

Centuries Along The Upper Niobrara

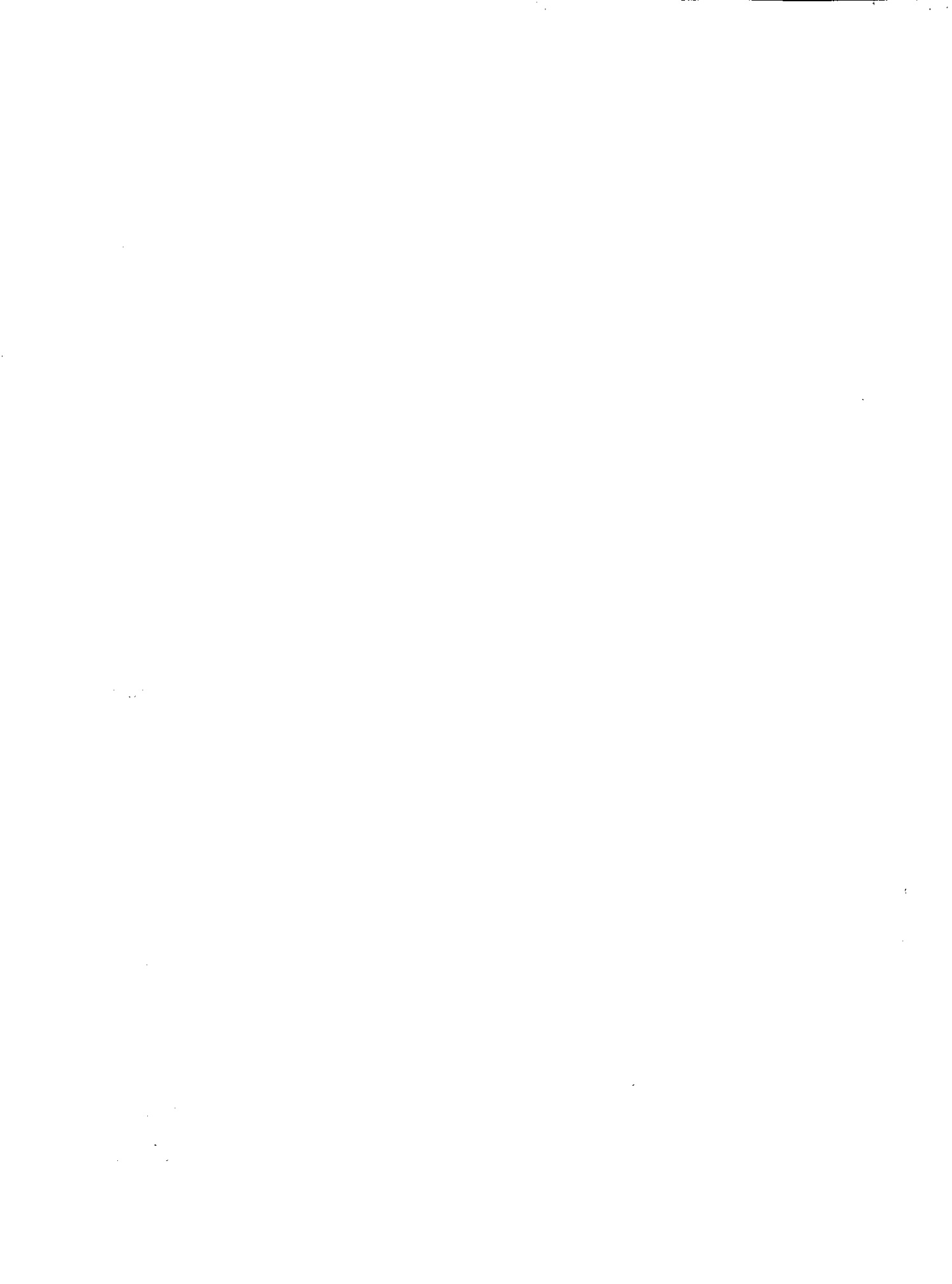
Historic Resource Study: Agate Fossil Beds National Monument



Gail Evans-Hatch, PhD
Evans-Hatch & Associates
2008



Midwest Region
National Park Service



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INTRODUCTION and ACKNOWLEDGEMENTS

Introduction

As steward of many of the United States' most important cultural and natural resources, the National Park Service (NPS) is required to create background documents along with specific plans aimed at managing and protecting these resources for the enjoyment of present and future generations. An important aspect of managing cultural landscapes requires knowing the past of those landscapes. A historic resource study (HRS) project involves researching and presenting the history of a park. A HRS also attempts to identify and evaluate the importance of all cultural resources within that park. Researching and presenting the broader historical context of a park as well as its specific details is essentially important in making judgments about the significance of cultural resources in that park. Ideally, a HRS becomes a valuable reference document that aids park managers and interpreters better protect the resources and share their knowledge with the general public.

Researching and writing the history of Agate Fossil Beds National Monument in a historic resource study has been an exciting and challenging endeavor. Some of the history of this place that qualified it for park status in the 1960s goes back thousands of years to the Miocene Epoch. There are also multiple waves of sometimes little-known human interaction that remain puzzling to researchers. There is much about the history of this place that will never be known and can only be surmised and suggested. Organizing the widely varying historical themes pertinent to this park in a coherent, sensible, and sensitive way has been another challenge.

In more recent times, humans who have passed through or occupied this portion of the serpentine upper Niobrara River have pursued a variety of activities—subsistence hunting and gathering, evolving relations between the governments of two nations, Euro-American exploration of a little-known prairie region, dry-land ranching and farming, excavating fossil bones, mineral exploration, tourism, and much more—each with its own convoluted and intricate history. Presenting these multiple historical themes and the specific details of the Agate contribution to the story has required searching in numerous places for all kinds of information—written, cartographic, artistic, geographic, and oral. It is hoped that this historic resource study of Agate Fossil Beds National Monument, *Centuries along the Upper Niobrara*, provides a balanced, accurate, and useful history for NPS personnel that is also enjoyable reading for them and the general public.

Acknowledgements

No project of this complexity can be completed alone without the assistance of numerous people. The project began by exploring the holdings of several libraries and archives scattered around the country. For their guidance and assistance in identifying, retrieving, and, in some cases, copying information I wish to thank: Mark Katzman, Library—Special Collections, and Susan Bell, research associate, Division of Paleontology/Vertebrate Paleontology at the American Museum of Natural History in New York City; Helen Weltin, senior librarian at the New York State Library in Albany; Mary-Jo Miller, Linda Hein, and Eva Bachman at Nebraska State Historical Society, Lincoln, Nebraska; Maryellen Ducey, University of Nebraska Archives & Special Collections; Kristine Haglund, chair, Library/Archives & Archives at the Denver Museum of Nature and Science; Janet Bloom, research services specialist, Clements Library at the University of Michigan; Rose Parisse and Barbara Larsen, Central Plains Region, National Archives and Records Administration, Kansas City, Missouri; Charis Wilson, records manager at the Technical Information Center, Denver Service Center, National Park Service in Denver; Denise Klein and Vern Hazelwood, Midwest Region, National Park Service. All these competent and cheerful librarians and archivists provided invaluable assistance in researching Agate Fossil Beds history.

The supportive staffs and working environments of local northeastern Oregon libraries contributed greatly to my research and writing endeavors. At these institutions I retrieved dozens of published books, articles, and illustrations that formed the foundation upon which additional research was conducted and the history of the upper Niobrara River was developed. I was granted generous borrowing privileges at the Penrose Library at Whitman College in Walla Walla, Washington, which has a superb collection of books and journals dealing with western United States history topics, such as trading and trapping, government exploration, Euro-American emigration and settlement, and ranching. Blue Mountain Community College Library in Pendleton, Oregon, provided excellent and speedy interlibrary loan services, implemented by a tremendously efficient and cheerful staff, including: Shannon Vankirk, librarian; Karen Eddy, interlibrary loan librarian; Paula Marquardt, reference assistant; Erik Jensen, reference assistant; and Heather Estrada, cataloger. The BMCC library became a haven for quiet, comfortable, and cool writing when my office's four walls became too close. The Pendleton Public Library and its staff provided another wonderfully helpful and pleasant working environment. To the many dedicated, intelligent, and welcoming people who work at these libraries I extend my hearty thanks.

Several individuals with knowledge of some aspect of Agate Fossil Beds history allowed me to conduct an oral history interview with them. I am most grateful to Angeline Morava (Crawford, Nebraska), Dale ("Bud") Buckley (Harrison, Nebraska), Gretchen Meade (Surrey, British Columbia), Kirk Meade (Alpine, Texas), and Moni Hourt (Crawford, Nebraska) for their willingness to share their historical knowledge and insights with me. The tapes and transcriptions that were created

during and after the interviews will be an invaluable contribution to future research endeavors as well as to this one. Many thanks to you all!

Owners of property that adjoin the Agate Fossil Beds National Monument on the east and west ends were extraordinarily receptive to answering my many questions and generous with their time during all phases of this project. Charles and Donna Skavdahl, owners of land at the northeastern corner of the park, spent part of a Sunday afternoon with me at their kitchen table sharing their more recent historical knowledge and their understanding of current ranching conditions. James Skavdahl, upper Niobrara River rancher whose family rents the Agate Springs Ranch, spent nearly an entire afternoon giving a thorough tour of the Agate Springs Ranch property—its buildings, century-old irrigation ditches, and its fields and hills. Finally, the descendants of long-time Agate Springs Ranch owners James and Kate Cook, gave me access to their ranch, answered several key questions about the ranch's history, and cooperated in every way with the forward progress of this project. Many thanks to them all for cheerfully aiding my efforts to present an accurate and balanced history of Cook family endeavors along the upper Niobrara River.

I extend great thanks to several staff of the Nebraska State Historical Society (NSHS) who aided my research and writing efforts in so many ways of this Historic Resource Study and the National Register of Historic Places nomination that accompanied the HRS. Jim Potter provided guidance in locating historical information and receiving permission to reproduce certain illustrations; Don Cunningham cheerfully granted permission to use NSHS illustrations; Stacy Stupka-Burda offered advice and much support of the National Register nomination process; Terry Steinacher, Grant Landreth, Greg Miller, and John Ludwickson for their general helpfulness and guidance.

Several individuals ably assisted in improving and producing this history. David Wishart, geographer and chair of the Department of Anthropology and Geography, made extremely helpful comments on the content and writing of every page of two chapters of this history. The editor of most of this tome, Cynthia Stowell, not only made some awkward sentences comprehensible and grammatically correct but transformed several weary lifeless sentences into elegant prose. She added great personal and professional sparkle and intelligence to every page. Shelley Ledbetter thoroughly and competently completed all the taped oral history transcriptions. James Ducey and Thomas Bouse provided superb guidance about video-taping interviews. The collaborative contributions of their knowledge and talents markedly improved the outcome of my efforts. My partner, Michael Evans-Hatch, worked magic with the graphics in this history. And, even more valuable, he offered enormous support encouragement throughout the entire project. He lifted me up many times. He is a cherished prize. Many thanks to him and to all those intimately connected with the production of this history.

Finally, throughout this complex, multi-tiered project several people worked closely with me to accomplish certain tasks or to provide overall guidance and

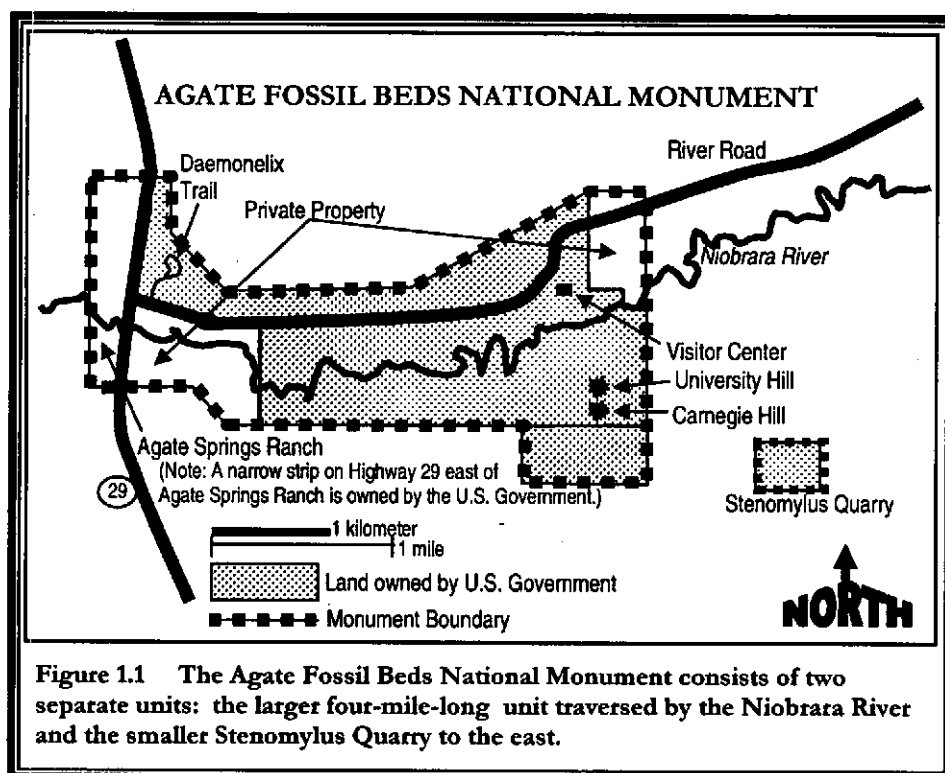
support. I wish to thank Blanca Alvarez Stransky, superintendent of Agate Fossil Beds National Monument, and Mark Hertig, curator and archivist at the park, who facilitated all aspects of this project; landscape architect Brenda Williams of Quinn Evans Architects, who completed valuable landscape observations and documentation; and National Park Service's Midwest Region architectural historian Dena Sanford, for her deep interest and knowledge of the park, and Ron Cockrell, senior historian, for overall guidance, enduring good cheer, and encouragement.

Chapter 1

A PLACE ALONG THE NIOBRARA

Agate Fossil Beds National Monument

Created by an act of Congress in 1965, Agate Fossil Beds National Monument encompasses 3,057.87 acres in Nebraska's northwestern panhandle, about 50 miles south of the border with South Dakota and 15 miles east of the Wyoming border. The park is situated in Sioux County and is 25 miles south of Harrison, the county seat and small ranching community. The sizeable city of Scottsbluff, Nebraska, is roughly 50 miles south of the park. Laramie, Wyoming, is 150 miles to the southwest. The park occupies portions of Sections 3 through 10 and 12 in Township 28 North, Range 55 West of the 6th Principal Meridian.¹



Agate Fossil Beds National Monument consists of two separate units. The larger unit, about four miles long from east to west and one to two miles wide from north to south, is accessed by Nebraska State Highway 29. The smaller unit, known as Stenomylus Quarry, is located east of the main unit and has no public road or trail

¹ *Agate Fossil Beds: Official National Park Handbook* (Washington, DC: Harpers Ferry Center: National Park Service, 1980), 77.

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access. Nearly three-quarters of the land in the park, or 2,270.3 acres, are in federal fee ownership. Scenic easements account for 432.2 acres (known as federal less-than-fee, not including the *Stenomylus* Unit right-of-way) ownership of the park. Roughly 760 acres are privately owned, including scenic easements.

The park was established to protect, preserve, and interpret the scientific paleontological specimens and geological features concentrated at University and Carnegie hills, and the Indian artifacts and relics collected by James Cook, long-time rancher at Agate Springs.² Congressional legislation creating the park in 1965 referred to “preserve . . . the outstanding paleontological sites known as the Agate Springs Fossil Quarries, and nearby related geological phenomena,” and “valuable collection of Indian artifacts and relics that are representative of an important phase of Indian history.”³ The park is significant for other reasons as well. Agate Fossil Beds National Monument has been recognized as an important ecological island of mixed prairie grass and the wildlife it supports in sparsely settled historic ranch lands. Finally, the cultural landscape features in the park, including the privately owned ensemble of buildings and features that compose the Cook family’s Agate Springs Ranch, tell a colorful and important story about ranching on the High Plains in the 1870s and 1880s. Thus, the park has rich associations with three historical themes: Native Americans, ranching, and paleontology. These topics will be explored in this history of Agate Fossil Beds National Monument.

Geology and Paleontology

Millions of years of geology have given distinctive form, color, and organic expression to the visible landscape features of the park, providing the setting for all human cultural activities and archaeological remains, and entombing and preserving the bones of ancient animals. The story of this prehistoric animal life and its discovery and paleontological analysis millions of years later gave initial impetus to the park’s creation by Congress.

Sixty-five million years ago, in the early Tertiary Period of the Cenozoic Era, ancient rocks were laid down in present-day Agate Fossil Beds National Monument. During this time, tectonic forces began uplifting what became the Rocky Mountains in the west, and eastward-flowing rivers deposited expansive layers of sediment (known as “White River” sediment) in shallow water-filled basins across the present Great Plains. These White River sediments covered much of the upper Niobrara River drainage, including the Agate Springs area, as well as present southwestern South Dakota in what is now Badlands National Park. During the early Tertiary

² Ron Cockrell, *Bones of Agate: An Administrative History of Agate Fossil Beds National Monument, Nebraska* (Omaha: Midwest Regional Office, National Park Service, 1986), Appendix C. Electronic copy at: <http://www.nps.gov/archives/agfo/adhi/adhi.htm>.

³ Quoted in John R. Bozell, *An Archaeological Overview and Assessment of Agate Fossil Beds National Monument, Sioux City, Nebraska* (Lincoln: Midwest Archeological Center, National Park Service, 2004), 5.

Period, the entire area of shallow seas, then nearly at sea level, existed in a humid subtropical climate.⁴

More than 20 million years passed. Gradually, during the Oligocene times 34 to 23 million years before the present (BP), the land became covered with more drought-tolerant grass with patches of trees, characteristic of “savanna” vegetative regions. By the early Miocene Epoch, 23 to 5 million years ago, the substantially uplifted mass of the Rocky Mountains created a rain shadow effect on a vast area to the east, including Agate. Consequently, here and throughout the present Great Plains, the climate became dryer and cooler. Eventually, the savanna gave way to the grassland prairies that exist today.⁵

The Miocene savanna landscape of 20 million years ago at Agate would be unrecognizable today. Although the climate and vegetation were moving toward the present dry conditions and prairie-grass plains, strange animals of all sizes roamed the land. The ancient Niobrara, then a wide stream with deep pools, traversed the land, and several small carnivores and rodents occupied this Niobrara drainage. These included: the *Oligobunis* (“little cusp”) that resembled modern badgers; the *Nothocyon* (“false dog”), a fox-like dog; the *Daphoenodon* (“blood-recking tooth”), a coyote-sized dog; the *Temnocyon* (“cutting [tooth] dog”) with its long heavy head; the *Meniscomys* (“crescent mouse”), an early relative of the mountain beaver; the *Gregorymys* (“Gregory’s mouse), an ancient relative of a pocket gopher; the *Palaeolagus* (“ancient rabbit”); and the *Palaeocaster* (“ancient beaver”), a non-dam-building ancestor of the modern beaver that dug spiral burrows in the dirt, called “devil’s corkscrews,” or *Daemonelix*.⁶

Larger mammals also abounded in this Miocene landscape. Among them were the: *Moropus*, distinguished by a large horse-shaped head and claw-toed feet; the six-foot-high *Dinohyus* (“terrible pig”), with its massive three-foot-long head; the related *Desmathyus* (“bond [filling a gap] pig”) or peccary, a distant relative of the modern domestic pig; the forked-, dual-horned *Syndyceras* (“together horn”); and Miocene Epoch versions of camels—*Stenomylus* (“narrow tooth”), *Oxydactylus* (“sharp finger”)—and rhinoceroses, including the *Menoceras*. Finally, the Niobrara of Miocene times was home to small primitive horses, such as *Miobippus* (“Miocene horse”) and *Parahippus* (“near horse”), both distant relatives of today’s horse. Most mammals that once existed on the landscape in the vicinity of Agate are now extinct.⁷ The fossils from the principal excavations at Agate are 19.2 million years old.

