember a big patio, must have been a school and a lot of chairs and the whole town was there, and I remember it was the first time I saw my mom and dad dancing away! I guess it's a typical small town life, like a Mexican typical life. They had like, just races, and yeah you know, just fooling around. The girls, you know, they would just go around and then I'm sure they had more things, but I was, you know, a kid, I just you know I was so – and then in la placita (see figure 6.74), everybody was gathering there and you know the excited and very happy, everybody was happy. I don't remember if there's music in la placita but I know that, it's a dance. They had a little dance DC. And I remember my mom telling us that they used to have to go down to the river and wet themselves completely. Because it was San Juan, because of the, you know, the Saint John the Baptist, and so they would, all the girls I remember her telling me that wherever they were they'd have to go into the river and completely drench themselves as if they were being baptized again (see figure 6.76). So that was the tradition from there CA. One thing that they always said too. They always waited for rain in Día de San Juan. You know, they were supposed to bring the water and that's supposed to bring the water– DC. For the harvest CA.
- » Se hacen bailes, venta de comida, si no se puede rosario, se celebra una misa a meDía noche, la víspera le decimos, eh y el otro día hay misa a las diez de la mañana, y hay confirmaciones y primeras comuniones de los niños, con el arzobispo. Y en semana santa pues se hace la procesión con niños de aquí de la comunidad. [There are dances, sale of foods, if the rosary can't be prayed there's a mass that is done at midnight, we call it the víspera (vespers), and the next day there's a mass at 10 in the morning and there's confirmations and first communions with the archbishop. And during Holy Week the procession is done with children from here. GP]
- » Pues en aquel entonces el Día de San Juan era muy importante. Habían bailes y andábamos en caballos todo el día. [Well in those days the Day of San Juan was very important. There'd be dances and we'd ride horses the entire day. TT]

6.6.6 The San Francisco Pilgrimage—September 15th to October 15th

Saint Francis of Assisi was the founder of the Franciscans and is the patron saint of animals and the environment. Two feast days are held in his remembrance on September the 17th and October the 4th. Saint Francis of Assisi was the first recorded stigmatic in Christian history and the September 17th feast is in remembrance of this miracle. Saint Francis was one of the patron saints of the expedition and whom eventually San Francisco was named after. The first mission founded in Alta California was The Mission of Our Father Saint Francis of Assisi.

- » The patronal feast of San Ignacio or San Francisco. So the patronal feast day is an occasion for the community to come together. So yes... and it's a week long celebration. The San Francisco pilgrimage is a month long celebration from September the 15th to October the 15th, it's a major event. VL



Figure 6.77 Miniature Statue of Saint Francis in San Miguel de Horcasitas

- » Well, there are processions; there are blessings of water and images. The procession generally carries the picture or the statue of the saint around the town. There is the mass that the priest comes and an often time there is a novena. There's nine days of preparation or triduum, three days minimal. There's a unique sponsorship and there is usually posters where people assume responsibilities for certain days and for certain activities for example the padrinos of the fireworks, the padrinos of the flowers, the padrinos of the musicians, the padrinos of the church fees so it's a whole way of incorporating community support and elements that contribute the food and some feast days bread is given out, distributed and so

generally there is a foods basket to be taken to the families of the poor and so it's a shared event. VL

- » Another thing that's a very old Mexican tradition. My mom was very religious and a lot of years during my childhood I spent were in habits. She would make the hábitos de San Francisco [habits of Saint Francis], she would make mandas [religious promises], you know if she would, want a miracle or something, and she would make, she was a big donator of San Francisco. You know how he wore that brown with the white knotted belt, made out of yarn – DC. I remember making one, she made me and it was cool the way it was made – CA. Yeah, yeah DC. We twisted and twisted and then got it going, and it just like becomes this belt CA. But there's one thing she, I was always wearing el hábito, you know because, tienes una manda mijita, tienes que salir en el hábito. [You have a religious promise my little daughter, you have to go out in the habit] And she had to wear it for, yeah was it a month CA? A month DC. Yeah, I remember that you would wear them. I never had to wear one, but it was, you know what a manda is she would probably say if such and such a thing happens, I promise that my daughter will wear, then – CA. And she wore them with, you know, it would be her and me. So, but thank God this – DC. And it was like a San Franciscan – CA. Yeah the manta [JMS- calico, course cloth], that brown manta, with a white belt DC.

6.6.7 Día de San Miguel—September 29th

The Day of Saint Michael is celebrated in honor of the archangel Michael. Michael is viewed as the leader of God's Army in the war against Satan. He is often depicted with a scale because of his other role as the "angel of death" (see figure 6.78).

At the hour of death, Saint Michael weighs the soul to measure the amount of good deeds and bad deeds. If the scale is in favor of good they shall pass into the kingdom of God. However, for those that don't pass this test, it is believed that Saint Michael gives all souls a chance to redeem their selves before going to purgatory. This day has a special significance to those who left for San Francisco in 1775, because it was on this day of September 29th that they departed San Miguel de Horcasitas. In Pedro Font's Diary he explains, "And since it was the feast of San Miguel, and he being the holy prince whose picture is at the bottom of the image of our Lady of Guadalupe, we chose him as copatron of the expedition." The following are community members' comments and reflections of Día de San Miguel:

- » Bueno el Día de San Miguel, en el 29 de septiembre, se festeja el santo de San Miguel. Precisamente, el capitán de Anza en ese tiempo, un 29 de septiembre se celebros una misa, y cuando se termino de dar misa, salio.
[Well the Day of San Miguel, on the 29th of September, the saint of San Miguel is celebrated. Precisely, Captain Anza in those times, on a 29th of September, a mass was celebrated and when the mass was over, he departed. FLT]



Figure 6.78 Saint Michael Statue (Center) at a Church in San Miguel de Horcasitas

- » Antes aquí donde hay un pequeño estadio que le llamamos el llanito es donde se veían las carreras de caballos. Y luego pues el Día de San Miguel pues siempre independientemente de la celebración pues están los bailes y las borracheras todo eso. [Well before, where there was a small stadium that we called “el llanito”, which is where horse races would take place. And then on the Day of San Miguel, independently from the celebration there are the dances and the drunkenness and all that (laughs). FL T]
- » Pues el Día de San Miguel, que es el 29 de septiembre, el 28 de septiembre enfrente de la iglesia se pone la banda y música, canta el que quiere y hay baile. [Well the Day of San Miguel, which is on the 29th of September, on the 28th of September in front of the church, there’s a band and music, whoever wishes to sing or dance can do so. T T]

6.6.8 Día de los Muertos—November 1st and 2nd

Día de los Muertos is a blending of two unique cultural practices: the European practices of All Saints Day and All Souls Day brought by the Spanish missionaries and a ritual that goes back 3,000 years and was practiced by the pre-European people. Like many rituals, in order to Christianize the practice, the time of year in which they were celebrated was moved to coincide with Christian holidays, in this case the pre-hispanic Day of the Dead was shifted to coincide with All Saints Day on November 1st and All Souls day on November 2nd. All Saints Day commemorates all saints known and unknown while All Souls Day is a time to remember the

dearly departed. Today, celebrations are different depending on where they are held but the overall theme is remembering loved ones who have passed on. The fusion of two societies' religious practice into one may be resemblance of the bond shared between European and Native American. This bond established in Mexico may have been a key ingredient of survival amongst the indigenous of Alta California.

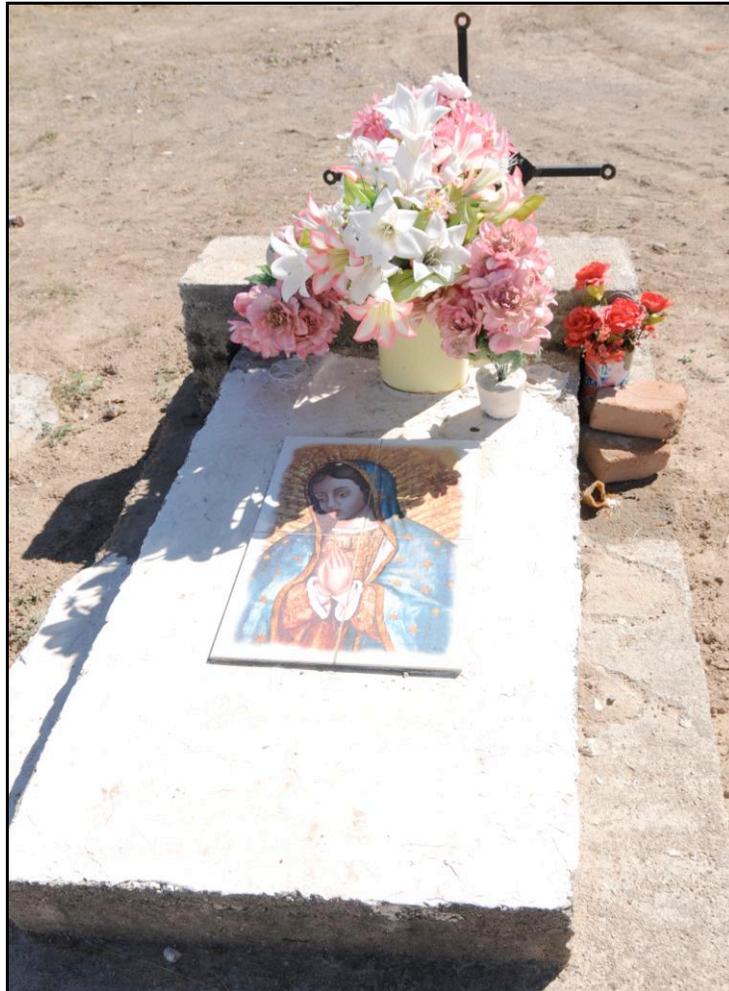


Figure 6.79 Fresh Flowers Placed at Gravesite in Honor of Día de los Muertos

A community member explained the traditions that accompany Día de los Muertos. “One goes to put their flowers there (the tomb of their relative(s)) G C A. But mostly people are accustomed to eat the day before they put the flowers, candles, and to go do the cleaning” (see figure 6.79).

- » Pues la gente acostumbra a llevarle flores, veladoras, rezar, la gente va y le reza a las tumbas en el panteón. Y todo el día esta la gente ahí, todo el día 2. Muchos hacen vísperas, van y pasan la noche a esperar a que llegue el día de los fieles difuntos. [Well, people are typically accustomed to taking flowers, candles, and going to the cemetery to pray to the graves. People stay here all day. Others come

the night before and spend the entire night at the cemetery waiting for the Day of the Dead. GP]

- » [The tradition of the 2nd of November also known as the Day of the Dead when people gather at the cemetery, and at 3 in the afternoon we have a mass. VI]

6.6.9 Christmas Season—December 8th to January 6th (Includes The Feast of the Immaculate Conception, Día de Guadalupe, Las Posadas 16th to 24th, Christmas, and Día de los Reyes)

The season leading up to the birth of Jesus, as well as the birth itself, is one of the busiest times for Christians around the globe. In Sonora, Mexico, it is no different. There are five celebrations that occur between December 8th and January 6th. The festivities begin with the Feast of the Immaculate Conception on December 8th, followed by the Día de Guadalupe on the 12th, Las Posadas from the 16th to the 24th, and Christmas on the 25th. The celebrations are brought to a close with Día de los Reyes on January 6th. The Feast of the Immaculate Conception is just that, a feast day. It is the time for Christians to pay homage to the conception of Jesus by the Virgin Mary. Día de Guadalupe, as previously mentioned, is the day to commemorate when Juan de Diego encountered the apparition of the Virgen de Guadalupe. Las Posadas is a nine day period symbolizing the trials Mary and Joseph faced trying to find a place where Jesus could be delivered. Christmas is the day Jesus was born and Día de los Reyes symbolizes the coming of the three kings.

- » The other big fiesta, how could I forget, is Guadalupe, December the 12th, my gosh. Every house has a shrine, every house has to have their shine blessed and the kids dress up like Juan Diego or like the Virgin Mary. The apparition is... the story of the Guadalupe apparition is told and re-told and played out, dramatized. Christmas is extraordinary. Christmas starts off the December the 8th with the feast of the Immaculate Conception and that's a psalm day and all the ladies are called Conception or Maria or Maria de la Conception or Conchas, that's their feast day. Then you have 3 days or 4 days or the novena of our Lady Guadalupe on the December the twelfth. Then from December the 16th to December the 24th you have the posadas, which for many, that is Christmas for many, especially for families who are poor because the children get to break piñatas and they get little gifts of whistles and we would call them all incidentals. For them it's candy and adults eat tamales and drink punch and so that's the nine days before Christmas is the posadas. Then you have Christmas itself and the family convenes at meDía noche or Christmas Eve, that's a big celebration. And really there is no opening of gifts generally, on Christmas day. Because Christmas has been happening since the 12th of December to the 24th and the big event is the Christmas meal on the 24th in the evening. The *composadas* have fireworks, they have, all different kinds of tamales or flautas or food is distributed, *chocorados*, oranges are given. Traditionally, it was oranges and peanuts that were distributed now they have sweets and candies and the rest of it. That's really the way you prepare for Christmas. Then you have the New Year, New Year is sort of rowdy is secular, it's hard for the church to get filled on New Years, but then comes the peace of

the Kings and that's for many, that's when a gift might be given or the rosca, a cake with the baby Jesus inside the cake and then if you bite the cake and you get the baby Jesus you have to provide the rosca the next year. So you have a festival that goes on from the Dec. the 8th to Jan. the 6th and people and communities and families are all involved eating, drinking singing, praying, coming together in neighborhoods and in homes. There are crib scenes, nascimientos crib scenes, baby Jesuses are blessed. There's a beautiful ritual, especially amongst the indigenous peoples of real al nino dios. You sing lullabies to baby Jesus and young couples generally are asked to be the padrinos and they sing lullabies to baby Jesus, al real al nino dios. This activity, and I suppose probably is what's conducive to maintaining of the faith not in the church, but in the home, in the streets, in the neighborhoods, and in families and in the communities. It's an extraordinary, confetti, streamers, special candies for each particular event, fireworks, little sparklers, the children play and sing and pray and eat candies and the adults eat tamales and drink punches and it's quite, quite, quite an event. VL

- » Ahh si, el 12 de diciembre es otra fiesta, mas que católicos podemos decir que somos, somos Guadalupanos, si si festejando a la virgen. [Ahh yes, the 12th of December is another festivity, we can say that were more than Catholic, we are Guadalupanos, yes, yes, celebrating the Virgin. FLT]

6.6.10 Religion in Every Day Life

Not all religious practices revolve around a certain time of year or are practiced the same by every family. During our conversations with community members we discovered a few different practices that deserve attention as well. These next couple of events help families cope with death:

Mi mama platica que por ejemplo si se moría un familiar tenían que durar un buen tiempo de luto y no salir a las fiestas. Y no las dejaban que bailaron o escucharan música. [Our mom would tell us that for example, if a family member died, we'd have to spend a considerable amount of time grieving and not go out to the communities parties and we wouldn't be allowed to dance or listen to the music. VE]

One community member explained how his family had a tradition of wearing black for an entire year after a loved one had died MV. During this time, they would also attend mass every day. Other community members mentioned ways they incorporate prayer into their day to day lives.

And though I know my aunt and my mom always prayed before bed, and you know when she rose and when she went to bed, so I know that when she would go with my mama Julia, they would say the rosary together. You know, they would always pray in [the] evening when everyone was down. CA

Two other community members discussed how saints were turned to during times of need, like droughts or when there was no food. The following is what was discussed:

Sí como no, desde que estaba chamaco yo, desde cerca de 70 años hacen estas procesiones con Santos. Porque aquí hubieron todas estas creencias de los Españoles, entonces tenían estas tradiciones, no precisamente en los días de sus santos, pero en días cuando tenían necesidad la gente, que cuando no llovía o había mucha hambre, sacaban un santo y se reunían gente, y oraban. [Yes, they've done these processions since I was a kid, these processions with Saints have been around close to 70 years. Since all of these Spanish beliefs have been present here, all these traditions remain, not precisely on the day of their Saints, but on days when people were in need, when there was no rain or there was hunger, they'd take a Saint out and people would gather and pray together. MT] Entonces, por ejemplo, para que el campo estuviera bien, le pedían a San Isidro Labrador no? [So, for example, for there to be rain, they'd pray to San Isidro Labrador right? SS] Sí sí, a San Isidro Labrador. [Yes, yes. San Isidro Labrador. MT]

Rituals such as these bring a sense of calmness to those who use them. Members of the Anza expedition probably shared their own set of practices to manage their longing for home, difficult circumstances, and/or a loved one who might have passed on the arduous journey of colonizing San Francisco.

