National Park Service
U.S. Department of the Interior

Coronado National Memorial

Long-Range Interpretive Plan

The 1540 Coronado Expedition ~ Reenactors at Coronado National Memorial

Coronado National Memorial

Long-Range Interpretive Plan

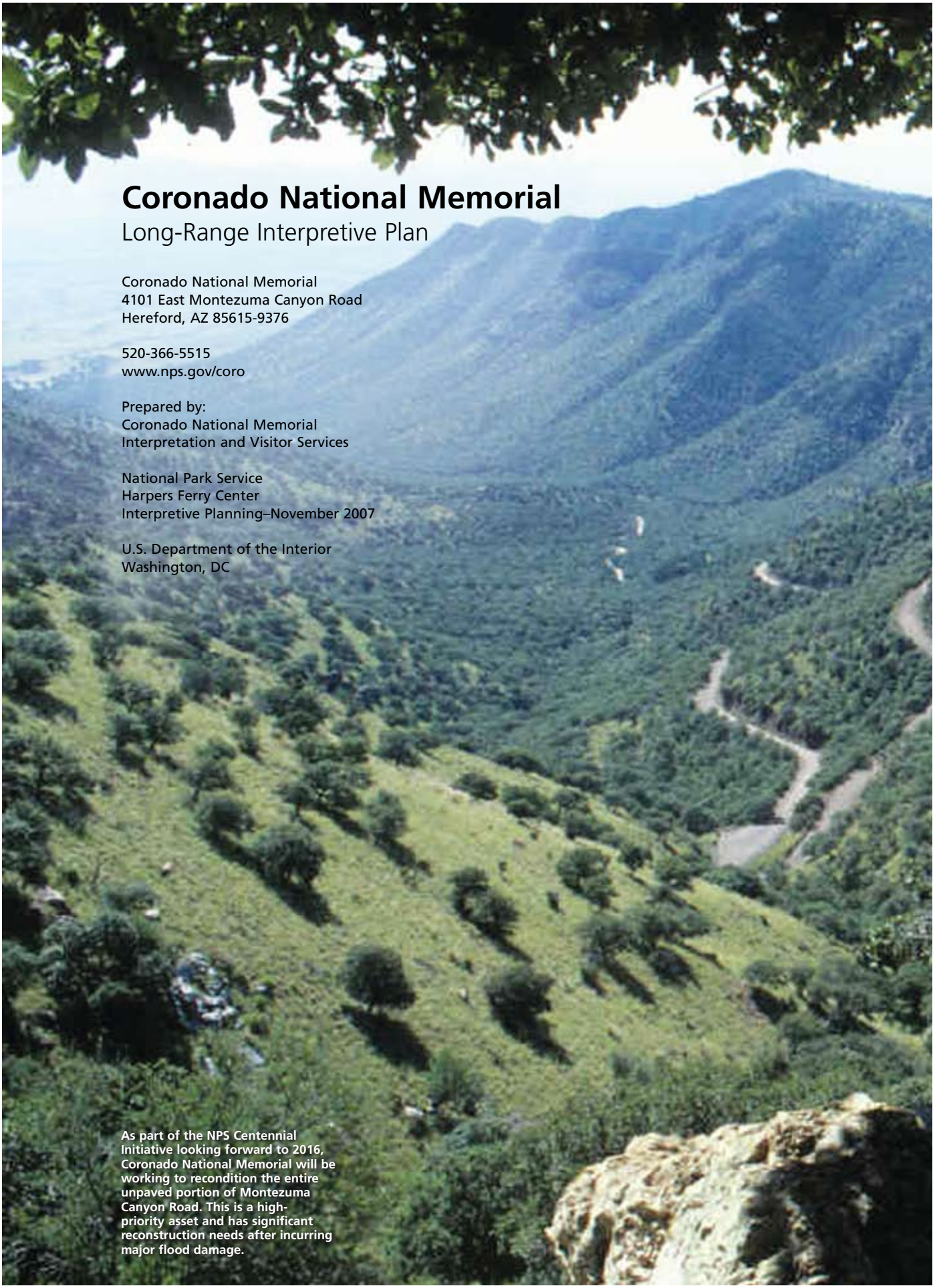
Coronado National Memorial
4101 East Montezuma Canyon Road
Hereford, AZ 85615-9376

520-366-5515
www.nps.gov/coro

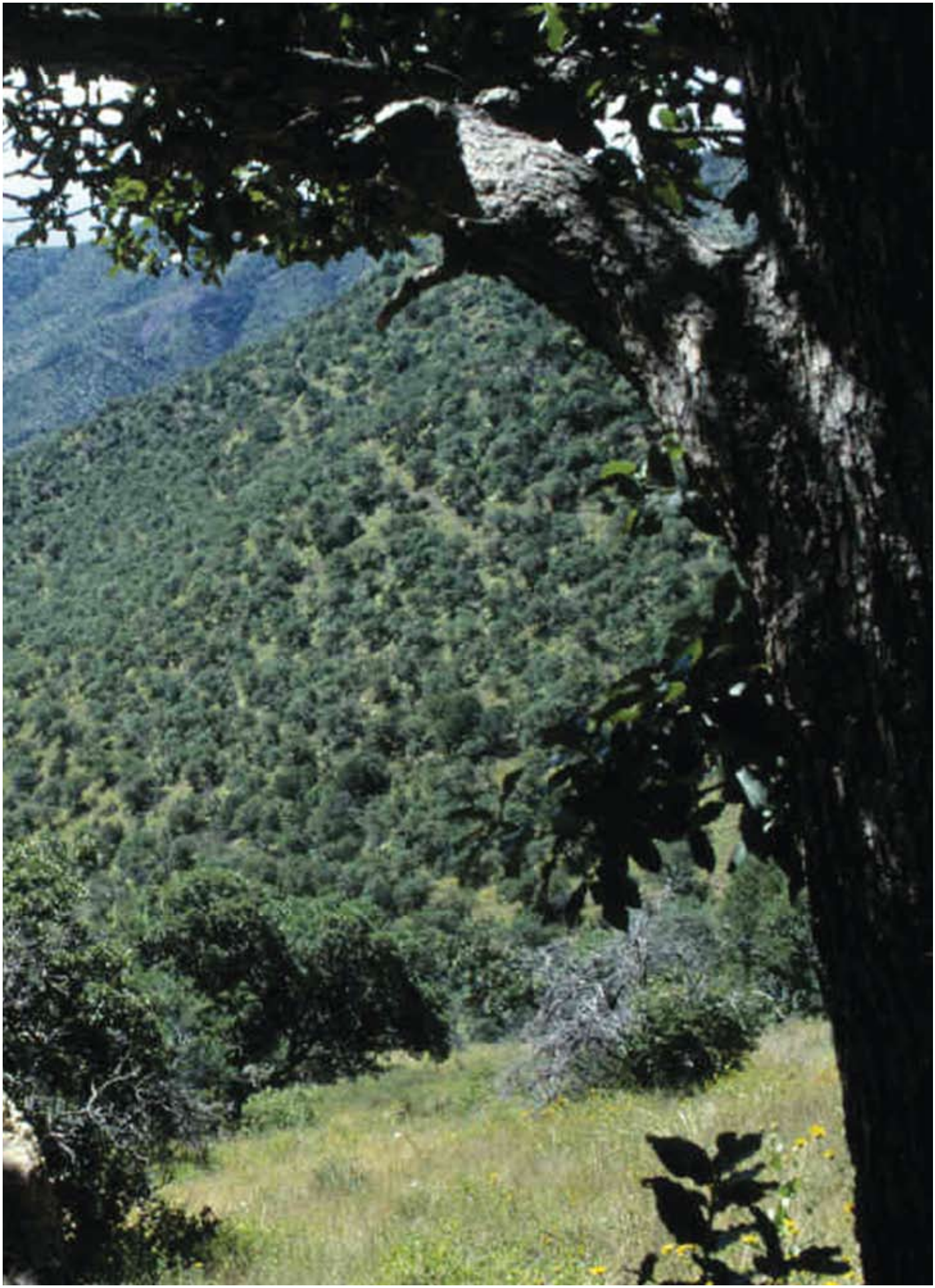
Prepared by:
Coronado National Memorial
Interpretation and Visitor Services

National Park Service
Harpers Ferry Center
Interpretive Planning–November 2007

U.S. Department of the Interior
Washington, DC



As part of the NPS Centennial Initiative looking forward to 2016, Coronado National Memorial will be working to recondition the entire unpaved portion of Montezuma Canyon Road. This is a high-priority asset and has significant reconstruction needs after incurring major flood damage.



PLAN HIGHLIGHTS

- **Remodel inside of the visitor center and update or replace current exhibits.**
  - Conduct audience evaluations for development of exhibits, waysides, and printed media to assess the needs of visitors and the effectiveness of the exhibits.
  - Add technology-based exhibits such as touch-screen kiosks and docking ports for downloading information to personal electronic devices.
  - Develop hands-on exhibits for kids.
  - Create a three-dimensional terrain model to provide a tactile sense of the park for visitors with visual challenges.

- **Develop a trail through the grasslands that is accessible to visitors with disabilities.**

- **Build an education center.**
  - Remove buildings and fencing at the ranch site.
  - Design and construct an education building including a traffic and parking plan, elevated viewing area, amphitheater, and volunteer campground.

- **Install additional wayside exhibits along the trails and new signs along Montezuma Canyon Road.**

- **Increase volunteer participation in programs and special events.**

- **Construct a usable space for the park library.**

Coronado's March - Colorado by Frederic Remington 1897 - Library of Congress Prints and Photographs

CONTENTS

I. INTRODUCTION 1
Park Map and Map of Coronado Expedition 2

II. FOUNDATION FOR PLANNING 3
Planning Process 3
Park Purpose 4
Park Legislative Significance 5
Park Significance 6
Park Mission 7
Primary Interpretive Themes 9
Desired Visitor Experiences 10

III. EXISTING CONDITIONS, ISSUES, and INFLUENCES 12
Park User and Audience Profiles 12
Pre-visit and Arrival Information 14
Media Outreach 14
Personal Services 14
Signs 14
Website 14
Facilities 14
Interpretive Media 16
Media Assets 17
Personal Services in Detail 18
Partnerships 21

IV. RECOMMENDATIONS and IMPLEMENTATION STRATEGIES 22
Pre-visit Orientation, Information, and Wayfinding 22
Arrival and Orientation 23
Picnic Area 24
Montezuma Pass Overlook 24
Windmill Road 24
Coronado Cave and Trail 25
Visitor Center 25
Visitor Center Exhibits 26
Ranch Site 28
Wayside Exhibits 31
Audiovisual Technology 33
Off-Site Activities and Partnerships 35
Personal Services 35
Education Program 37
Services for Special Populations 37
Library Collections and Research Needs 38
Staffing and Training 38
Implementation Priorities 39

APPENDICES
A. Knowing Your Audience 43
B. Current Park Organization 46
C. Special Populations Guidance 47
D. Bibliography and Reading List 48
E. Long-Range Interpretive Planning Team 49

I. INTRODUCTION

Coronado National Memorial commemorates and interprets the significance of Francisco de Vásquez Coronado's expedition and the cultural influences of sixteenth-century Spanish colonial exploration in the Americas.

Coronado National Memorial (CORO) was established as a unit of the National Park System to commemorate Francisco Vásquez de Coronado's sixteenth-century expedition into what is now the United States. This is the only national park unit commemorating this event. The memorial's southern boundary is on the border between the United States and Mexico and offers extraordinary views of the San Pedro River Valley and an opportunity to delve into the first major exploration of the American Southwest by European explorers.

The Coronado National Memorial General Management Plan notes that the mission of Coronado National Memorial is "to commemorate and interpret the significance of Francisco Vásquez de Coronado's expedition and the resulting cultural influences of sixteenth-century Spanish colonial exploration in the Americas. The memorial preserves and interprets the natural and human history of the area for the benefit and enjoyment of present and future generations."

Coronado National Memorial is located in Cochise County, in southeastern Arizona, situated on the border between the United States and Mexico. It is 21 miles south of Sierra Vista, Arizona, and 26 miles west of Bisbee, Arizona.

In the period from 1539 to 1543 Spain undertook three major expeditions to explore the lands to the north. The territory to the north of Mexico was a vast unknown land to Spain and very little exploration of the interior had taken place. Hernando De Soto explored Florida and what became the southeastern United States; Juan Rodriquez Cabrillo explored the west coast; and Francisco Vásquez de Coronado explored northwestern Mexico and what became the southwestern United States from California to Kansas. This initial Entrada by Spain set the course of history for these lands and introduced the rich Latino heritage, customs, architecture, and language to this part the world.

Right: Coronado National Memorial is located in Cochise County, Arizona, on the border between the United States and Mexico.

Opposite: Coronado National Memorial will be working to update the interpretive media and visitor use area at Montezuma Pass, a key visitor location that is the culmination of the drive up through the park and offers 320 degree views of the river valleys where Coronado's expedition likely travelled through.

The location for Coronado National Memorial was chosen for the panoramic views of the U.S.-Mexico border and the San Pedro River Valley, the route believed to have been taken by Coronado in 1540. It was hoped that this proximity to the border would strengthen bi-national cooperation and the bonds, both geographical and cultural, which continue to link the two countries. Coronado National Memorial, located near the center of the Sky Island Bioregion (the juncture of four major biogeographic provinces: Madrean, Sonoran, Chihuahuan, and Southern Rockies/Mogollon), preserves a rich biological and geological diversity. Visitors are able to enjoy recreational opportunities that foster a better understanding and appreciation of the natural and human history of the area.