⁴ Eugene P. Kiver and David V. Harris, *Geology of US Parklands* (New York: John Wiley & Sons, Inc., 1999), 719-21. For a more detailed discussion of geologic processes and geologic time, see Kiver and Harris, 8-48;

⁵ Kiver and Harris, *Geology of US Parklands*, 721; James R. MacDonald and Laurie J. MacDonald, “A Landscape Rich With Life,” in *Agate Fossil Beds Official National Park Handbook* (Washington, DC: Government Printing Office, 1980), 35-37.

⁶ Robert M. Hunt, Jr., “The Agate Hills: History of Paleontological Excavations, 1904-1925,” (Lincoln, NE: University of Nebraska, 1984). Also see: Macdonald and Macdonald, “Landscape Rich With Life,” 20-32.

⁷ *Ibid.*, 20-32.

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ERAS	PERIODS	EPOCHS	DOMINANT LIFE
	Quaternary	Holocene Pleistocene	
Cenozoic	Tertiary Tertiary Tertiary Tertiary Tertiary	Pliocene Miocene Oligocene Eocene Paleocene	Age of Mammals
Mesozoic	Cretaceous Jurassic Triassic		Age of Reptiles
Paleozoic	Permian Pennsylvanian Mississippian Devonian Silurian Ordovician Cambrian		Age of Invertebrates
Precambrian			
Proterozoic			
Archezoic			

Figure 1.2 Many fossils excavated at Agate Fossil Beds National Monument date from the Miocene Epoch, 23 to 5 million years ago.

Dynamic geological processes and climate shifts eventually brought change to this Miocene landscape. Continued erosion by shifting streams 20 million years ago and subsequent deposition of sediments gradually built up the Great Plains. Shallow waterholes in some of these migrating watercourses became magnets for animals during times of drought. Severe dry periods caused thousands of animals to perish at these waterholes. Two layers of fossilized animal bones at Agate Fossil Beds National Monument, one lying below a 21 million year-old ash layer and the other lying above a 20-million-year-old ash layer, provide a pinhole perspective on periods of severe environmental change and stress.⁸

Following the death and burial of thousands of mammals at present-day Agate, tectonic forces continued to raise the land. During the past 5 million years, the land rose to its present elevation of 4,400 feet above sea level. Erosion by water, wind, and ice, particularly during the Pleistocene Epoch, the so-called "Ice Age," caused the laying down of more sedimentary deposits.

Dramatic changes in climate and vegetation took place across the Great Plains following the retreat of glaciers during the Pleistocene Epoch, 1.6 million BP.

⁸ Kiver and Harris, *Geology of US Parklands*, 721.

The Laurentide ice sheet (continental, over central and eastern Canada and northern United States) and the much smaller Cordilleran ice sheet (mountain, over western British Columbia and southern Alaska) began to retreat some 18,000 years ago. Between their receding fingers, an ice-free corridor of open landscape extended from the northern Great Plains southward east of the Rockies Front Range. Patches of deciduous vegetation, dominated by poplar, willow, sage, grass, cheopods, and sedge, grew over the landscape. Vegetative changes that took place during the late glacial climate brought the demise of several Plains fauna that struggled unsuccessfully to adapt. The American mastodon, Columbia mammoth, long-nose peccary, Harlan's ground sloth, horse, camel, giant bison, dire wolf, and saber-toothed tiger all became extinct creatures on the Plains during this period.⁹

By 10,000 BP, the cool, dry post-glacial, or "Holocene," climate had waned and the consequent spruce-dominated boreal forest retreated to the north and disappeared, leaving grassland across the western Great Plains. Warmer and dryer conditions between 10,000 and 8,500 BP (during the Holocene early Postglacial period) caused grasslands to expand throughout the region. Spruce forests moved west and colonized at higher elevations (11,500 feet) along the present-day Colorado Front Range of the Rockies. Unlike numbers of species that never survived the shift in climate and vegetation, bison thrived on the drought-tolerant grasslands, and herds expanded. Small lakes, ponds, and rivers punctuated the landscape. Changes between seasons became more evident.¹⁰

Between 8,500 and 5,000 BP, the region, including Agate, experienced continued warming and drying. More drought-tolerant grasslands expanded in all directions, outcompeting the forests on the Plains's margins, especially in the north and east. A series of major droughts characterized this period known as the middle Holocene Alithermal, or "Hypsithermal." Although periodic droughts persisted, wetter conditions eventually arrived by 5,000 BP.¹¹

The arrival of cooler and moister conditions on the Great Plains between 5,000 and 3,000 BP again altered the environment in the Agate region. Many lakes formed and groundwater levels rose. This marked the beginning of the so-called Neoglacial period on the High Plains. Fluctuations in moisture and temperature over time and across the Great Plains were not uncommon during this period. In the last 1,500 years, the climate shifted from warm and moist conditions to a much cooler and dryer environment. More precise descriptions of climatic and environmental changes at Agate Fossil Beds will not be possible until detailed geomorphic and paleoclimatic research on the upper Niobrara region is completed.¹²

Since Pleistocene times, the Niobrara has established its watery course and cut into the layers of sedimentary material. In northwestern Nebraska's Sioux County, the

⁹ Marvin McKay, "The Great Plains Setting," in *Archaeology on the Great Plains*, edited by W. Raymond Wood (Lawence: University Press of Kansas, 1998), 21-23.

¹⁰ *Ibid.*, 22-23; Bozell, "An Archaeological Overview," 8-10.

¹¹ McKay, "Great Plains Setting," 25-27; Bozell, "An Archaeological Overview," 10.

¹² Bozell, "An Archaeological Overview," 10, 8.

many subterranean water sources that feed the Niobrara.¹⁶ Over the last thirty years, the Niobrara's volume has diminished somewhat, possibly due to upriver withdrawals for irrigation and hydroelectric generation.

The Niobrara River flows through the midsection of the park. Although small in size, measuring less than ten feet wide and three feet deep in the park, the ever-present Niobrara defines the visual and environmental character of the park's natural landscape. Eleven miles of the Niobrara inside the park meander through marshy bottomland and a broad, gently sloping, and grassy valley floor about one and one-half miles wide.¹⁷

Low terraces flanking the river rise above the 4,400-foot-high elevation valley floor. Narrow northwest-to-southwest trending upland ridges, some with bare, rocky outcrops of sandstone and occasional ledges of chert (known as "Moss Agate") reach a maximum elevation of 4,600 feet above sea level. These ridges contain many of the fossil remains that are a featured attraction of the park. Over tens of thousands of years, the Niobrara River cut through multiple layers of accumulated sandstone that had been laid down on top of other sediments at the bottom of an ancient shallow sea that occupied much of the present High Plains region prior to 65 million years ago. The Niobrara and its entire watershed flows from the mountains that deposited further sediments throughout the region between eight and five million years ago (during the Tertiary period), as internal geological forces uplifted and warped layers of accumulated sediment, creating a zone of highlands.¹⁸ Stream erosion by the Niobrara, as well as other High Plains rivers, eventually deposited huge quantities of material along their courses. Growing alluvial fans hundreds of feet thick eventually formed aprons of gravel, sand, silt, and clay sloping gently eastward from the base of the Rocky Mountains. The Niobrara River is one of several streams that cross the High Plains from the mountainous west to the east, which characteristically flow across sand beds in bluff-bordered flat valley floors lined by terraces.¹⁹

¹⁶ "Niobrara River," *Nebraska History* 28: 2 (April-June 1937), 150; Kurt M. Clark, "An Environmental History of the Niobrara River Basin" (M.A. thesis, University of Nebraska, Lincoln, 1997), 24-25.

¹⁷ National Park Service, "Red Cloud Campsite: National Park Service Cultural Landscape Inventory" (Omaha: Midwest Regional Office, National Park Service, 2003), 24-25.

¹⁸ Robert J. Lillie, *Parks and Plates: The Geology of Our National Parks, Monuments, and Seashores* (New York: W. W. Norton and Company, 2005), 223; George H. MacDonell and LuAnn Wandsnider, "The Western Niobrara River: An Inter-Island Passage on the Plains," in *Islands on the Plains: Ecological, Social, and Ritual Use of Landscapes* (Salt Lake City: University of Utah Press, 2003), 89-90; John R. Bozell, *An Archaeological Overview and Assessment of Agate Fossil Beds National Monument, Sioux County, Nebraska*. Lincoln, NE: Midwest Archaeological Center, National Park Service, 2004, 6; Hannan LaGarry, conversation with Mark Hertig, August 2007.

¹⁹ Waldo R. Wedel and George C. Frison, "Environment and Subsistence," in *Handbook of North American Indians: Plains, Vol. 13, Part 1 [of 2]*, Raymond J. DeMallie, volume editor (Washington, DC: Smithsonian Institution, 2001), 44.

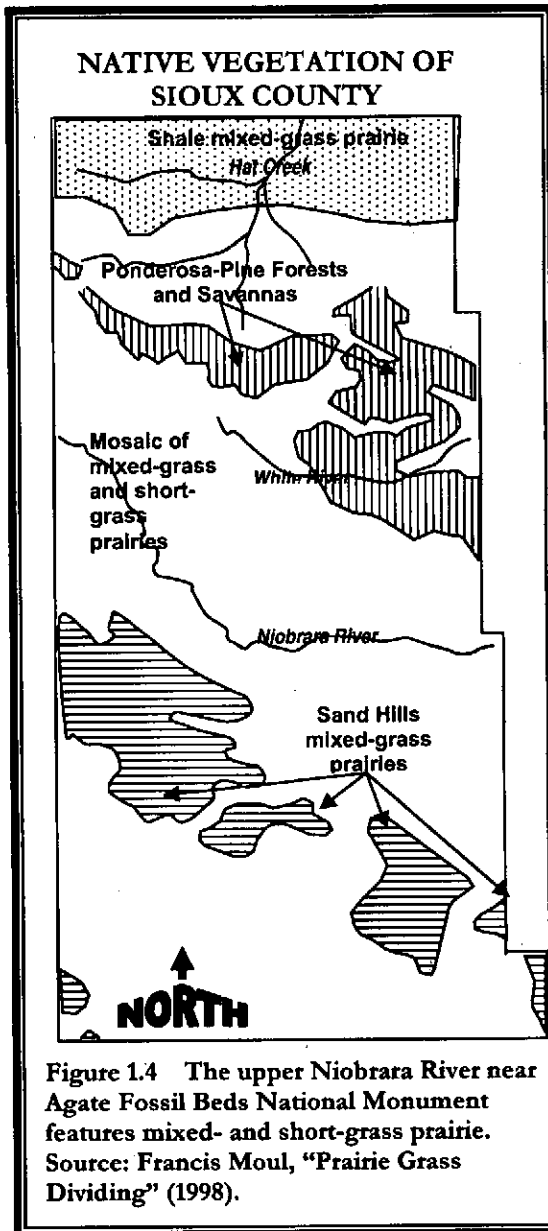
Chapter 1
Historic Resource Study
Agate Fossil Beds National Monument

The Niobrara River's riparian and upland grassy landscape in Agate Fossil Beds National Monument is part of the High Plains region of the gently rolling Great Plains. The High Plains is a mammoth grassland of low to moderate relief, occupying one and one-half million square miles in the heart of the North American continent. It extends from the Saskatchewan River drainage in Alberta, Canada,

1,380 miles south to the Rio Grande River of west Texas, at the Mexican border. It is 540 miles in girth and lies largely west of 96° west longitude (running north and south through the center of Nebraska) to the eastern foothills of the Rockies.

High Plains vegetation is dominated by perennial grasses that die back in winter and grow up from the ground every spring. Hollow, non-woody stems, narrow leaves, and small inconspicuous flowers of muted colors characterize these grasses.²⁰ When the continental ice sheet expanded to its southernmost point into present-day central Iowa about 14,000 years ago, a boreal coniferous forest extended across Nebraska and the Dakotas to the foothills of the present-day Rocky Mountains. A deciduous forest gradually replaced the coniferous one. Then, between 10,000 and 8,000 BP, the deciduous forest gave way to grasslands. Today, deciduous trees are largely confined to the edges of winding river courses and their narrow valleys.²¹

At Agate Fossil Beds National Monument, a short- and mixed-grass prairie, composed of a complex mosaic of short- and tall-grass prairie species growing between two and four feet high, along with a few trees, blankets the park's topographic landforms. Agate's mixed-grass prairie represents a



²⁰ For more detailed information about the characteristics of grasslands, such as grassland types, plants, animals, and historic human associations with grasslands, see Lauren Brown, *Grasslands* (New York: Alfred A. Knopf, A. Inc., 1985).

²¹ Wedel and Frison, "Environment and Subsistence," 44, 46-48.

transition zone between tall- and short-grass prairies. The sparseness of trees earned this prairie the sobriquet of the “Great American Desert” by Major Stephen H. Long, sent by Congress in 1820 to explore the expanse of territory between the Platte River, flowing through central Nebraska, and the Rocky Mountains. Long, and other Anglo-Americans who followed, believed that this vast grassland was “wholly unfit for cultivation and . . . uninhabitable by a people depending on agriculture for subsistence.” The mixed-grass prairie served much more admirably as a range for buffalo and wild goats, Major Long reported.²² In the late 1900s, nearly 90% of the total land area in Sioux County was planted in native grasses that were used for range or hay for cattle. About 85% of Sioux County comprised agricultural rangeland.²³

In the early twenty-first century, the Niobrara supports diverse plant life. In moist and sometimes marshy bottomlands along stretches of the Niobrara River, grasses such as little bluestem, alkali sacaton, prairie cordgrass, and northern reedgrass, flourish. Little bluestem is often dominant in this setting and throughout the mixed-prairie biome. Vegetation along small transitory drainages, mostly north of the Niobrara River, is dominated by the cheatgrass brome and sand dropseed. On slopes rising gradually from the Niobrara, threadleaf sedge, blue gramma, yucca, western wheatgrass, and cheatgrass brome thrive.²⁴ The Niobrara’s moist corridor is also home to those few trees that grow in the park’s mixed-grass prairie. Historically, small willows were the predominant tree species along winding stream courses before the arrival of Europeans and Euro-Americans in the region.²⁵ The wide variety of plant species in a fairly small area inside the park can be observed along the mile-long Daemonelix Trail at the west end of the park. Nearly twenty-five plants have been identified and marked along this trail, which rises about 400 feet from River Road near the Niobrara to bluffs overlooking the river. The plants marked on this trail include: yellow goats beard, tumble mustard, Kentucky bluegrass, Missouri milk vetch, fringed sagewort, wooly plantain, western fleabane, sand bluestem, winged dock, prostrate vervain, needle and thread, prairie sand reed, bird’s egg pea, plains prickly pear, bottlebrush squirrel tail, townsendia, blue gramma, fetid sumac, threadleaf sedge, mountain cat’s eye, wooly white, skeleton weed, and tansy mustard.²⁶

Niobrara Wildlife and Birds

The Niobrara’s water and mixed-grass prairie in the park also support a variety of mammals. The High Plains has historically been the home of the former

²² Brown, *Grasslands*, 45.

²³ Moul, “Prairie Grass Dividing,” 42.

²⁴ Bozell, *Archaeological Overview and Assessment*, 7; Brown, *Grasslands*, 47-49.

²⁵ MacDonnell and Wandsnider, “Western Niobrara River,” 90; Amy Koch, *Explore Nebraska Archaeology: High Plains Archaeology* (Lincoln: Nebraska State Historical Society, 2000).

²⁶ These plants were observed and recorded by the author in March 2007. Interpretive plaques along the trail also include each plant’s scientific name.

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range of the bison (also called “buffalo”).²⁷ Although a few of these huge quadrupeds once ranged as far east as the Appalachians’ western foothills, the encroaching westward settlement of Euro-Americans pushed the fringe bison west of the region of tall-grass prairies (north and southeast of the Mississippi River Valley) to the vast broad belt of the mixed-grass prairie. The mixed-grass prairie became the primary habitat for millions of bison roaming in immense herds in the 1800s, until aggressive over-hunting by settlers and commercial and native hunters, along with drought and depleted habitat, diminished their numbers from between 30 and 70 million to one thousand by 1870.²⁸

The mixed-grass prairie of the upper Niobrara drainage also historically supported pronghorns (also known as “American antelope”) and prairie dogs. Prairie dogs used the mixed-grass prairie when bison were present. Pronghorns, although less numerous and less widely distributed than bison, thrived on shrubs that became established in those areas grazed by bison. Deer and elk also roamed in rugged areas in the Niobrara drainage, where brush grew plentifully.²⁹ Mammals that are now found in the park include: coyotes, bobcats, muskrats, minks, weasels, raccoons, skunks, jackrabbits, and a host of rodents, including beavers, badgers, pocket gophers, chipmunks, bushy-tailed woodrats (also known as “pack” or “trade” rats), kangaroo rats, voles, and mice. Burrowing animals dominate the mixed-grass prairies, which provide fewer hiding places than forested land offer, less protection from fires, and often experience extreme variations in climate.³⁰

An abundant array of birds and migrating waterfowl spend time in the park, making the Niobrara bottomlands a birdwatcher’s paradise. Common nighthawks, lark sparrows, Say’s phoebes, rock wrens, common flickers, red-headed woodpeckers, eastern and western kingbirds, western wood pewees, blue jays, black-capped chickadees, house wrens, brown thrashers, robins, yellow warblers, black-billed magpies, common grackles, black-headed grosbeaks, goldfinches, house sparrows, and various swallows all find the habitat along the Niobrara hospitable. Back from the river and throughout the prairie other bird species can be sighted, such as: the killdeer, curlew, upland sandpiper, sharp-tailed grouse, western meadowlark, lark bunting, horned lark, chestnut-collared longspur, turkey vulture, golden eagle, prairie falcon, and a variety of hawks and owls. In addition to the diverse vegetation that support abundant bird populations, various insects, reptiles, amphibians, and fish add to the rich habitat that support birds and mammals alike.³¹

²⁷ The American bison belongs to the genus *Bison*. Nineteenth-century observers often used the term “buffalo” for the bison. Today scientists refer to the animal as bison to alleviate any confusion about this beast and the wild Indian buffalo, the African Cape buffalo, the domesticated water buffalo, and other creatures that belong to the *Bos* genus. In this history, buffalo and bison are used interchangeably. See Andrew Isenberg, “Toward a Policy of Destruction: Buffalos, Law, and the Market, 1803—83,” *Great Plains Quarterly* 12: 4 (Fall 1992), 238.

²⁸ Brown, *Grasslands*, 50-51.

²⁹ *Ibid.*, 50; MacDonnell and Wandsnider, “Western Niobrara River,” 90; Wedel and Frison, “Environment and Subsistence,” 50.

³⁰ Brown, *Grasslands*, 26-27.

³¹ Doris B. Gates, “Birding Along the Niobrara,” in *Agate Fossil Beds: Official National Park Handbook* (Washington, DC: Harpers Ferry Center, National Park Service, 1980), 81-85.