CHAPTER SEVEN RECOMMENDATIONS

During fieldwork in San Miguel de Horcasitas and Tucson, several recommendations were noted by community members in regards to keeping the Anza tradition alive and passing its historical importance on to the youth. The Presidente Municipal of San Miguel de Horcasitas asked the team to explicitly express to the NPS his willingness to work with them in any capacity to promote this historic event and foster relations that would allow for bi-national management and celebration of the trail itself.



Figure 7.1 UofA Ethnographer with Community Members

7.1 Community Recommendations

7.1.1 Anza Commemoration and Eco-Historical Tourism

Community members felt that commemorating the Anza expedition would be an important step in passing knowledge of the Anza expedition to future generations and emphasizing the common heritage between Mexico and the United States. Several recommendations were made by the community on how to best carry this out, including the creation of a local Anza interactive museum, an Anza statue, and marking the trail.

With outside organizers, community members would be eager to serve as guides for trips along the trail and facilitate selected community experiences that would help tourists better understand the history of the Anza expedition and the lives of the founders of San Francisco. This would provide community members with the opportunity to increase awareness of this historic event that connects these two countries, as well as providing an economically viable opportunity to preserve their traditional lifeways.

7.1.2 Education

Community members felt that incorporating community history, such as the Anza expedition, into local elementary and junior high school curriculums would be an important step in both honoring the past and ensuring its continuity. Incorporating traditional knowledge of local ecology and lifeways into such a curriculum was also seen as important. The community would like to continue to teach young people about their history and community ways, emphasizing traditional values such as the hardworking nature of their lifestyle, in order to continue their legacy that has been maintained since the time of the Anza expedition.

Educational materials, such as posters, lesson plans, powerpoints, or videos, about the expedition were specifically requested by community members at the March community meeting for local schools and community use. The community was excited about the prospect of having exposition panels describing the expedition displayed in the community to inform the younger generations and visitors about the expedition Anza led and the role San Miguel de Horcasitas played in it.

7.1.3 Historic Buildings

There are historical buildings still standing in the town that community members felt should be protected. They commented on how the Anza descendants have helped them to maintain Anza's house but there are two captains' homes and the governor's house that should be protected and preserved as well. Community members expressed that they would like more assistance in maintaining, getting protection for, and even restoring these historic buildings. The historic Sonoran town Arizpe, where Anza was buried, in particular, was pointed out as a model for how preservation should be conducted.

7.2 Ethnographic Recommendations

7.2.1 Ethnobotany

With the BARA team's visits to San Miguel de Horcasitas in October of 2009 and March of 2010, many community members demonstrated an extensive knowledge of plants and their uses. However, they expressed that this knowledge could be better transmitted when the plants are in bloom or fruit (because of the cold winter, many plants were still not in bloom by our March visit) and are thus more easily identifiable.

7.2.2 Oral Histories

Additional visits would allow our team to get a more complete version of the oral history passed down through the generations. These oral histories would serve as individual stories that would represent both specific people, as well as life in general for the people of San Miguel. These could then be used as teaching tools for local use to which the students could more easily relate to and benefit from.



Figure 7.2 Two Young Community Members Showing Ethnographers Their Plants

7.2.3 Youth

Although we made a concerted effort to maintain a gender balance with our interviews, the age distribution of the community members that we interviewed is severely skewed towards the older generations. It would be valuable to discover how much of the traditional knowledge of both Anza and lifeways of San Miguel de Horcasitas of the older community members is considered relevant and maintained by the younger generations.

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APPENDIX A SURVEY INSTRUMENTS

Appendix A contains the five survey instruments created for this study: A1- Community Oral History Form, A2- Agriculture Form, A3- Wild Plant Use Form, A4- Our Lady of Guadalupe-Culiacán Cathedral Form, and A5- Supplemental Community Oral History Form. The Community Oral History Form covers the participant's connection to one of the founder's communities of origin, the importance of the Anza expedition to the participant and their community, and how each of the activity complexes are organized and whether they have persisted in that community. The Agriculture Form was utilized when a community member had extensive knowledge of Agricultural practices that likely persisted since the time of the Anza expedition. The Wild Plant Form further delves into the processes of collecting and using wild plants and whether these practices would have likely been the same in the time of the Anza expedition. The Community Oral History Form, the Agriculture Form, and the Wild Plant Use form all were used in interviews in San Miguel de Horcasitas, as well as in the Tucson area. The Our Lady of Guadalupe-Culiacán Cathedral Form was never used as the BARA team was unable to conduct interviews in Culiacán, however, Dr. Henry Dobyns dedicated a good deal of time in creating a form that would be effective in describing a pilgrim's experience at the cathedral, and therefore the instrument in and of itself proves to be an important resource. The Supplemental Community Oral History Form was created in order to avoid repetitive data that had remained consistent and answer additional questions that arose in the course of our study. This form was used in later interviews in the Tucson area and on the second fieldwork visit to San Miguel de Horcasitas.

A.1 Community Oral History
JUAN BAUTISTA DE ANZA TRAIL
COMMUNITY ORAL HISTORY FORM
University of Arizona Note Form - DRAFT

Interview Number: _____
Número de Entrevista:

1. Date: _____
Fecha:

2. Respondent's Name: _____
Nombre de Participante:

Community of Origin: _____
Comunidad de Origen:

Ethnographer: _____
Investigador:

3. Gender: Male Female
Sexo:

Connections to San Miguel de Horcasitas- Conexiones con San Miguel de Horcasitas

First we would like to ask you a few questions in order to better understand your family's connections to the Anza Communities.
Primero, nos gustaría preguntarle unas preguntas para entender mejor la conexión entre su familia y San Miguel de Horcasitas.

4.) How long have you lived in San Miguel de Horcasitas?
¿Por cuántos años ha vivido en San Miguel de Horcasitas?

5.) In what year were you born? ¿En qué año nació Ud?

6.) Were your parents born in San Miguel de Horcasitas?
¿Sus padres nacieron en San Miguel de Horcasitas?

1= Yes/Sí 2= No 8= Don't Know/No Sé 9= No Response/Sin Respuesta

6a.) In what year(s) were your parents born?
En qué año(s) nacieron sus padres?

7.) Did your parents grow up here?
¿Sus padres crecieron en San Miguel de Horcasitas?

1= Yes/Sí 2= No 8= Don't Know/No Sé 9= No Response/Sin Respuesta

7b.) (If yes) what was life like for them here?
(Si responde sí) ¿Cómo era la vida para ellos aquí?

8.) Were your grandparents born in San Miguel de Horcasitas?
¿Sus abuelos nacieron en San Miguel de Horcasitas?

1= Yes/Sí

2= No

8= Don't Know/No Sé

9= No Response/Sin Respuesta

8a.) In what year(s) were your grandparents born?
¿En qué año(s) nacieron sus abuelos?

9.) Did your grandparents grow up here?
¿Sus abuelos crecieron aquí?

1= Yes/Sí

2= No

8= Don't Know/No Sé

9= No Response/Sin Respuesta

9a.) (If yes) what was life like for them here?
(Si responde sí) ¿Cómo era la vida para ellos aquí?

Juan Bautista de Anza and your Community

Earlier we discussed the story of Juan Bautista de Anza and the people who founded San Francisco. Now we would like to discuss him more in depth.

Anteriormente hablamos de la historia de Juan Bautista de Anza y las personas que fueron con él para establecer el presidio de San Francisco. Ahora nos gustaría hablar de él con más detalle.

10.) Do the people of your community ever talk about Anza or the people who traveled with him?

¿La gente de San Miguel de Horcasitas habla sobre Anza o las personas que viajaron con él?

1= Yes/Sí

2= No

8= Don't Know/No Sé

9= No Response/Sin Respuesta

10a.) If yes, then what kinds of things did they talk about?

Si responde sí, ¿que se dice sobre Anza y las personas que viajaron con él?

11.) Did your grandparents talk about Anza or the people who traveled with him?

¿Sus abuelos hablaron sobre Anza o las personas que viajaron con él?

1= Yes/Sí

2= No

8= Don't Know/No Sé

9= No Response/Sin Respuesta

11a.) If yes, what types of things did they share?

Si responde sí, ¿me podría contar lo que dijeron?

12.) Did your parents talk about Anza or the people who traveled with him?
¿Sus padres hablaban sobre Anza o las personas que viajaron con él?

1= Yes/Sí 2= No 8= Don't Know/No Sé 9= No Response/Sin Respuesta

12a.) If yes, what types of things did they share?
Si responde sí, ¿me podría contar lo que dijeron?

13.) In your opinion is the Anza story important to you, your family or your community?
¿En su opinion, es la historia de Anza importante para usted, su familia, o su comunidad?

1= Yes/Sí 2= No 8= Don't Know/No Sé 9= No Response/Sin Respuesta

13a.) If yes, how so for you?
Si responde sí, ¿En que manera para Ud?

13b.) If yes, how so for your family?
Si responde sí, ¿Cómo su familia?

13c.) If yes, how so for your community?
Si responde sí, ¿Cómo para su comunidad?

Life in 1775- La Vida en 1775

Given that Anza stayed in your community in 1775, we are interested to know more about what life may have been like at that time. Como que Anza quedó en su comunidad en 1775, estamos interesados saber más sobre como hubiera sido la vida en esa época.

14.) What kinds of food do you think people ate in 1775?

¿Cuáles tipos de comida usted cree que las personas aquí comieron en 1775?

14a.) Were these foods similar to what people eat today?

Esas comidas son parecidos a lo que se come hoy en día?

1= Yes/Sí

2= No

8= Don't Know/No Sé

9= No Response/Sin Respuesta

14b.) If so, please explain

Si responde sí, por favor explique su respuesta:

15.) How do you think the foods were prepared in 1775?

¿Cómo cree Ud que preparara la comida en 1775?

15a.) Do people still prepare foods in a similar way today?

¿La gente todavía preparan la comida en esta manera hoy?

1= Yes/Sí

2= No

8= Don't Know/No Sé

9= No Response/Sin Respuesta

15b.) If so, please explain. Si responde sí, por favor explique su respuesta.

16.) Do you think every family grew their own crops in 1775?
¿Cree Ud que cada familia sembraron sus propios cultivos en 1775?

1= Yes/Sí 2= No 8= Don't Know/No Sé 9= No Response/Sin Respuesta

16a.) If so, what kinds of crops would they have grown?
Si responde sí, ¿cuáles tipos de cultivos hubieran sembrados?

17.) Do people grow their own crops today?
¿Se siembra cultivos hoy?

1= Yes/Sí 2= No 8= Don't Know/No Sé 9= No Response/Sin Respuesta

17a.) If so, what kinds of crops do they grow?
Si responde sí, ¿cuáles tipos de cultivos se siembra?

18.) What types of tools do you think people used on their farms in 1775?
Cuáles tipos de herramientas cree Ud que utilizaran para trabajo agrícola en 1775?

18a.) Are these tools used today? ¿Se utiliza estas herramientas hoy?

1= Yes/Sí 2= No 8= Don't Know/No Sé 9= No Response/Sin Respuesta

18b.) If yes, which? Si responde sí, cuáles?

19.) Do you think people gathered wild plants in 1775?
¿Ud cree que la gente recolectaron plantas silvestres en 1775?

1= Yes/Sí 2= No 8= Don't Know/No Sé 9= No Response/Sin Respuesta

19a.) If yes, what plants would they have gathered?
Si responde sí, ¿Cuáles plantas hubieran recolectados?

19b.) In 1775, when people gathered plants, what purposes do you think they used those plants for?
En 1775, cuando las personas recolectaron plantas, para que cree Ud las usaran?

1=Food 2=Medicine 3=Basketry 4=Ceremony 5=Construction 6=Other _____
Comida Medicina Cestas Ceremonía Construcción Otro

20.) Do people gather wild plants today?
¿Se recolecta plantas silvestres hoy en día?

1= Yes/Sí 2= No 8= Don't Know/No Sé 9= No Response/Sin Respuesta

20a.) If yes, do people still gather for the same reasons today?

Si responde sí, ¿La gente todavía se recolecta para la misma razón hoy en día?

1= Yes/Sí

2= No

8= Don't Know/No Sé

9= No Response/Sin Respuesta

20b.) If yes, what plants do they collect today?

Si responde sí, ¿Cuáles plantas se recolecta hoy en día?

21.) Do you think in 1775 people of your community had horses?

¿Cree Ud que en 1775 había caballos en su comunidad?

1= Yes/Sí

2= No

8= Don't Know/No Sé

9= No Response/Sin Respuesta

21a.) If yes, what types of activities do you think the horses were most used for?

Si responde sí, ¿para qué usaran más los caballos?

1=Travel

2=Farm work

3=Recreation

4=Ranching

5=Other_____

Viajar

Trabajo agrícola

Diversión

Ganadería

Otro

22.) Do people in your community use horses today?

¿La gente en su comunidad se usa caballos hoy en día?

1= Yes/Sí

2= No

8= Don't Know/No Sé

9= No Response/Sin Respuesta

22a.) If yes, what types of activities does your community use them for today?

Si responde sí, ¿para que se los usa hoy en día?

23.) Do you think your community in 1775 had saddle makers?

¿Cree Ud que había personas en su comunidad que hicieran sillas de montar en 1775?

1= Yes/Sí

2= No

8= Don't Know/No Sé

9= No Response/Sin Respuesta

23a.) If yes, do you think that every family had a saddle maker or was there only one person in the community who made them?

Si responde sí, ¿Cree ud que había una en cada familia o sólo una en la comunidad?

23b.) If no, where do you think they had to go to get their saddles made?

Si responde no, ¿a dónde cree Ud tenían que ir para sillas de montar?

24.) Are there still saddle makers in or around your community today?

¿Todavía hay personas que hacen sillas de montar en o cerca de su comunidad hoy?

1= Yes/Sí

2= No

8= Don't Know/No Sé

9= No Response/Sin Respuesta

24a.) If so, do you know who they are and what community they live in?

¿Ud sabe quién y en qué comunidad viven?

25.) In 1775, do you think your community had events that everybody in the community participated in?

¿En 1775, cree Ud que había eventos en su comunidad en que participaron todos?

1= Yes/Sí

2= No

8= Don't Know/No Sé

9= No Response/Sin Respuesta

25a.) If yes, do you know what types they might have been?

Si responde sí, ¿cuáles tipos de eventos eran?

Type-Tipo	Time of Year Parte del Año	Location in Community Ubicación en Comunidad	Sponsor Patrocinador	Description of Activities Descripción de Actividades
Rodeo				
Religious Eventos Religiosos				
Harvest Celebración de la Cosecha				
Dances Bailes				
Commerce/Trade Fair Ferias de Muestras				
Other Otro				

26.) Did your community have a church in 1775?
¿Había una iglesia en su comunidad en 1775?

1= Yes/Sí 2= No 8= Don't Know/No Sé 9= No Response/Sin Respuesta

26a.) If yes, what do you think church was like back then?
Si responde sí, ¿Cómo cree Ud que era la iglesia en esa época?

26b.) Do you think they had a priest?
¿Cree Ud que había un sacerdote o cura?

26c.) Did the priest live in the community?
¿El sacerdote o cura vivía en la comunidad?

1= Yes/Sí 2= No 8= Don't Know/No Sé 9= No Response/Sin Respuesta

27.) If no, how did they practice their faith?
Si responde sí, ¿cómo practicaron su fé?

28.) Do you think people in your community practice their faith in a way similar to how they would have then?
¿Cree Ud que se practica su fé en una manera parecida hoy a lo que hicieran aquel entonces?

1= Yes/Sí 2= No 8= Don't Know/No Sé 9= No Response/Sin Respuesta

28a.) If yes, how so?
Si responde sí, por favor explique.

29.) Is there anything else you would like to add?
¿Hay algo más que Ud quiere intercambiar con nosotros?

A.2 Crops

JUAN BAUTISTA DE ANZA TRAIL
AGRICULTURE FORM

University of Arizona Note Form - DRAFT

Interview Number: _____
Número de Entrevista:

1. Date: _____
Fecha:

2. Respondent's Name: _____
Nombre de Participante:

Community of Origin: _____
Comunidad de Origen:

Ethnographer: _____
Investigador:

3. Gender: Male Female
Sexo:

4.) What kind of crops do people in your community grow today?
¿Cuáles tipos de cultivos siembra la gente en su comunidad?