Coronado National Memorial is the only unit in the National Park System that commemorates the Francisco Vásquez de Coronado Expedition of 1540 to 1542. When reporting to Congress in 1940 on the establishment of the memorial, the Committee on Public Lands and Surveys noted that: "Coronado's expedition was one of the outstanding achievements of a period marked by notable explorations. It made known the vast extent and the nature of the country that lay north of central Mexico, and from the time of Coronado, Spaniards never lost interest in the country. In no small measure their subsequent occupation of it was due to the curiosity so created."

II. FOUNDATION FOR PLANNING

The ultimate product is an effective and efficient interpretive program that achieves management goals, provides appropriate visitor opportunities, and facilitates desired visitor experiences.

The Planning Process

This long-range interpretive plan (LRIP) recommends actions that should occur over the next seven to ten years. It identifies park themes, describes visitor experience goals, and recommends a wide variety of personal and non-personal interpretive services and outreach activities that will best communicate the park's purpose, significance, and themes. In concert with the park's annual implementation plan and interpretive database, it completes the park's comprehensive interpretive plan, as established in Director's Order No. 6. In addition, this planning process has been customized to meet the individual park's needs, conditions, and special circumstances. The ultimate product is an effective and efficient interpretive program that achieves management goals, provides appropriate visitor opportunities, and facilitates desired visitor experiences.

Work on this LRIP began in July of 2005 when the Harpers Ferry Center interpretive planner traveled to Coronado National Memorial to meet with park staff, become familiar with park resources and facilitate an initial workshop that derived foundational elements of this plan.

A general management plan (GMP) for Coronado National Memorial was completed in January, 2004. This LRIP will utilize and support many of the components that were derived from the GMP, emphasizing those related to identifying and managing for key visitor experiences, educating the public, and assuring that critical management concerns are met.

Barring legislative changes or major new revelations, the foundational elements expressed in this LRIP—purpose, significance, themes, and visitor experience goals—will remain constant over the life of the plan. Specific recommendations about media and programs may need to be updated as staffing, funding, technology, or resource conditions change. Further design documents must be produced to implement some of the goals and recommendations in this plan.

Park staff, volunteers, and partners participate in an interpretive planning session at Coronado National Memorial.

Park Purpose

Coronado National Memorial permanently commemorates the explorations of Francisco Vásquez de Coronado and preserves and protects the cultural and natural resources within the memorial for public benefit and enjoyment.

The park purpose statement summarizes the reasons for including the park in the National Park System. Purpose is derived from legislation, legislative history, public participation, and public rule making. Purpose statements may reflect upon traditional purposes of preservation and enjoyment, the linkages between the management unit and its cultural and natural resources, connections with groups and areas external to the park, and the language of the enabling legislation. Additional purposes may have emerged since this area was originally set aside.

The purpose of Coronado National Memorial is to permanently commemorate the explorations of Francisco Vásquez de Coronado and preserve and protect the cultural and natural resources within the memorial for public benefit and enjoyment.

This long-range interpretive plan includes recommendations such as replacing old signs with new markers, waysides,and signs (such as this new park entrance sign) that are compatible with NPS Identity Program standards.

Park Legislative Significance

An act providing for the establishment of Coronado International Memorial was approved by Congress in 1941, ". . . for the purpose of permanently commemorating the explorations of Francisco Vásquez de Coronado . . . "

The park legislative significance statement clarifies and reveals key components of the original enabling legislation and subsequent pertinent legislation that defines and describes the park unit and its purpose.

An act providing for the establishment of Coronado International Memorial was approved by Congress in 1941, ". . . for the purpose of permanently commemorating the explorations of Francisco Vásquez de Coronado . . . " The Presidential Proclamation, signed by Harry S. Truman in 1952, set aside lands and established Coronado National Memorial. Amendments to the original legislation in 1952 and 1960 respectively changed the name from the original act of August 1941 to "Coronado National Memorial" and brought about a boundary revision which appended additional acreage.

The location of Coronado National Memorial was chosen for the panoramic views of the U.S.-Mexico border and the San Pedro River Valley, the route believed to have been taken by Coronado.

Significance statements describe the importance or distinctiveness of the resources of an area.

Park Significance

Coronado National Memorial commemorates the first European exploration of the American Southwest. The arrival of the expedition produced an influx of new language, food, technology, religion, agriculture, animals, and values. These influences continue to impact and shape the region today.

Park significance statements describe the distinctiveness of the combined resources of this park unit. These statements can reflect upon natural, cultural, scientific, recreational, inspirational, and other resources. The statements embody the power of the place through a factual representation of what makes this place special. Usually stated as facts placed in relevant context, these statements summarize the essence of the importance of this park's resources to our natural and cultural heritage. Significances may evolve over time as a result of discoveries and updates to our knowledge about this place.

Coronado National Memorial has national significance for the following reasons:

- Coronado National Memorial commemorates the first European exploration of the American Southwest. The arrival of the expedition produced an influx of new language, food, technology, religion, agriculture, animals, and values. These influences continue to impact and shape the region today.

- The memorial's location reminds us that the United States and Mexico are inextricably linked. Even though a visible, physical and political boundary is evident, living things continue to cross freely everyday.

- Coronado National Memorial has one of the most beautiful and unique (360-degree) views in the Southwest, revealing land that has been home to humans for centuries.

- The memorial provides exceptional views of the San Pedro River which has served as a migratory corridor and water source for wildlife and humans for thousands of years. The Coronado Entrada used the same corridor to search for the "Seven Cities of Gold."

- The memorial, located near the center of the Sky Island Bioregion (the juncture of four major biogeographical provinces including the temperate Rocky Mountains, the tropical Sierra Madre, the cold, high Chihuahuan Desert and the low hot Sonoran Desert), preserves an extraordinarily rich and regionally rare biological and geographical diversity.

Park Mission

The mission of Coronado National Memorial is to commemorate and interpret the significance of Francisco Vásquez de Coronado's expedition and the resulting cultural influences of sixteenth-century Spanish colonial exploration in the Americas.

The mission statement integrates the statements of purpose and significance for the national memorial, describing the reason the park exists and the contribution it makes to understand an important part of our nation's history. The mission is derived from this statement: The mission of Coronado National Memorial is to commemorate and interpret the significance of Francisco Vásquez de Coronado's expedition and the resulting cultural influences of sixteenth-century Spanish colonial exploration in the Americas. The memorial preserves and interprets the natural and human history of the area for the benefit and enjoyment of current and future generations.

After reaching the saddle at the top of Smuggler's Ridge, Joe's Canyon Trail continues westward with southerly views into the grasslands of Sonora, Mexico. Passing along the northeastern side of Coronado Peak, it joins with the Coronado Peak Trail, ending up at the Montezuma Pass parking area.

Primary themes should be few enough in number to provide focus for the interpretive program, but numerous enough to represent the full range of park significance.

Park Primary Interpretive Themes

With the establishment of the Republic of Mexico in 1821, the evolution of political and physical boundaries continually impacted the lives of many people and restricted their ability to move freely across this region.

Primary interpretive themes are those ideas and concepts about Coronado National Memorial that are key to helping visitors gain an understanding of the park's significance and resources. The themes, which are based on the park's mission, purpose, and resource significance, provide the foundation for all interpretive media and programs in the park. The themes do not include everything that may be interpreted, but they do address those ideas that are critical to understanding and appreciating the park's importance. All interpretive efforts (through both personal and non-personal services) should relate to one or more of the themes and each theme should be addressed by some part of the overall interpretive program. Effective interpretation is achieved when visitors are able to connect the concepts with the resources and derive something meaningful from their experience.

The following theme statements will provide the basis for interpretation at the park (the numbers do not denote any prioritization):

1. Although Coronado's exploration was perceived as a failure in 1542, the creation of the memorial in 1952 commemorates the lasting impacts of Coronado's expedition.
2. The expedition opened the doors to the clash of Indian and Spanish cultures. Resultant influences are still reflected and felt in Southwest cultures today.
3. With the establishment of the Republic of Mexico in 1821, the evolution of political and physical boundaries continually impacted the lives of many people and restricted their ability to move freely across this region. In contrast, the wildlife knows no such boundaries and inhabits the memorial dictated only by food supply and the seasons.
4. Sweeping views from Montezuma Pass reveal a vast and variable landscape full of history and hazards that inspires visitors to imagine distant places, or people seeking their fortunes or a new life.
5. Coronado National Memorial is centered at a crossroads of four major environments (Sierra Madre, Rocky Mountain, Chihuahua Desert, and Sonora Desert), providing opportunities to explore and study a vast and richly diverse plant and animal life where unique natural processes continue despite being surrounded by centuries-old human impacts.

The trailhead and trails originating at Montezuma Pass could be enhanced with new wayfinding and informational signs, along with trail maintenance.

"Visitor experience" is what people do, sense, feel, think, and learn. It is affected by experiences prior to the visit and affects behavior after the visit. The ultimate goal of interpretation is for visitors to experience strong emotional and intellectual connections with the meanings represented in park resources and as a result become better stewards of these places which characterize our national heritage.

Desired Visitor Experiences

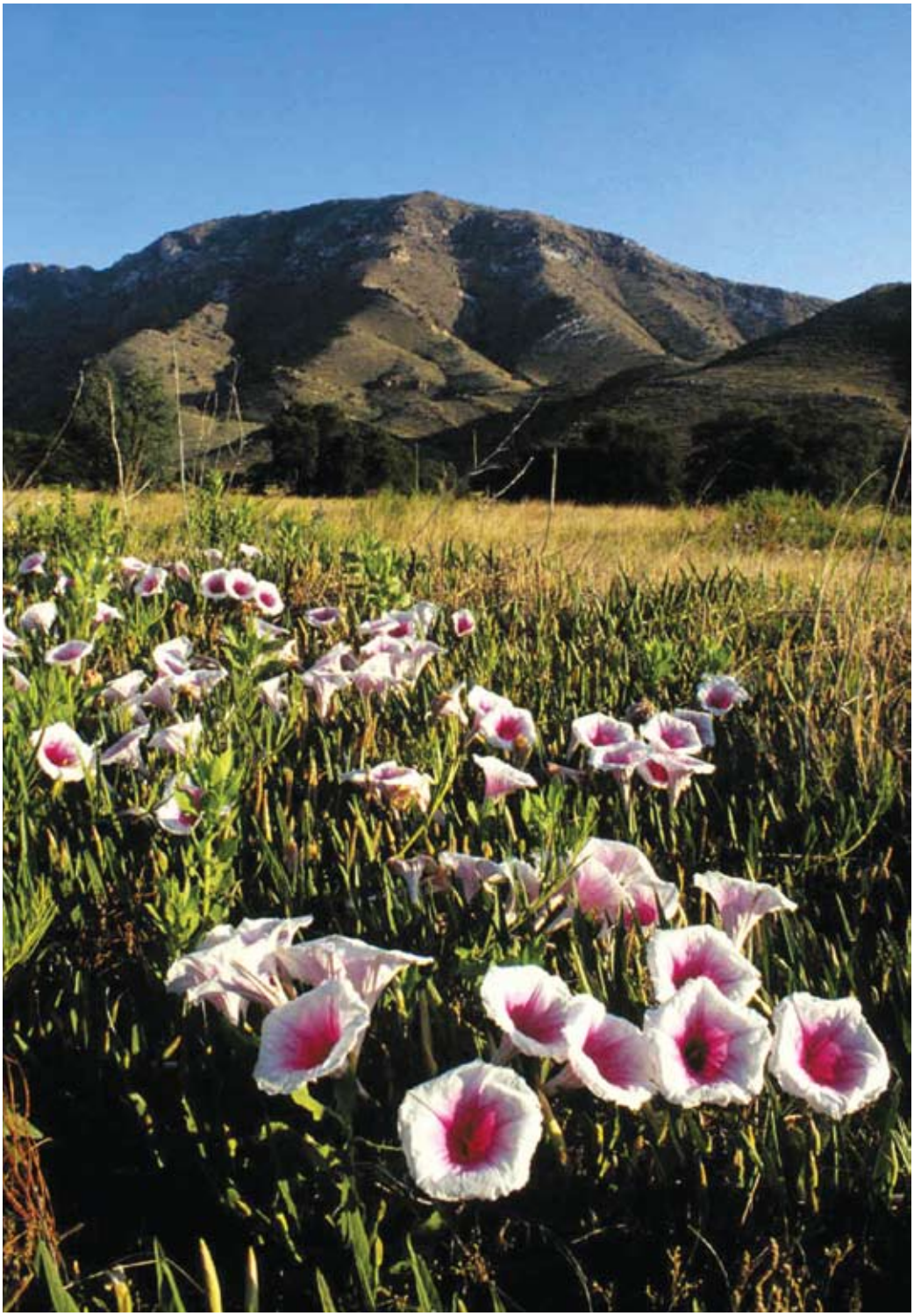
These experiences should be available to visitors of all abilities and backgrounds, including those with visual, auditory, mobility, or cognitive impairments.

Desired visitor experiences describe what physical, intellectual, and emotional experiences should be available for visitors to Coronado National Memorial. These experiences should be available to visitors of all abilities and backgrounds, including those with visual, auditory, mobility, or cognitive impairments. The experiences listed below are priority-ranked based on input during the foundational workshop and recommendations workshop.