The present plant, animal, and avian life in the Niobrara River Valley, in the park and elsewhere, reflect its intriguing ecological history. On a long stretch of the Niobrara in central Nebraska there exists one of the most important transition areas (or "suture zones") in the entire Great Plains, connecting east- and west-affiliated plant, animal, and bird species. "The Niobrara Valley represents a major east-west migration corridor that has probably existed since early post-glacial times." Like the Platte River to the south, the Niobrara River has served as a "major biological corridor," connecting the deciduous forests to the east with the conifer-dominated forests to the west.³²

Following glaciation, forests from the south and east colonized and moved upstream along the Missouri and Niobrara rivers to the extreme western limits of their tolerance for arid conditions. This post-glacial spread and mixing of species is relatively rare and gives biologists a fortuitous opportunity to study biological evolution in the Niobrara corridor as evidenced today by the far-reaching eastward extent of Ponderosa pine to central Nebraska. The Niobrara Valley is also home to relict populations of hybridized clones of western and eastern tree species, such as the western cottonwood and eastern balsam poplar and the western quaking aspen and eastern big-toothed aspen; generally, populations of the two tree species are separated by 180 miles. A similar east-west extension of shrubs, vines, ferns, mosses, lichens, and other plants is also evident in the Niobrara River woodland corridor.³³

This woodland corridor also serves as a historic passage and "mixing pot" for mammals and birds. The olive-backed pocket mouse, for example, is the only western mouse species that has its eastern limits in the Niobrara Valley. And the eastern woodrat is found well to the west and north of all other populations of the same. Breeding birds likewise extend their normal east-west range along the Niobrara. This important avian corridor "provides a meeting ground for several closely related species pairs of forest or woodland-edge birds whose common ancestors were probably separated into eastern and western components during Pleistocene times."³⁴ Several eastern and western pairs of bird taxa and of bird subspecies travel and breed up and down the Niobrara River Valley, including eastern and western wood pewees, rose-breasted and black-headed grosbeaks, and indigo and lazuli buntings.³⁵ (Agate Fossil Beds National Monument is home to both eastern and western kingbirds.)

Climate

Weather in Agate Fossil Beds National Monument typifies the High Plains continental climate, with sharp extremes in seasonal temperatures and precipitation,

³² Paul A. Johnsgard, *The Fragile Land: A Natural History of the Nebraska Sandhills* (Lincoln: University of Nebraska Press, 1995), 18.

³³ *Ibid.*, 19-21.

³⁴ *Ibid.*, 20.

³⁵ *Ibid.*, 20.

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featuring hot, dry summers and cold, dry, and windy winters. The High Plains semiarid climate is a consequence of its location east of the high Rocky Mountains, which intercept mild moisture-laden clouds that form over the Pacific Ocean and move eastward with the strong flow of westerly winds. Across much of the High Plains available moisture is marginal. Dry semiarid conditions have probably existed on the High Plains as far back as mid-Pleistocene times.³⁶ At Agate Fossil Beds, it rains an average of 11 inches annually. However, the actual rainfall varies widely, from 6 to 30 inches a year. Drought is not uncommon here. Precipitation is seasonal with the heaviest rainfall in April, May, and June, when dramatic thunderstorms deluge the landscape. Winter precipitation in the form of snow totals two feet, although drifting snow can produce much greater snow depths. Prevailing winds are westerlies, blowing from the northwest, west, and southwest, with gusts up to 50 miles per hour in the winter.³⁷ Continental weather patterns also create extreme temperatures, ranging from minus 22° F in the winter to 104° F in the summer. The harsh continental climate also provides ideal conditions for blizzards, tornadoes, hail and thunderstorms, and flooding, as major air masses coming from all directions meet over the flat Great Plains.

Shifts in High Plains climate have taken place over thousands of years. Evidence from small animal populations in the Agate Basin site in eastern Wyoming and also pollen data from Minnesota, indicate that significant climate changes occurred on the Plains between 11,000 and 10,000 BP.³⁸

Cultural Influences on the Natural Setting

Today's natural setting at Agate Fossil Beds has been greatly influenced by human activity over several centuries. Fires have regularly occurred as the result of natural and human causes. Fire also had cultural origins. Native Americans who occupied or traveled through the mixed-grass prairie customarily set fires either to attract bison to places of young fresh sprouting green grass or to drive herds to a location where they could be easily killed. Regardless of the cause, prairie grass fires during a wet year have usually increased the productivity of the grasses. Fires that have burned drought-stressed prairie grasses usually have slowed the growth of grasses.³⁹ Cattle grazing by Euro-Americans, which began in this area on the open-range prairies in the 1870s, has resulted in the introduction of new grasses and the compaction of soil, additionally altering the nature of vegetative growth. Euro-American residence along the Niobrara River inside and near the park has resulted in the introduction of numerous new trees, bushes, and smaller plants. Aging groves of cottonwood and willow now stand on the once wide-open prairie, and select species of evergreen trees can be found along or near the Niobrara and around the ranch headquarters. The Agate Springs Ranch headquarters presents the most striking

³⁶ Wedel and Frison, "Environment and Subsistence," 46.

³⁷ MacDonnell and Wandsnider, "Western Niobrara River," 94-95; National Park Service, "Red Cloud Campsite," 24-25.

³⁸ Wedel and Frison, "Environment and Subsistence," 50.

³⁹ Brown, *Grasslands*, 49, 50.

example of the return of trees to the prairie. A once treeless complex of ranch buildings is now shaded by a grove of hundreds of aging (and dying) cottonwood trees, most over 100 years old. Certain grasses, such as alfalfa, that were grown for hay continue to exist in habitats favorable to their growth. The Canadian thistle is another introduced plant species that has spread widely across the prairies. Some flowers commonly grown in gardens in the early and mid-twentieth century have now spread far beyond their original beds and borders into habitats that foster their growth. The yellow iris, probably once grown in gardens around the Agate Springs Ranch house, has extended its range for at least four miles down the banks of the Niobrara River through the entire park. Little vegetation in the “natural environment” at Agate Fossil Beds National Monument is natural; the park represents a complex cultural landscape that has undergone human-induced change—some subtle and some striking—over hundreds of years.

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HUMANS COME TO THE HIGH PLAINS

Introduction

Despite thousands of years of human activity moving around the High Plains, there is surprisingly little physical evidence of prehistoric habitation at Agate Fossil Beds National Monument. Scatters of projectile points, stone flakes, tools, and potsherds representing stages of culture from the Paleo-Indians to the Central Plains tradition have been identified throughout the park, especially on the Niobrara valley floor, upland terraces, and butte tops. But the large hunting and butchering camps, permanent houses, and burial sites that have been found in eastern Wyoming, southern Nebraska, western South Dakota, and southeastern Montana, have eluded archeologists at Agate. Perhaps this portion of the Niobrara was just a place to pass through—a transitional zone between wet and dry, where nomadic hunting and gathering were favored over a sedentary life—or perhaps a major campsite corresponds with the developed location of Agate Springs Ranch itself.

Like the Europeans who came to dominate North America in the historic era, the ancestors of today's Native Americans also came from somewhere else. It is a matter of great debate whether the Paleo-Indians arrived by land or water, how long ago the migration took place, and how quickly people dispersed through North and South America; but it is generally agreed among western scientists that the continents' earliest people came from Asia sometime between 12,000 and 30,000 years ago. Initially lured by a mild climate and an abundance of large game animals such as the mammoth and mastodon, the new North Americans spent the subsequent millennia adapting their culture to little more than the vicissitudes of climate.

From the beautiful Clovis points of the earliest Paleo-Indians and the nascent horticulture of the Archaic period, to the globular pottery and burial mounds of the Woodlands culture influence from the east, there is abundant evidence that the High Plains hosted not only a long continuum of culture but also a gradual diversification as the climate dried and prey became extinct. But the most dramatic changes occurred in the protohistoric period, when the three-pronged cataclysm of a cooling drought, native population shifts from the north and east, and diseases from the Old World produced the historic Plains Indian as encountered by the first Europeans. Thereafter, the speed of cultural change and destruction among the native people accelerated beyond anything they had ever known.

The Indians who passed through Agate Fossil Beds lived lightly on the land, their most enduring legacy found in soils impacted by the bison hunts, vegetation thinned by fires, and scatters of stone tools. But most of the secrets of these nomadic North Americans are still hidden in the ground, silenced by thousands of years of unrecorded history.

Arrival of Paleo-Indians—a Continuing Mystery

Archeologists generally support the idea that humans first arrived in the Americas from Asia between 12,000 and 30,000 years ago. These early arrivals, called “Paleo-Indians,” lived beyond the terminus of two receding glaciers, at the end of the last Ice Age. Recession of these glaciers began about 20,000 years before the present (BP) and ended around 10,000 BP. The powerful influence of huge continental and mountain glaciers in North America created a relatively uniform climate with mild temperatures, no seasonal extremes, and abundant rainfall over much of the continent. On the Great Plains, the earliest Paleo-Indians hunted on foot over savannahs of tall grass with scattered trees. Using wooden and bone clubs and long spears, they hunted large mammals, such as mammoths and mastodons,¹ as well as now-extinct species of horses, camels, long-horned bison, giant sloths, pronghorns, deer, elk, and, perhaps, small animals. Nomadic hunting and gathering characterized the early Paleo-Indian tradition. Evidence of the early Paleo-Indians has been found in the form of human-crafted stone points at the villages, camps, and mammal kill sites in places as far-flung as Washington State and New Mexico and beyond, to Venezuela, Chile, and Canada’s Yukon region.²

Archeologists speculate that these Paleo-Indians came to the Americas by two possible routes. For decades, it was believed that the first Americans traveled across the 1,000-mile-long Bering land bridge, known as “Beringia,” that once linked Siberia in present-day Russia and Alaska, which are now separated by the Bering Strait. Once on the continental North America, these nomadic hunter-gatherers migrated in less than 1,000 years southward through the ice-free passageway between the Laurentian continental ice sheet positioned over central and eastern Canada and the northern United States, and the much smaller Cordilleran ice sheet located over today’s British Columbia and southern Alaska. This theory of migration had its origins in the discovery, in 1932, of beautifully crafted lancet-shaped spear points among mammoth bones near Clovis, New Mexico. Scientists deduced that these early inhabitants arrived near the end of the Ice Age about 12,000 years ago.³

Recently, the route and timing of these human migrations to the Americas has been questioned. Recent archeological evidence found in widely scattered locations not far from the Pacific shoreline suggests that people may have arrived in the Americas by way of a coastal route that followed the southern shore of Beringia. Scientists concurred in 1997 that a small settled camp discovered in southern Chile, known as “Monte Verde,” is at least 12,800 years old. Archeological material found at the Meadowcroft Rock Shelter, southwest of present-day Pittsburgh, Pennsylvania, dates from 14,500 to even 19,000 BP. In the arid outback of northeastern Brazil, crude stone tools and cave paintings found in a huge sandstone

¹ Paul H. Carlson, *The Plains Indians* (College Station: Texas A & M University Press, 1998), 20-21.

² Barbara Huck, *In Search of Ancient British Columbia, Volume 1* (Winnipeg, Manitoba, Canada: Heartland Associates, 2006), 22.

³ John R. Bozell, “Big Game Hunters: The Ice Age and the First Immigrants,” 85-86; Huck, *In Search of Ancient British Columbia*, 22.

cliff shelter have been radio carbon-dated to 30,000 BP. Material at all of these sites predates the Clovis spear points and culture associated with them.⁴

The earliest human occupation of the North American Great Plains also remains unclear. In recent years, however, archeological evidence has bolstered theories that humans lived on the Great Plains prior to 11,200 BP—before the so-called “Clovis” culture. In northeastern Colorado, radio-carbon dating of fractured bones at two human butcher sites (Shelby and Dutton) suggests human activity in that region between 17,000 and 13,000 BP—considerably before Clovis times.⁵ In south-central Nebraska, at the Sena excavation on the shoreline of Medicine Creek Reservoir in Frontier County, fractured mammoth bones, possibly struck with stones by humans in the butchering process, have been radio carbon-dated to about 17,000 BP. Anthropologist Alan Osborn at the University of Nebraska, Lincoln, and many others now believe that existing substantial evidence suggests that Paleo-Indians arrived on the Great Plains at least 18,000 years ago.⁶

Other specialists, such as archeologists Jack L. Hofman and Russell Graham, believe that all of these sites with pre-Clovis remains are enigmatic and fail to provide unequivocal evidence of human habitation of the Great Plains before 11,200 BP. They continue arguing that “the pre-11,500 RCYBP [radiocarbon years before present] sites must have (1) good radiometric dating, (2) stratigraphic integrity, (3) indisputable evidence of human involvement, (4) concordant paleoenvironmental data from a variety of sources” to be convincing.⁷ Considerably more archeological evidence will need to be unearthed, they claim, before the arrival date of the first North American inhabitants can be established with precision.⁸

At least two Paleo-Indian archeological sites yielding chipped stone projectile points have been found on the broad floor of the Niobrara River in Agate Fossil Beds National Monument.⁹ Sites of Paleo-Indian cultural complexes are abundant in western Nebraska and eastern Wyoming because mid-Holocene landscapes often exist near the surface. Archeologists have identified several major time periods of their existence here, each characterized by such cultural traits as the existence, type, and technology of tools, pots, and shelters created, the food eaten, and the type of

⁴ Huck, *In Search of Ancient British Columbia*, 24-29; Steven R. Holen, “Did Someone Eat the La Sena Mammoth?,” *Nebraska History: The Cellars of Time* 75: 1 (Spring 1994), 88.

⁵ Alan Osborn, “Paleo-Indians,” in *Encyclopedia of the Great Plains*, edited by David J. Wishart (Lincoln: University of Nebraska Press, 2004), 588-89. Also see George C. Frison, *Prehistoric Hunters of the High Plains* (New York: Academic Press, 1991).

⁶ Holen, “Did Someone Eat the La Sena Mammoth?,” 88; Bozell, “Big Game Hunters,” 89-90.

⁷ Jack L. Hofman and Russell W. Graham, “The Paleo-Indian Cultures of the Great Plains,” in *Archaeology on the Great Plains*, edited by W. Raymond Wood (Lawrence: University Press of Kansas, 1998), 87-93; John R. Bozell, *An Archeological Overview and Assessment of Agate Fossil Beds National Monument, Sioux County, Nebraska* (Lincoln: Midwest Archeological Center, National Park Service, 2004), 11-12.

⁸ Osborn, “Paleo-Indians,” 589.

⁹ Bozell, *Archeological Overview*, 42, 44.

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subsistence economy pursued. The names of subgroups and the precise dates of existence vary somewhat as new evidence is continually uncovered and interpreted.¹⁰

Cultural Group on Great Plains	Before Present
Paleo-Indians	18,000 (or earlier)—8,000
Clovis	11,200—10,900
Goshen	11,500—10,500
Folsom	10,900—10,200
Plano (Late Paleo-Indian)	10,200—8,000
Archaic (on the Plains)	8,000—1,500 (AD 500)
Late Pre-Contact	2,000—400 (AD 1600)
American Southwest and	
Woodland influences on the Plains	2,000—1,000 (AD 1000)
Central Plains Tradition	1,100—550 (AD 900—1450)
Protohistoric	400 (AD 1600)

Clovis Paleo-Indians were adventurous bands of nomadic hunter-gatherers distinguished by their stone spear points and subsistence pursuits. They are best known for their fluted spear points, which they chipped from stone and inserted into the end of a long lance; when thrust into an animal, the spear point remained embedded. In the 1930s, Clovis projectile points, dating from 11,200 to 10,900 BP, were found among extinct Ice Age elephants near Clovis, New Mexico.¹¹ Archeologists hypothesize that men spent considerable time hunting mammoths, mastodons, bear, elk, deer, and other large mammals. Women collected seeds, nuts, and berries and dug the roots of various plants. Clovis peoples apparently moved between scattered camps, carrying few possessions, in groups of thirty to fifty people from interrelated families.¹² They were “resourceful and technologically advanced people with a tremendous aptitude for understanding, observing, and exploiting varied geologic, floral, and faunal resources,” according to archeologists Hofman and Graham.¹³

The Clovis people came to the Great Plains in two possible ways. They may have migrated from Eurasia in search of large mammals, becoming the first people to successfully colonize in North America. Alternatively, the Clovis people may have evolved from these pre-Clovis populations and developed their distinctive stone-flaking technology from humans already living on the continent, who were using bone, not stone, as raw material for tools.¹⁴

No intact Clovis sites have been discovered in Nebraska. Not far from Agate Fossil Beds National Monument, however, Clovis sites have been found in eastern Colorado and Wyoming, southern South Dakota, and western Kansas. The

¹⁰ Bozell, *Archeological Overview*, 42-44; James H. Gunnerson, “Chapter Two: The Ancient Ones,” *NEBRASKAland: The First Voices* 62: 1 (January-February 1984), 45-51.

¹¹ Osborn, “Paleo-Indians,” 589.

¹² Bozell, “Big Game Hunters,” 90; Carlson, *Plains Indians*, 21.

¹³ Hofman and Graham, “Paleo-Indian Cultures of the Great Plains,” 96.

¹⁴ *Ibid.*, 93-96; Bozell, *An Archeological Overview*, 11-12.

Lange-Ferguson site in southwestern South Dakota, the Sheaman sites in eastern Wyoming, and the Selby, Dutton, Dent, and Drake sites in northeastern Colorado have all yielded artifacts that have expanded our knowledge of the Clovis people. These sites can give us a picture of how people living near Agate Fossil Beds National Monument may have lived¹⁵

The Goshen cultural complex of Paleo-Indians closely coincides in time with the Clovis culture on the Great Plains, but continues four hundred or so years longer, to around 10,900 years ago. Like the Clovis people, the Goshen Paleo-Indians lived a subsistent, nomadic existence with few possessions. Goshen technology and stone tools may have been a variant of the Clovis cultural complex or they may represent a transitional phase of development between the Clovis people and those who followed (the Folsom), at least in some areas of the northwestern Great Plains. Goshen components have been identified at a few archeological sites near Agate Fossil Beds National Monument, such as at Hell Gap in eastern Wyoming near the Nebraska Panhandle border. Goshen artifacts have also been found at the Jim Pitts site in western South Dakota and the Mill Iron site in southeast Montana.¹⁶

Folsom Paleo-Indians, inhabiting the Great Plains from roughly 10,900 to 10,200 BP, continued some of the Clovis traditions and practices. Existing archeological evidence shows that Folsom peoples occupied an area between Canada and Mexico and from the Rockies eastward to northern Illinois and Wisconsin. Small hunting bands of Folsom people migrated cyclically among numerous campsites, perhaps as many as twelve to thirty-six every year. A single hunting group may have roamed across an area as large as 52,000 square miles (the approximate size of North Dakota).¹⁷ Like the Clovis Paleo-Indians, the Folsom people drove their prey into steep-sided boxed canyons or mucky-bottomed bogs, where they were killed. Unlike the Clovis, the nomadic Folsom people hunted now-extinct long-horned bison, pronghorn, elk, deer, and smaller game, such as ducks, geese, and turtles.¹⁸

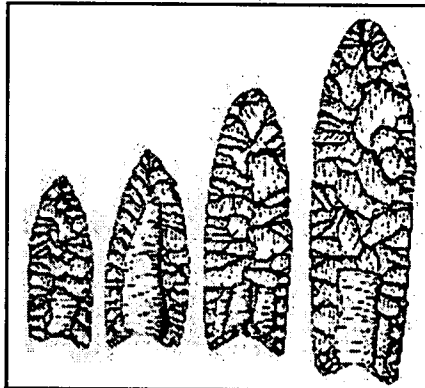


Figure 2.1 Fluted stone spear points are a characteristic feature of Clovis Paleo-Indians, who occupied the Great Plains more than 11,000 years ago. Drawn by and courtesy of Jack Hofman, in Hofman and Russell W. Graham, "The Paleo-Indian Cultures of the Great Plains," *Archeology on the Great Plains*, edited by Raymond Wood (Lawrence: University of Kansas Press, 1998).

¹⁵ Bozell, *An Archeological Overview*, 12; Bozell, "Big Game Hunters," 90; Hofman and Graham, "Paleo-Indian Cultures of the Great Plains," 88.