5.) Do you think these might have been the same kind of crops people grew during the time of Anza?
¿Cree Ud. que estos cultivos podría ser los mismos tipos que sembraba la gente en la época de Anza?

1= Yes/Sí

2= No

8= Don't Know/No Sé

9= No Response/Sin Respuesta

5a.) If no, what kind of crops would they have grown?
Si no, ¿Cuáles tipos de cultivos hubiera sido sembrado?

6.) How are these crops planted?
¿Cómo siembra estos cultivos? ¿Cuáles métodos usan? ¿a mano, con bestia, o a máquina?

7.) How do you think the people in the time of Anza planted crops? What methods did they use?

¿Cómo cree Ud. que la genta durante la época de Anza sembraba los cultivos?

¿Cuáles métodos usaban? – a mano, con bestia o a maquina

8.) Are there any crop varieties your parents, grandparents, or early generations grew that you still grow today?

¿Hay variedades de cultivos que sus padres, abuelos, bisabuelos o generaciones anteriores usaban que Ud. todavía cultiva?

Seed Varieties	1= Yes	2= No	Please Describe
Corn maíz			
Beans frijoles			
Squash Calabasa o chayote			
Chile			
Gourds Guajes o bules			
Melons Melones, Sandia, Casaba			
Tomatoes Tomates			
Cooking Herbs Hierbas			
Medicinal Herbs Hierbas medicinales			
Tobacco Tabaco, Punche			

Other			
-------	--	--	--

9.) If the people who traveled with Anza were growing any of these plants, do you think they might have brought these seed varieties with them to California?

¿Cree Ud. que los pobladores de Anza llevarían algunos de estos cultivos en jornada a California?

1= Yes/Sí

2= No

8= Don't Know/No Sé

9= No Response/Sin Respuesta

9a.) If yes, which might they have brought with them and why?

Si responde sí, ¿Cuáles y por qué?

10.) What tools do you use to grow your crops?

¿Cuáles herramientas utiliza Ud. para sembrar cultivos?

11.) Do you think the tools would have been the same in the time of Anza?

¿Cree Ud. que estas herramientas hubieran sido utilizados en la época de Anza?

1= Yes

2= No

8= Don't Know

9= No Response

11a.) If no, how would they have been different?

Si responde no, ¿Cómo serían diferentes? ¿Cuáles herramientas cree Ud. que utilizarían?

12.) Do you have water to irrigate with or do you dry farm, or both?

¿Tiene Ud. agua de riego/irrigar o siembra sin agua de riego/irrigar o una combinación de las dos técnicas?

13.) Does the community have a común de agua?

¿Hay un común de agua en su comunidad?

1= Yes/Sí

2= No

8= Don't Know/No Sé

9= No Response/Sin Respuesta

13a.) If no, did it used to?

Si responde no, ¿Había uno en su comunidad en el pasado?

1= Yes/Sí

2= No

8= Don't Know/No Sé

9= No Response/Sin Respuesta

13b.) If yes, who is the juez de agua (comisionado de agua)?

Si responde sí ¿Quién es el juez/comisionado/mayordomo del agua?

13c.) Can you tell us about the history of your community's común de agua?

¿Podría contarnos la historia del común del agua de su comunidad?

14.) Are there any crops you grow in companion with other plants?

¿Hay cultivos que siembra juntos con otras plantas o cultivas?

1= Yes/Sí

2= No

8= Don't Know/No Sé

9= No Response/Sin Respuesta

14a.) If yes, which ones?

Si responde sí, ¿Cuáles y por qué?

15.) Do you know of any stories or songs about when to plant/harvest?

¿Conoce Ud. algunos cuentos o canciones que se trata de la siembra, la cosecha o las temporadas de cultivar?

1= Yes/Sí

2= No

8= Don't Know/No Sé

9= No Response/Sin Respuesta

15a.) If yes, are there any you would like to share with us?

Si responde sí, ¿Me podría contar o decir lo que recuerda de ellos? o ¿Podría compartir conmigo lo que recuerda de ellos?

16.) Do you know of any stories or songs about certain crops or foods?

¿Conoce Ud. algunos cuentos o canciones que se trata de cultivos o comidas particulares?

1= Yes/Sí

2= No

8= Don't Know/No Sé

9= No Response/Sin Respuesta

16a.) If yes, are there any you would like to share with us?

Si responde sí, ¿Me podría contar o decir lo que recuerda de ellos? o ¿Podría compartir conmigo lo que recuerda de ellos?

17.) How do you store your crops after harvest?

¿Cómo guarda o ensila los cultivos después de la cosecha?

17a.) How do you think people might have stored food in the time of Anza?

¿Cómo cree Ud. que la gente en la época de Anza guardaba los cultivos?

18.) Do you think the people who traveled with Anza might have brought any of the previously mentioned farming techniques with them when they moved to California?

¿Cree Ud. que los pobladores que viajaba con Anza a California continuaba las técnicas agrícolas mencionaba anteriormente?

1= Yes/Sí

2= No

8= Don't Know/No Sé

9= No Response/Sin Respuesta

18a.) If yes, please explain:

Si responde sí, ¿Podría elaborar?

19.) Are there any fruit trees in your community?
¿Hay frutales en su comunidad?

1= Yes/Sí

2= No

8= Don't Know/No Sé

9= No Response/Sin Respuesta

19a.) If yes, when were they established?
Si responde sí, ¿Cuándo fueron establecidos?

19b.) Do you know who planted them or brought them here?
¿Conoce la historia de quién las sembró o las trajo aquí?

1= Yes/Sí

2= No

8= Don't Know/No Sé

9= No Response/Sin Respuesta

19c.) If yes, who?
Si responde sí, ¿Quién?

19d.) What do you use them for?
¿Para que las usa Ud.?

20.) What kinds of foods are traditional to this area/region?
¿Qué tipos de comidas son tradicionales de esta región?

21.) Do you know any stories related to food or its preparation?
¿Conoce algunos cuentos que se trata de comidas o la preparación de comida?

1= Yes/Sí 2= No 8= Don't Know/No Sé 9= No Response/Sin Respuesta

21a.) If yes, please share any that you would feel comfortable sharing:
¿Hay algunos que le gustaría compartir conmigo?

22.) Are there any foods your family used to prepare that they don't anymore?
¿Hay algunas comidas que su familia preparaba en el pasado pero ahora ya no prepara?

1= Yes/Sí 2= No 8= Don't Know/No Sé 9= No Response/Sin Respuesta

22a.) If yes, what were they?
Si responde sí, ¿Cuáles?

23.) What kinds of food dishes do you think people might have made during the time of Anza?
¿Qué tipos de comidas o platos tradicionales cree Ud. eran preparaba en la época de Anza?

23a.) Are they still prepared today? ¿Hay genta que prepara estas comidas o platos tradicionales hoy en día?

1= Yes/Sí 2= No 8= Don't Know/No Sé 9= No Response/Sin Respuesta

24.) How do you think people in your community might have kept food from going bad in the time of Anza?
¿Cómo cree Ud. que la gente en la época de Anza preservaba la comida para que no se pudriera?

24a.) Do people in your community still use these same methods?
¿Hay gente en su comunidad que todavía usa estos métodos hoy en día?

1= Yes/Sí 2= No 8= Don't Know/No Sé 9= No Response/Sin Respuesta

24b.) If no, what do they do today? Si responde no, ¿Qué hace o qué usa hoy en día?

25.) Do you think the people who traveled with Anza would have brought local foods/preparation methods with them to California?
¿Cree Ud. que la gente que viajaba con Anza hubiera continuado estos métodos de preparar comido en California?

1= Yes/Sí 2= No 8= Don't Know/No Sé 9= No Response/Sin Respuesta

25a.) If yes, which and why? Si responde sí, ¿Cuáles y por qué?

26.) Other than food, is there anything else you make from plants?

Además de comidas, ¿para qué más utilizan las plantas?

Plant Use	1=Yes	2=No	Please Describe
Medicine/ Healing Medicina o curar			
Carvings Tallas o esculturas de madera			
Basketry Canastas			
Weavings Tejidos			
Decoration Adornos o decoraciones			
Manufacturing Fabricar productos			
Spiritual/ Offering Espiritualismo o ofertas			
Other			

27.) Do you think the people who traveled with Anza might have brought these things with them to California?
¿Cree Ud. que los pobladores de Anza llevarían algunos de estas plantas en jornada a California?

28.) Do you think the people who traveled with Anza might have utilized these techniques for making things with plants in California?
¿Cree Ud. que los pobladores de Anza continuarían usando estos técnicos para fabricar cosas hechas de plantas en California?

29.) Is there anything else you would like to tell us?
¿Hay algo más que le gustaría decirnos?

A.3 Wild Plants

JUAN BAUTISTA DE ANZA TRAIL
WILD PLANT USE FORM

University of Arizona Note Form - DRAFT

Interview Number: _____
Número de Entrevista:

1. Date: _____
Fecha:

2. Respondent's Name: _____
Nombre de Participante:

Community of Origin: _____
Comunidad de Origen:

Ethnographer: _____
Investigador:

3. Gender: Male Female
Sexo:

4.) What kinds of wild plants do you use in your community?

En su comunidad, ¿Cuáles tipos o variedades de plantas silvestres usa Ud?

Plant	1= Yes	2= No	List and Describe Uses
4a.) Cactus (ex. Saguaro, Cardon, Pitaya, Gigante, Tunas, Nopales, Cholla)			
4b.) Otras frutas			
4c.) Yerbas de cocinar			
4d.) Quelites			
4e.) Medicinas			

4f.) Otras			
------------	--	--	--

5.) Who taught you how to use these plants?
 ¿Quien le enseñó usar estas plantas silvestres?

6.) Are there any songs or stories in your community about wild plants or collecting them?
 En su comunidad, ¿Hay algunas canciones o cuentos que se trate de plantas silvestres o la recolección de plantas silvestres?

1= Yes/Sí 2= No 8= Don't Know/No Sé 9= No Response/Sin Respuesta

6a.) If Yes, can you tell me about them?
 Si responde sí, ¿Me podría contar o decir lo que recuerda de ellos?

7.) What plants might they have used in the time of Anza?
 ¿Cuáles tipos de plantas serían usadas por la gente común en la época de Anza?

8.) Do you think these plants might have had different uses in the time of Anza?
¿Cree Ud. que estas plantas tenían usos diferentes en la época de Anza?

1= Yes/Sí 2= No 8= Don't Know/No Sé 9= No Response/Sin Respuesta

8a.) If Yes, how do you think they might have used them?
Si responde sí, ¿Cómo cree que la gente común las usaban/utilizaban?

9.) Do people in your community use wild plants for medicinal purposes?
En su comunidad, ¿Hay gente que usan las plantas silvestres para medicina?

1= Yes/Sí 2= No 8= Don't Know/No Sé 9= No Response/Sin Respuesta

9a.) If Yes, how are they used?
Si responde sí, ¿Cómo las usan? o ¿Cómo usan las plantas silvestres para medicina?

9b.) How do they prepare them?
¿Cómo las preparan? o ¿Cómo preparan las plantas silvestres para medicina?

9c.) Where are they collected?

¿Dónde las recogen o las recolectan? o ¿Dónde recogen o recolectan las plantas silvestres que son medicinales?

9d.) Are there specific places to collect certain plants?

¿Hay lugares específicos para recolectar plantas silvestres particulares?

1= Yes/Sí

2= No

8= Don't Know/No Sé

9= No Response/Sin Respuesta

If Yes, please describe:

Si responde sí, Por favor, descríbemelos. ¿Podría describir los lugares y las plantas silvestres que haya en cada lugar?

9e.) Are there specific times to collect these plants?

¿Hay temporadas específicas para recolectar estas plantas silvestres?

1= Yes/Sí

2= No

8= Don't Know/No Sé

9= No Response/Sin Respuesta

If Yes, when?

Si responde sí, ¿Cuándo?

9f.) Are there specific ways to collect these plants?

¿Hay maneras específicas para recolectar estas plantas silvestres?

1= Yes/Sí

2= No

8= Don't Know/No Sé

9= No Response/Sin Respuesta

If Yes, how?

Si responde sí, ¿Cómo?

9g.) How are these plants stored?

¿Cómo guarda o preservara estas plantas silvestres?

10.) Are there any curanderas or parteras in the community?

¿Hay curanderas o parteras en su comunidad? o En su comunidad, ¿Hay curanderas o parteras?

1= Yes/Sí

2= No

8= Don't Know/No Sé

9= No Response/Sin Respuesta

10a.) Could you tell me who they are?

¿Me podría decir quiénes son?

10b.) What kind of plants do they use?

¿Cuáles plantas silvestres usan ellas?

10c.) Do you know any of the uses?
¿Conoce Ud. cómo ellas usan las plantas silvestres?

11.) What medicinal plants do you think the curanderas/parteras might have used in the time of Anza?
¿Cuáles plantas silvestres medicinales cree Ud. que usaban las curanderas y parteras en la época de Anza?

12.) Are there any plants used in religious ceremonies?
¿Hay plantas silvestres que son usadas en ceremonias religiosas?

1= Yes/Sí 2= No 8= Don't Know/No Sé 9= No Response/Sin Respuesta

12a.) If yes, how so? Si responde sí, ¿Cómo las usan? o ¿Cómo usan las plantas?

1= Offerings 2= Visions 3=Medicine 4= Other
1= ofretas 2= visiones 3= medicinal 4= otro

Please elaborate:

¿Podría elaborar? ¿Podría elaborar sobre el uso de las plantas silvestres en ceremonias religiosas?

13.) Are any of these plants you would take with you if you moved?

¿Hay algunas plantas silvestres que llevaría con Ud. si se relocizaba a otra lugar?

1= Yes/Sí

2= No

8= Don't Know/No Sé

9= No Response/Sin Respuesta

13a.) If Yes, which and why?

Si responde sí, ¿Cuáles y por qué?

14.) Would any of these plants have been taken by Anza settlers?

¿Cree Ud. que los pobladores de Anza llevarían algunos de estas plantas silvestres en jornada a California?

1= Yes/Sí

2= No

8= Don't Know/No Sé

9= No Response/Sin Respuesta

14a.) If Yes, which and why?

Si responde sí, ¿Cuáles y por qué?

15.) Would these plants have been used differently during the time of Anza?

¿Cree Ud. que estas plantas silvestres serían usadas de otra manera en la época de Anza?

1= Yes/Sí

2= No

8= Don't Know/No Sé

9= No Response/Sin Respuesta

15a.) If Yes, how so?

Si responde sí, ¿Cómo las usan de otra manera? o ¿Cómo usan las plantas silvestres de otra manera?

16.) Would other plants have been used, more traditionally in your community?

¿Hay otras plantas silvestres que usarían tradicionalmente en su comunidad?

1= Yes/Sí

2= No

8= Don't Know/No Sé

9= No Response/Sin Respuesta

16a.) If Yes, how so?

Si responde sí, ¿Cómo? o ¿Cómo usan las plantas silvestres en una forma tradicional?

17.) Are there any wild plants you use for food or in the creation of traditional dishes?

¿Hay algunas plantas silvestres que usa Ud. para comida o en la cocinar de platos tradicionales?

18.) Other than food, what else is made from wild plants?

Además de comidas, ¿para qué más utilizan las plantas silvestres?

Plant Use	1=Yes	2=No	Please Describe
Medicine/ Healing Medicina o curar			
Carvings Tallas o esculturas de madera			
Basketry Canastas			
Weavings Tejidos			
Decoration Adornos o decoraciones			
Manufacturing Fabricar productos			
Spiritual/ Offering Espiritualismo o ofertas			
Other Otro			

19.) Are there any other uses of wild plants that you would like to talk about?

¿Hay otros usos de plantas silvestres que le gustaría contar?

1= Yes/Sí

2= No

8= Don't Know/No Sé

9= No Response/Sin Respuesta

If Yes, please elaborate:

¿Podría elaborar? ¿Podría elaborar sobre el uso de las plantas silvestres?

20.) Is there anything else you would like to add?

¿Hay algo más que le gustaría añadir?

1= Yes/Sí

2= No

8= Don't Know/No Sé

9= No Response/Sin Respuesta

If Yes, please elaborate:

¿Podría elaborar?