Visitors to Coronado National Memorial will have the opportunity to:

- Experience favorable park conditions:
  - Roads
  - Visitor Center
  - Restrooms
  - Signage
- Experience an emotional connection to the park and its resources, thus encouraging stewardship.
- Gain an understanding of Coronado's Expedition and its significance.
- Have a fun and memorable visit, thus creating a desire to tell a friend.
- Experience the area's great biodiversity.
- Understand the importance of the Coronado Expedition to contemporary society.
- Enjoy a natural cave experience and learn it's value as wildlife habitat.
- See the magnificent vistas of the United States and Mexico.
- Feel like they have been a part of something special.
- Obtain a sense of the ages—just how old the new West is.
- Be inspired by the view from Montezuma Pass.
- Come from far away places and understand that the Southwest is not a barren wasteland.
- Leave feeling the memorial is relevant to them.
- Enjoy peace and solitude in a relatively underdeveloped park unit.
- Understand clearly the border safety issues and feel safe at Coronado.
- Find park staff to be friendly and helpful.
- Experience a variety of activities to participate in that match their interests and physical abilities.
- Witness the ever-present connections with Mexico.
- Experience spectacular southwestern mountain scenery.
- Experience a variety of plant communities from grassland to pine forest.
- View wildlife and learn about threatened and endangered species.
- Experience the ethereal beauty of a harsh land, the awesomeness of Coronado.
- Experience human connections and cultural influences.
- Receive personal attention, including a warm welcome, accurate and helpful media of various types, information and options, and the opportunity to ask questions.
- Receive objective information regarding strenuous activities.

Morning glories bloom as the sun lights Bob Thompson Peak. Visitors come to Coronado National Memorial to learn about the history associated with the site and enjoy scenic vistas and outdoor recreational opportunities such as hiking, birding, caving, bicycling, and scenic vistas. PHOTO BY DAVID BLY



- Hike the memorial's trails
- Enjoy their visit and wish to return.
- Be comfortable, but also be challenged to learn, relate to nature and each other, and be inspired.
- Get away from traffic.
- View where history was made.
- Learn from hands-on exhibits.
- Participate in public programs and presentations (amphitheater) and have more public programs made available for them.
- Enjoy birdwatching in the memorial's mountains and grasslands.

III. EXISTING CONDITIONS, ISSUES, and INFLUENCES

The park website is a popular way to gain information about the memorial. Virtual visitors access the website to learn about the park's natural and cultural resources, recreational opportunities, operating hours, and directions to the memorial.

The following provides a summary description of visitor experiences and conditions as they existed at the onset of this long-range interpretive planning process.

PARK USER AND AUDIENCE PROFILES

Each year approximately 91,000 visitors come to Coronado National Memorial. These figures are based on a three-year average taken during calendar years 2002, 2003, and 2004.

Visitors come to Coronado National Memorial to learn about the history associated with the site, enjoy the outdoor recreational opportunities, hiking, birding, caving, bicycling, or simply to marvel at the spectacular views from Montezuma Pass. First-time visitors normally spend 30 minutes to two hours experiencing the park. Generally, weekends draw a higher number of visitors than weekday visits.

During a typical year, June through September is the period of lowest visitation while January through May is the period of highest visitation. An estimated 60 percent of park visitors come from all 50 states and foreign countries, while local visitors within 30 miles of the memorial account for the remaining 40 percent of all visits to the park. Visitors can be grouped into the following categories:

Adult Groups

Adult groups visit the memorial throughout the calendar year. Retired adults comprise the greatest percentage of visitors. From winter through early spring and in the fall season, adult groups tend to frequent the park. Adult groups spend the majority of their visit browsing the visitor center, viewing the audiovisual program, and taking the scenic three-mile drive to Montezuma Pass to enjoy the beautiful views of Montezuma Canyon. Younger adult groups often will hike the Coronado Peak Trail, Joe's Canyon Trail, Yaqui Ridge Trail, or the Crest Trail, or will hike to Coronado Cave. All adult groups equally use the picnic facilities year round.

Incidental Visitors

Incidental visitors visit the park each year by significant numbers. Often these visitors say they saw the Coronado National Memorial sign on Highway 92 and decided to stop. Some simply come because the memorial is a unit of the National Park Service, while others state that they have heard or known about the memorial but had never visited. Generally, these visitors begin their experience at the park's visitor center, seeking to understand the park's story. They utilize most media types in the visitor center and frequently desire personal interpretation. The memorial meets this need mostly through informal conversation at the visitor center desk. Staffing levels do not allow for regularly scheduled interpretive programs on a daily basis.

International Visitors

International visitors come from Canada, Mexico, Europe, and other countries. The memorial provides Spanish, French, and German translations of the park's brochure. International visitors have a strong interest in visiting our national parks.

Local Residents

Local residents constitute the highest percentage of visitors to Coronado National Memorial and tend to visit frequently. Many local residents regularly bring out-of-town guests. Locals visit the park to explore Coronado Cave, hike trails, ride bicycles, take the three-mile scenic drive to Montezuma Pass, watch wildlife, and have small or large group gatherings at the picnic site.

Military Groups

Military groups represent a substantial number of adult visitors. They primarily visit in large groups of approximately 50 to 100 to participate in organized military operations

Winter temperatures often fall below freezing at night, with highs of 40–60°F in December and January. Precipitation, including snow, averages about 20 inches per year.

inside the cave. The groups usually represent active duty and reserve components of the United States Army and Air Force. Fort Huachuca, located on the northwestern edge of nearby Sierra Vista, is an Army Intelligence Center that dates back to 1877.

Recreational Visitors

Recreational visitors enjoy Coronado National Memorial's natural features and recreational activities such as hiking, caving, bicycling, wildlife viewing, and picnicking.

School Groups

School groups are the most numerous of organized groups visiting the memorial. They account for more than three-quarters of all park groups. The majority of school groups visiting the park vary from third grade through sixth grade. A curriculum-based environmental education program is offered each week from March through May to approximately six hundred fourth grade students from Sierra Vista, Bisbee, Fort Huachuca, and other surrounding communities.

Subject Matter Enthusiasts

Subject Matter Enthusiasts visit the memorial because they are particularly interested in the site's history or natural attractions. They can be professionals searching for books or articles or, perhaps, hoping to photograph animals in a peaceful setting. Most, however, are amateurs with a strong desire to learn or to experience the park's peaceful setting.

Virtual Visitors

Virtual visitors may, or may not, ever physically visit the memorial; however, they are a substantial park audience. The park website has averaged 20,000 visits each year. People look at the park website in order to plan a visit or to gain information about the park's cultural and natural history.

PRE-VISIT AND ARRIVAL INFORMATION

Information regarding Coronado National Memorial is available by mail, phone, and on the park website. No analysis has been conducted regarding website effectiveness. Information is also available in several guide books produced by organizations such as the American Automobile Association (AAA) and other Southwest area travel publishers.

Wayfinding signs exist on the roadways accessing the memorial, but they do not conform to the National Park Service sign standards.

MEDIA OUTREACH

The park informs the public of upcoming events and special programs through public service announcements and press releases sent to local area newspapers and radio stations, and by posting flyers in adjacent communities.

PERSONAL SERVICES

Coronado National Memorial receives requests for information daily through letters, phone calls, and e-mails. Most requests are for basic information, orientation (brochures, pamphlets, etc.), and directions to the park.

SIGNS

Visitors traveling to the park or passing in the general vicinity of the memorial are directed to the site by a small number of signs located in Sierra Vista and off Highway 92 near the park. The first outdoor message-delivering media that visitors to Coronado National Memorial see are park-built wooden bulletin boards at the east entrance and at visitor center parking lot.

Both entrances to Coronado National Memorial feature wooden entrance signs. On the main (paved) park entrance road on the eastern boundary, there is a sun-bleached, waist-high, routed wooden sign. It does not comply with present-day NPS Identity Program or Sign Program standards for an arrival park portal. The old-style NPS arrowhead for this main entrance is on the left side of the entrance road, while the letter boards for the park name are on the right. On the western boundary, unpaved Forest Road 61 enters NPS lands at Montezuma Pass. A large, rustic, routed wooden sign displays both the U.S. Forest Service and National Park Service logos as well as simple diagrammatic maps of the Arizona Trail and memorial boundaries.

Signs at Coronado National Memorial were planned and produced before the advent of the new NPS sign system. The existing signs represent many different types and styles and appear to have been installed as needed over the years in response to changing conditions. As a result, they do not always consistently convey messages in terms of colors, designs, and materials, and they do not conform to the new sign standards in all respects. The new NPS sign standards are effective for embracing both traditional road and guide signs with more interpretive signs and wayside exhibits, and could be useful in many applications at Coronado.

WEBSITE

The park website is a popular way to gain information about the memorial. Virtual visitors access the website to learn about the park's natural and cultural resources, recreational opportunities, operating hours, and directions to the memorial. In Fiscal Year 2005, 17,647 people visited the Coronado National Memorial website. Park websites have become the most widely used form of media by the public.

FACILITIES

Montezuma Pass Overlook

The primary opportunity for interpretation is the three-mile scenic drive to Montezuma Pass Overlook. From the pass visitors have the opportunity to hike on any of four designated trails: Coronado Peak (0.4 miles one way), Yaqui Ridge Trail (2 miles one way), Joe's Canyon Trail (3.1 miles one way), or Crest Trail to Miller Peak in the Coronado National Forest (5.3 miles one way). An interpretive shelter with posted information is located atop Montezuma Pass. Six Dura-Etch™ metal wayside plaques are posted in designated locations at the overlook. Twelve additional wayside exhibits are located along the Coronado Peak Trail. Some plaques are bilingual in English and Spanish, and are limited to black-and-white illustrations. Most of the aluminum panels

Many different types and styles of signs at Coronado National Memorial appear to have been installed as needed over the years in response to changing conditions.

have a distracting decorative arabesque motif around the border. Many plaques are text-only and the fonts and letter spacing do not meet current Americans with Disabilities Act (ADA) standards for legibility. Linkage between existing black-and-white line-art waysides, the key Coronado 1540 stories, and the inspiring vistas is very weak. A hiking trail brochure containing a description of each described hiking trail and map is available in the visitor center for visitors to use as a reference guide.

Recreational Facilities

Recreational facilities at Coronado National Memorial include a picnic site with parking area, restrooms, picnic tables, grills, water, and four picnic shelters. The picnic site provides a appropriate opportunity for making formal and informal interpretive contacts. A large open area beyond the picnic cul-de-sac has been used to stage special events and cultural demonstrations. The memorial is a day-use site. There is no overnight camping.

Visitor Center

The visitor center is open daily, 8:00 a.m. to 4:00 p.m., and closed Thanksgiving and Christmas Day. Approximately 26 percent of park visitors use the facility. The visitor center contains a small museum with five vivid paintings depicting the Coronado Expedition. The museum includes authentic sixteenth-century Spanish armor, museum replicas, and Spanish cultural items. A bird and wildlife viewing area with a 14-foot window wall allows visitors to enjoy the views of nature. A nine-minute audiovisual program orients visitors to the history of the Coronado Expedition. The building also includes a bookstore operated by the cooperating association, a visitor information desk, and restrooms. Visitor orientation talks and cultural demonstrations are performed on the front porch of the visitor center. Visitors also have the opportunity to walk a very short nature trail near the visitor center. Free publications, park guides, and maps are stored at the desk and are issued upon request.

Core exhibits in the Coronado National Memorial Visitor Center were designed in 1979. The original color illustrations which form the heart of the exhibit were created at that time. The exhibits feature a panel-and-case approach much like traditional NPS "Mission 66" projects, but, unlike those produced by NPS museum labs or Harpers Ferry Center, were probably produced at a local or regional level.

In the last 20 years various exhibit units have been modified or moved, and many other units or furnishings have been added to the public spaces. As is true in many NPS visitor facilities, the sales area has expanded. There is very little circulation space, and almost all wall spaces are covered, even spaces above six feet high, leaving very few neutral spaces. Objects in museums placed above the visitors' line of sight are often not seen.

Glare from the front door makes it difficult to see the objects in the main artifact case. Lighting will be an important aspect of a redesign of the exhibit room. The light outside can be harsh, and visitors entering the room do not have much time to adjust to the dark nature of the exhibit room. A new design would place any light-sensitive items along a path away from the windows or doors, or provide more light control from these sources. It might also be good to brighten up the room with lighter backgrounds and structure colors.

The current pueblo model is well done, but is placed in a corner of the room without adequate circulation space for viewing, and with limited interpretation. The model is uncovered and subject to damage. The touchable exhibit with soldiers' costumes and accoutrements adds an important interactive aspect to the exhibit and should be continued in any new design.

INTERPRETIVE MEDIA

Audiovisual Presentation

A nine-minute interpretive video at the visitor center orients visitors to the history of the Coronado Expedition 1540-1542. The small theatre space for this presentation is adjacent to the visitor center desk and hallway and thus is not conducive for uninterrupted, comfortable viewing of the video.

Exhibits

New museum exhibits including five painted murals and a map depicting the Coronado Expedition were installed during the renovation of the visitor center in 1980. The exhibits are placed in sequential order to provide a chronological picture of the events leading up to the expedition.

The paintings of the Coronado Expedition are framed in dark-stained wood which features multiple inset panels as found on traditional wood doors. The frames are accented with moldings and carved details. The frames and the use of large bricks and ornate wallpaper give the space a Spanish atmosphere. Integrated light fixtures above the paintings make the artwork stand out against the otherwise dark backgrounds; however, the fluorescent tubes illuminate the tops of the paintings much more than the middle or lower sections. This lighting could be improved by installing new lamps and fixtures farther out from the wall than the two inches or so of the existing tubes.

Authentic sixteenth-century Spanish mail armor and weaponry, including some

reproduction items, are displayed in an enclosed exhibit case in the visitor center. The visitor center, built in 1960, serves as a multi-use facility, contact station, and staff offices. Due to the lack of adequate space, the expanding exhibit area and bookstore has become overcrowded. The park's general management plan proposes an expansion of the existing structure.

The memorial has several directional, visitor use, and regulation signs posted throughout the park. Most do not conform to the current NPS sign standards.

Publications

Coronado National Memorial provides several free publications including the following items:

- Coronado National Memorial unigrid brochure (official map and guide)
- Hiking Trails of Coronado site bulletin
- Coronado Cave site bulletin
- Environmental Education Teacher's Curriculum Guide
- Junior Ranger Program booklet
- Foreign language brochures in Spanish, French, and German.