¹⁶ Bozell, *An Archeological Overview*, 12; Bozell, "Big Game Hunters," 90; Hofman and Graham, "Paleo-Indian Cultures of the Great Plains," 96-98.

¹⁷ Osborn, "Paleo-Indians," 589.

¹⁸ Carlson, *Plains Indians*, 21-22; Hofman and Graham, "Paleo-Indian Cultures of the Great Plains," 97-101.

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Folsom food processing areas and campsites have been found near bison kills. The sites have yielded material that shows that the Folsom people developed a sophisticated and diverse lithic technology.¹⁹ A “Folsom point” was distinctively thin with pronounced fluting and a deeply chipped concave base. “The finely crafted weapons produced by the Folsom people represent a climax in Paleo-Indian chipped point technology,” according to archeologist John Bozell. “The pressure flaking on Folsom points is among the highest quality produced anywhere in the world.”²⁰

Folsom archeological sites are relatively limited in number but widespread across the Great Plains. In 1908, George McJunkin, an African-American naturalist and former slave, discovered stone tools with the bones of extinct animals near Folsom, New Mexico. Nearly twenty years later, in 1927, at this same Folsom site, archeologists found a fluted spear point among the bones of an extinct bison species, providing convincing evidence that humans had lived among these Ice Age animals.²¹



Figure 2.2 These unfluted lanceolate points, which were unearthed at the Hudson-Meng site near Agate Fossil Beds, are characteristic stone spear points of the late Paleo-Indians

Drawn by and courtesy of Jack Hofman, in Hofman and Russell W. Graham, “The Paleo-Indian Cultures of the Great Plains,” *Archeology on the Great Plains*, edited by Raymond Wood (Lawrence: University of Kansas Press, 1998).

No Folsom sites have been discovered in Nebraska to date.²² Not far from Agate Fossil Beds National Monument, however, are the Hell Gap and Agate Basin/Brewster sites in southeastern Wyoming near the border with the Nebraska Panhandle. Hell Gap was a deep valley with an ephemeral stream that provided shelter from the elements and water, and where quartzite stone outcrops served as an excellent material for crafting stone tools. Several distinctive, finely crafted lanceolate Folsom spear points, concave at the base, and

various scrapers of several types have been unearthed at the Hell Gap site and radio carbon-dated to 10,800 to 10,600 BP.²³

Plano Late Paleo-Indians (sometimes called “Plainview”), dating from about 10,200 to 8,000 BP, inhabited the Great Plains and focused on bison hunting. Archeological evidence, however, makes it clear that the Plano people hunted a wide array of other animals, such as deer, elk, pronghorn, and smaller animals, and subsisted on a variety of plants. Plano Paleo-Indians are known for the lanceolate

¹⁹ Hofman and Graham, “Paleo-Indian Cultures of the Great Plains,” 97-101.

²⁰ Bozell, “Big Game Hunters,” 91.

²¹ Osborn, “Paleo-Indians,” 589.

²² Bozell, “Big Game Hunters,” 90.

²³ This site is especially important because of the complete sequence of Paleo-Indian cultures found here, dating from about 11,000 to 7,500 years ago. Cynthia Irwin-Williams, Henry Irwin, George Agogino, and C. Vance Haynes, “Hell Gap: Paleo-Indian Occupation on the High Plains,” *Plains Anthropologist* 18: 59 (February 1973), 42, 46-47. The Lindenmeier, Johnson and the Fowler-Parrish sites are in northeastern Colorado. Bozell, *Archeological Overview*, 12-13.

projectile points that they fashioned, which, unlike similar tools created by their Clovis and Folsom predecessors, are unfluted. They sometimes killed their prey by driving them to the top of high cliffs and forcing them to jump off. Other times they drove game into corrals they had built. Unlike their predecessors, the Plano depended much more on seeds and roots, and thereby enjoyed a more varied diet.²⁴

There are many more Plano archeological sites on the Great Plains than Clovis, Goshen, and Folsom sites. Those excavated sites relatively close to Agate Fossil Beds National Monument include: the Hudson-Meng, Clary Ranch, Scottsbluff Bison Quarry, Lime Creek, Medicine Creek, and Red Smoke sites in western and southern Nebraska; the Ray Long site in southwestern South Dakota; and the Betty Greene and Agate Basin sites in eastern Wyoming near the Nebraska border.²⁵

The Hudson-Meng site, in extreme northwestern Nebraska, is especially noteworthy. It is an enormous bison kill site dating to about 9,000 to 9,800 BP. In the 1960s, artifact collector Bill Hudson and rancher Albert Meng found a bed with the remains of more than 600 buried bison. Archeological investigation led by Chadron State College archeologist Larry Agenbroad in the early and mid-1970s soon revealed that all 600 bison had been killed at one time or over a very short period. These late Paleo-Indians had necessarily devised a system of preserving the meat by jerking it. This enormous kill site proved to be the largest recorded Paleo-Indians bison kill and processing site ever discovered. The Hudson-Meng site offers important information about communal bison hunts during the Late Paleo-Indian period. It is located about forty miles northeast of Agate Fossil Beds National Monument.²⁶

Inside Agate Fossil Beds National Monument, at least two artifact scatters of chipped stone debris, along with a small number of projectile points dating from the late Paleo-Indian time period—the time of the Plano culture—have been found on the floor of the Niobrara River Valley.²⁷

Archaic Cultures Adapt to Environmental Transformation: Foragers Arrive

The profound interrelationship of environment and culture became strikingly apparent 8,000 years ago when the great Laurentide continental glacier retreated and the mild and moist climate over North America evolved into a much drier climate with more volatile weather patterns. Swamps, bogs, and marshes dried up. Deciduous woodlands on the Great Plains gave way to the present familiar expanses of perennial grasses. The climate on the Great Plains became warmer and drier than it is today. Many animals, unable to adapt to the new environment, disappeared in

²⁴ Carlson, *Plains Indians*, 22; Hofman and Graham, "Paleo-Indian Cultures of the Great Plains," 103.

²⁵ Bozell, *Archeological Overview*, 13; Hofman and Graham, "Paleo-Indian Cultures of the Great Plains," 104-109.

²⁶ Bob Grier, "Hudson-Meng Bison Bonebed, *NEBRASKAland* 76(May 1998), 40. Also see Hudson-Weng [*sic*] Bison Kill Site," *Sioux County History: First 100 Years, 1886-1986* (Harrison, NE: Harrison Community Club, 1986), 53.

²⁷ Bozell, *Archeological Overview*, 42, 44; Bozell, "Big Game Hunters," 92-93.

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one of the planet's greatest die-off periods. "Paleo-Indians lived during a dynamic time of environmental and ecological change that witnessed the extinction of many species and the evolution of various habitats," archeologists Jack Hofman and Russell Graham observed. "This dynamic environmental and social context provided for significant changes in human adaptive strategies."²⁸ As the Pleistocene epoch came to an end with the retreat of the glaciers, the Paleo-Indian traditions and culture also disappeared. The bison-hunting Paleo-Indians, such as those in evidence at Nebraska's Hudson-Meng site, were replaced by foragers of the Archaic period.

Archaic cultural traditions were ushered in roughly 8,000 to 1,500 years ago by this momentous environmental transformation across the Great Plains, including the western reaches of the Niobrara River. Archaic culture peoples successfully modified previous subsistence practices in order to adapt to the new environmental conditions on the Plains. In general, Archaic peoples remained nomadic or semi-nomadic. There was a continued and accelerating trend toward diversification of subsistence activities and complexity of social organization that had begun in the late Plano period. Archaic people on the Great Plains became less dependent on big-game hunting and developed new techniques and new sources of food to sustain themselves. Consequently, Archaic people produced smaller, less-well-made spear points than Paleo-Indians. Plains Archaic people evolved into masterful foragers; they hunted for large and small game, gathered wild plant foods, caught fish, and gathered mussels. Archaic people, in general, became less nomadic than their Late Paleo-Indian ancestors, and in their more sedentary lives they learned more about local and regional resources.²⁹

The Plains Archaic people created a technologically more advanced and versatile way of life that included horticulture. Along with pursuing more diverse subsistence survival activities, Archaic people on the Great Plains developed nonmaterial cultural practices and artistic endeavors. Archaic people began to practice burial ceremonialism, and burial mounds during this period first appeared. They also began to fashion clay pottery. The social organization of Archaic groups became more complex and stratified, archeologists speculate. Some groups began to use tobacco. Long-distance trade networks developed among the Plains Archaic peoples.³⁰

Archaic peoples living on the new semi-arid grasslands of the western Great Plains were much more widely scattered than those Archaic groups living in more humid, heavily vegetated areas to the east. Deteriorating ecological conditions made the western Great Plains a less desirable place to live and both bison and human populations decreased (except in the Black Hills, where bison maintained their numbers). Those people who remained, like their neighbors to the east, relied heavily on the seasonal collecting of seeds, nuts, berries, leaves, and on root-digging.

²⁸ Hofman and Graham, "Paleo-Indian Cultures of the Great Plains," 116.

²⁹ Gayle F. Carlson, "The Foragers: Diversified Lifestyle," in *Nebraska History: The Cellars of Time* 75: 1 (Spring 1994), 95-96.

³⁰ Carlson, "The Foragers," 95, 98; Bozell, *Archeological Overview*, 13-14; 98; Carlson, *Plains Indians*, 22-23.

Plant material, rather than game, became the main foodstuff. Cutting, scraping, and chopping tools became more prevalent and were more skillfully crafted than the chipped stone spear points of the primarily carnivorous Paleo-Indians. Meat was not eliminated from the Great Plains Archaic's diet, however. These people continued to hunt some bison and deer as well as birds and fish.³¹

"The entire Archaic Period on the Northwestern Plains [including western Nebraska] . . . , archeologist George C. Frison wrote, ". . . was characterized by groups of band-level size that continually fragmented and aggregated in response to food resources." Although a wide range of food sources existed, Frison continues, "the unpredictable nature of plant and animal resources . . . did not allow any permanency in settlements. . . . The social organization of these groups had to be fluid enough to adapt to these changes [in climate and available resources]."³²

Archaic people inhabiting present-day Nebraska differed from those living in other regions. No Archaic pottery has been found in Nebraska to date, suggesting that it may not have been developed. No dwellings from the Archaic period have been discovered, except for one temporary structure. Dry conditions on the Great Plains during much of the Archaic period may have discouraged little more than temporary campsites of small Archaic groups, or caused a general depopulation, especially on the drier western Great Plains.³³

In Nebraska, archeologists have divided the Archaic period into three phases: Early Archaic (8,000 to 5,000 BP); Middle Archaic (5,000 to 3,000 BP); and Late Archaic (3,000 to 1,500 BP). There are relatively few archeological sites on the central High Plains dating from the Early Archaic period. Only one notable site is near Agate Fossil Beds National Monument. The Spring Creek site in southwestern Nebraska, dating from 6,000 to 5,000 BP, is apparently a bison-hunting base camp. A greater number of sites date from the Middle Archaic Period, reflecting the increasing number of people living on the High Plains in a moister climate. For example, only fifty miles south of Agate Fossil Beds is the Signal Butte campsite, dating from 5,000 to 3,000 BP. A rich variety of artifacts have been uncovered there: hearths and storage pits sometimes lined with flat rocks, chipped stone items, chipping debris, grinding and hammering tools, paint pigments, worked bone and antler items, bird-bone beads, and shell pendants. Also south of Agate Fossil Beds archeologists have found two Middle Archaic burial sites, with utilitarian and decorative artifacts as well as skeletal remains, near the North Platte River in Scotts

³¹ Carlson, *Plains Indians*, 23-24; George C. Frison, "Archaic Period Sites," *Encyclopedia of the Great Plains*, edited by David J. Wishart (Lincoln: University of Nebraska Press, 2004), 563-64. Also see George C. Frison, "The Northwestern and Northern Plains Archaic," in *Archaeology on the Great Plains*, edited by W. Raymond Wood (Lawrence: University of Press Kansas, 1998), 140-72, for a detailed discussion of the Archaic culture on the northern High Plains, encompassing western Nebraska as well as western North and South Dakota and Wyoming, Montana, and Saskatchewan east of the Rockies.

³² George C. Frison, "Hunting and Gathering Tradition: Northwestern and Central Plains," in *Plains, Volume 13, Part 1 of 2*, edited by Raymond J. DeMallie (Washington, DC: Smithsonian Institution, 2001), 145.

³³ Carlson, "The Foragers," 96.

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Bluff County and on the eastern edge of Sidney in Cheyenne County. Several small to quite large side-notched lance-shaped projectile points define this and other similar sites.³⁴

The Late Archaic period, like the Middle Archaic, also has a number of archeological sites on the High Plains of western Nebraska. Major sites from the Late Archaic exist at Agate Basin and Hell Gap in eastern Wyoming, and at Signal Butte II, Ash Hollow Cave, and Cedar Canyon in western Nebraska. Medium- to large-size corner-notched spear points are the most characteristic types of artifact found from this period. Archeological artifacts found in western Nebraska dating from the Late Archaic suggest that habitation sites were relatively abundant. Several Late Archaic burial sites containing many individuals have also been found in western Nebraska, as well as elsewhere in the state.³⁵

Inside Agate Fossil Beds National Monument archeologists have discovered, since the mid-1970s, several sites with cultural material dating from the Archaic (or, if not late Archaic, possibly subsequent Woodland stage). These sites are widely scattered throughout the park, and exist in several different natural settings—a terrace north of the Niobrara, a high bench overlooking the Niobrara in the northwestern part of the park, a ridge in the southwestern part of the park, along the banks and ephemeral tributaries of the Niobrara, and at several places not far from River Road, which bisects the park. Unearthed objects date from the Early, Middle, and Late Archaic periods and include lithic scatters, stone flakes, chipped stone debris, isolated stone flakes, projectile points, and a few tools.³⁶

Late Pre-Contact Period and the Rise of Horticultural Subsistence

Toward the close of the Archaic period (between 2,800 and 1,500 years ago), distinct cultural communities emerged in different regions of the continent, some of which ultimately influenced those groups inhabiting or using the High Plains of western Nebraska. In the American Southwest at least three cultural communities evolved—Hohokam, Mogollon, and Anasazi—from traditions of various Archaic people living on dry desert lands. Horticulture became the dominant subsistence economy of all three groups; hunting and gathering continued as secondary activities. Religion, dance, music, and folklore became well developed in these communities, according to anthropologists. They also made pottery and wove textiles from cotton and animal fibers. In the present-day “four corners” region where Arizona, New Mexico, Utah, and Colorado join, the Anasazi lived in settled communities and raised corn, beans, squash, and cotton. Both the Anasazi and the Mogollon, living in present-day west Texas, traded surplus goods, such as woven blankets and pottery, to people far beyond their territory, including to people in the High Plains.³⁷

³⁴ *Ibid.*, 96-106.

³⁵ *Ibid.* 96-106; Bozell, *Archeological Overview*, 14-15; Hofman and Graham, “Paleo-Indian Cultures of the Great Plains,” 113-16; Frison, “Northwestern and Northern Plains Archaic,” 142; Frison, “Hunting and Gathering Tradition,” 136-38.

³⁶ Bozell, *Archeological Overview*, 39-60.

³⁷ Carlson, *Plains Indians*, 24.

The Woodland cultural tradition also emerged from Archaic peoples. At least three different Woodland cultural communities became established east of the Mississippi River beginning around 2,800 years ago—the Adena (2,800 to 2,200 BP), Hopewell (2,200 BP to AD 500), and Mississippian (AD 500 to AD 1200). Each group flourished during a different time period and occupied a different region east of the Mississippi. Like the communities in the American Southwest, the Woodland peoples practiced horticulture and lived in settled villages. They also built burial mounds and conical or pyramidal earthen shelters, crafted conical pottery, and developed the bow and arrow. They had an interest in death and the afterlife. Remnants of the stable cultural patterns of the general Woodland tradition continued nearly until the arrival of Europeans on the continent in the 1500s.³⁸

The Mississippian cultural communities, the most recent of the three Woodland traditions, inhabited the lower Mississippi

River valley and its tributaries, extending into present-day Missouri, Wisconsin, and Illinois. The Mississippians built solid earthen pyramidal mounds, constructed high platforms for ceremonial rituals, and maintained a death cult. The Mississippians became masters of horticulture. Corn was their principal crop, but they grew beans, squash, sunflowers, pumpkins, and amaranth as well. They also continued to hunt game and gather wild berries, seeds, nuts, and roots. The Mississippians had well-developed artistic skills, fashioning personal ornaments, ceremonial pieces made of

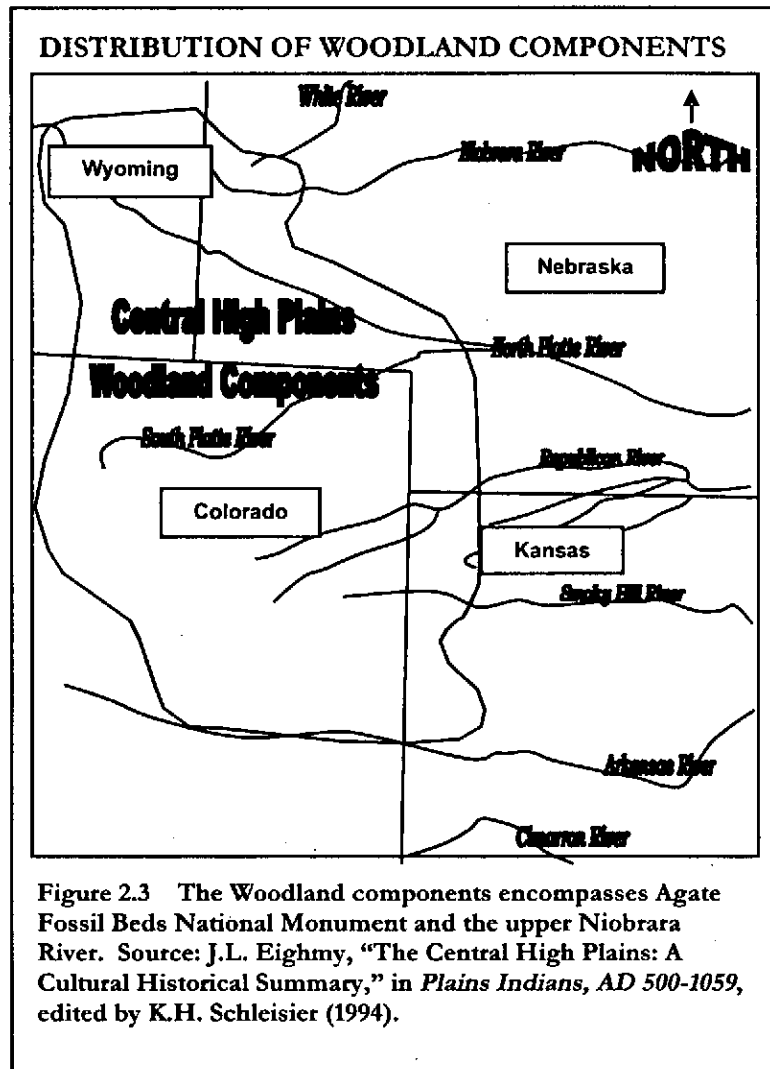


Figure 2.3 The Woodland components encompasses Agate Fossil Beds National Monument and the upper Niobrara River. Source: J.L. Eighmy, "The Central High Plains: A Cultural Historical Summary," in *Plains Indians, AD 500-1059*, edited by K.H. Schleisier (1994).

³⁸ *Ibid.*, 24-26.