A.4 Our Lady of Guadalupe

JUAN BAUTISTA DE ANZA TRAIL
OUR LADY OF GUADALUPE - CULIACÁN CATHEDRAL FORM

University of Arizona Note Form - DRAFT

Interview Number: _____

1. Date: _____

2. Respondent's Name: _____

Name of Community: _____

Ethnographer: _____

3. Gender: Male Female

4. Have you heard of Our Lady of Guadalupe? 1= Yes 2= No 8= Don't Know 9= No Response

4a. If Yes, Is there something you would like to share about Our Lady of Guadalupe?

5. How old were you when you first visited Our Lady of Guadalupe in the Culiacán Cathedral?

1= Yes 2= No 8= Don't Know 9= No Response

6. When you first visited Our Lady of Guadalupe in the Culiacán Cathedral, were you: (Circle all that apply)

1 = Child 2= Teenager/young adult 3= Adult

6a. Did you go with anyone? 1= Yes 2= No 8= Don't Know 9= No Response

6b. If yes, with who?

7. Have you visited Our Lady of Guadalupe in Culiacán Cathedral to fulfill a vow? 1= Yes 2= No 8= Don't Know 9= No Response

7a. If Yes, would you like to share what it was for?

7b. Do you think that the people of 1775 did similar activities? 1= Yes 2= No 8= Don't Know 9= No Response

7c. If yes, what types of vows do you think they may have made?

8. Did you leave a gold or silver milagro? 1= Yes 2= No 8= Don't Know 9= No Response

8a. If yes, what type did you leave?

8b. Do you think that the people of 1775 did similar activities? 1= Yes 2= No 8= Don't Know 9= No Response

8c. If yes, what types of milagros do you think they may have left?

9. Did you light a candle? 1= Yes 2= No 8= Don't Know 9= No Response

9a. Do you think that the people of 1775 did similar activities? 1= Yes 2= No 8= Don't Know 9= No Response

10. Does Our Lady of Guadalupe in Culiacán have a reputation of miraculous healing? 1= Yes 2= No 8= Don't Know 9= No Response

10a. If yes, how so?

11. Do you personally know someone who has been healed Our Lady of Guadalupe in Culiacán?

1= Yes 2= No 8= Don't Know 9= No Response

11a. If Yes, is there anything additional you would like to share about that?

12. Do other members in you family share your devotion? 1= Yes 2= No 8= Don't Know 9= No Response

12a. If yes, how so?

13. Do you or your family have a shrine in your home for Our Lady of Guadalupe? 1= Yes 2= No 8= Don't Know 9= No Response

13a. If Yes, Is it you or your family that has the shrine? 1 = Self 2 = Family 3 = Both 8= Don't Know 9= No Response

13b. Do you think that in 1775, the homes in your community had shrines for Our Lady of Guadalupe?

1= Yes 2= No 8= Don't Know 9= No Response

14. Is it common for people to make frequent visits to her in Culiacán? 1= Yes 2= No 8= Don't Know 9= No Response

14a. Do you think this was common for people back in 1775? 1= Yes 2= No 8= Don't Know 9= No Response

15. Do people have to wear special clothing to visit her? 1= Yes 2= No 8= Don't Know 9= No Response

15a. If yes, what kind of clothing?

15b. Do you think this was the same for people back in 1775? 1= Yes 2= No 8= Don't Know 9= No Response

15c. If yes, how so?

16. How do people normally approach Our Lady of Guadalupe? 1 = On Knees 2 = Walking 8= Don't Know 9= No Response

16a. Do you think this was the same for people back in 1775? 1= Yes 2= No 8= Don't Know 9= No Response

16b. If yes, how so?

17. How do people normally prepare prior to going to visit Our Lady of Guadalupe?

17a. Do you think this was the same for people back in 1775? 1= Yes 2= No 8= Don't Know 9= No Response

17b. If no, how would it have been different?

18. Do you know if there is a hermandad for Our Lady of Guadalupe in Culiacán? 1= Yes 2= No 8= Don't Know 9= No Response

19. Are there any pilgrims that come from outside the city to visit her? 1= Yes 2= No 8= Don't Know 9= No Response

19a. If Yes, Do you know which communities they come from? 1= Yes 2= No 8= Don't Know 9= No Response

19b. If Yes, where?

20. Do you know how Our Lady of Guadalupe arrived in Culiacán? 1= Yes 2= No 8= Don't Know 9= No Response

20a. If Yes Please explain when, how and who was involved

21. Do you think she was important to the communities back in 1775? 1= Yes 2= No 8= Don't Know 9= No Response

21a. If yes, how so?

22. Do you think the people in 1775 that went with Anza to found San Francisco would have taken Our Lady of Guadalupe with them?

1= Yes 2= No 8= Don't Know 9= No Response

22a If yes, what do you think they would have taken? 1= Statue 2=Painting or Wall hanging 8= Don't Know 9= No Response

A.5 Supplemental Community Oral History

JUAN BAUTISTA DE ANZA TRAIL
SUPPLEMENTAL COMMUNITY ORAL HISTORY FORM

University of Arizona Note Form - DRAFT

Interview Number: _____
Número de Entrevista:

1. Date: _____
Fecha:

2. Respondent's Name: _____
Nombre de Participante:

3. Community of Origin: _____
Comunidad de Origen:

Ethnographer: _____
Investigador:

4. Gender: Male Female
Sexo:

Agriculture- Agricultura

The cement canal (sequia) was built in 1945, were the earthen canals built then too or are they more traditional?

La sequia fue construida en 1945, fueron contruidos los canales de tierra durante esta época o son mas tradicionales?

1= Yes/Sí

2= No

8= Don't Know/No Sé

9= No Response/Sin Respuesta

If more traditional, can you explain how they were used more traditionally:

¿Si son mas tradicionales, puede explicar como fueron usados tradicionalmente?

Was there another irrigation system used more traditionally?

¿Hubo otro sistema de riego que fue usado más tradicionalmente?

1= Yes/Sí

2= No

8= Don't Know/No Sé

9= No Response/Sin Respuesta

If so, can you explain it:

¿Si es así, lo puede explicar?

Were trees planted on the side of the river or the canals or to make fences?

¿En el pasado, eran plantados los árboles a lado del río y canales o como cercos?

1= Yes/Sí

2= No

8= Don't Know/No Sé

9= No Response/Sin Respuesta

If yes, how so?

¿Si es así, como?

How did they plant? Did it differ by the plant?

¿Como sembraban las plantas? Era diferente el proceso para diferentes tipos de plantas?

What agricultural tools did they use back then?

¿Qué herramientas usaban en aquella época?

Were crops planted together?

¿Eran plantados juntos los cultivos?

1= Yes/Sí

2= No

8= Don't Know/No Sé

9= No Response/Sin Respuesta

If so, which ones and why?

¿Si es así, cuales y porque?

How did they know when to plant?

¿Cómo sabían cuando empezar a sembrar?

Did farmers usually have one piece of land or switch between several?

¿Tenía cada agricultor un solo pedazo de tierra o cambiaban entre varios terrenos?

Were wild plants allowed to grow in with crops?

¿Se permitía dejar crecer plantas silvestres entre los cultivos?

1= Yes/Sí

2= No

8= Don't Know/No Sé

9= No Response/Sin Respuesta

If so, which ones and why?

¿Si es así, cuales y porque?

How were unwanted plants, animals, and insects kept out?

¿Cómo mantenían a las plantas, animales, e insectos no deseados fuera de los cultivos?

How did they harvest? Did it differ by the plant?

¿Cómo cosechaban? Era diferente para diferentes tipos de plantas?

Are there any stories about crops or when/how to plant or harvest them?

¿Hay algunas historias sobre los cultivos o cuando/como se plantaban y/o cosechaban?

How did they save seeds from one year to the next?

¿Cómo guardaban las semillas de un año a otro?

Were seeds passed from one generation to the next?

¿Eran las semillas heredadas de una generación a la otra?

If so, does anyone in the community still have any of these seeds?

¿Si es así, hay algún miembro de la comunidad que ha podido conservar algunas de estas semillas?

Did they used to grow different kinds of squash? Melons?

¿Sembraban diferentes tipos de calabazas? Melones?

1= Yes/Sí

2= No

8= Don't Know/No Sé

9= No Response/Sin Respuesta

If so, can you name or describe them:

¿Si es así, puede nombrar o describirlos?

Food

How did they process their crops to use them for food?

¿Qué se le hacía a los cultivos para poder usarlos en la comida?

How did they conserve food before refrigerators?

¿Cómo conservaban la comida antes de que hubiera refrigeradores?

What were some traditional cooking methods?

¿Qué eran unos de los métodos tradicionales que usaban al cocinar?

What were some traditional tools that were used in cooking?

¿Qué eran algunas de las herramientas tradicionales que usaban para cocinar?

What were some herbs/seasonings used in cooking?

¿Qué eran algunas de las hierbas/condimentos que usaban para cocinar?

Were the different kinds of beans used for different foods?

¿Eran usados los varios tipos de frijoles para comidas diferentes?

Were different kinds of squash/melons used for different things?

¿Eran usados los diferentes tipos de calabazas/melones para comidas diferentes?

Are there foods that your family used to make that they don't anymore?

¿Hay algún tipo de comida que su familia solía hacer que ya no se hace?

Wild Plants/Plantas Silvestres

How were wild plants collected?

¿Cómo colectaban las plantas silvestres?

When were wild plants collected? How do you know when it's time? Are there reasons/times not to collect a plant?

¿Cuándo eran colectadas las plantas silvestres? ¿Cómo se sabe cuando ya es tiempo? ¿Hay ciertas razones/épocas por la cual no se colectan las plantas?

Where were wild plants gathered? Were certain plants gathered in certain places?

¿En donde eran reunidas las plantas silvestres? ¿Había ciertas plantas que eran reunidas en lugares específicos?

Are there any stories about wild plants (specific plants, e.g. pitaya, or others?) or when/how to collect them?

¿Hay algunas historias sobre las plantas silvestres (plantas específicas, e.g. la pitaya, o otras?) o sobre cuando/como coleccionarlas?

1= Yes/Sí

2= No

8= Don't Know/No Sé

9= No Response/Sin Respuesta

If so, can you please share them?

¿Si es así, puede usted compartir estas historias?

How were wild plants stored for later use?

¿Cómo eran conservadas las plantas silvestres para después?

How were wild plants prepared for use?

¿Cómo eran preparadas las plantas silvestres para su uso?

How were Tunas? Nopales? Pitayas? Mesquite pods? Chollas (if at all?) collected and prepared for use?

¿Cómo eran colectadas y preparadas las Tunas? Nopales? Pitayas? Pechitas de mesquite? Las chollas?

Were wild plants used for anything other than food, medicine, or firewood? For what?

¿Usaban las plantas silvestres para otros propósitos además de comida, medicina, o leña? ¿Para que?

How were wild plants used spiritually?
¿Cómo eran usadas las plantas espiritualmente?

Was wild tobacco used?
¿Era usado el tabaco silvestre?

Were wild animals used for anything other than food or medicine?
¿Tenían otro usos los animales salvajes además de para la comida y medicina?

1= Yes/Sí 2= No 8= Don't Know/No Sé 9= No Response/Sin Respuesta

If yes, how so?
¿Si es asi, para que?

Horses and Livestock

How were horses used in the past?

¿Cómo eran usados los caballos en el pasado?

What methods were used to work with them?

¿Qué métodos eran utilizados para trabajar con ellos?

What are traditional tools that were used with livestock/horses?

¿Qué son algunas herramientas tradicionales que eran utilizadas con el ganado/caballos?

Were there breeds of livestock in San Miguel that were traditionally passed down in the generations?

¿Había razas de ganado en San Miguel que eran tradicionalmente heredadas de una generación a la otra?

1= Yes/Sí

2= No

8= Don't Know/No Sé

9= No Response/Sin Respuesta

If so, are they still passed down today?

¿Si es así, están siendo heredadas todavía?

Other than selling livestock, what else would they have been used for? Anything besides food?

¿Además de ser vendido, tenía el ganado otro propósito que no tenga que ver con la comida?

Religion/Spirituality and the Land

What were personal ways of practicing spirituality in the past?

¿Qué era alguna forma personal de practicar la espiritualidad en el pasado?

What was the role of the Virgen de Guadalupe?

¿Cuál era el rol de la Virgen de Guadalupe?

How was the Día de San Juan celebrated?

¿Cómo era celebrado el Día de San Juan?

Were there spiritual practices outside of the church?

¿Había algún tipo de prácticas espirituales que eran utilizadas fuera de la iglesia?

What kind of connection do the people of San Miguel feel to the land in general and their land specifically (if they have land)?

¿Qué tipo de conexión tiene la gente de San Miguel a la tierra en general y a su tierra en específico (si la tienen)?

How did El Pópulo come to be part of San Miguel? Do people still recognize being from one or the other?

¿Cómo fue que El Pópulo llegó a ser parte de San Miguel? ¿Todavía reconoce la gente de ser de uno o del otro?

Community and Family History

When older people in the family talked about the past, did they talk about the history of the town at all (the presidio, Anza) or did they mostly focus on the family history?

¿Cuándo la gente más grande en la familia hablaba sobre el pasado, hablaba sobre la historia del pueblo (el presidio, Anza) o se enfocaba por lo general en la historia familiar?

Was Anza talked about before the reenactments or did they renew the interest?

¿Se acostumbraba hablar sobre Anza antes de las recreaciones o renovaban el interés en el?

What was life like for your grandparents? Your greatgrandparents?

¿Cómo fue la vida de tus abuelos? Bisabuelos?

APPENDIX B
COST OF SUPPLIES FOR THE EXPEDITION

The Echeveste-Anza Calculation of the Probable Cost of the Second Anza Expedition

This text was taken directly from pages 461-465 of Chapman's (1916) *The Founding of Spanish California*.

THE ECHEVESTE-ANZA CALCULATION OF THE PROBABLE COST OF THE SECOND ANZA EXPEDITION

In course of the preparations for Anza's second expedition Anza and Juan Jose de Echeveste were asked to draw up a minute calculation of the probable cost of the expedition. A translation of their calculation is given below, partly because it bears a relation to the northwestward movement, showing in one instance the expense which the government was ready to undergo, but more because of its interest from the standpoint of individual equipment, wages, and prices at that time. The estimates are in *pesos* and *reales*, eight reales being worth one peso. The present [1916] value of a peso would be fifty cents. I have seen copies of this document in three *testimonios* concerning the preparations for the second Anza expedition. The location and nature of the three testimonies are as follows:

A.	Certified copy, dated December 24, 1774, Mexico, in A.G.I., 104 16. (C-2496.)
B.	Copy in A.P.C.H. of a certified copy, dated January 18, 1775, Mexico, in A.G.P., <i>Californias</i> , v. 72.
C.	Copy in A.P.C.H. of a certified copy, dated March 20, 1777, Mexico, in A.G.P., <i>Californias</i> , v. 35.

The original is probably in A.G.P., *Provincias Internas*, v. 134, a volume which contains the originals of other documents in the file of papers concerning the authorization of the second Anza expedition. Jose de Gorraez certified that the copies mentioned in A and B conformed to the original, and Melchor de Peramas did so for the copy referred to in C. There are some differences in the three. B employs abbreviations of words, while the words appear in full in A and C. Certain obvious errors or omissions in some of the copies are corrected by use of the others. *The translation is based on all three, with an indication in notes of some of their difficulties and differences.* [Emphasis added]

“Minute calculation of the cost that it may amount to: for the wardrobe of thirty recruits, their wives, and the garments adequate for one hundred and eighty children, six for each one, half for males and half for females; for the arms, riding-horses, rations, and baggage for the service and transportation of all, from the province of Ostimuri to the presidio of San Carlos de Monterey, namely:

<i>"Wardrobe for a Man"</i>	
3 shirts of good Silesian linen	at 18 <i>reales</i>
3 pairs of underdrawers of Puebla cloth ¹ of 4 <i>varas</i> ²	at 2 <i>reales</i>
2 cloth coats which with their lining and	

¹ The Spanish is *Manta de la Puebla*. *Manta* is a coarse kind of cloth.