The development of a Coronado Nature Trail brochure is being planned.

Wayside Exhibits

Twenty-one outdoor wayside exhibits, made of hard anodized aluminum with Dura-Etch™ photo images and maps are placed at two designated sites within the memorial. The majority of wayside signs are located at the Montezuma Pass Overlook and along the Coronado Peak Trail. Two waysides are placed near the front entrance to the visitor center, and one at the trailhead of the Coronado Cave adjacent to the visitor center.

Coronado National Memorial contains only one interpretive trail with twelve bilingual (English/Spanish) wayside exhibit panels that include journal excerpts describing the Coronado Expedition 1540-1542. With an annual visitation of more than 90,000, the Coronado Peak Trail located at Montezuma Pass Overlook is one of the more frequently used trails in the park.

Due to limited staff presence and heavy visitor use of this trail, many of the signs become targets of vandalism and graffiti. Beginning in Fiscal Year 2001, a regular replacement cycle was instituted to replace the most heavily damaged signs each year. Each wayside exhibit, with the exception of the signs in the parking lot area at Montezuma Pass, is mounted on adobe bases. Many years of weather exposure and visitor impacts have caused erosion and crumbling to each base, creating a visitor safety hazard. Future plans include mounting all interpretive wayside signs on metal posts so that a solid foundation and a more professional appearance exist.

MEDIA ASSETS

Media assets include other park resources available to interpretation that support the design of personal services programs or interpretive media.

Artifact Collection

The memorial currently has a total of 28,216 artifact collections. The collections are divided into the following categories:

Archives: 26,743
Biology: 1,173
Archeology: 227
History: 73

Seventy-one objects are presently displayed in the visitor center exhibit area. Some objects include circa 1540s items including original chain mail armor and a metal helmet, dagger, mace, and spur. These items were purchased from the Smithsonian Museum in Washington D.C. Five original paintings depicting the Coronado Expedition and a route map adorn the museum walls. Other visitor center objects include a Spanish guitar, silver and turquoise jewelry, porcelain crafts and reproductions of swords and a crossbow. Several other paintings depicting the expedition are located in the hallway and the library of the visitor center. A wrought iron gate separates the museum area from the offices at the visitor center.

The majority of the cultural history collection is presently stored at the Western Archeological Conservation Center (WACC) in Tucson, Arizona.

The natural history collections are currently stored at the University of Arizona and the Tucson Botanical Garden in Tucson, Arizona, and at Arizona State University in Phoenix, Arizona.

Archives Collection

All original historical documents, journals, early park maps, and photographs for Coronado National Memorial are stored at the Western Archeological Conservation Center in Tucson, Arizona. Some of the materials are available on CDs in the park library.

Park Library

The park library includes a large collection of reference material specific to the park's natural, cultural, and human history. There are presently 1,077 library items available in the library. Topics in this collection include the following:

- Spanish Colonial history
- Native American Indian history
- Arizona history
- Archeology
- Geology
- Plants
- Animals
- Recreation (hiking, biking, birding, etc.)
- Border history and issues
- Project studies made at the memorial
- Exploration history and journals
- Children's books
- Interpretive resources
- NPS history and resources
- Biographies and journals of explorers of the Southwest
- Local and regional magazines
- VHS and DVD videos
- CDs
- Audiocassettes

PERSONAL SERVICES

The present interpretive staff is comprised of two interpreters: one GS-09 Park Ranger/Interpretation, and one Term GS-05 Park Guide. Both are stationed in the visitor center. Their primary duties include staffing the information desk, greeting visitors, and providing informal interpretation and site orientation to park visitors. Due to limited staffing, the majority of ranger-led programs are provided by advanced reservation only. Weekly interpretive programs are scheduled from February through April during the busier visitation season.

The Coronado National Memorial interpretive staff relies heavily on the volunteer staff to assist with visitor center operations and educational and interpretive programs.

Programs by Reservation

Guided Cave Hikes: The most popular ranger-led hike is to Coronado Cave. This includes hiking three-quarters of a mile on the Coronado Cave Trail, a mildly strenuous trail (compacted soil and loose rocks), and climbing numerous stone masonry steps. The two-hour program includes the hike, entering a 600-foot natural limestone cave, and interpreting the geology of the cave. Most cave hikes are requested during the school year by local schools. Guided public cave hikes are scheduled during the peak season (February through April).

Environmental Education Program: This curriculum-based education program is designed for fourth grade students. The environmental education program is provided to approximately 50 students every Friday from March through May. Four stations are established in designated areas of the picnic site and students rotate to each location. Students develop an appreciation for the cultural diversity of the area by emphasizing the Spanish and American Indian cultures and traditions during the period of first contact in 1540. The goals of the program are to familiarize students with clothing, weapons, and tools of the Spanish conquistadors and the Pueblo Indians and to acquaint them with the native flora and fauna used by Indians for food, textiles, and utility items. Each station offers hands-on activities to give the students a better understanding of the program. Students are given a pre-exam prior to their visit, and a post-exam following the program to assess program effectiveness.

The education program, which was developed in 1992, continues to be a very popular on-site activity. Because of the magnitude of the program, the interpretive staff relies almost entirely on volunteers.

Environmental education stations in the picnic area offer hands-on activities to give the students a better understanding of the program.

Ranger Guided Hikes: Ranger-led hikes on the Coronado Peak Trail (0.4 miles), Joe's Canyon Trail (3.1 miles), and Yaqui Ridge Trail (2.0 miles) are provided to the public during the peak season of visitation (February through April). Programs include nature hikes, site-specific informational hikes, and hikes emphasizing history. Visitors thoroughly enjoy the benefits of the magnificent scenery.

Roving Interpretation: Roving allows rangers to interact with visitors on the park grounds and is a very effective type of informal interpretation. The staff makes contacts with approximately 30 percent of visitors while roving. This activity normally takes place during the busier season.

Outreach: Park staff members provide off-site programs to schools and community organizations within 30 miles of the memorial. The programs are tailored to the groups' requests and include standard talks on the Coronado Expedition 1540-1542, plants and animals of southeast Arizona, geology, and information specific to the National Park Service (opportunities, careers, etc.).

Junior Ranger Program: Coronado National Memorial offers an on-site Junior Ranger Program designed for children ages five to twelve years old. The Junior Ranger program requires completion of a 10-page site-specific activity workbook. Children between the ages of five to eight must complete four activities, and those between nine and twelve complete seven activities. Following the completion of the program the child receives a colorful Coronado National Memorial patch.

Special Events

The memorial hosts a holiday open house each December at the visitor center. A cultural demonstrator is invited to demonstrate his or her individual area of expertise to the public. Performers include pottery design, hand-carved woodworks, tinsmithing, flint knapping, Southwestern crafts, and traditional foods. The one-day event allows visitors the opportunity to purchase sales merchandise in the bookstore at 15 percent off the regular price.

For fifteen consecutive years (1973 to 1988) Coronado National Memorial hosted a special event called the "Coronado Pageant" at the park's picnic site. The international event provided arts and crafts demonstrations, entertainment, including mariachi music, Spanish folklorico dancing, and guest speakers. This event became so popular that the memorial was drawing excess crowds, and it became difficult to manage. In addition, a fire in 1988, and later a flood, affected a large part of the memorial's resources; therefore, the staff had to concentrate their time on restoring trails and repairing facilities.

The memorial hosted the fiftieth anniversary celebration of its establishment in November 2002, drawing approximately 1,500 visitors for the two-day event. This special event also provided a cultural and international atmosphere in keeping with its theme. Guest speakers included historians and authors, a Zuni Pueblo representative, musical entertainment, living history demonstrations, and children's activities.

Coronado National Memorial plans to expand its interpretive programs by conducting special evening events (night-sky interpretation) and additional cultural demonstration programs on a regular basis during the busier visitation season.

Current Personal Services Program

The staff interprets the "Entrada" (Coronado Expedition1540-1542), the Spanish Colonial period and the resulting cultural, economical, and religious influences that occurred in later years. Another significant interpretive theme is the unique natural features and panoramic views of the area. The memorial preserves and interprets a rich biological and geological diversity of the Sky Island Bioregion.

Coronado National Memorial offers a multitude of interpretive opportunities related to a wide range of topics from natural and cultural/human history and geology to diverse plant and animal groups. Beautiful scenery accentuates the area.

The interpretive staff is working hard to meet the needs of its audiences through

formal and informal interpretation. Low visitation and small staffing levels limit the number of interpretive programs given throughout the year. In addition, the memorial lacks a designated site or facility to provide adequate public interpretive programs.

The current interpretive staff includes one GS-09 Interpretive Park Ranger and one Term GS-05 Park Guide. The seven-day-per week visitor center hours create a significant impact on the interpretive operation. The interpretive staff is very dependent on other divisions and volunteers to operate the visitor center during scheduled programs, and to open and close the facility during times that an interpreter is unavailable. Understaffing limits the availability to provide outreach (off-site) services to schools and community groups.

In summary, the interpretive operation requires the addition of at least one full-time interpretive position to meet all basic operational requirements. The addition of a third staff member is critical if the park is to undertake any program expansion.

Interpretive Facilities: There is currently no interpretive facility or easily accessible location to adequately meet the needs of visitors. The interpretive staff normally provides talks at the picnic site, Montezuma Pass Overlook, and near the visitor center entrance station.

Picnic Site – The picnic site located approximately one-quarter mile from the visitor center is a flat sandy area with four separate picnic shelters. Interpretive programs are given at the picnic site because of easier access for visitors of all ages. Parking and restrooms are added conveniences. The drawback is that the picnic site is not designed for interpretive programs. The shelters are small and the picnic tables are able to accommodate only six to eight people comfortably. Furthermore, picnic tables do not provide appropriate seating for presentations. A mini-amphitheater is proposed in the cul-de-sac of the picnic area.

Montezuma Pass –The Montezuma Pass Overlook provides the most scenic location for interpretive programs. The outstanding panoramic views of the San Pedro and San Rafael Valleys are striking. Programs given at the pass are typically ranger-led hikes. The disadvantage is that two miles of the three-mile drive are unpaved washboard road that is narrow and windy. Once at the pass, it is difficult for physically challenged visitors to access an upgraded slope to arrive at the location where talks are presented.

The three-mile scenic drive to Montezuma Pass offers some interpretive opportunities for all visitors. Vehicle pullouts with interpretive waysides describing the historical landscape, geographical formations, and vistas are suggested improvements. Another recommendation would be to provide visitors driving to the pass with an audiocassette or CD containing historical, biological, and habitat information relevant to the site.

Visitor Center – The most convenient location in terms of visitor accessibility is the Visitor Center. Flat benches are placed in an outdoor open area to the side of the visitor center where orientation and general talks are provided. During times that talks are being given, visitors passing to the restrooms and/or visitor center become a distraction for those visitors listening to the program.

Recommendations listed in the park's general management plan suggest an expansion of the visitor center facility to allow additional space for increased interpretive media, an audiovisual room, and staff offices. The inclusion of an attached all-purpose interpretive facility would provide an added benefit.

Managerial Plans: Nearly every trail within the memorial requires uphill climbing and walking on hard and rocky surfaces. This significantly decreases accessibility for visitors with physical limitations who wish to go on short hikes. Long-term plans for a lowland ADA-accessible trail located in an already disturbed area (old Montezuma Ranch) with direct views of the San Pedro Valley and Mexico would provide a benefit for visitors of all ages. An interpretive facility at this site could also serve as a good location.

Current plans include conducting evening programs at Montezuma Pass. Nighttime

The Montezuma Pass Overlook provides the most scenic location for interpretive programs with outstanding panoramic views of the San Pedro and San Rafael Valleys.

programs have never been offered. Montezuma Pass offers beautiful night-sky views unimpacted by light from local communities.

PARTNERSHIPS

Cooperating Association

Western National Parks Association (WNPA) operates the bookstore in the Coronado National Memorial visitor center. The sales area contains a variety of site-specific publications on subjects including history, botany, animals, geology, and recreation, as well as theme-related items (T-shirts, ball caps, pins, magnets, etc.). Bookstore sales generate approximately $32,000 annually. The association donates a percentage of its sales each year to aid the park interpretive program.

Outside Partnerships

The Coronado National Memorial interpretive division is actively involved in the Southeastern Arizona Volunteer Education Program (SAVE), a training opportunity partnership between the National Park Service, The Nature Conservancy, Bureau of Land Management, and the U.S. Forest Service. A representative of each agency coordinates the monthly SAVE programs on a rotating basis. Guest speakers from southeast Arizona share their knowledge and expertise on a variety of environmental topics.

Volunteer Program

The memorial maintains a Volunteers-In-Parks (VIP) Program to enhance the interpretive mission of the park. Twenty-five volunteers help conduct interpretive programs and staff the visitor center information desk throughout the year. Coronado has an annual $1,400 Volunteers-In-Parks Program allotment from the NPS Intermountain Region. These monies are used each year to pay for uniforms, supplies, housing utilities, and VIP recognition awards and gifts.

Issues and Influences

These safety, resource, and management issues could be addressed by interpretation.

Visitor-related resource issues

- Increase the NPS presence at Montezuma Pass for enhancing visitor experience and safety.
- Develop unified messaging for visitors concerning border issues and safety.
- Increase presence at Coronado Cave for greater resource protection and enhancement of visitor experience.

Safety issues

- Increase NPS presence at Montezuma Pass for visitor safety.
- Enhance coordination with the park's protection division for visitor and staff safety.

The ultimate goal of all recommendations is to support management's strategies and to provide visitors opportunities to connect with the meanings inherent in this park's resources.