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many different materials, and distinctive globular pottery. They traded surplus goods widely.³⁹

The Mississippian culture in particular exerted a strong influence on peoples of the Great Plains. Globular pottery, burial mounds, and horticultural activities, hallmarks of the Mississippian culture, have been found in the eastern Great Plains. "Semi-horticultural Plains people of an unmistakable Mississippian influence spread over much of the eastern prairies before extending their settled communities far up the rivers and onto the plains," observed historian Paul H. Carlson. "The Missouri, Platte, Loup, Dismal, Republican, Arkansas, Red, and Canadian river valleys received many new people, but other valleys attracted substantial settlement as well."⁴⁰ The influence of Woodland people reached the High Plains of western Nebraska around 2,000 years ago.⁴¹

Across the Great Plains, archeological sites with material culture objects revealing American Southwest and Woodland influences are abundant. In Nebraska (and elsewhere) pottery designs and burial mounds reveal a significant Mississippian influence. In western Nebraska, eastern Wyoming, and northeast Colorado, a thin scattering of cultural material dating up to AD 1100 suggests cultural traditions associated with pottery making, horticulture, and an increasingly sedentary life. The tangible artifacts of this so-called "South Platte phase" and the subsistence practices, material culture, and social organization suggest Woodland influences.⁴²

In western Nebraska and Kansas and eastern Colorado and Wyoming, archeologists have uncovered material from an important High Plains Woodland culture dating from a slightly later period, about AD 1200 to AD 1400. Such artifacts are distributed widely along the upper Republican and Loup rivers. The globular pottery, substantial square and rectangular earthen dwellings, the use of bows and arrows for hunting, items of personal adornment, and evidence of the cultivation of corn, beans, squash, and sunflowers all show the influence of Woodland (principally Mississippian) cultures reaching westward onto the High Plains while they declined in the east.⁴³

Woodland period inhabitants of the High Plains made some innovative changes and adaptations to eastern Woodland objects and practices in order to better meet their specific needs and adapt to their particular natural environment. High Plains inhabitants, over time, altered the globular pottery forms of neighboring traditions by fashioning thick, elongated pottery that allowed for boiling hard and starchy plant material. These pots often display decorative bosses (round symmetrical symbols) and incised lines on the outside walls. High Plains peoples, although far more sedentary than their ancestors, never achieved the high level of subsistence horticulture practiced by their Woodland neighbors to the east. Small,

³⁹ *Ibid.*, 26-27.

⁴⁰ *Ibid.*, 27.

⁴¹ John Ludwickson and John R. Bozell describe the material culture of the Middle Woodland inhabitants of central and southern Nebraska in "The Early Potters; Emerging Technologies," *Nebraska History: The Cellars of Time* 75: 1 (Spring 1994), 111-19.

⁴² Bozell, *Archeological Overview*, 17; Carlson, *Plains Indians*, 28.

⁴³ Carlson, *Plains Indians*, 28.

semipermanent settlements were widely scattered across the High Plains. Temporary hunting camps (rather than permanent villages) were often located on stream terraces with easy access to faunal and floral communities in both the valley and upland. In many respects, the Woodland High Plains cultural communities resembled the late Archaic traditions, in that these peoples led a seminomadic hunting and gathering existence. Hunting for big game such as bison remained a significant activity on the High Plains into and beyond the late Woodland period. Such hunting was often undertaken communally. Woodland people of the High Plains lived a far more mobile and less sedentary life than their Woodland neighbors to the east, where the climate and general environment invited a more settled life of planting and harvesting.⁴⁴

At Agate Fossil Beds National Monument a very small number of sites with High Plains Woodland material have been discovered. Additionally, positive identification as to the time period and culture has been difficult, since Late Archaic and Woodland Plains objects, produced about the same time period, are easily confused. Artifacts such as projectile points, stone tools, chipped stone debris, and isolated flakes, dating from either the Late Archaic or the Woodland on the Plains, have been found inside the park on low terraces, near River Road on the Niobrara River floor, and along an eroded section of the Niobrara River.⁴⁵

By AD 1200 the Southwest American and Woodland cultural traditions were in decline. Though the reasons for the Woodland culture's disappearance on the High Plains are not clear, unstable food sources, prolonged drought, endemic disease, and recurring war between regional Indian groups may have contributed to their demise. Over the next 300 years (AD 1200—1500), American Indian groups went through a cataclysmic transition, not well understood by scholars, that gave way to myriad groups expressing new social and religious customs, political organizations, and subsistence economies. This period, just preceding the arrival of Europeans on North America, was characterized by a splintering of a relatively small number of Indian groups into hundreds of different communities, large and small, across North America.⁴⁶

This splintering reached west into the Nebraska Plains. The Woodland culture on the High Plains was replaced by one of the numerous new Indian groups belonging to what archeologists call the "Central Plains Tradition." This Indian cultural group occupied an area encompassing present-day western Iowa, north central Kansas, parts of eastern Wyoming and northeast Colorado, and much of Nebraska, from roughly AD 900 to 1450. In western Nebraska and Kansas this culture was distributed widely along the Republican and Loup rivers. This culture's traditions seem to have been well-adapted to their local environments, with minor adjustments being made to accommodate slight environmental variations. The

⁴⁴ Jeffrey L. Eighmy, "The Central High Plains: A Cultural Historical Summary," in *Plains Indians, AD 500-1500: The Archaeological Past of Historic Groups*, edited by Karl A. Schlesier (Norman: University of Oklahoma Press, 1994), 226-38; Waldo R. Wedel, "The High Plains and Their Utilization by the Indian," *American Antiquity* 29 (July 1963), 3; Bozell, *Archeological Overview*, 17.

⁴⁵ Bozell, *Archeological Overview*, 39-41, 47, 55, 60.

⁴⁶ Carlson, *Plains Indians*, 27; Eighmy, "Central High Plains," 237-38.

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Central Plains tradition was the first truly sedentary culture in this region of the Plains. Its people engaged in horticulture and lived in permanent settlements. Because of their sedentary pursuit of agriculture, some archeologists have given them the sobriquet of "Village Farmers."⁴⁷ They often occupied earthen lodges, clustered in small villages on terraces along nearly every waterway in eastern and central Nebraska and adjoining areas. The Central Plains people are distinguished from the Woodland peoples living on the Great Plains by their adoption of small-scale horticulture, based primarily on planting and harvesting maize (corn). They also engaged in hunting and gathering. Archeologists believe that the Great Plains supported a larger population between AD 900 and 1450 than at any time before or immediately after this period of the Central Plains Tradition.⁴⁸

Physical evidence of their culture includes earthen house foundations, rounded globular ceramic pottery often with an unthickened rim and some exterior decoration, well-crafted triangular projectile points with symmetrical notching in the sides, and bone tools.⁴⁹ At the McIntosh site, near Enders Lake in the Sand Hills of north-central Nebraska, faunal remains were found along with ceramic pottery, chipped stone tools and debris, ground stone, and modified bone. This site, dating from the Central Plains Tradition, sheds light on subsistence strategies used to adapt to variable and unpredictable climatic conditions.⁵⁰ John Bozell contends that the McIntosh site is significant because it "provides strong evidence that Village Farmers were using the western portions of the state for mobile hunting and also were attempting to establish permanent settlements there."⁵¹

Agate Fossil Beds National Monument lies at the western fringe of the Central Plains Tradition. Scattered throughout western Nebraska's panhandle, however, are nearly fifty campsites of people belonging to a semi-nomadic variation of that tradition who engaged in bison-hunting forays. Like the Central Plains cultural complex, these peoples created round, globular clay pots and stone and bone tools. Unlike the mainstream Central Plains tradition, residents of these short-term campsites did not build earthen lodges, grow corn, or tend gardens. Campsites were built in rock shelters, on butte tops, and on stream terraces. Archeologists have found no maize (corn) pollen or gardening tools at any of these temporary campsites in western Nebraska. They theorize that these camps existed for one or more of the following reasons: 1) Central Plains people periodically traveled west to hunt and gather resources and build campsites on the High Plains; 2) earlier groups from the

⁴⁷ John R. Bozell, "Late Precontact Village Farmers: An Agricultural Revolution," *Nebraska History: The Cellars of Time* 75: 1 (Spring 1994), 121-23.

⁴⁸ Terry L. Steinacher and Gayle F. Carlson, "The Central Plains Tradition," in *Archaeology on The Great Plains*, edited by W. Raymond Wood (Lawrence: University Press of Kansas, 1998), 235-68; Bozell, "Late Precontact Village Farmers," 121.

⁴⁹ Steinacher and Carlson, "Central Plains Tradition," 235-68; Waldo R. Wedel, *Central Plains Prehistory: Holocene Environments and Culture Change in the Republican River* (Lincoln: University of Nebraska Press, 1986), 49; Bozell, *Archaeological Overview*, 18; Carlson, *Plains Indians*, 28.

⁵⁰ Amy Koch, "The McIntosh Fauna: Late Prehistoric Exploration of Lake and Prairie Habitats in the Nebraska Sand Hills," *Plains Anthropologist* 40: 151 (February 1995), 39-59.

⁵¹ Bozell, "Late Precontact Village Farmers," 129.

east moved west, took up hunting and gathering, and built these shelters; 3) people originating on the High Plains in the West adopted some of the material culture traditions (such as making globular pots) from the Central Plains cultures in the east.⁵²

In 1973, a Woodland burial site was excavated in Sioux County, near Agate Fossil Beds. On a hilltop in the Hat Creek Canyon drainage, north of the Niobrara River, a stream wash unearthed the skeletal remains of a fifty-year-old man, along with charred stone, ashes, stone flakes, and a large, broken ceramic vessel. The oval-shaped grave in which these items were found dated from around 750 BP.⁵³

In 1975, archeologists working in the general vicinity of the interim Visitor Center at Agate Fossil Beds National Monument found and recorded Central Plains cultural material—small pottery pieces, biface projectile point fragments, and a few flakes of lithic debris, principally of chert. This material is native to the east near Chadron, and may have been transported from the north in southwestern South Dakota, and from the west in southeastern Wyoming. Dating of this material suggests that this site was occupied about 1,000 BP (AD 1000).⁵⁴

The demise of the Central Plains peoples is still an unsolved mystery, although climate change may have prompted them to leave the region. Some archeologists speculate that they moved away from the central Plains, migrating north up the Missouri River to become part of another culture. Others contend that they evolved in place into a different culture, such as the ancestors of the Pawnee Indians, who did not appear in Nebraska until around 1600.⁵⁵ Still others believe that the Central Plains cultural group migrated north, but eventually returned to present-day central Nebraska, where they evolved into the historic Pawnee tribe. All agree that there is not yet enough data available to link late cultural complexes, such as the Central Plains people, with the historically known Native American tribes that came to inhabit Nebraska and were encountered and described by the first European visitors to penetrate the region. There remains a substantial gap in time between the end of the Central Plains culture and the first date of material evidence produced by the historic Pawnee.⁵⁶ The first visible evidence of historic Native American tribes on the Great Plains dates no farther back than the late 1700s and early 1800s. Archeologists believe that the Central Plains culture relates in some tenuous way to both the historic Pawnee tribe that appeared in the central Nebraska region and the Arikara tribe, inhabiting South Dakota.⁵⁷

There have been no sites found in Agate Fossil Beds National Monument that are positively associated with the Central Plains culture. Not far away, however,

⁵² Steinacher and Carlson, "Central Plains Tradition," 247-48.

⁵³ George W. Gill and Rhoda Owen Lewis, "A Plains Woodland Burial from the Badlands of Western Nebraska," *Plains Anthropologist* 22: 75 (1977): 68-72.

⁵⁴ Danny E. Olinger, "Agate Fossil Beds National Monument: Archeological Investigations at Site 25SX163 (Lincoln, NE: National Park Service, Midwest Archeological Center, 1980)

⁵⁵ John Ludwickson, "Historic Indian Tribes: Ethnohistory and Archaeology," *Nebraska History: The Cellars of Time* 75: 1 (Spring 1994), 136.

⁵⁶ Steinacher and Carlson, "Central Plains Tradition," 258-59.

⁵⁷ Bozell, *Archaeological Overview*, 19.

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in northeastern Colorado, the recently discovered Donovan site is a High Plains campsite where bison were processed, and multiple families may have lived for short periods. Several artifacts from the site date from AD 1000—1300. High Plains culture likely extended into the western Nebraska panhandle.⁵⁸

Dramatic Changes Usher in Protohistoric Era, AD 1400—late 1700s

Protohistoric Indian groups (those groups present on the eve of written record keeping) arrived on the High Plains of western Nebraska during a period of seismic change in demographic, social, and environmental conditions, beginning around AD 1400 and continuing to the late 1700s. These major alterations brought about the modern historic Plains Indians, described by European visitors and Euro-American residents.

One major change came as the result of three prolonged droughts on the High Plains between 1470 and 1510. This climatic shift caused successive crop failures and forced Plains villagers to leave their homes and disperse. Some Indian villages disappeared completely. In the Niobrara River and upper Republican River valleys, semipermanent villages drew together and consolidated, producing more uniform cultural characteristics.⁵⁹ Another climate change happened around a hundred years later, in the years preceding the early 1600s. During this period, known as the “Neo-Boreal” or “Little Ice Age,” a general cooling of the Plains environment occurred, shortening the growing season of corn and altering the population and migration patterns of bison. In response to these changes, people moved into, through, and out of the present-day western Nebraska region.⁶⁰

The second alteration came with the arrival of the Apaches, who migrated south from their homeland in west-central Canada sometime after 1200, probably in pursuit of expanding herds of bison, and arrived along the eastern front of the Rockies after 1400. The Apaches overran much of the western High Plains, including western Nebraska, where they took up residence in semipermanent villages and pursued horticulture. The Apaches drove out or pushed back Indians then using the Plains, such as inhabitants of present-day South Dakota who had ventured into northern Nebraska to hunt bison in the 1400s and 1500s. (The artifacts of this displaced group, such as thin pottery, stone tools, and manufactured debris, have been uncovered near Fort Robinson on Slaughterhouse Creek, not far from Agate Fossil Beds National Monument.⁶¹) The Apache dominated the central High Plains for two centuries, into the mid-1700s.⁶² Archeologists believe that bison-hunting horticultural Apaches on the Plains, possibly the Kiowa-Apache, occupied western Nebraska during the late 1600s and early 1700s (during a period known by archeologists as the “Dismal River phase”). Dismal River phase sites have been

⁵⁸ *Ibid.*, 18-19.

⁵⁹ Carlson, *Plains Indians*, 29.

⁶⁰ Ludwickson, “Historic Indian Tribes,” 135.

⁶¹ *Ibid.*, 142.

⁶² Carlson, *Plains Indians*, 28-29; James H. Gunnerson and Dolores A. Gunnerson, “Ethnohistory of the High Plains” (Denver: Bureau of Land Management, Colorado State Office, 1988), ix, 1-2.

identified in Agate Fossil Beds National Monument, as well as the Wind Springs Ranch in southern Sioux County and in neighboring counties.⁶³ Most Apaches had left the Plains, including northwestern Nebraska, by the time European travelers came to the region.⁶⁴

Finally, a catastrophic disruption occurred with the arrival of Europeans in North America and the pathogens they carried with them. Diseases of devastating proportions appeared among Plains inhabitants even before European travelers actually encountered North American inhabitants. Having developed no previous immunity against most of these pathogens, Native Americans were defenseless against the scourges of influenza, cholera, smallpox, and typhoid, and succumbed in huge numbers during so-called “virgin soil epidemics.”⁶⁵

As early as 1520—1524, a pandemic of either influenza or cholera swept northward from the Caribbean and Mexico, shortly after the arrival of Spanish explorers. Beginning in 1617 and again in the 1640s and after 1671, smallpox spread along trade and transportation routes from Mexico and Spanish colonies located in present-day New Mexico and Florida.⁶⁶ The deadly viral form of smallpox, *Variola major*, could spread from a single infected person by respiratory contact to an entire population. Those living in sedentary villages who shared drinking water and utensils were especially vulnerable to contracting the disease. Smallpox reached the southern Plains between 1687 and 1691. French explorer Sieur de La Salle (who led the first European expedition to follow the Mississippi River to its mouth on the Gulf of Mexico) witnessed and described the deadly effects of this virgin soil episode during which 50 percent or more of the Arikara population was wiped out along the Missouri River in present-day South Dakota. Smallpox moved up the Missouri River from Texas to the Great Lakes in the early 1750s. Between 1775 and 1782, as the American Revolution unfolded in eastern North America, the potent *Variola major* smallpox virus again swept across the continent, ravaging native populations from Massachusetts to Mexico and from Florida to the Pacific Northwest of present-day U.S. and Canada. Cholera and typhoid struck next in the late 1770s and ravaged

⁶³ Bozell, *Archeological Overview*, 20. Also see Raymond DeMallie, “Chapter Three: The Buffalo,” *NEBRASKAland: The First Voices* 62: 1 (January-February, 1984), 60-63.

⁶⁴ Dolores Gunnerson and Ken Bouc, “Chapter Three: A Time of Change,” *NEBRASKAland: The First Voices* 62: 1 (January-February 1984), 52-59.

⁶⁵ Henry Dobyns, *Their Number Became Thinned* (Knoxville: University of Tennessee Press, 1983). Also see John Verano and Douglas Ubelaker, editors, *Disease and Demography in the Americas* (Washington, DC: Smithsonian Institution Press, 1992); Russ Thornton, *American Indian Holocaust and Survival* (Norman: University of Oklahoma Press, 1987).

⁶⁶ William R. Swagerty, “History of the United States Plains Until 1850,” in *Handbook of North American Indians: Plains, Volume 13, Part 1 of 2*, edited by Raymond J. DeMallie (Washington, DC: Smithsonian Institution, 2001), 257. On the general topic of the transfer and consequences of diseases spread across oceans and continents, see Alfred W. Crosby, *The Columbian Exchange: Biological and Cultural Consequences of 1492* (Westport, CT: Praeger, c. 2003); Alfred W. Crosby, *Ecological Imperialism: The Biological Expansion of Europe, 900-1900* (Cambridge, England: Cambridge University Press, 1986); Alfred W. Crosby, *Germ, Seeds & Animals: Studies in Ecological History* (Armonk, NY: M.E. Sharpe, c. 1994).

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Plains populations stretching from the Red River in the north, through Texas and Louisiana to the south.⁶⁷

On the northern Plains, the earliest record of epidemic disease dates to 1734-1735. It was then that smallpox struck the western Cree Indians, the western groups of Lakota (Sioux), and the Arikaras. The Lakota images from the Sicangu Lakota 1734—1735 winter count of Battiste Good depict a figure with a spiral symbol in the stomach, indicating pain, which is a characteristic symptom of smallpox.⁶⁸ Smallpox probably struck these same groups again in the 1750s. Around 1779 and 1780, the western Sioux first contracted smallpox, according to the reports of traders and trappers who received second- and third-hand reports from Indians on the northern Plains. The Brule Sioux winter counts recorded smallpox in 1779—1780 and again 1780—1781. The disease probably spread over this enormous territory to native populations by way of European clothes, acquired and worn by Indians, and by Indians traveling on horseback. The Sioux, who had recently migrated westward onto the north-central Plains, not only contracted smallpox but may well have spread it great distances as well. Once again, from 1800 to 1803 and from 1805 to 1814, smallpox invaded the northern Plains, this time possibly from the north, spreading southward from Canada.⁶⁹

All told, these episodes of diseases among native inhabitants of the Plains between 1734 and the late 1700s caused a precipitous decline in population across all of western North America ranging in degree from 10 to 50 percent in the 1780s alone. Some regional populations lost one-third of their members—without ever seeing the European carriers of these deadly diseases.⁷⁰ Some authors have argued that as many as 95 percent of all Native Americans in North America died over nearly four centuries from European diseases.