² A *vara* is equivalent to 2.78 feet.

trimmings are worth	
2 pairs of trousers, ditto	
2 pairs of stockings	at 2 <i>reales</i>
2 pairs of chamois-skin boots ³	at 10 <i>reales</i>
3 pairs of gaiter shoes	at 5 <i>reales</i>
1 cloth cape lined with thick flannel	at 11 <i>reales</i>
1 hat	
2 Puebla powder-cloths ⁴	at 2 <i>reales</i>
1 ribbon for the hat and hair	
<i>"Wardrobe for a Woman "</i>	
3 shirts	at 4 <i>pesos</i>
3 pairs of white Puebla petticoats	at 12 <i>reales</i>
2 pairs of petticoats, some of silk serge, others of thick flannel, and an underskirt	
2 <i>varas</i> of linen stuff for two linings	at 5 <i>reales</i>
2 pairs of Brussels stockings	at 4 1/2 <i>reales</i>
2 pairs of hose	at 2 <i>reales</i>
2 pairs of shoes	at 6 <i>reales</i>
2 women's shawls	at 12 <i>reales</i>
1 hat	6 <i>varas</i> of ribbon
<i>"Clothing for Ninety Boys "</i>	
5 pieces of cloth containing 180 <i>varas</i>	at 12 <i>reales</i>
12 pieces of Puebla cloth for linings and white trousers	at 6 <i>pesos</i> 4 <i>reales</i>
270 <i>varas</i> of linen stuff for shirts of about 3 <i>varas</i>	at 5 <i>reales</i>
50 hats ⁵	at 4 <i>reales</i>

³ *B* has *zapatos abotanad* which might be rendered "button shoes." *A* and *C* have it *zapatos abotinados* (or *avotinados* in *C*), which might mean black shoes or gaiter shoes as rendered above.

⁴ This is a doubtful translation for *Paños de Polvos Poblanos*.

8 dozen shoes for children of various sizes at	at 4 <i>pesos</i>
<i>"Clothing for an Equal Number of Girls"</i>	
270 varas of linen stuff for shirts	at 5 <i>reales</i>
4 pieces of Puebla cloth ⁶ 6 for petticoats and linings	at 6 <i>pesos</i>
90 cloths for women's shawls of all sizes	at 10 <i>reales</i>
2 pieces of thick flannel for little petticoats	at 45 <i>pesos</i>
4 pieces of cloth of about 34 <i>varas</i> for undershirts a <i>vara</i>	at 12 <i>reales</i>
12 pieces of ribbon for bands	
16 ditto of fine rope	
8 dozen shoes for girls of various sizes	at 4 <i>pesos</i>
120 blankets, single bed size for all	at 15 <i>reales</i>
120 shepherds ⁷ blankets	at 5 <i>reales</i>
<i>"Arms"</i>	
20 saddle-tree guns ⁸	at 12 <i>pesos</i>
20 cases of those that they call <i>fundas ordinarias</i> ⁹ of good timber	at 15 <i>reales</i>
20 swords	85 <i>pesos</i> (total)
20 lances	40 <i>pesos</i> (total)
22 ¹⁰ leather jackets ¹¹ of about 7 <i>ases</i> ¹² 13 each a <i>vara</i> and a quarter in length	at 24 <i>pesos</i>

⁵ Possibly the fifty hats were only a reserve supply, as the boys might be expected to have a hat apiece to begin with. Certainly fifty hats could not be divided among ninety boys.

⁶ *Manta* is rendered "Puebla cloth," although *de la Puebla* does not appear in this case.

⁷ For *Pastoras*, a word that does not appear in the Spanish dictionaries. Probably it was made from the noun *Pastor*, meaning "shepherd." Blankets worn to-day by shepherds in Mexico have a hole in the centre through which the wearer puts his head, leaving the blanket to fall naturally about his shoulders.

⁸ *Escopetas de Arzon* means literally "shot-guns of saddle-trees," probably referring to the guns used by cavalry-men, which are attached to the saddle-tree. The word "guns" is used instead of "shot-gun" because *escopetas* was frequently used in documents of that time, as if it were the general word for "gun."

⁹ *Fundas ordinarias* is equivalent to "ordinary cases."

¹⁰ Eight of the thirty soldiers were to be veterans; therefore but twenty-two were necessary.

30 shoulder-belts with the name of <i>San Carlos de Monterey</i>	at 11 <i>reales</i>
20 cartridge-boxes with 14 bullets	at 10 <i>reales</i>
<i>"Horses and Trapping for a Man "</i> ¹³	
60 horses, 2 for each recruit	at 8 <i>pesos</i>
20 saddles	at 9 <i>pesos</i> 4 <i>reales</i>
20 pairs of spurs	at 7 <i>reales</i>
20 fine mule-bits	at 11 <i>reales</i>
20 pairs of pads	at 2 <i>pesos</i>
<i>"Ditto for a Woman and Family "</i>	
60 mares	at 8 <i>pesos</i>
30 saddles	at 9 <i>pesos</i> 4 <i>reales</i>
<i>30 fine mule-bits</i>	<i>at 11 reales</i>
<i>"Baggage and Beasts of Burden "</i>	
20 mules	at 25 <i>pesos</i>
20 instruments and things in connection with them	at 4 <i>pesos</i> 2 1/2 <i>reales</i>
30 chamois-skin gripsacks for the soldiers and their families	at 2 <i>pesos</i>
By 3 months' pay in advance to the lieutenant, sergeant, and 28 soldiers: the first at the rate of the enjoyment of 700 pesos a year; 450 to the second; and one peso daily to each soldier	2807 <i>pesos</i> (total)

"Collection of stores at the presidio of Tubac necessary for the expedition, of useful articles necessary for it, of cattle, provisions, and their conveyances, to ration all its people, reckoning 70 days' march, including rests, for 122 individuals, to which its number reaches, the

¹¹ *B* has *cuerdas* which could mean "ropes," "cords," or "halters," clearly an error for *cueras* which *A* and *C* have.

¹² An *as* is a measure of weight amounting to eleven ounces. Therefore, these jackets would weigh four pounds and eleven ounces each.

¹³ This paragraph was omitted in *A*, an error of the copyist, for these estimates of expense appear in the totals.

expense of everything in detail and that of the aid [in useful articles] which it is bearing to the presidio of *San Carlos de Monterey*, namely:

1 flag with the royal coat of arms	12 <i>pesos</i> (total)
11 tents for cavalry of bramant linen, with wooden frames from those that the factory of the royal estate ¹⁴ possesses, and [of a kind] that shall be fit for use, ¹⁵ 10 for the 30 families and [the other] for the Father Chaplain.	at 27 <i>pesos</i>
4 Biscayan hatchets well strengthened with iron	at 3 <i>pesos</i>
4 spades ditto	at 9 <i>reales</i>
4 shovels ditto	at 3 <i>pesos</i>
1 small crow-bar	5 <i>pesos</i> (total)
10 ball cartridges	0
40 leather powder-flasks for blasting	at 4 <i>reales</i>
8 iron pans ¹⁶	at 2 <i>pesos</i>
10 copper campaign kettles	75 ¹⁷ <i>pesos</i> (total)
12 large chocolate-pots ditto	6 <i>pesos</i>
1 case of iron pieces ¹⁸ well adapted and arranged; 2/3 for horses and 1/3 for mules; with a duplicate key	82 <i>pesos</i> (total)
1 tool-chest [with the instruments] for shoeing horses	10 <i>pesos</i> (total)
2 blank-books for military registers	at 2 <i>pesos</i>
<i>"Cattle and Provisions to Ration the People of the Expedition"</i>	
100 head of cattle, one for each day	at 8 <i>pesos</i>
30 loads of flour for <i>tortillas</i> ¹⁹	at 8 <i>pesos</i>

¹⁴ *Real Hacienda*, referring to the board of finance in Mexico.

¹⁵ *B* and *C* omit the part of this sentence after "possesses" through "use."

¹⁶ *Comales*, or flat pans, used in cooking corn-cakes.

¹⁷ *B* and *C* have 15 *pesos*, but the 75 of *A* is in accord with the totals and with the normal price.

¹⁸ The Spanish word in *herreaje* in *A* and *errage* in *B* and *C*, for what is now *herraaje*. The literal translation has been preferred rather than "shoes" or "horseshoes," which the writers probably meant, that word being *herradura*.

¹⁹ A kind of pan-cake

60 <i>fanega</i> ²⁰ of pinole ²¹	at 18 <i>reales</i>
60 <i>fanegas</i> of kidney-beans	at 5 <i>pesos</i>
6 cases of ordinary chocolate	225 <i>pesos</i> (total)
2 <i>tercios</i> ²² of white sugar with 6 ²³ <i>arrobas</i> ²⁴	at 2 <i>pesos</i>
soap	12 <i>pesos</i> (total)
3 barrels of <i>aguardiente</i> ²⁵ for necessities	at 71 <i>pesos</i>

"Table for the *comandante* and chaplain about which Echeveste is making a statement to His Excellency the viceroy against the objection of the party concerned [Anza].

1 case of beans ²⁶ with 7 <i>arrobas</i>	at 5 <i>pesos</i>
25 pounds of pork-sausage	at 1 <i>peso</i>
6 cases of biscuit	96 <i>pesos</i> (total)
1 ditto of fine chocolate with 7 <i>arrobas</i>	at 3 3/4 <i>reales</i> ²⁷
1 barrel of wine	65 <i>pesos</i> (total)
6 <i>arrobas</i> of cheese	at 2 <i>pesos</i>
4 pounds of pepper	at 5 1/2 <i>reales</i>
1/2 pound of saffron	3 <i>pesos</i> (total)
4 ounces of cloves	at 6 <i>pesos</i> a pound
4 ditto of cinnamon	at 9 <i>pesos</i> a pound
1 jug ²⁸ of "olive1 oil	at 4 <i>pesos</i>

²⁰ A *fanega* is equivalent to about 1.6 bushels.

²¹ A kind of cereal meal.

²² A *tercio* is one of the packages of a mule-load.

²³ A has 16, but 6 seems to be right.

²⁴ An *arroba* is equivalent to 25 pounds.

²⁵ A spirituous liquor.

²⁶ In A it is *jamones*, or hams.

²⁷ The extension for the amount and price stated is wrong, but some small measure seems to be contemplated. At 3 3/4 *reales* a pound the extension would be correct and more in keeping with the price that we would expect.

²⁸ *Botija*, a round, earthen, short-necked jug.

1 ditto of vinegar	at 5 <i>pesos</i>
for the freight of all the pieces reckoned at 500 <i>arrobas</i>	at 28 <i>reales</i>
for sleeping-mats"	at 4 <i>pesos</i>
1 ditto of vinegar	at 5 <i>pesos</i>
for the freight of all the pieces reckoned at 500 <i>arrobas</i>	at 28 <i>reales</i>
for sleeping-mats, ²⁹ <i>guangoches</i> , ³⁰ large sacks and plaited bass-ropes	
4 divisions composed of 132 mules	at 25 <i>pesos</i>
100 complete harnesses for the 4 divisions " 6~"	at 6 1/2 <i>pesos</i>
20 mule-rivers with their respective monthly salaries from 8 to 14 <i>pesos</i> , reckoned for a journey of only 2 1/2 months	540 <i>pesos</i> (total)
<i>"Provision and Aid for the New Establishments "</i>	
200 head of cattle: bulls and cows	at 6 <i>pesos</i>
6 Indian cowboys at 1 real each day	52 <i>pesos</i> (total)
<i>"Gifts for the Indians "</i>	
6 cases of glass beads that contain no black and abound in red, with 600 war-clubs	at 8 1/2 <i>reales</i>
1 sleeveless cloak of blue cloth lined with gold	20 <i>pesos</i>
1 coat and trousers of chamois-skin	13 <i>pesos</i> (total)
2 shirts ³¹	at 4 <i>pesos</i>

²⁹ The word in *petates*, which might also be rendered "luggage" or "baggage."

³⁰ *Guangoches* is the Mexican word for a certain kind of thick, coarse cloth.

1 cap with its coat of arms like that of dragons	5 <i>pesos</i> (total)
2 <i>tercios</i> of highest grade tobacco containing 350 lbs.	262 <i>pesos</i> (total)
[Total] 21:927 <i>pesos</i>	

“As appears in the margin, the calculation of the outfit of the 30 recruits with their families and wardrobe, the arms, horses and trappings, baggage and beasts of burden, and other expenses of the second expedition of Captain Juan Bautista de Anza, from his presidio of San Ignacio de Tubac to that of San Carlos de Monterey, [amounts to] 21,927 *pesos*, 2 *reales*, in which quantity is included the estimated value of the effects at present in the royal estate here and at Alamos, to the end that one may at once gain a clear knowledge of the total cost of the expedition.”³²

³¹ *B* and *C* omit this item. By including it the total becomes a *peso* too high, but without it would be 9 *pesos* too much. The shirts, as also the cloak, coat, and trousers, were for a gift to Chief Palma of the Yumas.

³² The signature of *Juan José de Echeveste* alone appears on all three copies, but it is clear from other documents that Anza helped *Echeveste* to draw up the document.

APPENDIX C

SAN MIGUEL DE HORCASITAS/SAN FRANCISCO ECOLOGICAL COMPARISON

In order to better understand the transition that the founders of San Francisco made in leaving Sonora, this appendix highlights the essential environmental differences which would affect their lifestyle. The analysis is broken up into sections: ecology, climate, geomorphology, and soils. Comparing the two areas directly illustrates the marked differences which would necessitate acclimating, along with the presence of a few similarities.

To begin, the ecological comparison was undertaken by compiling species lists. These lists demonstrated the differing composition of plant communities which would strike the founders immediately; the stark difference between the cactus and thornscrub ambassador species from Sonora and the forbs and large trees from San Francisco would be immediately apparent to a newcomer. Even beyond first impressions, essentially zero noted plant species cross over from the two disparate biomes (Felger, Nabhan, and Sheridan 1976; <http://ucjeps.berkeley.edu/consortium>). Specifically, Ethnobotany on the Rio San Miguel, and the Consortium of California Herbaria, provided the species lists for Sonora and the San Francisco area respectively. The list provided by Felger and colleagues outlined specific biome subtypes within Sonora, while the Consortium list was broken up into plants found in the San Francisco Bay and those found in San Francisco County outside of the Bay area. Additionally, Brown classifies the San Francisco area as a California Valley Grassland, so a species list for the Central Valley Grassland was included from the World Wildlife Federation website (Brown 1994). Instead of inundating the following table with hundreds of species, we broke the lists down to share a glimpse of the different composition of plants found between the two areas.

Comparison of climate centered on variation in temperature and precipitation between the two areas. Weather stations at Mission Dolores in San Francisco and Hermosillo provided temperature data for San Francisco and Sonora respectively. Hermosillo demonstrated markedly higher temperatures; even the minimum temperature in Hermosillo was higher than in San Francisco from May to September. The shape of the temperature curves also varied, with Sonora showing gradual ascent to a peak during July (range from 48 F to 108 F) and San Francisco demonstrating a far shallower curve (range from 45.6 to 69.8) with a maximum in September. Average temperatures for San Francisco and Hermosillo were 63.6 F and 91 F respectively. However, where average temperature in Hermosillo demonstrated a 43% increase from San Francisco's, average precipitation in Hermosillo was only 16% lower.

Precipitation data for Sonora was averaged between Ures and Opodepe in order to focus on the midpoint town of San Miguel de Horcasitas. The data points came from Servicio Meteorológico Nacional study of average precipitation between 1971 and 2000 (<http://smn.cna.gob.mx/>) and a Western Regional Climate Center study of precipitation at Mission Dolores between 1914 and 2009. While San Francisco only surpassed Sonora by 3

inches of precipitation, the distribution of precipitation was almost completely different. San Francisco demonstrated a smooth curve and winter peak, from 0.05 cm in July to 11.19 cm in January while Sonora demonstrated a more variable curve and summer peak, from 0.185 cm in May to 12.9 cm in July. The presence of regular fog in San Francisco also represents an additional point of contrast; the annual mean of 14 days of heavy fog could represent a new experience for the settlers accustomed to more arid conditions.

The soils of San Francisco and Sonora both demonstrate unique sets of limiting factors for agriculture. For San Francisco, limiting factors include the coarse texture and limited water holding capacity combine with significant slope (30-75%) around the mission. For Sonora, agricultural limitations center predominantly on the lack of water. Although Sonoran soils contain very low levels of organic material, they are fertile when provided with ample irrigation. While not directly related to agricultural productivity, both soils demonstrated a gravelly or rocky quality.

Overall, San Francisco and Sonora represent two drastically different settings. Nearly every element of their environment differs in some respect, magnitude, composition, seasonality, or non-seasonal variability. While certain common points exist – annual average precipitation and a gravelly soil component – these similarities mainly represent surface level phenomena which would not drastically alter the settler’s livelihoods. In the vast majority essential parameters of the San Franciscan environment offered an entire new world for the Sonoran pioneers.