IV. RECOMMENDATIONS and IMPLEMENTATION STRATEGIES

A primary challenge for interpreters is to help visitors visualize and understand what this place was like when Coronado and his expedition traveled through this area. Few clues that would provide hints of this past remain.

Interpretive planning assesses current conditions and formulates recommendations that will provide direction and focus to achieve the desired future interpretive program. The discussion of each program or media proposal identifies its place within the overall strategy; special considerations will sometimes suggest specific theme and location pairing to facilitate a desired interpretive outcome. These suggestions should provide a framework for the park's strategic vision, but should not limit the creativity and scope that is essential when planning specific programs and media. These recommendations contain both long-term and short-term strategies which may be very helpful when preparing the annual implementation plan and related funding requests.

A primary challenge for interpreters at Coronado National Memorial is to help visitors visualize and understand what this place was like when Coronado and his expedition traveled through this area. Few clues that would provide hints of this past remain. Historic viewsheds still exist, but are impacted by modern development and remnants of the continuing challenges at the border between the United States and Mexico.

PRE-VISIT ORIENTATION, INFORMATION, AND WAYFINDING

General and trip planning information regarding Coronado National Memorial will continue to be provided by traditional means such as regular mail, phone, website, and e-mail. All mailed information should include the park's website address, so that visitors may easily access more in-depth information. Critical information regarding access, weather, and safety should be included in all communications.

Adequate, clear information should be provided at some distance from the park so that potential visitors are given the tools and motivations with which to make a decision as to whether to visit the park. As no public transportation exists at the site, visitors typically enter from the eastern or western side of the memorial by vehicle and rely on signs to direct them to points of interest and the visitor center.

Recommendations

- Continually update training for all employees and volunteers on park information, wayfinding, and informal visitor contacts. Park staff should understand the value in providing excellent visitor services.

- Assure that up-to-date orientation information is available at park partners' sites and related tourist contact points. Local airports, visitor information centers, libraries, other agency offices, and military offices were mentioned in the workshops.

- Develop an updated park sign plan that includes wayfinding signs that direct visitors to the site and internal points of interest. Park signs should conform to NPS sign standards and enhance agency identity in this region. A consistent, recognizable design may develop greater "brand identity" for the park.

- Expand the depth of information on the park's website. This is an excellent venue to attract potential park visitors, while providing solid wayfinding information. An overview on how to safely visit the park is critical. The website can also provide a wealth of information to historians and academics that seek solid research and information from the park.

- Review internal and external printed and electronic tourism literature promoting Coronado and associated sites to assure that it is accurate, appropriate, and up-to-date.

Drivers heading east on Highway 92 enjoy panoramic views of mountain ranges along the border between the United States and Mexico before reaching South Coronado Memorial Drive.

- Develop and improve orientation/information literature and displays for regional tourism contact points. These may include rack cards, portable or permanent exhibits, and other methods to dispense literature.

ARRIVAL AND ORIENTATION

The visitor is welcomed to the park with traditional, although older, park entrance signs and directional signs to points of interest.

Recommendations

- A new park entrance sign that unites the park name with the new NPS Arrowhead is recommended for both entrances. A modified parking arrangement for the east entrance area would alleviate safety concerns regarding visitors who are crossing the road at the entrance.

- A traveler's information station (TIS) at the approach to the park could be used to introduce visitors to the significance of the park, park themes, visiting options, and safety concerns. In lieu of a bulletin board at the entrance, the first pullout could feature a small wayside exhibit shelter to provide orientation and basic visitor information.

- Distributed and web-based information should be available in other languages, especially Spanish.

- Safety information should be integrated into all facets of the visitor experience at Coronado, beginning with pre-trip planning.

- Continued coordination with the Arizona Department of Transportation (ADOT) to maintain adequate directional signs on roads leading to the memorial. It is especially important to maintain or establish those signs at critical decision points in a traveler's journey to Coronado.

- Downloadable information including audiovisual, MP3, and PDF files, offered at the park's website and other venues should include wayfinding, orientation,

and safety messages. Podcasts or equivalent audiovisual files could include such information and expand into more in-depth orientation and interpretive information. *(See www.parkcast.com for insight on what other parks are offering.)*

- The use of an outdoor terrain model could help provide all visitors a better sense of the park landscape that is not apparent from the park entrance, and which is difficult to convey with flat maps. This model could clearly show the importance of the Montezuma Pass Overlook experience, but would also begin making the connection between the San Pedro River Valley, the route of Coronado, and the high-level view from Montezuma Pass. Versions of the model could be made for use at several sites in the park including the entrance, the ranch site, the visitor center, and Montezuma Pass Overlook.

PICNIC AREA

The picnic area is primarily utilized as a place for family recreation, ranger-led activities, and educational programs. However, the usability of the site could be expanded with a few changes and additions.

Recommendations

- Install a new orientation/safety/trailhead exhibit, as noted under the Wayside Exhibits section.

- Renovate the picnic area; replace picnic sites and infrastructure as soon as possible to maintain recreational opportunities for local visitors and families. A grand reopening to welcome back the regional constituency might be a good way to reinvigorate civic engagement with the memorial.

- An amphitheater was considered for a site adjacent to the picnic area, but may be more effective adjacent to the visitor center. *(Note discussion in the Visitor Center section.)*

- Expand opportunities for visitors to interact with ranger staff through special programs and increased informal (roving) interpretation.

MONTEZUMA PASS OVERLOOK

Montezuma Pass offers magnificent vistas and a somewhat weak linkage to many of the memorial's primary interpretive themes, because of geography and distance. However, with modifications to the infrastructure and available information, the pass area could offer more opportunities for greater visitor understanding of other facets of the Coronado story.

Recommendations

- Modification of exhibits as specified under the Wayside Exhibit section recommendations.

- Consultation with a landscape architect regarding modification of the infrastructure to better facilitate visitor experience. This may include enhanced accessibility, modification of the railing and seating options at the overlook, modification of the parking area, and modification of the restroom (possibly with state of Arizona assistance). The general management plan recommends a minimal contact station at the current visitor shelter, but this may be problematic due to staffing and safety concerns.

- The trailhead and trails originating at the pass could be enhanced with new wayfinding and informational signs, along with trail maintenance, encouraging visitors to step off the asphalt and enjoy a different experience. The shade structure on the shorter trail leading to the peak offers an alternative view of the landscape and should be rehabilitated.

- Pronounced safety messages are very important in this relatively isolated area, which is in close proximity to the border.

- A shift in the emphasis at this site would be to better utilize the scenic values to support visitor understanding related to interpretive themes 1, 3, and 4, rather than discussing the Entrada from an obscured viewpoint.

WINDMILL ROAD

This site provides a good opportunity for recreation and a less structured experience in this unique desert environment.

Visitors learn about the limestone that houses Coronado Cave, which formed about 250-300 million years ago when southern Arizona was covered by a shallow sea.

Recommendations

- Develop the trail into a multi-purpose hiking and mountain biking trail.
- Provide a developed trailhead with appropriate signing including safety and orientation messages as reflected in the Wayside Exhibit recommendations.

CORONADO CAVE AND TRAIL

This very popular area offers a great opportunity for visitors to explore and recreate, with the added benefit of gaining further understanding about the memorial. It is anticipated that the Coronado Cave Trail and Coronado Cave will reopen in mid-2007.

Recommendations

- Install an improved trailhead information and safety sign as specified in the Wayside Exhibit section.
- Expand ranger-guided walks and create more opportunities for visitors to explore the cave on their own.
- This site reveals much about the area's natural history and thus could be used to expand visitor understanding related to interpretive theme 5.
- Produce a virtual tour of the walk to the cave and the cave experience for use on the park website, in the visitor center, and for those that are physically challenged.
- Expand educational and visitor opportunities for visitors to learn about caves and understand human impacts on such environments.
- Investigate the "Buffalo Soldier" connection with this cave and expand upon it, if relevant to Coronado's significances.

VISITOR CENTER

The primary visitor contact point is at the visitor center complex. Upon entering the visitor center, people are greeted with an information desk and history association sales outlet. It is disconcerting for some visitors to travel for a fairly significant distance in the park before reaching the visitor center.

Recommendations

- If new view-related interpretive facilities are established at the ranch site—waysides, signs, audio messages, and commemorative structures—then visitor center spaces can be redesigned to accommodate those functions that are best accomplished in a protected, staffed interior space.

The primary visitor contact point is at the visitor center complex where people encounter an information desk and an association sales outlet.

- A visitor center schematic plan should be considered for the visitor center. This plan would specify visitor experience opportunities for this facility, more specifically relate interpretive themes to particular exhibit designs and content, create bubble diagrams or floor plans, produce a visitor walkthrough narrative, and provide three-dimensional views of the proposed exhibits, information desk, lighting scheme, sales area, water hole viewing area, and theatre. Such a plan could also inform and support further design work that would be necessary for these alternatives

- Artifacts at Coronado National Memorial are powerful interpretive tools, but are also part of the core park resource that visitors are entitled to see. The visitor center should continue to be a display area for significant objects or those that facilitate the telling of the park's story. The current lighting should be modified to better reveal these artifacts.

- The team discussed the value of amphitheaters in the park, with one possible location being adjacent to the visitor center in the current nature trail area. The general consensus was to build a detached structure in the area of the present short nature trail. The structure should extend the architecture of the current visitor center. A 30- to 50-seat structure would fulfill anticipated needs. The amphitheater should be designed for multipurpose use, including an integral audiovisual system, a presentation podium, and should be optimized for visitor shade protection. An amphitheater in the picnic area was discussed as well, but may be more problematic due to lack of power access, environmental and safety concerns, etc.

- The short self-guided accessible nature trail could be relocated in an area adjacent to the picnic area. As part of the relocation, trail exhibits and signs should be updated to reflect fauna and flora in the context of use by Spanish and American Indian inhabitants.

VISITOR CENTER EXHIBITS

New exhibits could be designed to incorporate all identified exhibit purposes into a consistent and professional design

which would better meet modern visitors' needs, engage visitors' interest more strongly, make the best use of space, feature a more elegant appearance, and be easier to maintain and sustain. These include the display of interpretive exhibits containing artifacts and fragile models; the presentation of videos and computer programs; the display and sale of books, videos, and other educational materials; and a space to interact with rangers and interpreters. All exhibits in the visitor center will be available for rangers to use in informal or formal interpretive talks. Of particular use might be the terrain model with maps and the expedition diorama. In addition, with a reconfigured exhibit space, the view to the pond area behind the visitor could be opened up to introduce the "Sky Island" concept.

Recommendations

- It may be helpful to relocate some of the administrative functions currently housed in the visitor center to allow the park to show videos in a dedicated space where the sights and sounds of the program would not distract those viewing exhibits, or vice versa. This mini-theater could show multiple videos at the discretion of the staff or visitors on themes such as Coronado's expedition, Spanish exploration in North America, park natural resources, and boundary issues. Any new theater installation would include an upgrade of audiovisual equipment to utilize the latest technology for players, projectors, and accessibility. All programs would be available in English and Spanish.

- An exhibit design plan would facilitate the integration of these components to best enhance the visitors' experience and understanding.

- A terrain model of the park would be a useful addition to the exhibit area. Associated with such a model could be a map of the surrounding area to show Coronado's route. The dramatic changes in elevation in the park would work well in the model, which could be colored to show the various vegetation and landform types. The model should be fabricated of durable materials to allow touching. A visitor with vision impairments could obtain a good perspective of the canyon and the winding road to Montezuma Pass. The international border could be a touchable line. Once the model is fabricated, additional models could be produced at a reduced cost, perhaps half the cost of the first. A color model made of fiberglass or plastics would probably not be practical for outdoor use, but metal castings could be made for use at the ranch site and Montezuma Pass.

- A new exhibit concept could include a diorama of the Entrada, perhaps in miniature, which would show Coronado, soldiers, livestock, and pack mules winding their way up the river valley. A diorama background painting that would show the surrounding mountains—and perhaps what is the present-day park—to make the connection with the memorial.

- The current pueblo model might be utilized in a second diorama that would show the type of town that Coronado actually encountered—not the cities of gold he sought. Figures of Coronado's men and the American Indians could be added, with labels to explain the scene and its significance. Although the park is situated proximate to the point of Coronado's entrance into what is now the United States, it is important to follow up with what he learned and what impact it had on the nations affected.

- Another possible exhibit concept would be to illustrate or model the supplies and equipment the Spaniards would have had to bring with them on their long journey. The value would reach beyond a mere inventory, because the collection of items would illustrate the difficulty of the long journey and the character of the participants. The exhibit could also provoke thought and discussion by comparing and contrasting what immigrants from Mexico today bring into the United States, versus what Coronado brought.

- The planning team recommends that audience evaluation be conducted as part of any new media development. Most of

the media elements in the park are old, and visitors are more diverse than in the past. It would be valuable to conduct front-end evaluation to determine what visitors already know and what they might like to experience in the park; formative evaluation to test proposed exhibit concepts before final production; and summative evaluation to fine-tune the exhibits after installation. Evaluation will increase the cost of exhibit development, but will probably add value during the life of the exhibits by ensuring that visitors' needs are being met.

RANCH SITE

The Coronado National Memorial Visitor Center has many functions integrated into a relatively small space, and it is not a good place to make a direct visual connection with Coronado. It would be an advantage to relieve some of the interpretive and educational burden on this building.

The ranch site, which is closer to the park entrance, could be a good companion site for interpretive visitor experiences because of the potential for close-range and superb views of the international boundary and the San Pedro River alignment. The ranch site is far more accessible than Montezuma Pass, and when the structure and its dependencies are removed, the memorial will have a ready-made parking area and overlook with wide views to once again directly link the story of 1540 Entrada to the landscape.

The now abandoned Montezuma Ranch house site provides superb views of the San Pedro River Valley and could easily be made accessible to all visitors. The existing deteriorating house is problematic, but once it is removed, this place should become the main focus of new outdoor exhibit development. Visitors should be channeled to go there as a primary new element of their Coronado National Memorial experience.