The more sedentary Mandans, Hidatsas, and Arikaras, who contracted smallpox from the Sioux and other sources, experienced the most devastating losses. Fur trader-explorer Jean-Baptiste Truteau penned in his 1795 journal that the Arikara, who once “counted thirty-two populous villages [are] now depopulated and almost entirely destroyed by the smallpox.”⁷¹ Greatly weakened, these diminished tribes found themselves ill equipped to fend off their enemies—the marauding, nomadic Sioux—who threatened them from the east and whose losses from smallpox were far less since they lived in small wandering groups rather than compact villages. During the late eighteenth century, the Sioux pushed the weakened Arikaras farther and farther north up the Missouri River, where they eventually took refuge in the Mandan villages.⁷² The consequences of repeated deadly epidemics among Indians of the Plains in the 1700s and early 1800s were

⁶⁷ *Ibid.*, 257.

⁶⁸ Elizabeth A. Fenn, *Pox Americana: The Great Smallpox Epidemic of 1775-82* (New York: Hill and Wang, 2001), 16-17.

⁶⁹ Swagerty, “History of the United States Plains Until 1850,” 257.

⁷⁰ *Ibid.*, 257-58.

⁷¹ Quoted in *Ibid.*, 257.

⁷² Richard White, “The Winning of the West: The Expansion of the Western Sioux in the Eighteenth and Nineteenth Centuries,” *Journal of American History* 65: 2 (September 1978), 325.

almost unimaginable and truly immeasurable.⁷³ Catastrophic epidemics, combined with climatic changes and the arrival of the Apache on the High Plains, produced, over many decades, the situations of the Plains Indian described in historic journals of European visitors and settlers.

Imprint and Meaning: Native Inhabitants' Cultural Landscape

The appearance and cultural meaning of the prehistoric and protohistoric physical landscape of the upper Niobrara River Valley in Sioux County and, even more specifically, of Agate Fossil Beds National Monument, can only be generally surmised. Little physical evidence of prehistoric habitation exists at Agate Fossil Beds National Monument. Scatters of projectile points, stone flakes, tools, and potsherds representing stages of culture from the Paleo-Indians to the Central Plains tradition have been identified throughout the park, especially on the Niobrara valley floor, upland terraces, and butte tops. But the large hunting and butchering camps, permanent houses, and burial sites that have been found in eastern Wyoming, southern Nebraska, western South Dakota, and southeastern Montana, have eluded archeologists at Agate. Perhaps this portion of the Niobrara was just a place to pass through.

The Apache attached great cultural significance to the bison, a prime source of food and a spiritually significant animal. The bison were a ponderous presence on the landscape, their enormous thundering herds impacting and imprinting the land they traversed. Although transitory, the bison passed through the area of Agate Fossil Beds National Monument, leaving a marked imprint on the physical landscape.⁷⁴ These sizeable animals grazed native prairie grasses and other fauna, compacted the soil, and dispersed some faunal seeds and plants that they digested and excreted.

Fire, set by native inhabitants of present-day western Nebraska, produced another cultural imprint on the landscape. Most fires set by Indians in the protohistoric and historic periods burned tall-grass prairies east of the 100th meridian (in central Nebraska). However, the Pawnees and their ancestors living in southern Nebraska's Republican River Valley between 1300 and 1700 used fire in the fall to encourage the growth of prairie grasses in order to feed their herds of horses. Fires may have been set occasionally by other Indian groups inhabiting the short- and mixed-grass High Plains to trap and control game animals. Fires might burn for days at a time and consume grasslands covering hundreds of square miles. Such human-set fires would have left a distinctive cultural imprint in the form of altered density and height of prairie grasses. These same fires also destroyed groves of trees that lined watercourses through the Plains.⁷⁵ Whatever trees and shrubs may have been

⁷³ Fenn, *Pox Americana*, 262-63; Raymond J. DeMallie, "Sioux Until 1850," in *Handbook of North American Indians: Plains, Volume 13, Part 2* (Washington, DC: Smithsonian Institution, 2001), 731.

⁷⁴ See Richard White, "Cultural Landscape of the Pawnees," *Great Plains Quarterly* 2: 1 (Winter 1982): 31-40, for a discussion of the cultural meaning of the bison and the horse to the Pawnee, occupying territory south of the Lakota Sioux prior to their arrival in present-day western Nebraska.

⁷⁵ *Ibid.*, 37-39.

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growing naturally along the upper Niobrara in the vicinity of Agate Springs could have been leveled by bison-hunting horse-riding native inhabitants of the protohistoric and historic periods. Native populations manipulated the environment in their own way, just as Euro-American settlers did later.

The Indians who passed through Agate Fossil Beds lived lightly on the land, their most enduring legacy found in soils impacted by the bison hunts, vegetation thinned by fires, and scatters of stone tools. But most of the secrets of these nomadic North Americans are still hidden in the ground, silenced by thousands of years of unrecorded history. There is great potential for learning more about these ancient people; much evidence has yet to be uncovered.

Chapter 3

VISITORS PASSING THROUGH, 1500s-1870s

Introduction

The Spanish came to the “Llano Estacado” from the southwest looking for gold and were disappointed. The French explored the Great Plains from the northeast in pursuit of beaver and otter pelts, but left little more behind than French place names. And the British fur trading empire in Canada didn’t reach much farther south than the northern Plains. Into the perceived vacuum of the “Great Sandy Desert” came the Americans, following their “manifest destiny” west of the Mississippi River. Along the way, the distant upper Niobrara River began to appear on explorers’ and settlers’ maps.

European rivalries on the Plains during the seventeenth and eighteenth centuries mirrored ongoing Old World conflicts, and their resolution in distant European capitals set the course for American domination of the West. Soon after the Louisiana Purchase in 1803, Lewis and Clark’s Corps of Discovery brought the natural riches of the upper Missouri River, Rocky Mountains, and Northwest into the American consciousness. In the 1830s, John Jacob Astor’s American Fur Company capitalized on the collapse of the beaver fur market and the new demand for bison robes, as well as the advent of steamboat navigation on the Missouri, and created a fur trading monopoly throughout the Missouri drainage. A hierarchy of trading posts was set up, some very close to present-day Agate, and business flourished with the local Indian tribes, who provided bison robes in exchange for the finest European trade goods. At the height of this fur frenzy, 100,000 robes were being produced annually on the Great Plains, and by the 1880s not only was the bison population decimated but the native peoples had lost their homeland on the Plains through centuries of killing diseases and more recent starvation and conflict.

At mid-century, emigrants had begun streaming across Nebraska on their way to the lush meadows and mineral deposits of the Far West, and the U.S. Army was an increasing presence on the Plains. The army’s task was not only to protect the emigrants from hostile natives, but to improve transportation routes through the region. While Lieutenant G. K. Warren of the U.S. Army Corps of Topographical Engineers pronounced the upper Niobrara in 1858 “a perfect paradise for savage life,” he ultimately determined that the Platte River valley was a better route for an overland wagon road and, eventually, a transcontinental railroad.

The upper Niobrara’s time would come. As trading posts became forts and ration centers, and commerce with the Indians turned to war, local natives were forced to the treaty table and efficiently but tragically removed from the path of settlement. And when railroad tracks were finally laid twenty miles north of Agate Springs in the 1880s, the upper Niobrara was no longer just a passageway for newcomers, but a place to stop and linger.

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Spanish, French, and English Fur Trading on the High Plains, late 1600s—1803

The Spanish were the first Europeans to visit the Great Plains and its native residents in present-day Nebraska. Two hundred and fifty years before Lewis and Clark ventured up the Missouri River past the mouth of the Niobrara in northeast Nebraska the Spanish entered the region from the Southwest. In 1541, soldiers under orders from Francisco Vasquez Coronado marched north from the Rio Grande in search of the mythical Kingdom of Quivira, a rich land where everyone ate from gold plates. Although Coronado found no gold, he and his men were introduced to the central Great Plains, its native inhabitants, and its roaming “cows,” or bison. Other Spanish expeditions that set out for the Central Plains—those led by Rodriguez-Sanchez Chamuscado in 1580, Antonio de Espejo in 1581, and Gaspar Castano de Sosa in 1590—never traveled as far north as the Niobrara River. Generally unimpressed with the Great Plains and the lack of gold or any rivers that might lead to the western sea, the Spanish reported on the foreboding character of the “*Llano Estacado*”, or High Plains, and generally avoided it. For the next two hundred years the Spanish refrained from visiting the High Plains of the Niobrara River valley.¹

It was not until the early 1700s that Spanish interest in the region was reignited—by their rivalry with the French, who had entered the Great Plains from the northeast Great Lakes region to trade with the Pawnee Indians in central present-day Nebraska in the late 1600s. After a French explorer found the mouth of the Missouri River on the Mississippi River in 1673, the French and later Spanish fur traders also ventured up the Missouri River, traveling as far north as the Mandan Indian settlements on the upper Missouri River (in present-day North Dakota). In 1720, Lieutenant Governor Pedro de Villasure marched north from Santa Fe to assess the French strength on the Great Plains and the potential for establishing permanent settlements on the southern Plains. With more than forty Spanish troops and sixty auxiliary troops, Villasure journeyed as far north as the Platte and Loup rivers in present-day eastern Nebraska. There, Pawnees and Otos attacked and destroyed the force, killing Villasure and many others. The thirteen Spanish survivors retreated to their existing settlements in the south. Spanish presence and influence on the challenging “*Llano Estacado*” after 1720 was nonexistent.²

Through much of the 1700s, the meandering upper Niobrara River remained on the outer fringes of the earliest French reconnaissance expeditions, which explored the upper reaches of the Missouri River. In 1723, the French opened Fort Orleans near Brunswick, Missouri, but failed to commit to a long-term presence

¹ Ralph H. Vigil, Frances W. Kaye, and John R. Wunder, *Spain and the Plains: Myths and Realities of Spanish Exploration and Settlement on the Great Plains* (Niwot: University Press of Colorado, 1994), 67; James C. Oldon and Ronald C. Naugle, *History of Nebraska* (Lincoln: University of Nebraska Press, 1997), 27-30.

² Thomas E. Chavez, “The Villasur Expedition and the Segesser Hide Paintings,” in *Spain and the Plains*, edited by Vigil, Kaye, and Wunder (Niwot: University Press of Colorado 1994), 90-113; Oldon and Naugle, *History of Nebraska*, 30.

there. According to Nebraska fur trade scholars Charles E. Hanson and Veronica Sue Walters, “any possibility that French traders actually visited the northwestern area is extremely remote.” Although a party led by the French brothers Francois and Joseph de La Verendrye did reach the Pierre (South Dakota) vicinity and may even have ventured as far west as the Black Hills in the 1740s,³ very little firm evidence exists to support the theory that they traded as far west as the upper Niobrara.⁴

The 1739 expedition led by French Canadian fur traders Pierre and Paul Mallet also failed to reach the upper Niobrara River. Born in Montreal, the brothers moved to a French settlement in Illinois around 1734. Five years later, they organized and led a small group of seven men up the Missouri River. Confused about the geography of the Great Plains, they led their small entourage in search of Santa Fe as far north as present-day South Dakota before native inhabitants set them straight, sending them back down the Missouri to northeastern Nebraska. At an Omaha village they purchased horses and headed west along the Platte and Loup rivers to Pawnee villages in present-day central Nebraska. From there they turned south, crossed most of present-day central Kansas, then proceeded west to Santa Fe. The Mallet brothers led two other expeditions in the Southwest. The Mallet expedition of 1739 opened the way for French trade with Spanish settlements in the Southwest in the 1740s.⁵

By the late 1750s, however, the French began to lose their political and economic dominance in the Mississippi Valley. In the 1763 Treaty of Paris, the French gave up all the land west of the Mississippi River to the Spanish. The Spanish, like the French, remained unmotivated to exploit the fur resources in the upper Missouri River, seeming content to trade mostly with Indian tribes near St. Louis on the Mississippi. As late as the mid-1780s, the Spanish possessed little knowledge of the Missouri River beyond the mouth of the Niobrara River. Three hundred miles to the west, Agate Springs on the upper Niobrara remained unknown to Euro-American visitors to the region.⁶

Soon the English fur trading empire in British North America (later Canada) reached into the Missouri River interior of the Central Plains. The British had retained economic control of the upper Mississippi River valley during and after the American Revolution, between 1775 and 1781. The Hudson’s Bay Company and the North West Companies competed intensely for fur across modern Canada’s Prairie Provinces, across the present Canadian-U.S. border, and into the upper Missouri River drainage in the Dakotas and Montana. Some English traders did reach the

³ Olson and Naugle, *History of Nebraska*, 31-32; Francois Verendrye and Joseph Verendrye, “Journals,” *South Dakota Historical Collections* 7 (1914), 349-58; G. Hubert Smith, *The Explorations of the La Verendryes in the Northern Plains, 1738-43*, edited by W. Raymond Wood (Lincoln: University of Nebraska Press, 1980).

⁴ Raymond Wood, “Fur Trade,” in *Encyclopedia of the Great Plains*, edited by David J. Wishart (Lincoln: University of Nebraska, 2004), 419.

⁵ Donald J. Blakeslee, *Along Ancient Trails: The Mallet Expedition of 1739* (Boulder: University Press of Colorado, 1995), 1-78; Donald J. Blakeslee, “Mallet Brothers,” in *Encyclopedia of the Great Plains* (Lincoln: University of Nebraska Press, 2004), 241; Olson and Naugle, *History of Nebraska*, 32-33.

⁶ Olson and Naugle, *History of Nebraska*, 33.

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Missouri River in present-day eastern Nebraska, after ascending the Des Moines River to the east and traveling overland from the upper Mississippi River, where they took over trading with the Lakotas from the Spanish and traded with Omaha and Pawnee Indians as well as the Poncas, located near the mouth of the Niobrara River. When the two English trading companies merged in 1821, the Hudson's Bay Company dominated fur trading on the northern Plains. Once again, however, the upper Niobrara River remained on the periphery of the English trading sphere.

The Spanish made a small number of final efforts to explore the upper Missouri in the late 1780s and 1790s. The Spanish traveling north from Santa Fe apparently reached farthest into the region of present-day northwest Nebraska in their effort to harvest furs. Possibly the earliest known written reference to any part of the Niobrara River dates from 1785 and is in Spanish. In a letter dated December 12, 1785, and written by Esteban Miro, Spanish Governor of Louisiana, to Antonio Rengel, commandant of the Interior Provinces, Miro referred to the Niobrara as the "Rio Escarpado [Rugged]," or the River-that-Runs, which characterizes its condition during heavy spring flooding. The river was large, he noted, but not navigable. Miro, who was probably describing the lower Niobrara River, most likely received his information about the Niobrara second-hand from Indians and trappers.⁷

In 1794, Jean Baptiste Truteau led a Spanish trading expedition from St. Louis up the Mississippi to Mandan villages on the Missouri, where the group spent a miserably cold winter trading only a little with the Lakotas, Omahas, and Poncas. Truteau continued north the next spring, but did not progress far. A second expedition, led by Lecuyer, left St. Louis in the spring of 1795; however, it never traveled farther than the Ponca Indian settlements near the confluence of the Niobrara River and the Missouri. Later in 1795, the Spanish sent a third expedition party led by James Mackay, whose ultimate efforts to find a passage across the continent to the sea would fall far short; this party reached not much farther west than the Omahas on the Missouri. After 1797, Mackay confined his efforts to developing trade with the Indian tribes along the Platte River in present-day eastern Nebraska. Within three years, the Spanish did manage to travel and trade as far north as the Mandan villages on the upper Missouri River, even reaching as far northwest as the confluence with the Yellowstone River in present-day southeastern Montana. The Spanish days of exploring and trading along the upper Missouri and its tributaries were numbered. Soon international negotiations in Paris and Madrid, and eventually Washington, DC, would change the course of history on the upper Missouri and the distant reaches of the upper Niobrara River, and new traders and explorers would take the place of the Spanish.⁸

In 1804, Lewis and Clark found Spanish bits, knives, axes, and textiles in southwestern Dakota. In the early 1800s, the separate traveling parties of Zebulon Pike, in 1806, and trapper Manuel Lisa, in 1811, found that Santa Fe traders, perhaps John Mackay, had occasionally traded with the Pawnee as well as the Arapaho

⁷ Kurt M. Clark, "An Environmental History of the Niobrara River Basin" (M.A. thesis, University of Nebraska, Lincoln, 1997), 22.

⁸ Olson and Naugle, *History of Nebraska*, 34-35.

Indians on the Platte River.⁹ By the early 1800s, the upper Niobrara River region began to enter the orbit of American fur trading companies that extended their trading parties and influence up the many tributaries of the upper Missouri River.¹⁰

Purchase, Exploration, and Exploitation by the United States, 1803—early 1830s

It was only after the United States purchased the Louisiana Territory from France in 1803 that exploration of the region and exploitation of its resources, including those on the upper Niobrara River, began in earnest. Immediately after the United States purchased the vast territory west of the Mississippi River, President Thomas Jefferson selected Meriwether Lewis and William Clark to lead an expedition up the Missouri River to its headwaters, across the Rocky Mountains, and down the nearest westward-flowing stream to the Pacific Ocean. The purpose of the expedition was two-fold: to investigate and pave the way for the extension of American fur trade through the Northwest, and to gather geographical and scientific information about the vast western part of the newly acquired western region of the country. The Corps of Discovery, as it was called, ascended the Missouri River and arrived at the mouth of the Niobrara River on September 4, 1804. Clark traveled several miles west up the river to the site of an abandoned Ponca Village. Meriwether Lewis, although he never traveled up the Niobrara, used second-hand sources to describe its length. According to the Corps's Indian and French sources, the upper twenty-five leagues (roughly three miles) of the river was bordered by plains and meadows and had very little tree cover. The river, Lewis reported, was shallow and non-navigable. Lewis thought the Niobrara offered great potential for fur trading since it sustained large beaver and otter populations.¹¹ (It is unclear exactly what stretch of the Niobrara River he was describing, since the character of the river and its surrounding environment changes drastically as it crosses the 100th meridian in central Nebraska and ascends across an arid short-grass prairie in present-day eastern Wyoming.)

Lieutenant Zebulon Pike headed a U.S. government-sponsored exploration of the central and southern Plains in 1806—1807. Comprising twenty-one soldiers, an interpreter, and a doctor, Pike's small entourage headed west from St. Louis across present-day Kansas to the Rocky Mountains. Although the Pike expedition traveled hundreds of miles south of the Niobrara, he characterized the entire Great Plains as a "Great Sandy Desert," a general sobriquet that appeared on maps and in literature of the Plains for decades to come and strongly influenced public

⁹ Charles E. Hanson, Jr., and Veronica Sue Walters, "The Early Fur Trade in Northwestern Nebraska," *Nebraska History* 57: 3 (Fall 1976), 293.

¹⁰ The two other Great Plains fur systems were the French, followed by the English fur trading activities on the Prairie Provinces and Northern Plains and, secondly, the fur trade on the Southern Plains of the United States. Wood, "Fur Trade," 419.

¹¹ Clark, "An Environmental History of the Niobrara River Basin," 24-25; R. Jay Roberts, "Preliminary Sketch of the History of Agate Springs Ranch," typed manuscript (Omaha: Midwest Regional Office Library, National Park Service, August 1965), 2.

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perceptions, settlement patterns, and government management of the entire region encompassing northwestern Nebraska.