Area of comparison	San Miguel de Horcasitas	San Francisco
Associated Biomes	<p><u>Plains of Sonora:</u> The town of San Miguel de Horcasitas lies in the Plains of Sonora biome. It differs from other subdivisions of Sonoran Desertscrub in a lesser presence of cactus, with trees, shrubs and forbs constituting the majority of vegetation. (Brown 1994)</p> <p><u>Sinaloan Thornscrub:</u> East of San Miguel de Horcasitas, Sinaloan Thornscrub commonly inhabits sloping terrain with thorny, drought deciduous trees and shrubs defining the basic community structure. These plants present a more bare, thorny environment in the absence of rain, with more lush greening during the summer rainy season. (Brown 1994)</p> <p><u>Madrean Evergreen Woodland:</u> Located east and northeast of San Miguel de Horcasitas, Madrean Evergreen</p>	<p><u>California Valley Grassland:</u> The city of San Francisco and the Mission Dolores lie within the California Valley Grassland biome. While Brown explains that understanding the historical character of the biome is difficult due to the extent of degradation and development, he describes the earliest accounts of the area as annual prairies. (Brown 1994)</p> <p><u>California Evergreen Forest and Woodland:</u> Surrounding San Francisco, the California Evergreen Forest and Woodland biome are characterized predominantly by oak with chaparral understories, or annual grasses and forbs in the absence of chaparral. (Brown 1994)</p> <p><u>Aquatic ecology:</u> In addition to its terrestrial biome designation, Michael Josselyn’s ecological profile explains, “the San Francisco Bay, the largest estuary on the Pacific coast,</p>

	Woodland represents the nearest mountain biome. Brown describes the environment as a “mild winter-wet summer woodland” with a generally open structure composed of oak, juniper, and pine.	historically contained an extensive contiguous system of salt and brackish tidal marshes. (Josselyn 1983)
Plant Species	<p>Common Name: _____</p> <ul style="list-style-type: none"> Alfalfa Aloe Arrow grass Barley Bonpland willow Bottlegourd Castorbean Chamomille Chiltepins Choya's brother Copalquin Cottonwood Coyote Tobacco Creosote Datura Desert Zinnia Elderberry Fish Goosefoot Garambullo Guayacan Indian grass Indigo Limberbush Lizard tail Mustard greens Pearlberry Pigweed Prarie Acacia Prostrate Sandmat Purslane Red bird of paradise Rock fig Rue Scarlet Cinquefoil Seepwillow Senita Sina Sonoran ratany Southern Sandbur Tullidora Watercress 	<p>Common Name: _____</p> <ul style="list-style-type: none"> Adobe snakeroot Beach starwort Catalina Island mountain mahogany Coast Range linanthus Coast rock cress Coastal sage scrub oak Compact cobwebby thistle Curlyleaf monardella Dudley's rush Dune gilia Fox sedge Fragrant fritillary Franciscan manzanita Franciscan thistle Hartweg's spineflower Island mallow Longhair sedge Manyleaf gilia Marin dwarf flax Marsh horsetail Marsh silverpuffs Michael's piperia Monterey cypress Monterey Indian paintbrush Monterey pine Mt. Diablo helianthella Nuttall's milkvetch Presidio clarkia Pt. Reyes bird's-beak Raven's manzanita Rocky Mountain iris Roundhead Chinese houses San Francisco blue eyed Mary San Francisco champion San Francisco gumplant San Francisco lessingia San Francisco owls clover San Francisco spineflower San Francisco wallflower

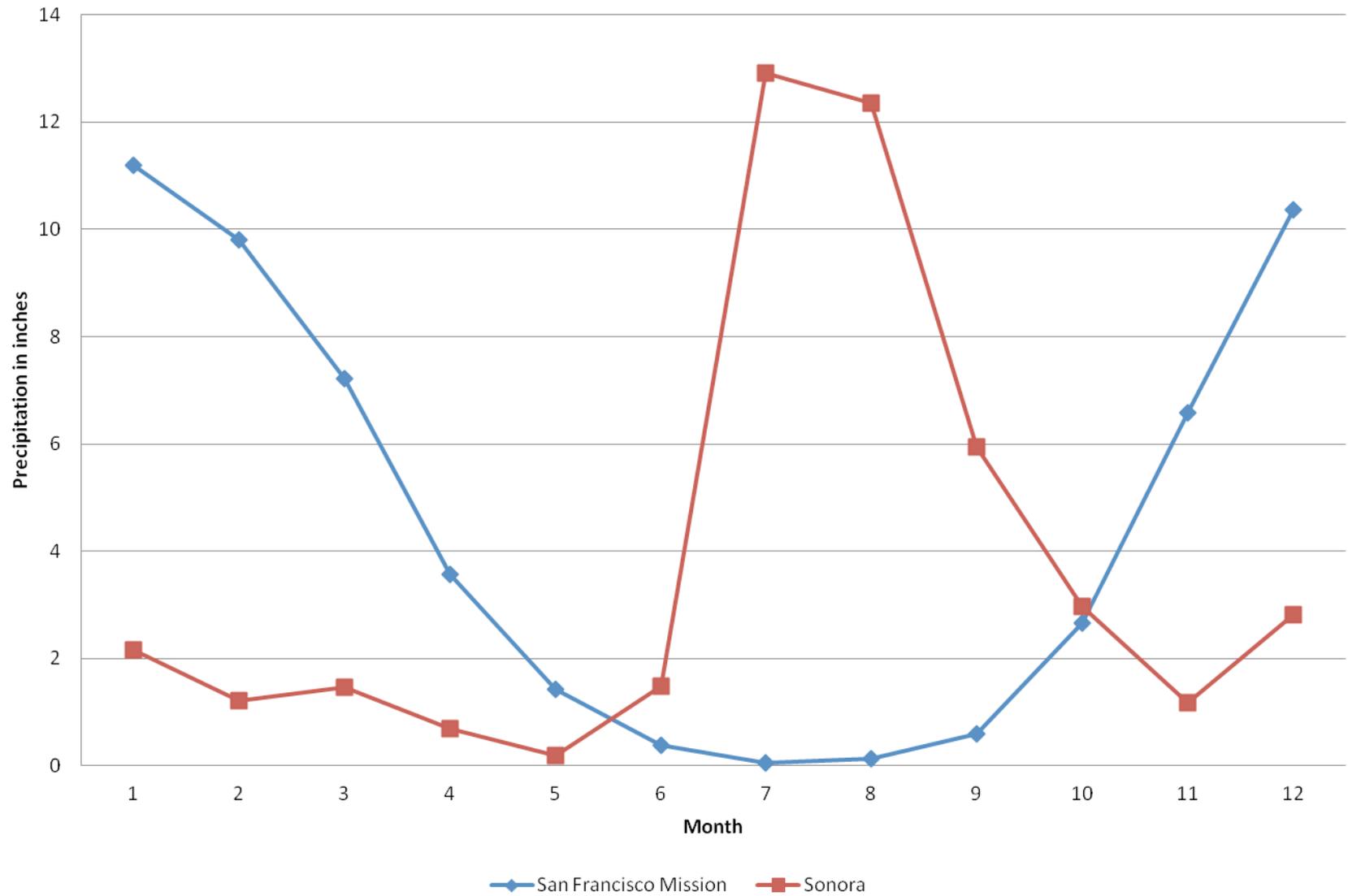
	<p>Wolfberry Wormseed</p>	<p>Sandmat manzanita Santa Cruz manzanita Santa Cruz tarplant Shagbark manzanita Torrey's popcornflower Vasey's thistle Wedgeleaf horkelia Whitehair manzanita</p>
Soils	<p><u>San Miguel de Horcasitas Soils:</u></p> <p>Regosol</p> <ul style="list-style-type: none"> - Rocky/gravelly texture - Located in the east and west of the San Miguel area - Agricultural use is limited by depth of soil present - Susceptibility to erosion varies with slope. <p>Aerosol</p> <ul style="list-style-type: none"> - Located in the center of the San Miguel area - Light colored surface horizon - Poor in organic matter - Agricultural production is limited to areas with irrigation <ul style="list-style-type: none"> o Irrigated areas have high production - Low susceptibility of erosion. <p>Yermosol</p> <ul style="list-style-type: none"> - Rocky/gravelly texture - Located in the center of the San Miguel area - Light colored surface horizon - Poor in organic matter - Natural biomes are pastures and shrublands - Agricultural production is limited to areas with irrigation <ul style="list-style-type: none"> o Irrigated areas have high production <p style="text-align: center;">(Chávez and Guadalupe 2006)</p>	<p><u>San Francisco Mission Soils:</u></p> <p>Barnabe-Candlestick Blend</p> <ul style="list-style-type: none"> - Depth of bedrock is between 8 and 20 inches - Sandstone beneath - Mainly low coastal brush, forbs, and annual grasses - Coastal uplands <p>45% Barnabe</p> <ul style="list-style-type: none"> ▪ Dark grayish brown ▪ Very gravelly sandy loam ▪ Shallow and well drained ▪ Moderate permeability ▪ Steeper side slopes ▪ Very low water capacity ▪ 8-20 inch effective rooting depth ▪ Rapid runoff <p>35% Candlestick</p> <ul style="list-style-type: none"> ▪ Fine sandy loam ▪ Brown loam underneath ▪ Moderately deep and well drained ▪ Moderately slow permeability ▪ Side slopes and toe slopes <ul style="list-style-type: none"> o Toe slopes – the less steep slopes which transition between steeper slopes above, and flat below ▪ Low or moderate water capacity ▪ 20 – 40 inch effective rooting depth ▪ Rapid runoff ▪ High danger for slippage

Soils		<p>Kron</p> <ul style="list-style-type: none"> - Shallow and well drained – derived from hard fractured sandstone - Fractured sandstone at 14 inches - Moderate permeability - Very low water capacity - Surface is brown sandy loam <ul style="list-style-type: none"> o Brown loam underneath - 10-20 inch effective rooting zone - Rapid runoff <p>Buriburi</p> <ul style="list-style-type: none"> - Has a detritus layer 2 inches thick - Surface layer of dark grayish brown gravelly loam <ul style="list-style-type: none"> o Same underneath but a bit lighter - Moderate permeability - Sandstone at 30 inches - Bedrock from 20-40 - Low water capacity - 20-40 inch effective rooting zone - Rapid runoff - Hard fractured sandstone at 24 inches, bedrock between 20 and 40 <p><u>Other Soil Series surrounding San Francisco:</u></p> <p>Sirdrak Sand</p> <p>Present on beaches and wind deposited dunes</p> <ul style="list-style-type: none"> - Rapid drainage - Low available water capacity - Sand texture <p>Typic Argiustolls</p> <p>Present in coastal areas</p> <ul style="list-style-type: none"> - Moderate drainage - Moderate available water capacity - Sand clay loam texture <p>(Natural Resources Conservation Service 2009)</p>
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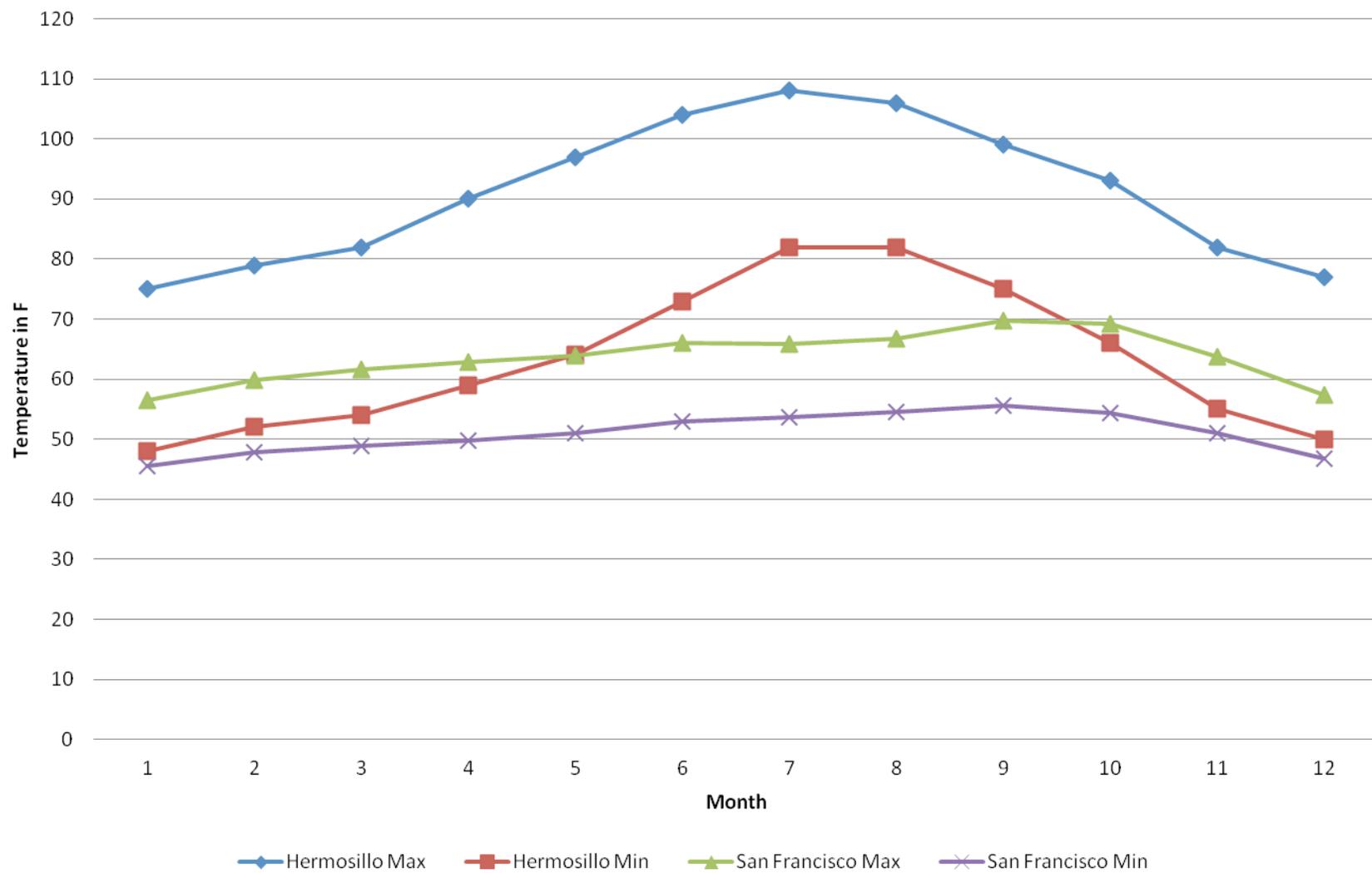
Climate/ Precipitation	<p>San Miguel de Horcasitas:</p> <ul style="list-style-type: none"> - Data averaged from 1971 to 2000 <ul style="list-style-type: none"> ▪ (Servicio Meteorológico Nacional) - 518 m (1699.5 ft) elevation <p>(Instituto Nacional para el Federalismo y el Desarrollo Municipal, Gobierno del Estado de Sonora 2005)</p> <p><u>Hermosillo precipitation</u></p> <table border="1"> <thead> <tr> <th></th> <th>in</th> <th>cm</th> <th>% of yearly precip.</th> </tr> </thead> <tbody> <tr><td>Jan</td><td>0.04</td><td>0.11</td><td>1.82</td></tr> <tr><td>Feb</td><td>0.16</td><td>0.4</td><td>6.63</td></tr> <tr><td>Mar</td><td>0.07</td><td>0.19</td><td>3.15</td></tr> <tr><td>Apr</td><td>0.00</td><td>0.01</td><td>0.17</td></tr> <tr><td>May</td><td>0.00</td><td>0</td><td>0.00</td></tr> <tr><td>Jun</td><td>0.09</td><td>0.23</td><td>3.81</td></tr> <tr><td>Jul</td><td>0.60</td><td>1.52</td><td>25.21</td></tr> <tr><td>Aug</td><td>0.28</td><td>0.71</td><td>11.77</td></tr> <tr><td>Sep</td><td>0.65</td><td>1.65</td><td>27.36</td></tr> <tr><td>Oct</td><td>0.37</td><td>0.93</td><td>15.42</td></tr> <tr><td>Nov</td><td>0.06</td><td>0.15</td><td>2.49</td></tr> <tr><td>Dec</td><td>0.05</td><td>0.13</td><td>2.16</td></tr> <tr><td>Total</td><td>2.37</td><td>6.03</td><td>100</td></tr> </tbody> </table> <p>(Servicio Meteorológico Nacional)</p>		in	cm	% of yearly precip.	Jan	0.04	0.11	1.82	Feb	0.16	0.4	6.63	Mar	0.07	0.19	3.15	Apr	0.00	0.01	0.17	May	0.00	0	0.00	Jun	0.09	0.23	3.81	Jul	0.60	1.52	25.21	Aug	0.28	0.71	11.77	Sep	0.65	1.65	27.36	Oct	0.37	0.93	15.42	Nov	0.06	0.15	2.49	Dec	0.05	0.13	2.16	Total	2.37	6.03	100	<p>San Francisco Mission Dolores:</p> <ul style="list-style-type: none"> - Data averaged from 1/1/1914 to 12/31/2009 - Weather station at 15.24 m (50 ft) elevation <p><u>San Francisco Mission Dolores Precipitation</u></p> <table border="1"> <thead> <tr> <th></th> <th>in</th> <th>cm</th> <th>% of yearly precip.</th> </tr> </thead> <tbody> <tr><td>Jan</td><td>4.37</td><td>11.19</td><td>20.73</td></tr> <tr><td>Feb</td><td>3.83</td><td>9.8</td><td>18.16</td></tr> <tr><td>Mar</td><td>2.82</td><td>7.22</td><td>13.38</td></tr> <tr><td>Apr</td><td>1.39</td><td>3.56</td><td>6.60</td></tr> <tr><td>May</td><td>0.56</td><td>1.43</td><td>2.65</td></tr> <tr><td>Jun</td><td>0.15</td><td>0.38</td><td>0.70</td></tr> <tr><td>Jul</td><td>0.02</td><td>0.05</td><td>0.09</td></tr> <tr><td>Aug</td><td>0.05</td><td>0.13</td><td>0.24</td></tr> <tr><td>Sep</td><td>0.23</td><td>0.59</td><td>1.09</td></tr> <tr><td>Oct</td><td>1.04</td><td>2.67</td><td>4.95</td></tr> <tr><td>Nov</td><td>2.57</td><td>6.58</td><td>12.19</td></tr> <tr><td>Dec</td><td>4.05</td><td>10.37</td><td>19.21</td></tr> <tr><td>Total</td><td>21.1</td><td>53.97</td><td>100</td></tr> </tbody> </table>		in	cm	% of yearly precip.	Jan	4.37	11.19	20.73	Feb	3.83	9.8	18.16	Mar	2.82	7.22	13.38	Apr	1.39	3.56	6.60	May	0.56	1.43	2.65	Jun	0.15	0.38	0.70	Jul	0.02	0.05	0.09	Aug	0.05	0.13	0.24	Sep	0.23	0.59	1.09	Oct	1.04	2.67	4.95	Nov	2.57	6.58	12.19	Dec	4.05	10.37	19.21	Total	21.1	53.97	100
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	<p>Miguel de Horcasitas were unavailable, so values for Hermosillo were utilized because of nearness and climatic similarity</p>	<p>Mean Monthly and Annual Number of Days Heavy Fog</p> <table border="1"> <tr><td>January</td><td>4</td></tr> <tr><td>February</td><td>3</td></tr> <tr><td>March</td><td>*</td></tr> <tr><td>April</td><td>*</td></tr> <tr><td>May</td><td>*</td></tr> <tr><td>June</td><td>*</td></tr> <tr><td>July</td><td>*</td></tr> <tr><td>August</td><td>*</td></tr> <tr><td>September</td><td>1</td></tr> <tr><td>October</td><td>1</td></tr> <tr><td>November</td><td>2</td></tr> <tr><td>December</td><td>3</td></tr> <tr><td>Annual</td><td>14</td></tr> </table> <p>- Heavy fog is defined as an observation with 1/4 mile visibility or less sometime during the day.</p> <p>* = less than 1/2 day</p> <p>(Western Regional Climate Center N.d. b.)</p>	January	4	February	3	March	*	April	*	May	*	June	*	July	*	August	*	September	1	October	1	November	2	December	3	Annual	14
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Precipitation Comparison: San Francisco and Sonora