There are many advantages to the ranch site for a first primary stop in the park. It would be the closest and most accessible place to make the strongest connection to Coronado. It would be the park site that is nearest to Coronado's entrance into what is now the United States, and it features the best view of the river valley and international border. The vista from Montezuma Pass Overlook is beautiful from an aesthetic point of view, but the relevant historic features are much farther away, and compete with the colorful scenery of Montezuma Canyon its surrounding peaks. Another strong advantage is the location of the ranch site which, being closer to the park entrance, is more easily accessed by visitors who have limited time, or who arrive too late in the day to travel to the pass and return before closing. There would also be better accessibility related to road conditions. The road to the pass is not suitable for all vehicles and drivers, and it would be closed more often due to weather, washouts, rockslides, limited staffing, and law enforcement and security issues. The ranch site can be kept open longer, and can be closed late in the day when rangers go off duty.

It is assumed that the buildings at the ranch site which are not related to the park's primary themes and which are not historically significant, will be removed. An improved entrance road with appropriate signing would lead visitors to a parking area equivalent in size to that at the current visitor center. Trails would also connect to the site, making it a convenient trailhead. The intent of the road signing and trailhead orientation exhibits would be to suggest to visitors that a stop at this site is to be considered a primary park experience.

Important elements in converting the ranch site to a primary park experience will be signing, naming of the site, roads, parking, walks, wayside exhibits, trailheads, accessible overlooks and view structures, and some type of memorial element(s) such as a sculpture.

Recommendations

- The concept at the ranch site would be to create the visitors' first major stop on the tour road and provide a number of experiences that would complement traditional visitor center functions. Here the park can introduce its primary themes and link them with the most important landscape features.

- Interpretive themes 2 and 5 might best be revealed at this site.

Coronado National Memorial is known for its wide variety of birds, with different species being sighted each season of the year. More than 150 species have been recorded, including about 50 resident birds, such as this cactus wren.

- Develop a lowland ADA-accessible nature and history trail with direct views of the San Pedro River Valley and Mexico that would provide a benefit for visitors of all ages. This trail would also complement the other developments.

- A series of high-quality wayside exhibits at the ranch overlook, relying heavily on illustrations that link the landscape views with historical figures and events, would be very powerful. This is addressed more completely in the Wayside Exhibits section of the plan.

- A traffic plan and adequate accessible parking would need to be created. This may be most appropriate at the site where the ranch house is removed.

- Because the ground is gently sloping at the site, it would be important to establish an elevated viewing area through the use of a deck or terrace. Much of the appeal of the Montezuma Pass Overlook is the high-level perspective, and the dramatic drop-off at the overlook wall. For the ranch overlook to succeed, the park would need to provide enough elevation to make the viewpoint dramatic. Some minor vista clearing and junk removal will be needed, and it would be advisable to relocate or bury utility lines that degrade the view.

- Some extra creative thought needs to be invested in what to name this new overlook. The new overlook name should be short and memorable and directly tied to what the park staff wants people arriving to be thinking about. An intriguing and relevant name would help to establish the site. This would require some time to develop, but here are a few suggestions and their rationales. "Entrada Overlook" would be a reference to the Coronado Expedition and would imply a good view, close proximity to the historic expedition route, and the Spanish connection. "International Plaza" would denote an outdoor gathering area, proximity to the Mexican border, and an expectation of artistic or commemorative features. "Coronado Memorial Terrace" would denote a sloped landscape with a view, a direct connection to Coronado, and the expectation of landscape features that would commemorate the explorer and his corps. Many other combinations are possible, each generating expectations.

- Many NPS historic areas have historic landscapes, visitor overlooks, and memorial structures very closely related in a logical and convenient way for visitors to quickly comprehend the historic scene and its relationship to the present day park setting. For example, on Little Round Top at Gettysburg National Military Park, there is a life-size statute of Union General Governor Warren surveying the battlefield immediately below with his binoculars. A nearby wayside exhibit describes Warren's role there, accompanied by an illustration. Accessible walkways connect the statue and exhibit with related monuments and waysides. In addition, visitors are walking the same ground where the troops fought. Visitors have come to expect this direct, captioning-of-the-landscape approach at NPS sites.

- Shade will be critical to the success of the new development at Montezuma Ranch. The open vistas that make this spot great for wayside storytelling are a liability if the place is too extreme for visitors to stay long enough to enjoy the full benefit of the work invested in creating waysides and other improvements. Fortunately, Denver Service Center created a shade shelter for Palo Alto National Battlefield (Brownsville, Texas) only a few years ago. The Palo Alto shade structure was designed and built to be large enough for a big school group, and also houses 12 bilingual waysides on the waist-high wall that faces the battlefield. This plan could easily be adapted to be built at Coronado. *(Contact Superintendent Myrna Palfrey-Pérez/Palo Alto National Battlefield, or Supervisory Park Ranger Douglas Murphy/Palo Alto National Battlefield, 956-541-2785 x230 for more information on existing DSC architectural plans for a shade shelter amply sized for NPS purposes.)*

The Palo Alto National Battlefield (Brownsville, Texas) shade structure created by Denver Service Center was designed and built to be large enough for a big school group, and also houses bilingual wayside exhibits on the waist-high wall that faces the battlefield. This plan could easily be adapted to be built at Coronado National Memorial.

- A full-size replica of a boundary marker could also be displayed at the overlook plaza, portraying the "memorial" that visitors inquire about regularly. Other elements which could help interpret the story at this site are implements symbolic of the Entrada and which could be cast in metal as tactile forms—a helmet, crossbow, sword, spurs, mace, cross, or other objects used by the Spaniards. If presented more as reliefs attached to their backgrounds than stand-alone objects, these forms could be relatively durable in an outdoor environment. Tactile elements would increase the accessibility of interpretation for children, and for those with visual impairments.

- The overlook plaza might also include flags of the United States, Tribal Nations, Mexico, and Spain to honor the nations associated with the history of Coronado National Memorial, and their placement in the plaza might also reinforce their relationship to the ground, with the U.S. flag on the north side of the border view, and the Mexican flag on the south side.

- The team discussed the value of amphitheaters in the park, with one possible location being the ranch overlook, as an expansion of the shade structure. Tiered seating could be included with an amphitheater on the back side of the plaza so that visitors could be seated and see the memorial elements in the foreground, as well as the view of the San Pedro River and the border. In this way, interpreters could make that direct connection in their interpretive talks. Daytime talks would be much more practical in a shaded environment.

- In addition to commemorative and interpretive elements, the site may need some comfort-related improvements to ensure that visitors would remain long enough to gain a meaningful interpretive experience. Items to consider in this regard are restrooms or portable toilets, drinking water, shade structures or shade trees as mentioned previously, and seating.

WAYSIDE EXHIBITS

Every unit of the National Park Service needs to "show the flag" at the same time that we inform visitors what they can see and do at that site. Waysides created by park staffs working with Harpers Ferry Center use a standard Servicewide design to quietly remind visitors that a place preserved within the National Park System is something of great value to our nation.

Signs, like the NPS uniform, also reinforce the idea that this is a special place that merits national significance. Much effort has been invested at the national level to have a distinctive, easy-to-read, comprehensive system of signs. The system provides off-the-shelf solutions from formal park entrance signs to trail direction markers and campsite numbers. Built into the NPS Sign Program is a visual hierarchy that gives readers clear clues as to the relative importance of the blocks of information seen on the signs.

Coronado National Memorial should work toward replacing any worn signage with signs according to the national standards. The park should begin with the east entrance sign, because first impressions are lasting impressions. Non-standard (locally built) signs often do not have an effective hierarchy among the visual elements, so that the reader cannot quickly find the information most important to them. The agency identity can be confused, or conversely, can be made too prominent. The National Park Service/U.S. Forest Service routed wooden sign at Montezuma Pass is a case in point.

As mentioned previously, the planning team recommends that audience evaluation be conducted as part of any new media development. It would be valuable to conduct front-end evaluation to determine what visitors already know and what they might like to experience in the park; formative evaluation to test proposed exhibit concepts before final production; and summative evaluation to fine-tune the exhibits after installation.

Recommendations

Seven places at Coronado need waysides that both introduce visitors to the immediate site and its possibilities, and link the

memorial to the greater National Park System. These are all places where some percentage of visitors will be getting out of their cars for the first time. In most NPS areas, **orientation** and **agency identity** are accomplished by trailhead style upright waysides, often paired at the parking lots or overlooks. These orientation pairs would be the minimum level of outdoor orientation and interpretation that should be provided. Examples of wayside and sign options are included in the Appendix.

Recommended Wayside Exhibits

Wayside Exhibit Location	Purpose	Type of Exhibit
East entrance	parkwide orientation bulletin board	upright wayside upright wayside
Montezuma Ranch site	parkwide orientation site orientation/trailhead bulletin board safety message	upright wayside upright wayside upright wayside upright wayside
Visitor Center parking	parkwide orientation site orientation/trailhead safety message	upright wayside upright wayside upright wayside
State of Texas Mine pullout	site orientation (mining history/conservation)	upright wayside
Paved road pullout	site orientation (themes 1 and 2/natural resources)	upright wayside
Picnic grounds	parkwide orientation site orientation/trailhead safety message	upright wayside upright wayside upright wayside
Montezuma Pass entrance	parkwide orientation site orientation/trailhead safety message	upright wayside upright wayside upright wayside

Non-standard signs often do not have an effective hierarchy among visual elements, so that the reader cannot quickly find the most important information. Agency identity can be confused, as seen in the National Park Service/U.S. Forest Service sign at Montezuma Pas.

Because illegal activities occur daily along this part of the international border, visitors arriving at this memorial should also receive prudently worded, practical personal safety information before they start their park visit.

At this long-range interpretive plan workshop, we heard that there are at least four other sites where a main trail leaves the main park road. A single upright trailhead could introduce the trail, provide basic trail data about distance, elevation gain or loss, difficulty, and surface conditions.

This need could either be met by colorful upright wayside-format trailhead exhibits (usually 36 inches wide by 48 inches high), or by the newer, leaner looking VIS (Visitor Information System) trailheads from the National Park Service Sign Program.

Recommended Wayside Exhibits

Wayside Exhibit Location	Purpose	Type of Exhibit
Coronado Cave	site orientation/ railhead	upright wayside
Joe's Canyon	site orientation/trailhead	upright wayside
Windmill Road	site orientation/trailhead	upright wayside
Grasslands Trail (future)	site orientation/trailhead	upright wayside

The best potential for high-quality, effective new site-specific interpretive waysides revealed during the LRIP workshop would link site-specific stories to grand views.

Recommended Wayside Exhibits

Wayside Exhibit Location	Subject
Ranch	Following the San Pedro River into the Unknown How Far the Coronado Expedition Had Come How Far the Coronado Expedition Would Go Who Marched with Coronado? Why the USA-Mexico Border is Here
Montezuma Pass	Vista identifiers Some duplicates from the ranch location (above)
Coronado Peak trail	Some duplicates from the ranch location (above)
Plant Identifiers	May work well if scattered randomly in picnic grounds and trails near visitor center. A dedicated "nature(-only) trail" seems out of place for this site.
Rockslides from floods	When temporary explanation of a situation is needed, the best quick solution might be in the VIS format.

DISTRIBUTABLE MEDIA

Generally the distributable media here is historically accurate and well accepted by the visitor. Providing orientation and wayfinding material on a regionwide basis would serve to increase Coronado's exposure to greater numbers of more diverse visitors.

- Create and distribute a yearly calendar of events, to include both special events and daily opportunities. Expand the distribution of this schedule to local businesses and tourism centers.
- Continue to develop and refine current handouts and related media.

AUDIOVISUAL TECHNOLOGY

Since the 1970s the National Park Service has utilized many types of audio message repeaters to complement outdoor wayside exhibits. Audio, if done well, can add emotional color and authenticity. When visitors hear directly from recognized subject-matter experts or from people who work in the park and know it well, the message is powerful. Period music or sound

effects or actors using historic dialects can shape and deepen the visitor experience. Like waysides, audio messages work best if they are kept short and well focused. An audio message that runs longer than 90 seconds loses its impact.

Fixed audio stations of the last 50 years often failed to deliver good value for what they cost. Developing and producing the audio content was never inexpensive and the park had to pay the recurring costs to maintain the hardware. Outdoor audio units are notorious for breaking down. In remote areas, audio repeaters can use batteries or easily vandalized solar panels. Visitors who punch an audio start button and receive no message have a strong negative experience.

Considering the issue of visitor sovereignty is just as important as cataloging all the technical challenges the National Park Service has experienced with outdoor audio stations. Visitors should have the right to choose what to read or hear and what to ignore. For example, when school groups are on a trail, a fixed message repeater will be triggered over and over and over. The quality of the park experience for any visitors on that trail who are not part of the school group suffers, because these visitors have no choice as to whether they want to hear the audio message repeated or not.

Cell phones now offer an alternative message delivery system. With a cell phone system, visitors could hear brief and focused audio messages at the various wayside exhibit sites around the memorial — in either English or Spanish. Valley Forge National Historical Park has been testing this cell phone audio tour concept since July 2006. Initial reports from park managers, interpreters, and visitors have been very positive. In any area where there is at least one-bar cellular reception, this solution could work far better than fixed (in-ground) audio stations or rental tape players, CD players, and audio wands. Using cell phones as the device to communicate NPS interpretive messages eliminates the administrative burden on parks compared to the staff time required to provide and rent audio tour equipment, where there is a potential for theft or hardware loss. The National Park Service would have no funding committed to elaborate hardware that will become obsolete in three to five years. Cell phones would also solve the visitor sovereignty dilemma. Only those visitors interested in the audio messages would be hearing the content presented, individually, in their own ears. With a cell phone delivery system, all visitors within hearing range would not be forced to listen to interpretive messages. Audio provides intellectual access to visually impaired visitors and can be more effective for reaching visitors whose preferred learning style is auditory rather than visual.