Despite the disparaging label of the “Great Sandy Desert” affixed to the Great Plains, American traders and trappers began exploiting the resources of the Missouri River drainage in earnest immediately upon the return of Lewis and Clark. In 1807, Manuel Lisa, an enterprising New Orleans native of Spanish descent, became the first St. Louis fur trader to respond to Lewis and Clark’s assessment that the Louisiana Territory was “richer in beaver and otter than any country on earth.”¹² Leading an expedition of about sixty men up the Missouri River, Lisa built Fort Raymond at the confluence of the Yellowstone and Bighorn rivers in present-day Montana. Two years later, he organized the Missouri River Fur Company in St. Louis and immediately began trapping in the headwaters of the Missouri and building posts along the river to trade with the Indians. Troubles with Blackfeet Indians caused Lisa to abandon his enterprise in mid-1810. Then the War of 1812 with Great Britain disrupted all St. Louis fur trade for much of that decade. In 1819, Manuel Lisa organized a second Missouri Fur Company. The company continued to operate, even after Lisa’s death in 1820, under the leadership of Joshua Pilcher and Thomas Hempstead, until 1824, when a devastating attack by Blackfeet Indians on several of the company’s trappers led to the company’s dissolution.¹³

Several other American trading companies followed Lisa’s pursuit of furbearing animals and trade with the Indians on the Missouri River and its upper reaches. Pierre Chouteau Jr. and his St. Louis business partners Bartholomew Berthold and Bernard Pratte Sr., backed Lisa’s failed 1819 trading expedition, and then went on to build a series of trading posts on the Missouri River between Council Bluffs and the Cheyenne River, all under the name of the French Fur Company. The French Fur Company dominated fur trade in this territory for many years. In 1821, Joseph Renville and several traders from the dissolved North West Company formed the Columbia Fur Company, which came to dominate trade above the Cheyenne River’s juncture with the upper Missouri and beyond the French Fur Company’s territory. The next year, yet another trading aspirant, William Ashley, along with trapper Andrew Henry, organized a company of a hundred men to hunt, trap, and trade with the Indians on the upper Missouri. Within a couple of years, Ashley diverted his trapping attention from the upper Missouri to the Rocky Mountains, creating an opportunity for another trader—the American Fur Company—to channel its resources into the upper Missouri River territory.¹⁴

¹² Quoted in David J. Wishart, “Lisa Manuel,” in *Encyclopedia of the Great Plains*, edited by David J. Wishart (Lincoln: University of Nebraska, 2004), 360.

¹³ *Ibid.*, 360; Wishart, *Fur Trade of the North American West*, 42-48.

¹⁴ Wishart, *Fur Trade of the American West*, 49-52; David J. Wishart, “Chouteau, Pierre, Jr.,” in *Encyclopedia of the Great Plains*, edited by David J. Wishart (Lincoln: University of Nebraska, 2004), 413-14; William R. Swagerty, “History of the United States Plains Until 1850,” in *Handbook of North American Indians, Vol. 13, Part 1: Plains*, edited by Raymond J. DeMallie (Washington, DC: Smithsonian Institution, 2001), 276.

Fur Trapping on the Upper Niobrara, Early 1800s

Before 1803, the upper Niobrara in the vicinity of Agate Springs was probably not prime beaver fur trapping grounds for American fur trading companies. Named “*L'eau qui Court*” (loosely translated as a rapid stream) by early French visitors to its lower course, the Niobrara remained somewhat distant from the main avenues of trapping and trade along the Missouri River. Furthermore, although the river and its moist environs would have been inviting for small water-loving mammals like beaver, otter, and muskrat, the total lack of trees anywhere on the prairie and even along the river would have provided a marginally sustainable environment for beaver, even those that made their home by burrowing into the riverbank rather than building lodges or dams from trees and shrubs.¹⁵ Otters and muskrats that occupied the same environmental niche as the beaver were less dependent on large trees needed for making beaver lodges. They may have managed to exist on the smaller shrubs that grew naturally along the upper Niobrara, though the limited quantity of vegetation in the 1800s probably could not support a large population of these animals. Despite, the muskrat's ability to reproduce rapidly (an adult female muskrat rears five litters a year, each with as many as eleven cubs),¹⁶ the value of these furs would probably not have been great alongside the market price for beaver pelts. It is conceivable that the environment around Agate Springs Ranch became much more hospitable to small furbearing animals, causing their numbers to increase, after James Cook planted hundreds of cottonwood trees and other non-native plants on the banks of the Niobrara and on the grounds around the Cook ranch complex of buildings. Beavers favored aspen for food, but also ate cottonwood, birch, elder, and willow. Harold Cook enjoyed at least occasional success trapping muskrat along the Niobrara River at the turn of the twentieth century.

In the early 1830s, three significant developments far from the serpentine banks of the upper Niobrara changed this river's marginal place in American fur trading. First, steamboat navigation on the Missouri River as far north as Fort Pierre (present-day central South Dakota) replaced the transport of goods by dugout canoe and keelboats. With the inaugural trip of the sternwheeler *Yellowstone* in 1832, the

¹⁵ Gail Evans-Hatch, telephone communication with H. David Evans, former Alaska trapper of muskrat and lynx on tributaries of the Yukon River between 1973 and 1983, who relocated to Tucson and Chiracahua National Monument, Arizona, April 6, 2007. A detailed description of trapping on the Yukon and its tributaries by Evans and other contemporaries can be found in Dan O'Neill, *A Land Gone Lonesome: An Inland Voyage Along the Yukon River* (New York: Counterpoint Press, 2006) and John McPhee, *Coming into the Country* (New York: Farrar, Straus and Giroux, 1977).

¹⁶ Farther to the northeast on Chadron Creek, south of present-day Chadron, a hand-forged beaver trap, dating from around 1820, was found and is now on display in the Museum of the Fur Trade in Chadron. Additionally, fur trapper Hubert Rouleau continued to trap for beavers on the lower White River into the 1840s. However, even small variations in vegetation that occur as one moves east or downstream along the White and Niobrara rivers and their tributaries can create a very different habitat and one more hospitable to beaver. Charles E. Hanson, Jr., and Veronica Sue Walters, “The Early Fur Trade in Northwestern Nebraska,” *Nebraska History* 57: 3 (Fall 1976), 296; Wishart, *Fur Trade of the American West*, 36.

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transport of tons of goods was now possible up and down the Missouri River. This development stimulated a great expansion of American fur trading enterprises on the northern Plains, controlled from St. Louis. Second, the market for beaver in Europe abruptly collapsed in the mid-1830s when beaver fur—pounded, stiffened, and rolled to make a felt-like material for hats—fell out of fashion. Before 1834, beaver had been the most valuable commodity in the entire fur trade system. The beaver hat's decline in popularity coincided with the emerging market for bison robes in the 1820s and 1830s. Further, bison meat served as a staple food for traders and Indians alike, and bison bone and fat were used to make tallow for candles. Bison migrated in loosely knit bands throughout the Niobrara and the neighboring White and Cheyenne river drainages, depending on seasonal weather conditions, and throughout the entire Great Plains in the 1830s, thus making the Agate Springs vicinity an important bison hunting destination. Finally, the rise of the American Fur Trading Company and its developing monopoly over fur trade in the early 1830s also contributed to bringing the upper Niobrara region into the upper Missouri River fur trading sphere.¹⁷

American Fur Company Empire on the Upper Niobrara, 1830s—1860s

In 1808, New York City native John Jacob Astor had founded the American Fur Company by a charter approved by the New York legislature, in response to Lewis and Clark's high praise of the fur-trapping potential in the newly acquired Louisiana Territory. Although Astor established the Fort Astoria trading post on the Columbia River just inland from the Pacific Coast as early as 1813, he did not venture into the Great Plains fur trade market until 1821. That year, Astor arranged with St. Louis mercantile agents Berthold and Chouteau to supply the American Fur Company with trade goods; and one year later, the American Fur Company created its so-called "Western Department," thus preparing to capture the fur trading business on the upper Missouri River. Only the French Fur Company and the Columbia Fur Company stood in the way of the American Fur Company's Western Department drive to monopolize the upper Missouri fur trade.¹⁸

The American Fur Company wrested control of the upper Missouri fur trade from both competing companies by incorporating them into its own organization. In 1826, Astor's close associate Ramsey Crooks placed the operation of the American Fur Company's Western Department in the hands of Pierre Chouteau, by then a partner in Pratte, Chouteau and Company. This act made the French Fur Company a unit of the American Fur Company. One year later in July 1827, the

¹⁷ Ted D. Regehr, "The Fur Trade," in *Encyclopedia of the Great Plains*, edited by David J. Wishart (Lincoln: University of Nebraska, 2004), 403; David J. Wishart, *The Fur Trade of the American West, 1807-1840: A Geographical Synthesis* (Lincoln: University of Nebraska, 1979), 27-37; Wood, "Fur Trade," 419. Also see Hiram Martin Chittenden, *The American Fur Trade of the Far West, Vol. 2* (Lincoln: University of Nebraska Press, 1986), 754-63.

¹⁸ Wood, "Fur Trade," 419; Wishart, "Chouteau," 413-14; David J. Wishart, "American Fur Company," in *Encyclopedia of the Great Plains*, edited by David J. Wishart (Lincoln: University of Nebraska, 2004), 410.

Columbia Fur Company entered an agreement with the American Fur Company to withdraw from the Great Lakes fur trade. Further, the Columbia Fur Company became incorporated into the American Fur Company and became known as the "Upper Missouri Outfit," or the "Northern Department." Thus, by the end of 1827, the American Fur Company had absorbed all of its fur trade competitors on the Great Plains. It had acquired numerous trading posts on the upper Missouri and its tributaries, in a territory that extended from the Platte River on the south to the Canadian border and from the Missouri River on the east to the Rocky Mountains.¹⁹ This vast territory encompassed the drainage of the upper Niobrara River.

As the American Fur Company gained control over trapping on the upper Missouri River, John Jacob Astor and Ramsey Crooks helped develop a fur trading strategy and system that ideally suited conditions on the Great Plains. Part of this fur trading system depended on Indians to provide the bison robes. Unlike trapping beaver in the Rocky Mountains, fur trading on the Great Plains depended on local Indians to kill and process the bison robes for trade. Only a few Indian tribes with skilled trappers participated in the Rocky Mountain beaver trade. But after the beaver market declined in the early 1830s, several Great Plains Indian tribes began enthusiastically producing bison robes. "The upper Missouri fur trade was," according to historical geographer David Wishart, "an Indian trade."²⁰

Native Americans on the northern Great Plains were frequently the first link in the entire trading system. They often led the way in scouting new territory for fur trading potential, and furnished traders and trading posts with food. Indians also procured a sizeable percentage of the processed bison robes. Typically, Indian men hunted bison cows and young bulls during the winter months when the fur was thickest. Native American women dressed the furs in preparation for spring sale to traders; one woman might prepare between twenty and thirty-five bison hides in a winter. The supply of bison robes was dictated less by the number of bison men could kill and more by the number of hides that the women could prepare. In the company's robust years of growth in the 1830s, the American Fur Company exported at least 25,000 bison robes every year from the Great Plains.

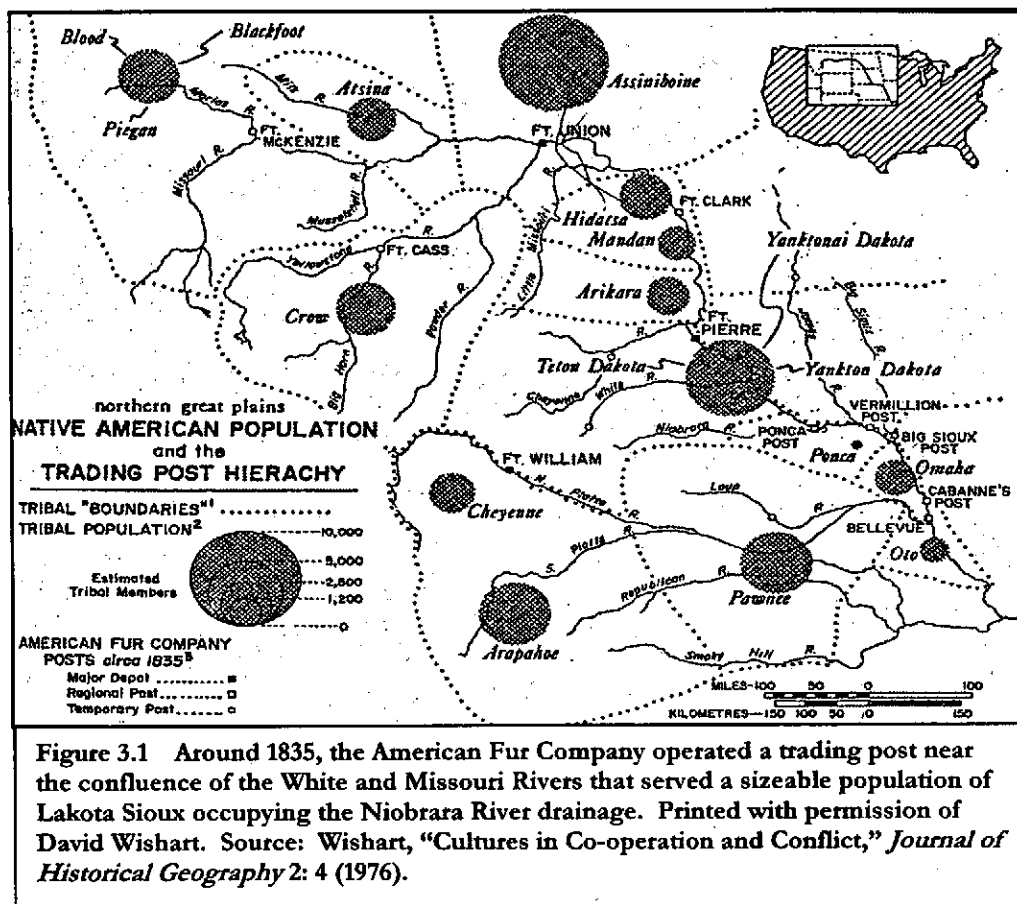
When Indians delivered the robes to trading posts, they were usually paid with a wide assortment of trade goods ordered by the American Fur Company from around the world: beads from Trieste, Italy; blankets from England and France; guns from Birmingham, England; traps and knives from Sheffield; vermilion pigment from China; and whiskey from various sources. Indians accepted only the finest goods in exchange for their superior bison robes. An American Fur Company agent stayed in Europe to monitor market conditions and maintain contracts with various European companies that produced trade goods. Once they arrived in St. Louis, trade goods were transported by steamboat each spring to different forts on the Missouri, moved farther upstream on keelboats, and, finally, transferred by various means to trading houses in the interior. Trading posts served multiple

¹⁹ Wishart, *Fur Trade of the American West*, 52-53.

²⁰ David Wishart, "Cultures in Co-operation and Conflict: Indians in the Fur Trade on the Northern Great Plains, 1807-1840," *Journal of Historical Geography* 2: 4 (1976), 312.

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purposes for Indians: they were general stores filled with utilitarian as well as ornamental goods, and they were social gathering places. The trading posts also served as “banks,” where credit for next year’s bison robes could be obtained in advance.²¹ “By 1850 Indians across the Plains had become integrated into the capitalist economy,” according to anthropologist William Swagerty.²² At mid-century, Indians produced an average of 100,000 bison robes annually.²³



Another part of this trading system depended on a hierarchy of trading posts that lined the Missouri and its tributaries. This network of trading posts expanded tremendously between the early 1830s and the 1850s in response to the growth of the lucrative bison robe market and the introduction of the steamboat on the Missouri River that greatly facilitated the transport of weighty bison robes and trade goods from around the world. In the early 1830s, the American Fur Company acquired several existing posts previously under the control of the French Fur

²¹ Wishart, “Cultures in Co-operation and Conflict,” 313, 319-24; Wishart, “American Fur Company,” 410.

²² Swagerty, “History of the United States Plains,” 277.

²³ *Ibid.*, 277.

Company and the Columbia Fur Company. The American Fur Company further expanded this network of posts across the central and northern Great Plains. In 1833, about 500 men were employed by the American Fur Company at trading posts spread throughout the upper Missouri River region.²⁴

The major organized hubs of the American Fur Company trading network became: Fort Union, established at the mouth of the Yellowstone River in 1829; Fort Pierre, founded on the Missouri River by Pierre Chouteau in 1832; and Fort William (later renamed Fort John, then Fort Laramie), established by three fur traders on the Laramie River near its confluence with the Platte in 1834. Major posts were usually quite substantial complexes comprising many buildings of various sizes, all enclosed by a high, fortified, palisaded wall. "These posts served as control points for the fur trade decision-making centers, collection foci for the furs from dependent regional posts, and major trading centers in their own right," writes Wishart.²⁵ They functioned as the regional headquarters of a company, like the American Fur Company, or of a trading outfit. Fifty to one hundred men worked at each of the main depots, where between \$15,000 and \$20,000 worth of trade goods were stored. Different Indian tribes tended to gravitate to different posts. Almost since its inception, Fort Laramie had been a gathering place for certain Oglala bands of the Lakota Sioux. Fort Tecumseh and, later, nearby Fort Pierre, on the other hand, was a central trading place for other Lakota and also Yankton Sioux Indians, who traded large quantities of bison robes there in the 1830s.²⁶

Regional posts of secondary importance in the Great Plains trading hierarchy were: Fort Clark (in present-day central North Dakota); Fort Piegan, later Fort McKenzie (on the upper Missouri in contemporary eastern Montana); Fort Cass (at the fork of the Yellowstone and Big Horn rivers in southeastern Montana); and a series of posts (Cabanne's, Big Sioux, Vermillion, and Ponca) all on the Missouri River above its juncture with the Platte. These secondary forts and posts existed to serve the needs of the various Indian tribes and bands in their immediate vicinity. They were constructed much more simply than the major posts and intended to last for a much shorter time. Secondary posts employed three to six men and stored \$500 to \$3,000 worth of trade goods. Finally, in addition to the major depots and the secondary posts, numerous temporary trading houses, sometimes called "wintering houses," completed the fur trading network hierarchy. Lacking the high, fortified, palisaded encircling walls of the major posts, these houses often were no more than rude log cabins or even skin lodges. Traders occupied these houses from late fall through early spring to serve the nearby Indian camps and villages and to

²⁴ Wishart, *Fur Trade of the American West*, 65.

²⁵ Wishart, "Cultures in Co-operation and Conflict," 312; Swagerty, "History of the United States Plains," 276; Charles Larpenteur, *Forty Years Fur Trader on the Upper Missouri: The Personal Narrative of Charles Larpenteur, 1833-1872* (Chicago: R. R. Donnelley & Sons Co., 1933, xviii).

²⁶ Wishart, "Cultures in Co-operation and Conflict," 318; Wishart, *Fur Trade of the American West*, 54, 65; William J. Hunt, Jr., "Trading Posts," in *Encyclopedia of the Great Plains* (Lincoln: University of Nebraska Press, 2004), 98.

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collect the products of the winter bison hunt. Small independent traders frequently used this type of post.²⁷

Wintering houses became a common part of the trading network during the lucrative bison robe period of expansion. In the vicinity of Fort William/Fort John alone, three other posts were constructed near the juncture of the Laramie and North Platte rivers, all built by different traders: For many years, wintering houses existed in the region encompassing the upper Niobrara and White rivers and Hat Creek in modern northwestern Nebraska. By the end of 1841, a substantial log trading house stood on Chadron Creek, a tributary of the White River. Other independents like John Richards and Geminien Beauvais operated small posts that were part of the much larger fur trading network across the northern Great Plains. Many of the men who operated these wintering houses north of the Platte had economic and social ties to American Fur Company trading posts on the North Platte, especially to Fort William on the Laramie River.²⁸

Perhaps the trading post of longest duration not far from Agate Springs was the Bordeaux wintering house on Bordeaux Creek, a tributary of the White River. In the fall of 1837, American Fur Company trader Frederick Laboue ordered the establishment of this post in the protected valley of Bordeaux Creek in order to take the greatest advantage of the trade of bison robes with the Indians who wintered and hunted bison in the area. Laboue, who with William Sublette had earlier founded Fort William (later Fort Laramie), soon selected James Bordeaux, known to the local Indians as "The Bear," to manage the trading post. Bordeaux and his two wives, Brule Lakota Sioux sisters, began spending their winters at the post as early as 1841. Bordeaux first worked for the American Fur Company as the post manager until the American Fur Company sold Fort Laramie to the federal government in 1849. He then went into business as an independent trader. Despite the existence of other trading posts in the vicinity, such as one operated about a mile away by fur trader Joseph Bissonette, James Bordeaux became singularly identified with trade on Bordeaux Creek and the upper White River region; by the mid-1800s, the area around the post became known as "Bordeaux's District." Bordeaux prospered. Eventually, he operated a store and ranch near Fort Laramie and had a stock ranch on Chugwater Creek in Wyoming. In 1868, he served as an interpreter at the Fort Laramie Treaty negotiations (see Chapter 5). During his absence from the post in later years, James Bordeaux's son, Louis, often ran the Bordeaux post. Finally, as the supply of bison diminished drastically and the movement and lifeways of the Oglala Sioux in the area were greatly restricted by settlers and U.S. government policies, Bordeaux let go of his interest in his trading post and other financial interests in his western properties. In 1872, he moved to Fort Randall, fifty miles up the Missouri from the confluence of the Niobrara and Missouri rivers. From his base there he supplied hay, firewood, and other supplies and services to the federal government. Undoubtedly, just as with many other former fur post traders, Bordeaux supplied the

²⁷ Wishart, "Cultures in Co-operation and Conflict," 313, 315; Wishart, *Fur Trade of the American West*, 59, 65; Swagerty, "History of the United States Plains," 277; Hunt, "Trading Posts," 98.