Comparison of Temperature Variability: San Francisco and Hermosillo



APPENDIX D FOUNDERS CALIDAD

Table D.1 Calidad of 75 Founders of San Francisco

The table below lists the ethnicity of 75 founders of San Francisco. The majority of this information was recorded by the 1790 Census (see Table D-3), however, five of the founders (N. Galindo, Berrellesa, M.M. Bojorquez, M.T. Pinto, and F. Co Duarte) do not appear in the 1790 Census but were obtained from an unknown source. Ana Maria Bernal, one of the founders listed on the 1790 Census, is excluded from the table below due to her unknown ethnicity.

ESPANOL	MESTIZO	MULATO	INDIO	COYOTE	PARDO
Grijalva	R. Bojorquez	Bojorquez	Linares	Berreyesa	Aceves
F. Alviso	Romero	M. M. Amézquita	1	1	1
X. Alviso	M. G. Bojorquez	S. M. Amézquita			
V. Mesa	M. M. Bojorquez	Altamirano			
Borboa	J. A. Amézquita	J. J. Tapia			
J. J. Mesa	M. D. Amézquita	A. Aceves			
J. I. Mesa	J. R. Linares	P. Aceves			
J. A. Mesa	J. I. Vázquez	M. M. Tapia			
J. D. Mesa	F. Cortés	J. de la Bastida	This information was collated by Dr. H. Dobyns		
J. Mesa	J. M. Pinto	X. Pico			
Rivas	M. Pinto	J. P. Pico			
G. Linares	Ruelas	J. M. Pico			
G. Peralta	M. G. Bojorquez	M. R. Tapia			
F. M. Valenzuela	S. de la Cruz Pico	M. T. Pinto			
J. J. Peralta	M. J. Bernal	F. co Duarte			
L. M. Peralta	J. J. Bernal				
M. L. Alviso	I. C. Castro				
P. Peralta	Nicolás Galindo				
A. Vázquez	Berrellesa				
I. Soto	M. M. Bojorquez				
B. Espinosa					

20

J. A. Soto
 J. Pico
 P. Bojorquez
 F. Valencia
 S. López
 J. A. Sánchez
 M. Morales
 J. A. Sánchez
 (2)
 M. Sánchez
 J. Castro
 M. Botiller
 F. Castro
 V. Feliz
 M. G.
 Pacheco
 B. Pacheco
 M. Pacheco

37

Table D.2 Recruitment Zone of 75 Founders of San Francisco Recorded in the 1790 Census

The table below lists the recruitment zone of 71 Founders of San Francisco. The statistics below were compiled through the utilization of the 1790 Census (see Table D-3). Three of the founders' recruitment zones were not found in the Census and are therefore listed as unknown.

Villa Sinaloa	25 = 35%
Terrenate	7 = 9.9%
Horcasitas	6 = 8.5%
Altar	6 = 8.5%
Culiacán	4 = 5.9%
San Bartolomé, Chihuahua	3 = 4.2%
San Xavier Cabazán	3 = 4.2%
Sonora	2 = 2.8%
Tubac	2 = 2.8%
Valle de San Luis, Río Chico, San Juan Bautista, Tepic, Bayoreca, Aguage, Aqualulco, Guadalajara, Fronteras, Los Alamos	1 = 1.4% each
Unknown	3 = 4.2%

Table D.3 Founders Calidad

The table below is the 1790 Census listing of the founders of San Francisco, displaying the name, age, ethnicity, and place of origin of each individual.

Name	Age (1775)	Age (1790)	Calidad	Origin Place	Page
Sgt. Juan Pablo Grijalva	33				30
Alférze Pablo de Grijalva		48	Español	Valle de San Luis, Son.	77
Francisco Alviso	14				30
“ ”		28	Español	Horcasitas	95
Francisco Xavier	12				30
Xavier Alviso		24	Español	Horcasitas	95
María Agustina Bojórquez	1				33
Agustina Bojórquez		18	Mulata	Villa Sinaloa	95
Valerio Mesa	33				30
“ ”		60	Español	San Juan Bautista	99
Marie Leonor Borboa	30				30
Leonor Borboa		50	Española	Altar	99
José Joaquín Mesa	13				30
Joaquín Mesa		28	Español	Altar	97
José Ignacio Mesa	12				30
“ ”		25	Español	Altar	95
José Antonio Mesa	7				30
“ ”		19	Español	Altar	97
José Dolores Mesa	9				30
Ignacio Dolores Mesa		23	Español	Altar	96
Juan Mesa	5				30
“ ”		19	Español	Altar	99
Ramon Bojórquez	32				30
“ ”		58	Mestizo	Villa Sinaloa	104
María Francisca Romero	30				30
Francisca Romero de Boj		52	Mestiza	Villa Sinaloa	104
María Gertrudis Bojórquez	14				30
“ ”		28	Mestiza	Villa Sinaloa	83
María Micaela Bojórquez	12				30
De Higuera		28	Mestiza	Villa Sinaloa	103
Juan Antonio Amézquita	35				31
“ ”		70	Mestizo	Terrenate	97
María Dolores Amézquita	5				31
“ ”		24	Mestiza	Terrenate	95
María Matilde Amézquita	4				31

Matilde Amézquita		21	Mulata	Terrenate	81
Salvador Manuel Amézquita	14				31
Manuel Amézquita			Mulato	Terrenate	99
Ignacio Linares	30				31
“ ”		45	Indio	Horcasitas	101
Gertrudis Rivas	22				31
María Gertrudis Rivas		38	Española	Río Chico, Son.	101
José Ramón Linares	4				31
Ramón Linares		19	Mestizo	Horcasitas	104
María Gertrudis Linares	7				31
Gertrudis Linares		22	Española	Horcasitas	92
Justo Roberto [Altamirano]	30				31
Justo Altamirano	widower	45	Mulato	Aguage, Son.	101
Gabriel de Peralta	40				31
Gabriel Peralta, retired		55	Español	Terrenate	104
Francisca Manuel Valenzuela	33				31
María Francisca Valenzuela		51	Española	Terrenate	104
Juan José Peralta	18				31
“ ”		33	Español	Terrenate	95
Isabel Berrellesa	18				35
Isabel Berreyesa		36	Coyota	Villa Sinaloa	95
Luis María Peralta	16				31
“ ”	corporal	32	Español	Tubac	101
María de Loreto Alviso	8				30
María Loreto Alviso		19	Española	Horcasitas	101
Pedro Regalado Peralta	15				31
Pedro Peralta		26	Español	Tubac	102
Juan Tiburcio Vázquez	20				31
Tiburcio Vázquez		35	Mestizo	Ahualulco, Jalisco	99
José Antonio Vázquez	9				31
Antonio Vázquez		26	Español	Villa Sinaloa	88
Juan José Tapia	9				32
“ ”		26	Mulato	Culiacan	95
María Petra Aceves	12				32
Petra Aceves		28	Parda	San Bartolomé, Chih.	98
Antonio Quiterio Aceves	35				32
Antonio Aceves		50	Mulato	San Bartolomé, Chih.	100
María Feliciana Cortes	30				32
Feliciano Cortes de Aceves		50	Mestiza	San Bartolomé, Chih.	100
Juan Pablo Aceves	1				32

Pablo Aceves		18	Mulato	Culiacan	103
Juan María Pinto	16				33
“ ”		34	Mestizo	Villa Sinaloa	94
María Manuela Tapia	6				32
Manuela Tapia de Pinto		25	Mulata	Culiacan	94
José Marcelo Pinto	14				33
Marcelo Pinto		27	Mestizo	Villa Sinaloa	97
Francisca Xavier Ruelas	40				33
Francisca Ruelas	widower	70	Mestiza	Villa Sinaloa	98
Ignacio de Soto	27				33
Ignacio Soto		41	Español	Villa Sinaloa	101
Bárbara de Espinosa	18				33
María Bárbara de Espinosa		30	Española	Villa Sinaloa	101
José Antonio Soto	2				33
“ ”		17	Español	Villa Sinaloa	101
José María Pico	7				33
“ ”		27	Español	San Xavier de Cabazán	80
María Gertrudis Bojórquez	14				30
“ ”		28	Mestiza	Villa Sinaloa	83
Santiago de la Cruz Pico	38				33
“ ”	vaquero	60	Mestizo	San Xavier de Cabazán	85
María Jacinta Bastida	26				33
Jacinta de la Bastida de Pico		53	Mulata	Tepic	85
Francisco Xavier Pico	5				33
Xavier Pico		23	Mulato		85
José Patricio Pico	3				33
Patricio Pico		21	Mulato		85
José Miguel Pico	4				33
Miguel Pico		20	Mulato	San Xavier de Cabazán	90
Pedro Bojórquez	21				33
“ ”	vaquero	36	Español	Villa Sinaloa	100
Francisco María Valencia	5				33
Francisco Valencia		22	Español	Bayoreca	103
Sebastian Antonio López	17				33
Sebastian López		34	Español	Villa Sinaloa	94
María Rosa Tapia	13				32
Rosa Tapia de López		30	Mulata	Culiacan	94
Ana María Bernal	5				34
“ ”	de Moraga	18		Villa Sinaloa	93
María Teresa Bernal	2				34
“ ”	de Chavoya	17	Mestiza	Villa Sinaloa	101

José Antonio Sánchez	29				34
“	”	39	Español	Guadalajara	103
María Dolores Morales	26				34
“	”	de Sánchez	34	Española	Villa Sinaloa
José Antonio Sánchez	2				34
“	”	17	Español		103
José Joaquín Bernal	15				34
Joaquín Bernal		28	Mestizo	Villa Sinaloa	103
María Josefa Sánchez	3				34
“	”	17	Española	Villa Sinaloa	103
Joaquín Isidro de Castro	43				34
Joaquín Castro, Labrador		50	Español	Villa Sinaloa	99
María Martina Botiller	40				34
Martina Botiller de Castro		50	Española	Villa Sinaloa	99
Francisco Castro	5				34
Francisco María Castro		18	Español	Villa Sinaloa	99
Vicente Feliz	34				34
“	”	widower	51	Español	Alamos
María Gertrudis Pacheco	13				35
Gertrudis Pacheco de Archuleta		36	Española	Sonora	98
Ignacio Clemente de Castro	22				34
Ignacio de Castro		36	Mestizo	Villa Sinaloa	96
Bárbara Pacheco	8				35
“	”	de Castro	25	Española	Sonora
Miguel Pacheco	21				34
Miguel Pacheco	corporal	36	Español	Fronteras	101

1.1797 DEC. 6

Copia

Senores Curas de Nro Obispado de Sonora

El Exmo Senor Comisario Apostolico general de las tres gracias, Dn Patricio Martinez de Bustos con fecha del primero de Julio del corriente ano nos ha participado que nro Smo Padre el SOr Pio Sexto condescendiendo a las piadosas instancias del Rey Nro Senor se ha dignado prorrogar por otro sexencia que comenzara a contarse desde el bienio de mil ochocientos, y mil ochocientos uno el Yndulto concedido en veinte u ocho de Agosto de mil stecientos noventa y cincopara quetodos los fieles habitants en los dominios de Su Mag,d Catolica asi de Espana come de Yndias puedan con seguridad de conciencia comer carnes saludables en los dias quadragesmales Dominogo, Lunes, Martes, y Jueves, baxo las precias condiciones que dho Exmo Senor Comisario Gral de Cruzada como interprete de la mente de su Santidad en esta parte expondra en su edicto declaratorio de esta concesion pontificia, cuyos exemplars se remitiran a todos los Parrocos al tiempo que se las distribuyan los sumarios de la Bula de la Santa Cruzada para su inteligencia y publicacion. So que prevenimos a V.mdes a fin de que arreglandose en la explicacion del sobredicho Indulto a lo mandado por su Exa.ia se verifiquen puntualmente complidas las piadosas intenciones de Nro Soberano, y dejando trasladados a sus libros esta nra carta circular cuidaran que siga por su acostumbrado derrotero, hast el ultimo Curato de donde se dirijira a nra Secretaria de Gobierno= Dios que la vida Vmdes muchos anos. Hazienda de Sn Nicolas de Panuco Diciembre seis de mil setecientos noventa y siete.

Fray Francisco Obispo Governador de Sonora.