For visitors who are visually impaired, a new audio tour for Coronado National Memorial could include developing audio descriptions, such as those now used in major museums and in theatrical performances. Audio description would not only narrate the text of a wayside exhibit and describe the graphics seen on the panels, but also describe the third dimension of any wayside exhibit—the surrounding view that prompted the need to tell the story.

The main foreseeable disadvantage to cell phone tours is that the NPS might be perceived to be discriminating against visitors who do not own a cell phone. A solution is readily at hand. Volunteer groups exist that take donated cell phones and hardwire them to only call emergency numbers. A park could program phones to only call the audio system. This eliminates any incentive to steal loaner phones. Such modified phones could be retained at visitor center desks in the same way rental tape players are now stored.

Recommendation

- If a cell phone transmitter could be accommodated on the existing U.S. Border Patrol tower at the ranch site, visitors could be given the option of hearing audio messages at various wayside locations and in front of any statuary or commemorative elements. This would bring a higher degree of depth and accessibility to the media at the site, and with the emerging cell tour technology, messages could be updated by park staff at any time from any phone—as easy as recording a

Coronado National Memorial is working to improve natural and cultural resource management through collaboration with partner agencies such as the U.S. Forest Service and through more strategic deployment of research, protection activities, and habitat restoration.

new greeting in a voice mail program. An additional level of cell messages could provide information on services, facilities, regulations, special events, hours, closings, and safety issues. Audio tour services could be designed to serve all locations in the park, including the park road and Montezuma Pass Overlook.

OFF-SITE ACTIVITIES AND PARTNERSHIPS

Partnerships and greater civic engagement have proven to benefit park sites and regional communities.

Recommendations

- The interpretive division should continue involvement in the Southeastern Arizona Volunteer Education Program (SAVE), a training opportunity partnership between the National Park Service, The Nature Conservancy, the Bureau of Land Management, and the U.S. Forest Service.

- Developing an off-site visitor center experience in nearby Sierra Vista, Arizona, would provide extended regional recognition and an opportunity for greater civic engagement. This facility could be located in the Convention Visitor Bureau. New rack cards and a podcast outlet at this location could further enhance the visitor experience at Coronado.

- Enhanced cooperation and interaction with the U.S. Military and U.S. Forest Service could enhance both interpretive results and related management issues.

PERSONAL SERVICES

Personal interpretive services are those in which the memorial staff interacts with visitors. Examples of personal services include staffing the visitor center, formal interpretive programs, informal (roving) interpretation, conducted activities, special events, orientation and educational programs. All these services allow the park staff an opportunity to enhance the visitor's experience through personal interaction. Personal services are often most effective for interpreting complex or conceptual themes and topics.

Personal services encourage visitors to become active participants in exploring the park's stories. A variety of formal and informal programs are offered at Coronado, including formal guided talks, roving interpretation, and education programs. Because this site has few visible clues to its many stories, personal services are vital to create opportunities for visitors to truly understand and relate to the meanings and stories represented here.

The interpretive staff at Coronado National Memorial should assess which particular personal interpretive services will be most effective on a yearly basis. This is the core of the annual implementation plan that will guide the interpretive program in supporting management goals and providing optimum opportunities for the visitor. This process includes yearly reevaluation of desired visitor experiences and subsequent assessment of the most effective combinations of interpretive themes, locations, audiences and types of personal services to best fulfill the visitor's needs. These factors can change from year to year as the parks demographic, management needs, and other factors change.

Recommendations

- Critical opportunities for visitors at Coronado National Memorial could be provided by guided interpretive walks led by uniformed interpreters. Varied theme-based programs would provide visitors with a multitude of prospects for connecting with Coronado's stories. It is very important to provide this visitor opportunity because of the scope of the site and the lack of remaining visible landscapes and clues from the time period of the Coronado Expedition.

- Expand roving and informal interpretation opportunities for visitors at Montezuma Pass, the picnic area, and the ranch site.

- Expand the opportunity for guided walks to the cave for visitors and educational groups.

- Roving or informal interpretation also serves as a major component

at Coronado National Memorial, though the staff must aggressively seek out visitors and create moments of opportunity. This is particularly beneficial to those visitors that do not receive much wayfinding information.

- The Volunteers-In-Parks Program could be enhanced with more dedicated NPS supervision, enhanced VIP accommodations, and an increase in VIP funding. Greater outreach to those volunteers interested in this specific time in history could produce benefits in research and the availability of costumed interpretation. An effort to enhance and expand the participation of local volunteers would be beneficial as well.

- Developing historical symposiums that meet at the memorial could enhance the park's ability for research and expand the recruitment for volunteers even further.

- As mentioned previously, an annual implementation plan should be created and revised yearly. It is important to assess changes in management strategy, demographic shifts, and any new information that would modify the message to the visitor. One tool that helps to integrate inevitable change into a personal services program is the use of a matrix which assesses the best combinations of current interpretive themes or sub-themes, best locations for services, and most effective services for particular audiences. This should, in turn, facilitate the park's desired visitor experiences. This is also a good time to assess whether the park is best utilizing resources to produce these desired visitor experiences and support management initiatives.

- Assessment of the effectiveness of our interpretive techniques and services is critical to maintaining positive visitor experiences and providing rationale for our programs. These assessments can include supervisory assessments of effectiveness, more formal outcome based assessment, a correlation of visitor inputs, and formal demographic studies. The rubric-based assessment method utilized in the interpretive development plan, while not addressing "supervisory concerns" does give great insight into whether a particular service is effective in creating interpretive opportunities for park visitors. Outcome-based evaluative methods would be effective as well.

A Mexican blue oak displays ripening acorns. The upper portion of the Memorial is predominately oak woodlands with some areas of Mexican pinyon and alligator juniper.
PHOTO BY DAVID BLY

- The presence of a costumed interpreter performing informal interpretation could be very effective in introducing visitors to the Coronado Expedition. This type of personal interpretive service continues to prove an invaluable method of assuring that visitors "connect" with the resources and find personal meaning and relevance. Costumed interpretation at Coronado National Memorial could be made even more effective by adding more staff in costumes representative of the explorers and native inhabitants, especially if they reveal the interactions between those groups. To accomplish this, staffing levels would need to increase accordingly.

- When core operations have been addressed, it could be very beneficial to step off of the park grounds and expand personal outreach to park partners, the community center, assisted living centers, and other regional venues. Interpretive and educational programs could also be developed for the Tel-Net system, which would expand Coronado's presence even further.

- Participation by all interpretive staff is encouraged in the NPS Interpretive Development Program. This is the NPS primary professional training in interpretation and is critical for field-level interpreters and interpretive supervisors. Such training keeps staff informed of the most effective interpretive methods and provides valuable insight into national policy.

- Higher staffing levels are required for the park to fully support this plan. Realizing that budget levels are stagnant at the time this was written, it would be appropriate for the park to examine other methods of staffing. Increasing the number of park volunteers and Student Conservation Association (SCA) volunteers could be effective, though the infrastructure needed to support a large volunteer force can drain resources quickly.

EDUCATION PROGRAM

The current education program at Coronado National Memorial centers around the established environmental education program and outreach program for numerous schools and groups in the region.

Recommendations

- The park's education coordinator needs to keep informed about changes to the Arizona State curriculum, so as to keep the program effective and relevant to education partners.

- Develop a "Treasure Trunk" traveling trunk program in concert with existing and planned curriculum-based programs. This will provide greater student and teacher access to specialized reproductions of historical objects and related concepts.

- Develop a science curriculum-based program for older students that is classroom and on-site-based learning with an accompanying teachers guide.

- An enhanced Junior Ranger program can inspire local residents to further explore the opportunities at Coronado with their children. The popular program is also becoming a traveling point for many families, who seek out parks with fun and effective Junior Ranger programs.

- Develop a "Cross Border" educational opportunity to further engage individuals in the concept of building partnerships in Mexico.

SERVICES FOR SPECIAL POPULATIONS

The visitor center and picnic area have been modified to accommodate disabled visitors. It is important to move beyond just accommodation to an active pursuit of equal opportunities in all facets of interpretation for those that are differently abled.

Recommendations

- Wayfinding and interpretive materials should be updated with appropriate accommodations for disabled visitors.

- When developing new waysides and exhibits, the designs should not just accommodate disabled visitors, but should be designed to fully involve those visitors in interpretive opportunities.

Coronado National Memorial's Junior Ranger program features 10 activities with subjects ranging from Coronado's Expedition to the cave, a nature walk, visitor center displays, and more. After completing the activities, children receive a Junior Ranger patch and discount coupon for the bookstore.

- Guidelines for designing for and accommodating those with special needs are found in the Appendix.

LIBRARY COLLECTIONS AND RESEARCH NEEDS

The park currently has a comprehensive collection of artifacts stored primarily off-site. The ultimate goal of any collection is to allow optimum research accessibility. In addition, a small research library is maintained at the ranger office, accessible to the public on a case-by-case basis.

Recommendations

- Develop a plan for funding a searchable database of the entire collection, which will be available online. Search for possible partnership assistance and new opportunities with educational institutions and other partners.
- Develop a list of needs for the library and plan and develop a new library space.

STAFFING AND TRAINING

To implement this plan, especially with additional costumed interpretive programming, would require three GS-04 seasonal park guides. The most effective area for living history may be at the newly developed ranch site.

As proven in the past, additional programming does not assure greater visitation, especially as the park continues to confront ever-present heat, isolation, and safety issues.

Coronado National Memorial's programs could be further enhanced with expanded living history training and more staff involvement in the Interpretive Development Program, both as participants and certifiers.

IMPLEMENTATION PRIORITIES

Pre-visit Orientation, Information, and Wayfinding

Short-Term (1-2 years)
- Distribution of newspaper, bulletins etc.
- Newspaper in cooperation with CHIR/FOBO
- Interpretive workshop with CHIR, FOBO, SAGU, TUMA
- Website development
- Park sign plan
- Work with Arizona Department of Transportation and Office of Tourism on the 511 information project.

Medium-Term (2-5 years)
- Rack cards
- Electronic information kiosk
- Work with Arizona Department of Transportation (ADOT) to increase number and location of signs.

Long-Term (5-10 years)
- Install traveler's information stations.

Arrival and Orientation

Short-Term (1-2 years)
- New entrance sign
- Website development
- Bulletin boards
- Develop downloadable driving tour.

Medium-Term (2-5 years)
- Work with ADOT to increase number and location of signs.
- Podcast
- Outdoor terrain model

Long-Term (5-10 years)
- Install traveler's information stations.

Visitor Center

Short-Term (1-2 years)
- Develop exhibit plans/maps for remodel.
- Remodel visitor center.
- Modify lighting.
- Relocate video.

Medium-Term (2-5 years)
- Develop plans for new visitor center.
- Terrain model of the park

Long-Term (5-10 years)
- Construct new visitor center and education center.

Visitor Center Exhibits

Short-Term (1-2 years)
- Develop exhibit plans/maps for remodel.
- Remodel visitor center.
- Modify lighting.
- Relocate video.

Medium-Term (2-5 years)
- Terrain model of park
- Diorama of the Entrada
- Develop exhibit plan for new visitor center facility.
- Develop diorama on collection of items Coronado brought. Compare/contrast with items immigrants are bringing today.
- Add technology-based exhibits (i.e., touch-screen kiosks, interactive exhibits).

Long-Term (5-10 years)
- Implement exhibit plan for new visitor center facility.

Cooperating Association Sales

Short-Term (1-2 years)
- Develop scope of sales.
- Develop plan for remodeling sales area.

Medium-Term (2-5 years)
- Implement remodel plan.

Long-Term (5-10 years)
- Increase revenue through off-site sales in local business, tourism offices, etc.

Ranch Site

Short-Term (1-2 years)
- Develop ADA trail.
- Remove buildings and fencing from area.

Medium-Term (2-5 years)
- Develop plans for new visitor center and education center.
- Develop traffic and parking plan.
- Develop plan for elevated viewing area.
- Develop plan for shade structures/plantings.
- Develop plan for education/amphitheater.
- Develop plan for restrooms, drinking water and benches.

Long-Term (5-10 years)
- Construct new visitor center and education center.

Wayside Exhibits

Short-Term (1-2 years)
- Conduct audience evaluation for media development.
- Develop wayside exhibit plan.

Medium-Term (2-5 years)
- Replace worn signage with signs meeting national standards.
- Install new wayside exhibits at Montezuma Ranch site, visitor center parking area, picnic grounds, Montezuma Pass entrance, and on Coronado Peak Trail.
- Install site orientation/trailhead signs for Coronado Cave, Joe's Canyon Trail, Yaqui Ridge Trail and Crest Trail.

Long-Term (5-10 years)
- Install new wayside exhibits at State of Texas Mine pullout, paved road pullout, Coronado Cave, Windmill Road, and Grasslands Trail.

Distributable Media

Short-Term (1-2 years)
- Partner with CHIR/FOBO to add articles and site information to their current newspaper publication.
- Monthly articles in local papers
- News bulletin/special events on website
- Develop brochure on native plants to go along with the rehab of the front of the visitor center.

Medium-Term (2-5 years)
- Work with WNPA to print in Spanish and English some of the letters from Coronado, Fray Marcos, etc.

Long-Term (5-10 years)
- Develop a Sky Island publication in cooperation with Chiricahua NM and WNPA.

Audio Visual Technology

Short-Term (1-2 years)
- Develop CD/DVD for audio tour going to Montezuma Pass.

Medium-Term (2-5 years)
- Develop podcast.
- Develop virtual tour of cave hike.
- Add touch screen kiosks to visitor center exhibits.

Long-Term (5-10 years)
- Produce new orientation video.

Off-site Activities and Partnerships

Short-Term (1-2 years)
- Continue involvement with Southeastern Arizona Volunteer Education Program (SAVE).
- Enhance cooperation and interaction with the U.S. Military and U.S. Forest Service.

Medium-Term (2-5 years)
- Develop an off-site visitor center experience in Sierra Vista, Arizona.
- Enhance partnership with the Center for Desert Archaeology.

Long-Term (5-10 years)
- Develop new and enhance current relationships with educators in Cochise County, Arizona.

Personal Services

Short-Term (1-2 years)
- Request increase in OFS funding for additional interpretive staff.
- Host interpretive workshop to develop skills of staff and volunteers.
- Expand guided interpretive walks.
- Expand roving/informal interpretation opportunities.
- Expand cave tours.
- Increase number and type of special events/talks.
- Develop annual implementation plan.

Medium-Term (2-5 years)
- Increase VIP spaces/housing.
- Increase VIP funding.
- Develop historical symposiums/site specific events or meetings.

Long-Term (5-10 years)
- Utilize additional OFS funding to increase interpretive and educational programs.

Services for Special Populations

Short-Term (1-2 years)
- Develop ADA accessible grassland trail.
- Modify and/or move waysides at Montezuma Pass parking area to make them more accessible.
- Create a nature area in front of visitor center with plant signs that are accessible.

Medium-Term (2-5 years)
- Create virtual cave tour and exhibit on kiosk as well as website.
- Develop terrain model of the park.

Long-Term (5-10 years)
- Construct ADA accessible grassland trail.

Education Program

Short-Term (1-2 years)
- Expand relationships with affiliated tribes to increase consultation in the development of appropriate and accurate interpretive content.
- Assess interpretive content in current education program and develop a program that is less staff-intensive.
- Develop education program that can be presented in schools and other community venues.
- Encourage staff participation in the NPS Interpretive Development Program.
- Increase volunteer participation.
- Participate in the Teacher-Ranger-Teacher program.
- Enhance the Junior Ranger program.
- Develop a “Cross Border” educational opportunity to further engage education/park partners in Mexico.

Medium-Term (2-5 years)
- Request increase in OFS funding for additional interpretive staff.
- Develop “Traveling Trunk.”
- Develop a curriculum-based science program.

Long-Term (5-10 years)
- Utilize additional OFS funding to increase staff and educational programs.

Interpretive planning discussions addressed the value of amphitheaters in the park, with one possible location being next to the visitor center in the current nature trail area.

Library, Collections, and Research Needs

Short-Term (1-2 years)
- ANCS+ training for collections manager.
- Develop a scope of collection.
- Request funding for primary library space.

Medium-Term (2-5 years)
- Plan and develop a new library space.
- Upload Pro-Cite data to NPS Focus.

Long-Term (5-10 years)
- Construct new library space.

Staffing and Training

Short-Term (1-2 years)
- Request additional OFS funding to increase interpretive staff.
- Encourage participation in the NPS Interpretive Development Program.
- Increase number of volunteers.

Medium-Term (2-5 years)
- Expand costumed interpretation opportunities.

Long-Term (5-10 years)
- Utilize additional OFS funding to increase staff and interpretive programs.

APPENDICES

Conquistador by Frederic Remington ~ www.discoverseaz.com

Appendix A: Knowing Your Audience

The media evaluation process requires the planning team to identify the intended exhibit target audience in terms of their ages, educational levels, and levels of entering knowledge of the subject matter of the exhibit. The team must also have clearly defined objectives—both cognitive and affective.

KNOWING YOUR AUDIENCES
The Role of Evaluation in Exhibit Planning and Design

Over the past thirty years it has become increasingly evident that exhibitions of all kinds and in a variety of venues (including visitor centers) can significantly benefit from the use of a variety of evaluation activities carried out during the development process. A recent bibliography lists over 600 studies that have demonstrated the value of getting inputs from target audience members to help inform decisions about both the content and presentation methods being considered, thus avoiding serious and costly mistakes discovered only after the work has been completed.

Traditionally, there are three stages during which formal visitor studies are conducted.

1. **Front-End Evaluation:** during conceptual planning when themes, story lines, and program ideas are being considered;

2. **Formative Evaluation:** during early fabrication of exhibits when mock-up testing can be carried out;

3. **Summative/Remedial Evaluation:** conducted after final installation, when the total "package" can be evaluated and final adjustments can be made.

Front-end evaluation concentrates on getting input from potential visitors by means of interviews and/or focus groups, to find out what kinds of information they need and would like to know, and how this information could be presented in a meaningful, interesting, and cost-effective way. Misconceptions about the subject matter are also revealed at this stage, often leading to specific content and presentation elements designed to counter them.

Formative evaluation is intended to "catch" design and/or content problems before they become a part of the final exhibition, when they are often difficult and expensive to "fix." Especially critical to test at the mock-up stage are interactive exhibits, where feedback from users almost always reveals flaws or weaknesses in the program that can be easily corrected.

In a comprehensive evaluation program, conducting summative/remedial studies often reveals problems that were not, or could not be, identified during the earlier stages of development. For example, crowd-flow problems are often revealed only when the actual configuration of all the elements of the exhibition are in place. Similarly, orientation and signage problems become "obvious" at this point, and can often be corrected by relatively minor adjustments to wording and/or placement.

The media evaluation process requires the planning team to identify the intended exhibit target audience in terms of their ages, educational levels, and levels of entering knowledge of the subject matter of the exhibit. The team must also have clearly defined objectives—both cognitive and affective. Cognitive objectives relate to the intended impact of the exhibit on the target audience in terms of knowledge of the subject matter (e.g., facts, concepts, controversies, comparisons). Affective objectives relate to the intended impact of the exhibit on visitors' beliefs, interests, feelings, and attitudes as related to the exhibit content. These explicit and agreed-to objectives guide not only the way the exhibit is tested at the formative and summative/remedial stages, but the entire exhibit development process, including decisions about content, sequence, media, interpretation, and presentation techniques.

From the personal writings of evaluator Dr. Harris H. Shettel, Rockville, Maryland, and used by his permission.

Professional Organizations

The following professional organizations are concerned with exhibit evaluation and can provide additional information on the subject:

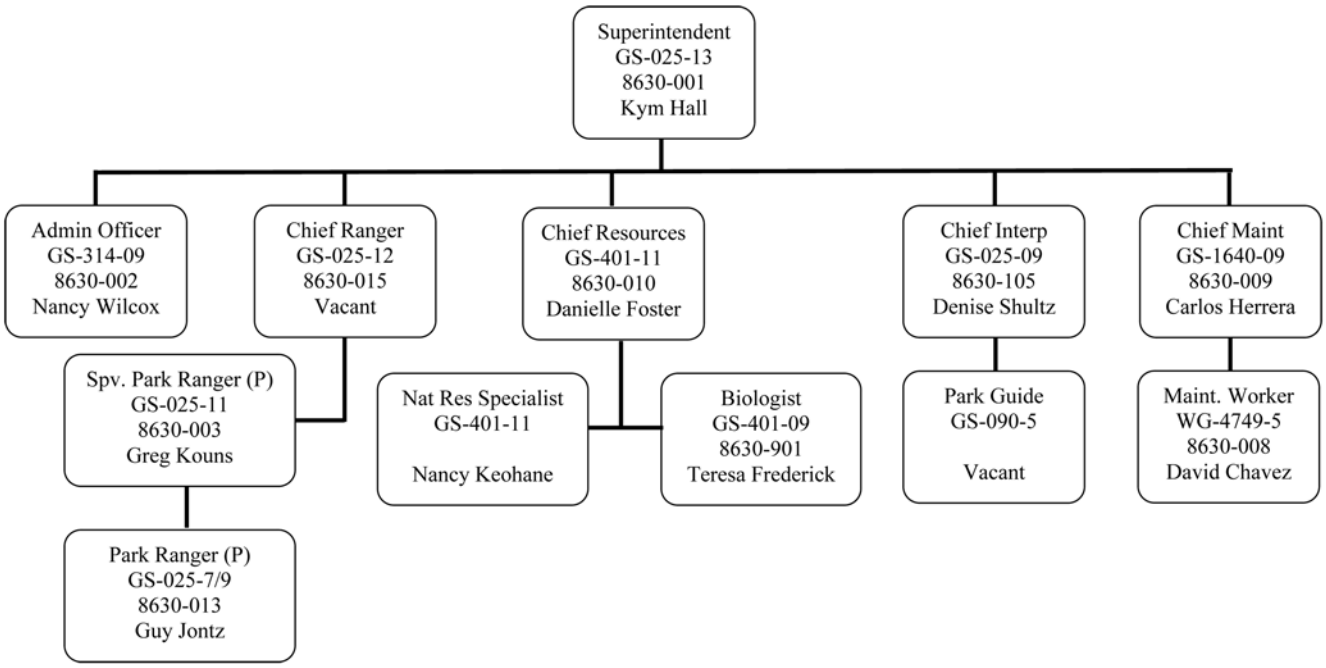
Committee on Audience Research and Evaluation (CARE)
American Association of Museums (AAM)
1575 Eye Street, NW, Suite 400
Washington, DC 20005
tel.: (202) 289-1818
http://www.aam-us.org/index.htm

CARE publishes *Current Trends in Audience Research and Evaluation*, and the *Directory of Evaluators*.

Visitor Studies Association (VSA)
8175-A Sheridan Blvd., Suite 362
Arvada, CO 80003-1928
303-467-2200
303-467-0064 fax
http://www.visitorstudies.org/
VSA publishes *Visitor Studies Today*.

American Evaluation Association
16 Sconticut Neck Rd #290
Fairhaven MA 02719
Phone/fax 888-232-2275 (toll free in US and some Canada)
http://www.eval.org/
AEA publishes *American Journal of Evaluation* (published three times/year).

Appendix B: Current Park Organization



Appendix C: Special Populations Guidance

Harpers Ferry Center has recently revised the Programmatic Accessibility Guidelines for NPS Interpretive Media. These guidelines clarify how to provide enhanced programmatic access to people with disabilities and those from special populations. The document is written for media specialists, interpreters, rangers, superintendents, and other National Park Service employees and contractors who approve or develop interpretive media and programs. It provides guidance regarding personal services programs, audiovisual programs, audio tours, exhibits, publications, and web-based media. Topics include the following:

- **Highlights of the new Americans with Disabilities Act and Architectural Barriers Act Accessibility Guidelines (ABAAS), which takes the place of the Uniform Federal Accessibility Standards (UFAS).**
- **New chapters on the laws, regulations, and policies that govern accessibility interpretive media.**
- **Useful links to laws and best practices in accessible media.**
- **Park and Harpers Ferry Center accountability for accessible media.**
- **The latest pictographs and links for pictograph downloads**
- **How to plan and scope for accessibility.**
- **Accessibility for web-based media.**
- **Updates on new technology.**
- **How to prepare a report or document so that computers can read the text content aloud.**
- **How parks can convey messages about their accessible sites and programs.**
- **Numerous diagrams to help NPS employees and contractors understand the specifications.**

Successful programmatic accessibility begins with comprehensive parkwide interpretive planning, so that all media and personal services can work together. Where one service may not be accessible to all persons, other services can fill the gaps. Early recognition of, and sensitivity to accessibility issues will result in the most successful visitor experience.

The new guidelines are available now in PDF format at www.nps.gov/hfc.

Appendix D: Bibliography and Reading List

Bolton, Herbert Eugene, *Coronado, Knight of Pueblos and Plains*, Whittlesey House and University of New Mexico Press, 1949.

Chavez, Fr. Angelico, OFM, *Coronado's Friars*, Academy of American Franciscan History, 1968.

Flint, Richard, *Great Cruelties Have Been Reported, 1544 Investigation of the Coronado Expedition*, Southern Methodist University Press, 2002.

Flint, Richard and Flint, Shirley Cushing, *The Coronado Expedition to Tierra Nueva. The 1540-1542 Route Across the Southwest*, University Press of Colorado, 1977.

Flint, Richard and Flint, Shirley Cushing, *The Coronado Expedition from the Distance of 460 Years*, University of New Mexico Press, 2003.

Flint, Richard and Flint, Shirley Cushing, *Documents of the Coronado Expedition, 1539-1542*, Southern Methodist University Press, 2005.

Hammond, George P. and Rey, Agapito, *Narratives of the Coronado Expedition, Vol. II*, University of New Mexico Press, 1940.

Hammond, George P., *Coronado's Seven Cities*, United States Coronado Exposition Commission, 1940.

Winship, George Parker, *The Coronado Expedition 1540-1542*, Rio Grande Press, 1964.

Winship, George Parker, *The Journey of Coronado 1540-1542*, Fulcrum Publishing, 1990.

Appendix E: Planning Team and Consultants

Kym Hall
Superintendent, Coronado National Memorial

Frank Torres
Chief of Interpretation, Coronado National Memorial

Denise Shultz
Chief of Interpretation, Coronado National Memorial

Maggi Daly
Park Guide, Coronado National Memorial

Leigh Carter
Park Ranger, Coronado National Memorial

David Bly
Photographer

Neil DeJong
Chief of Interpretation, Intermountain Regional Office

David Guiney
Media Specialist, Harpers Ferry Center

Mark Johnson
Media Specialist, Harpers Ferry Center

Rick Jones
Interpretive Planner, Harpers Ferry Center

National Park Service
U.S. Department of the Interior

Coronado National Memorial
4101 East Montezuma Canyon Road
Hereford, AZ 85615-9376

520-366-5515

www.nps.gov/coro

EXPERIENCE YOUR AMERICA™