Archivo de la Catedral de Cuiliacan

Arizona Historical Society, Microfilm MCF 0.560.2

APPENDIX F THE 1770 FLOODS OF SONORA/SINALOA

In September of 1770, the banks of the rivers of western Mexico swelled to disastrous levels and caused vast flooding throughout the river valley. The regions most affected by these floods were Sinaloa and southern Sonora. Anywhere from hundreds to thousands of people were left homeless by the flooding (Mason 1998). In some instances, entire villages were destroyed, as Dobyns notes in chapter three. Friar Juan Dominguez, who was at the Nuestra Señora de la Asuncion de Arizpe Monastery along the Río Sonora a few years after the flood, gave a brief insight into the total amount of destruction that the raised floodwaters caused. He stated that the floods were caused by *equipates*, or rains that cause heavy currents in the river. These rains were excessive in September of 1770 and the floodwaters caused most of everything to be swept away. The friar emphasizes the ferocity of these currents brought about by the rains in his report by saying, “Not only arable soil [was swept away] but whatever plants were growing, be they in leaf, flower or even in fruit as happened in September of 1770” (Carlisle and Fontana 1969: 186). The friar, who wrote these observations in July three years after the flood, also noted the reservoirs and canal structures servicing Arizpe and Chinapa had not yet been rebuilt, despite the time that had passed. The monastery was also not interested in repairing its earthwork irrigation or mill, both of which were destroyed by the flooding, and instead simply moved their agriculture and granary to one of the monastery’s *vistas*, Bacoachi. Bacoachi was largely left undamaged because of a wide opening in the channel there, making it one of the only large and viable producers of food in the area.

Other towns were not as fortunate as Bacoachi. Both Arizpe and Chinapa were heavily damaged, leaving both the Spaniards and the Opata of these villages with nothing to eat. Friar Dominguez categorizes this damage by stating that only 3 pieces of workable land remained in Arizpe and two in Chinapa (Carlisle and Fontana 1969). It can be reasoned that the personal loss of homes and food sources was equally as devastating in these towns. As Dobyns discusses in chapter four, houses of that time period were largely adobe or wood and would not have been able to stand up to the force of the rivers. The town of San Miguel de Tuape along the Río San Miguel, also suffered heavy losses as the lands and gardens of the two hundred twenty eight Opata and Eudebe people were carried away. The only thing left behind was an old adobe church that somehow survived. Villa Sinaloa, on the banks of the Río Sinaloa, was also extensively damaged. Hundreds of people in Villa Sinaloa lost their homes. The old Jesuit church built in the 16th century was swept away, leaving only the belfry behind (Mason 1998). Other towns and groups of people that were most likely impacted were, the Opata at Baviacora, Sinoquipe, Alamos, Ures, Anconchi, and Huapac; the Tehumia at Bacuachi and Banamichi; and Lowland Pimas at Ures. Dobyns lists these groups of people and the villages they lived in extensively in chapter three. Countless other river towns and villages were mostly likely impacted throughout the western coast (see Map F.1).

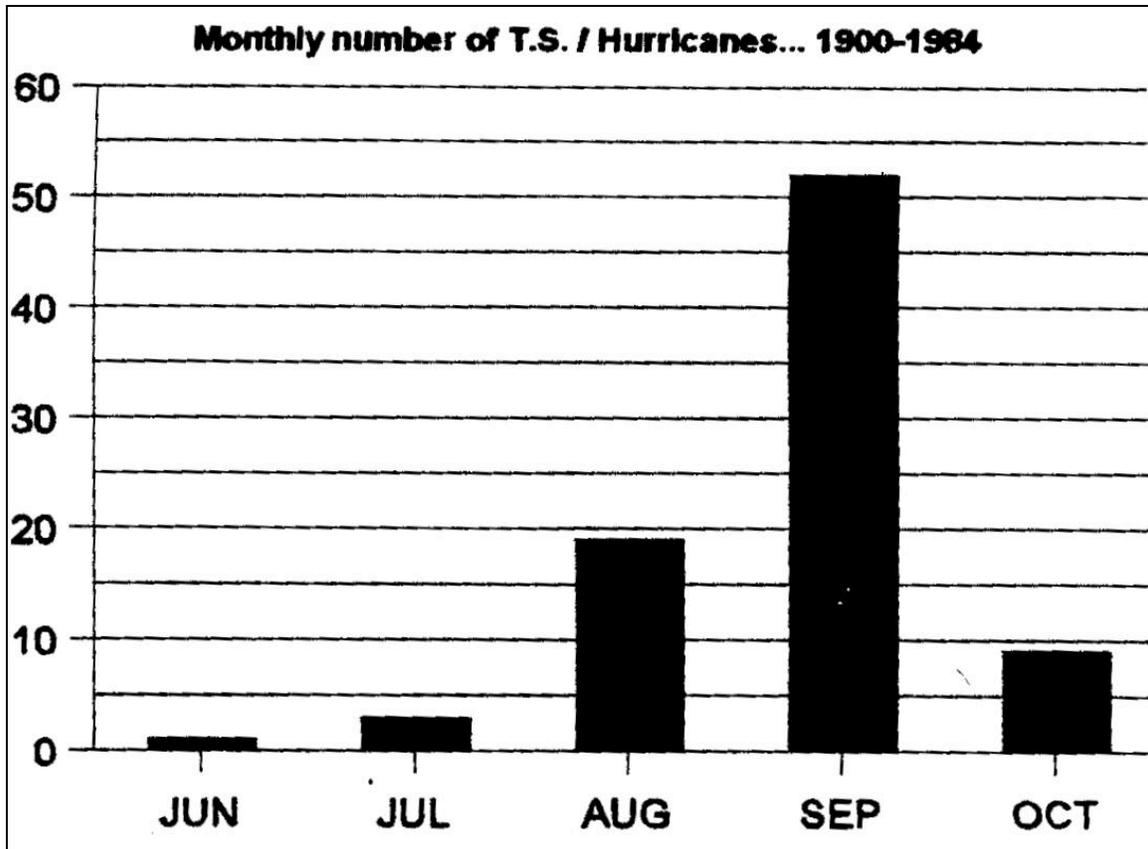


Figure F.1 Number of Tropical Cyclones that Moved Inland

The extensive amount of flooding over such a large area lends credence to the theory that the floods were caused by a north pacific tropical cyclone. These storms originate in the pacific off the coast of Central and South America and typically travel west out into the open sea. However, several times a year between June and October, these storms will move inland drenching Mexico and the US Southwest with excessive precipitation. The most likely time that the storms will affect precipitation in Mexico is during the month of September (see Figure F.1). This table shows the high frequency of eastern north Pacific tropical cyclones affecting Mexico and the Southwest during the various months of the cyclone season from the years 1900 to 1984. September noticeably stands out as the highest month in which tropical cyclones make landfall. After a brief interview discussing the known facts, Dr. Katie Hirschboeck, an associate professor at the University of Arizona who studies large-scale atmospheric circulation, (interviewed May 21, 2010), believes that a good argument can be made that the flooding occurring in September of 1770 was in fact caused by heavy rainfall due to a pacific tropical cyclone (with possible hurricane strength), and not localized thunderstorms or the seasonal monsoons.



Map F.1 River Systems and Towns in Path of Possible Tropical Cyclone

The impact of these floods most likely caused many people to move out of the depressed areas. Evidence shows that many of the families that lived in Sonora first lived in Sinaloa. This would have made the recruiting of people by Juan Bautista de Anza much easier, since the families had already been displaced only a few years before. Roots would not have been as deep and people would not have been as established in Sonora as they would have been in Sinaloa,

where they had originally lived. This would have made the journey to San Francisco with Anza much less traumatic. Evidence of this exists in the Spanish census of 1790. Families such as the Picos who originally hailed from San Xavier de Cabazan, on the Rio Piastla in Sinaloa were recruited for the California expedition by Anza in San Miguel de Horcasitas. Other families who were recruited from Sonora, although they were originally from Sinaloa, were the Castro and Valencia families amongst others (Mason 1998). Although not all families were induced into leaving Sinaloa and moving into Sonora because of the flood, it was a probable cause for many of the migrations. Without the tragedy of this flood it might have been a much smaller population traveling with Anza across Sonora and into California.

Glossary

Abarrote- General convenience store.

Aguate- Avocado. [*Persea americana*].

Ajo- Garlic. [*Allium sativum*].

Álamo- Cottonwood. [*Populus sp.*]

Albaricoque- Apricot.

Alfalfa- Alfalfa. [*Medicago sativa*]

Algodón- Cotton.

Añil- Indigo. [*Indigofera suffruticosa*]

Apellidos- Last names.

Aventada- Daring.

Bacanora- An agave-derived liquor.

Bachata- Wolfberry. Plant that produces little black fruit. Used for circulation problems, diabetes, purifying the blood, etc. [*Lycium berlandieri*]

Barbacoa- Beef that is slow cooked over an open fire.

Batamote- Seepwillow. [*Baccharis glutinosa*]

Berro- Watercress. [*Nasturtium officinale*]

Brasil- Brasil [Tree- *Haematoxylum brasiletto*]

Buñuelos- Fried dough often coated with sugar.

Cacahuate- Peanut.

Cajeta- Thickened syrup made from caramelized milk.

Capirotada- Bread pudding with a mixture of fruits and walnuts.

Cal- Lime (Mineral).

Calabazas- Squash/Pumpkins/Zucchini.

Caldo de Queso- Cheese stew.

Camote- Sweet Potato/Yam.

Caña- Sugar cane.

Caravana- Caravan. Used interchangeably with reenactment.

Carne asada- Grilled meat.

Carne seca- Dried meat.

Cebada- Barley. [*Hordeum vulgare*]

Cebolla- Onion.

Charro- Term referring to traditional horseman from Mexico known for their colorful clothing.

Chicharrones- Pork rinds.

Chicos- Dried corn that is crushed and often soaked in chili.

Chile colorado- Meat smothered in red chili sauce.

Chile verde- Green chili.

Chiltepines- Chiltepins. [*Capsicum annuum var. Glabriusculum*]

Choal- Fish goosefoot. [Wild Green- *Chenopodium neomexicanum*]

Chorizo- Pork and beef meat that is marinated in chili and spices and sometimes stuffed into an intestinal casing.

Cilantro- Coriander.

Ciruela pasa- Prune.

Comal- Iron griddle for making tortillas.

Copalquin- Copalquin. [*Hintonia latiflora*]

Cosahui- Sonoran ratany. [*Krameria grayi*]

Coyotas- Large, flat cookies traditionally stuffed with brown sugar.

Cundina- Rotating credit.

Curandero- Traditional folk healer.

Datil- Date.

Durazno- Peach.

Ejido- A system whereby the government promotes the use of communal land shared by the people of the community.

Café- Coffee.

Elote- Young sweet corn.

Empacho- Stomach ailment.

Epazote- Wormseed. [*Dysphania ambrosioides*]

Eucalipto- Eucalyptus.

Fríjol Amarillo- Yellow Bean.

Fríjol Blanco- White Bean.

Fríjol Pinto- Pinto Bean.

Fríjol Tepari- Tepary Bean.

Fríjol Yurimun- Yurimun Bean.

Frijol- Bean.

Frijoles de Fiesta- Dish composed of beans, cheese, and chili.

Ganaderia- Cattle.

Garambullo- Garambullo. [*Pisonia capitata*]

Garbanzo- Garbanzo Bean, Chickpea.

Golondrina- Prostrate Sandmat [*Euphorbia petrina or prostrate*]

Granada- Pomegranate.

Guayacán- Guayacan. [*Guaiacum coulteri*]
Guerequi- Choya's brother. [*Ibervillea sonora*]
Hediondilla-Creosote. [*Larrea tridentata*]
Hierba Colorada- Scarlet Cinquefoil. [*Potentilla thurberi*]
Hierba de la Flecha- Arrow grass. [*Triglochin sp.*]
Higo- Fig.
Higuerilla- Castorbean. [*Ricinus communis*]
Huerta- Orchard.
Huevito- Pearlberry. [*Vallesia glabra*]
Jabalí- Javalina.
Jamoncillo- Candy made from a combination of milk, sugar, and vanilla.
Jícara- Bottlegourd. [*Lagenaria siceracia*]
Lima- Lime.
Limón- Lemon.
Limonada- Lemonade.
Limon de Castilla- Sweet lemon tea.
Machaca- Dried, spiced meat (most commonly beef).
Maguey- Agave.
Maíz- Corn.
Maíz dulce- Sweet corn.
Maíz reventador- Popping corn.
Manata- Skin that forms on the top of fresh milk.
Mango- Mango.

Mano- Grinding stone.

Manzana- Apple.

Manzanilla- Chamomille. [*Matricaria chamomilla*]

Masa- Dough.

Masorca- Dried corn ready to be ground.

Melga- a type of canal used in flood agriculture of cereals that require a lot of water like alfalfa.

Melón- Melon.

Membrillo- Quince.

Menudo- Soup that contains a mixture of tripe (intestines) and stomach beef with a variety of spices and condiments.

Metate- Grinding stones used to tenderize meat, or corn, coffee, etc.

Mesquite- Mesquite.

Mostaza- Mustard greens. [*Brassica campestris*]

Naranja Agria- Bitter Orange.

Nixtamal- Prepared grain for tamales and other foods.

Nogal- Walnut tree.

Nopales- Prickly pear pads.

Nuez- Walnut.

Ocotillo- Ocotillo.

Orégano- Oregano.

Padrinos- Leaders of community activities.

Pajareros- Group of people from around the San Miguel area who exchanged goods with the residents of various towns.

Palo Fierro- Ironwood.

Papa- Potato.

Partera- Midwife.

Pera- Pear.

Piloncillo- Unrefined brown sugar.

Pimienta- Pepper.

Pinole- Coarse flour made from ground toasted corn kernels which can be eaten by itself or used as a base for a sweet beverage.

Pitaya- Organ Pipe Cactus and its fruit.

Pitayero- Long pole with a crossbar and a point at the end that was used to get the pitaya fruit.

Plátano- Banana.

Pomelo/Toronja- Grapefruit.

Posada- Mexican Christmas tradition held from the 16th to the 24th of December.

Pozo- Well.

Pozole- Chicken soup that contains a mixture of chicken, chili pepper, corn soaked in lime to make it easier to digest, and other seasonings.

Pozole milpero- Another form of *pozole*, that sometimes includes a larger combination of meat and vegetables, or in San Miguel was noted to be leftover foods cooked in pozole.

Presa- Dam.

Presidente Municipal- Mayor.

Quelites- Pigweed. [*Amaranthus palmeri*]

Quinzini- Mexican gypsies.

Riatas- Bridle.

Romero- Rosemary.

Rosa de Castilla- Rose.

Rosca- Traditional mexican cake made on the Day of the Kings.

Ruda- Rue. [*Ruta graveolens* or *chalepensis*]

Sábila- Aloe. [*Aloe Vera* L.]

Saguaro- Saguaro cactus.

Sandía- Watermelon.

Sábila- Aloe. [*Aloe Vera* L.]

Sauco- Elderberry. [*Sambucus mexicana* or *caerulea*]

Sauz- Bonpland willow. [*Salix* sp.]

Semana Santa- Holy Week.

Sembradillo- Garden/Orchard.

Sina- Sina. [*Stenocereus alamosensis*]

Sinita- Senita. [*Lophocereus schottii*]

Sorgo- Sorghum.

Tabachin- Red bird of paradise. [*Caesalpinia pulcherrima*]

Tabaco de coyote- Coyote tobacco. [*Nicotiana attenuata*]

Tamales- Dish consisting of a starchy corn dough that is filled with meats or vegetables, wrapped in a leaf wrapper, and then steamed or boiled.

Tescalama- Rock fig. [*Ficus petiolaris*]

Tesquin- Beverage made from pineapple and *piloncillo*. .

Toboso- Southern Sandbur. [*Cenchrus echinatus*]

Toloache- Datura. [*Datura meteloides* or *inoxia*]

Tomate- Tomato.

Tomatillo- Husk Tomato.

Torote- Limberbush. [*Bursera hindsiana or inopinnata*]

Tortuga- Desert Tortoise.

Trigo- Wheat.

Tripas- Intestines

Tullidora- Tullidora. [*Karwinskia humboldtiana*]

Tunas- Prickly Pear cactus and fruit.

Uva- Grape.

Vacacutai- Dam.

Vaquero- Cowboy.

Venado- Deer.

Verdolagas- Purslane. [*Trianthema portulacastrum*]

Víbora- Snake.

Vinorama- Prarie Acacia. [*Acacia angustissima*]

Yerba Buena- Mint.

Yerba del Indio- Indian grass. [*Sorghastrum nutans*]

Yerba Mansa- Lizard tail. [*Animopsis californica*]

Zanahoria- Carrot.

Zinnia- Desert Zinnia. [*Zinnia acerosa*]