²⁸ Hanson and Walters, "Early Fur Trade in Northwestern Nebraska," 297, 303, 305.

government with some goods that were given as annuities and rations to Indians at agencies such as those at Red Cloud and Spotted Tail agencies in northwestern Nebraska and at agencies on the Great Sioux Reservation in southern South Dakota. James Bordeaux died of pneumonia at age sixty-eight in 1878.²⁹

After James Bordeaux left his trading post in the early 1870s, Francis Boucher, son-in-law of Chief Spotted Tail of the Brule Lakota Sioux, took over the operation of the post on Bordeaux Creek. For a while, he smuggled arms and ammunition to those Sioux resisting white acculturation and reservation life. In 1876, the army discovered Boucher's activity and ended it. By the mid-1880s, after the railroad and the first settlers had arrived, the Bordeaux post had fallen into disrepair. Archeological excavations of the Bordeaux trading post in the 1950s uncovered the hearthstones of the fireplace and the threshold stones in the entryway, as well as the structural arrangement of upright hand-hewn timbers. The subsequent reconstruction of Bordeaux Trading Post, completed with the utmost accuracy and with authentic materials, provides tangible evidence of one small part of the Missouri River trading system perfected by the American Fur Company. (Thorough interpretation of this period of history can be found in the nearby Museum of the Fur Trade in Chadron, Nebraska, about seventy-five miles northeast of Agate Springs.)³⁰

Throughout the fur trading period, the location of secondary and seasonal wintering houses often were established close to the tribal groups who supplied most of the bison robes. In the 1831—1832 season, for example, the Oglala requested a post at the mouth of the "*L'eau qui Court*" River (the location of Ponca Post), the Cheyenne asked for one between the forks of the Cheyenne River, and the Brule requested a post above the forks of the White River, according to Fort Pierre's head trader.³¹

During the halcyon days of bison trade in the 1830s, John Jacob Astor, founder and developer of the American Fur Company, decided to let go of his company. Old and ailing, Astor sold the Northern Department, encompassing the Great Lakes region, to his associate Ramsey Crooks. The St. Louis mercantile firm of Pratte, Chouteau and Company purchased the Western Department. Soon the Pierre Chouteau company of traders purchased the log-constructed Fort William, renamed it Fort John, and eventually rebuilt it of adobe.³² Under Pierre Chouteau the fur trade system developed by the American Fur Company continued to operate on the Great Plains into the 1860s, a decade after the sale of Fort John/Fort Laramie in 1849 and Fort Pierre in 1855, both to the federal government.³³ By the 1870s the historic fur trade with the Indians dissolved because Indians had no bison robes to

²⁹ Museum of the Fur Trade staff, *The Jewel Box on Bordeaux Creek: The Museum of the Fur Trade Story* (Chadron, NE: Museum Association of the American Frontier, 1999), 27-30; Hanson and Walters, "Early Fur Trade in Northwestern Nebraska," 297, 303, 305

³⁰ Museum of the Fur Trade staff, *The Jewel Box on Bordeaux Creek*, 27, 29-30.

³¹ Wishart, "Cultures in Co-operation and Conflict," 320.

³² Hanson and Walters, "The Early Fur Trade," 296-98; Robert W. Frazier, *Forts of the West* (Norman: University of Oklahoma Press, 1972), 136.

³³ Wishart, "American Fur Company," 410.

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sell. Traders at Indian agencies no longer sold the old trade goods from around the world, but now dealt with annuity goods like tepee canvas, blankets, needles, and axes. Some traders left the Indian agencies altogether and pursued new lines of business, like stagecoach companies. Frank Yates and W. H. Brown, who had fur trade operations at the Red Cloud Agency on the White River near the confluence with Soldier Creek, established a stage line through the Red Cloud and Spotted Tail agencies and on to the Black Hills gold mining camps. Another former Red Cloud Agency trader, John W. Dear, started a stage line between Sidney, Nebraska, south of the Platte River, and the Red Cloud Agency; he also built stage stations and ranches along the Niobrara River, Snake Creek, and White Clay Creek. For a very brief time in the 1870s and early 1880s, the traders and transporters of goods to the Red Cloud and Spotted Tail agencies northeast of Agate Springs “formed the last link in the commercial chain between whites and Indians in pre-reservation Sioux history. Their demise marked . . . the conclusion of the old fur trade in northwestern Nebraska.”³⁴

Fur Trading Trail near Agate Springs

The upper Niobrara River in the vicinity of Agate Springs was part of this world of international fur trade involving Indians, Euro-Americans, and Europeans in a far-reaching capitalist economy. It was during the Chouteau company’s ownership of the former Western Department of the American Fur Company that a regular trade trail was developed between Fort John (later Fort Laramie) and Fort Pierre, 300 miles to the northeast. From Fort Pierre, a major depot for collecting furs, steamboats carried weighty bison robes down the Missouri River to St. Louis, while trade goods came up the Missouri to Fort Pierre. The trail from Fort John to Fort Pierre headed east down the North Platte River, then swung northeast across Rawhide Creek (in present-day eastern Wyoming). The fur traders’ trail then crossed the Niobrara River close to but west of the Agate Springs Ranch, before continuing north and east to the headwaters of the White River and on to the Badlands where it turned north to the Bad River and to Fort Pierre. Several traders associated with the American Fur Company’s succeeding Chouteau company operated in the White River region and used the fur trade route across the Niobrara River near Agate. James Bordeaux operated small houses for these traders on Bordeaux Creek. Fur traders continued to use this Fort Laramie—to—Fort Pierre trail regularly until 1855, when the U.S. Army bought Fort Pierre as a military fort after the fur trading empire had nearly vanished.³⁵

³⁴ Tom Buecker, “Red Cloud Agency Traders, 1873-1877,” *The Museum of the Fur Trade Quarterly* 30: 30 (Fall 1994), 13, 4-14.

³⁵ Hanson and Walters, “Early Fur Trade in Northwestern Nebraska,” 298, 300; Roberts, “Preliminary Sketch of the History of Agate Springs Ranch,” 3-4.

U.S. Government Expeditions, 1850s

Fort Laramie and Fort Pierre in the 1850s continued to serve as important destinations linked by a road that crossed the upper Niobrara near Agate Springs. With the sale of Fort John (renamed Fort Laramie in 1849) and of Fort Pierre in 1855 to the U.S. Army, these outposts assumed a much more military than commercial function and appearance. Now, traffic over the Fort Laramie—to—Fort Pierre Road and between the two forts generally included military officers and personnel on horseback and in wagons.

In the 1850s and later, the U.S. Army played two principal roles in the West. The first was to protect overland emigrants traveling across Indian hunting grounds from possible conflicts with Native Americans like the Oglala and Brule Lakota Sioux, who occupied a large swath of territory in present-day northwest Nebraska, eastern Wyoming, and southeastern Montana. Secondly, the U.S. Army had been charged with amassing scientific information about the West. One branch of the army in particular, the Corps of Topographical Engineers, was charged with all civil works, such as harbor and river improvements and road construction. Their general task was to explore, record, and develop an undeveloped continent. The Corps “operated under orders to make a general examination of the plants, animals, Indians, and geological formations of the country traversed.”³⁶ Created in 1838, the Corps of Topographical Engineers consisted of a small, elite group of fewer than forty officers charged with surveying and mapping the nation’s natural and human resources with accuracy and consistency. In an era of exuberant imperialistic and expansionist impulses, known as “Manifest Destiny” and embraced by the federal government from around 1840 to the Civil War, the Corps of Topographical Engineers engaged professional scientists and artists to complete a grand geographic inventory of natural and human resources of the entire trans-Mississippi West. This massive scientific inventory of the mid-1800s became “one of the basic works of the Great Western Reconnaissance,” according to historian of the West William Goetzmann.³⁷

Beginning in 1855, the U.S. Army sponsored a series of expeditions to open up the Dakota Territory to settlement and to establish a network of trails and wagon roads for moving troops and supplies through unsettled Sioux country. Gouverneur Kemble Warren, a lieutenant in the Corps of Topographical Engineers, led the first of these forays.³⁸ Born on January 8, 1830, in Cold Springs, New York, G. K. Warren grew up along the bucolic banks of the Hudson River near West Point Military Academy. At age sixteen, he entered the academy in a class of eighty cadets. Four years later in 1850, he graduated second in his class of forty-three. When asked to choose his military branch of service, twenty-year-old Warren chose the Corps of Topographical Engineers; Warren’s wide-ranging interests in paleontology,

³⁶ William H. Goetzmann, *Exploration & Empire: The Explorer and the Scientist in the Winning of the West* (New York: W. W. Norton & Company 1966), 303.

³⁷ Goetzmann, *Exploration & Empire*, 302.

³⁸ *Ibid.*, 309.

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ethnology, zoology, astronomy, meteorology, and linguistics, and his adeptness at mathematics made him ideally suited for the Corps. In addition to these interests and skills, Warren brought to the Corps the traits of precision, efficiency, thoroughness, dependability, and dedication. For four years, Warren worked first as an assistant engineer on the topographical and hydrographical survey of the Mississippi Delta, then on the canal around the Ohio River falls at Louisville, followed by surveys of the Rock Island and Des Moines rapids on the Mississippi. He then was called upon to expand current knowledge of the extensive territory west



Figure 3.2 In 1855 and 1857, Lieutenant Gouverneur Kemble Warren explored the region of the upper Niobrara River for the U.S. Army Corps of Topographical Engineers. Courtesy of the Nebraska State Historical Society, Lincoln.

of the Missouri River. Handsome, slim, with black hair and moustache, the young 5'6," 125-pound twenty-five-year-old embarked on his 1855 expedition across western Nebraska and southern Dakota with unrestrained enthusiasm.³⁹

From April 29 to June 1, 1855, Lieutenant Warren steamed up the Missouri River from St. Louis in the *Clara*, leading his survey expedition all the way to Fort Pierre, recently purchased from the American Fur Company by the U.S. Army and converted from a major fur trading depot to a military post. His assignment was to lay out a military reserve for Fort Pierre and to examine and inventory the Missouri River upstream to the mouth of the Cheyenne River. After surveying the army's new acquisition, Warren left Fort Pierre on August 8 with six fur traders and headed directly south to Fort Kearny on the Platte River. There, he joined Colonel W. H. Harney in an attack against the Brule Lakota Sioux at Ash Hollow in the co-called "Battle of the Blue Water Creek." Warren's stature and his position as Harney's assistant won

him the Brule sobriquet of "Little Chief." From Ash Hollow, Warren proceeded west to Fort Laramie.⁴⁰

³⁹ James A. Hanson, *Little Chief's Gatherings: The Smithsonian Institution's G. K. Warren 1855-1856 Plain's Indian Collection and the New York State Library's 1855-1857 Warren Expedition Journals* (Crawford, NE: The Fur Press, 1996), 3-4; Frank N. Schubert, "Introduction," in *Explorer on the Northern Plains: Lieutenant Gouverneur K. Warren's Preliminary Report of Exploration in Nebraska and Dakota, in the Years 1855-'56-'57* (Washington, DC: Government Printing Office, ?), vii.

⁴⁰ Lieutenant G. K. Warren, *Explorations in the Dakota Country, in the Year 1855*, Senate, Executive Document No. 76, 34th Cong., 1st Sess. (Washington, DC: A. O. P. Nicholson, Senate Printer, 1856), 9-13, 24-25, map compiled by Warren; Goetzmann, *Exploration & Empire*, 309; Roberts, "Preliminary Sketch of the History of Agate Springs Ranch," 5-6; Hanson, *Little Chief's Gatherings*, 4.

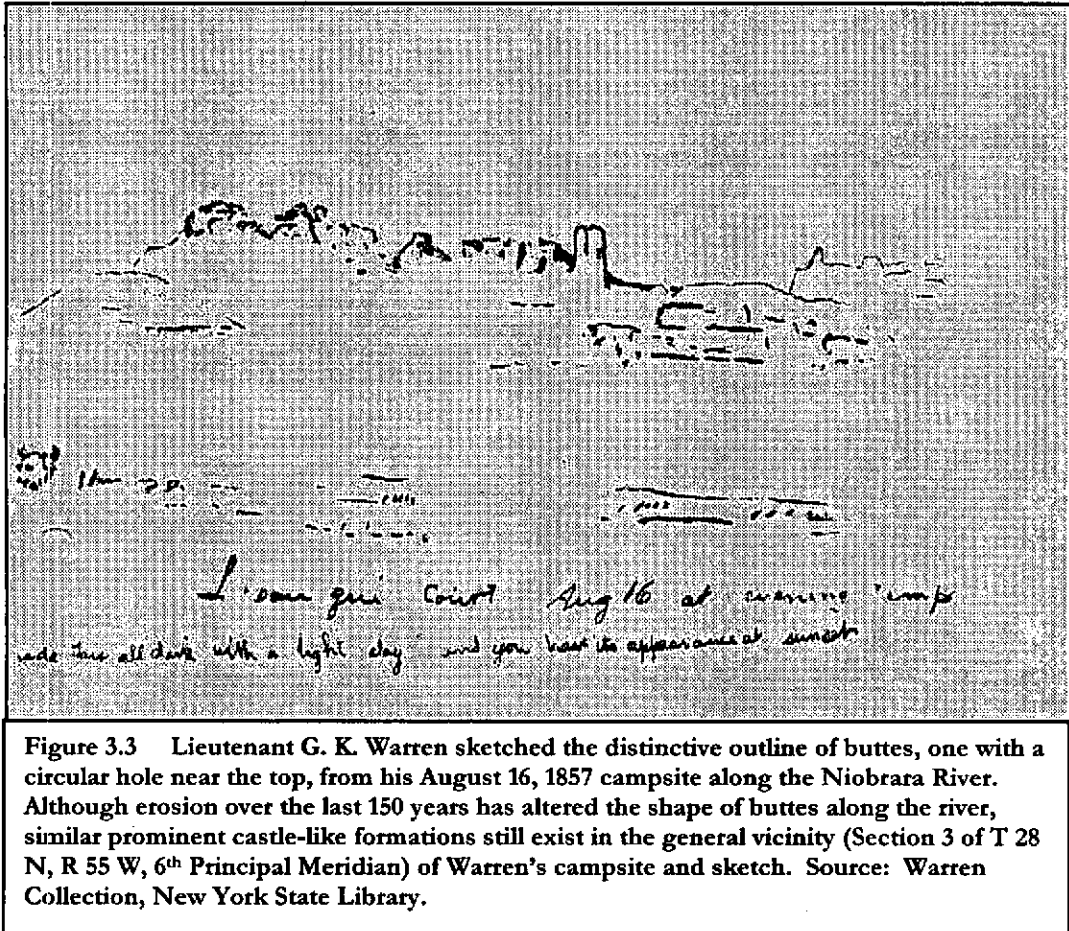


Figure 3.3 Lieutenant G. K. Warren sketched the distinctive outline of buttes, one with a circular hole near the top, from his August 16, 1857 campsite along the Niobrara River. Although erosion over the last 150 years has altered the shape of buttes along the river, similar prominent castle-like formations still exist in the general vicinity (Section 3 of T 28 N, R 55 W, 6th Principal Meridian) of Warren's campsite and sketch. Source: Warren Collection, New York State Library.

Believing that a military route might be needed between Fort Laramie and Fort Pierre, Lieutenant Warren struck out for Fort Pierre, 325 miles to the northeast, at the end of September 1855. Noted geologist Ferdinand V. Hayden accompanied Warren. Along the way, Warren and one of his companions, Captain John Todd (cousin of Mrs. Mary Todd Lincoln) recorded distances in a log and sketched noteworthy landscape features. Warren may have followed stretches of the fur trading route between Forts Laramie and Pierre. After crossing Raw Hide Creek, Warren's party came to the *L'eau qui Court* (Niobrara) River on October 1 and crossed it just east of the 104th meridian, near the present Nebraska-Wyoming border. Lieutenant Warren's 1855 expedition presumably crossed the Niobrara about twelve miles west of Agate Springs. Warren commented in his log about the fine grass and the absence of "wood" (trees).⁴¹

Two years passed before Lieutenant G. K. Warren returned to the upper Niobrara. His 1857 survey proved to be his last western expedition. His orders

⁴¹ Roberts, "Preliminary Sketch of the History of Agate Springs Ranch," 6.

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instructed him to gather information about the Loup River and the Niobrara River and to make a reconnaissance of the Black Hills. He was also directed to locate and survey possible routes between military posts in Nebraska Territory, Minnesota, and Iowa—specifically between Fort Snelling, at the juncture of the Missouri and Mississippi rivers, Sioux City on the Missouri River, and Fort Laramie and South Pass beyond. Warren was instructed to find routes that the army could use to stage operations against the Lakota Sioux in their own territory. Joining Warren again on the 1857 expedition was geologist Hayden, along with meteorologist J. Hudson Snowden, topographer N H. Hutton, medical doctor Samuel Moffett, and several topographical assistants, including, C. J. Carrington and P. M. Engel. Warren's thirteen-year-old brother, Edgar Warren, also accompanied the expedition as an assistant. Like Warren and Snowden, Edgar Warren kept his own record of the party's travels. A military escort of thirty men under Lieutenant McMillan also was assigned to the Warren expedition.⁴²

Lieutenant G. K. Warren set out from St. Louis on the steamboat *Florence* in early June 1857. After reaching Omaha, where Warren's party obtained additional pack animals and supplies and got organized, he left for Sioux City. Arriving there on July 1, Warren met his military escort and proceeded overland with an entourage of horses, mules, and wagons to the mouth of the Loup Fork (near present Columbus). Here, J. H. Snowden, leading another outfitted wagon train, met Warren's main party on July 15. The Warren and Snowden contingents continued west together, up the middle fork of the Loup River to its source in present-day north-central Nebraska. Heading northwesterly from there, the party crossed the Sand Hills before striking the *L'eau qui Court*, between the 102nd and 103rd meridians. On Sunday, August 16, Warren's party followed the north side of the Niobrara and according to Warren "travelled 21 miles; stream continues about 10 to 15 yards wide, very crooked and full of rapids. very good road. no wood in the valley or on the bluffs."⁴³ Lieutenant Warren sketched the bluffs south of the Niobrara River from this approximate location, capturing on paper the rough outline of what may be the fossil quarry hills. He also sketched the ridge profile north of the *L'eau qui Court* from his party's encampment on August 16. Although erosion has since modified some of its features, the northern skyline in Warren's sketch is now thought to be part of the eastern scenic easement north of River Road in the park.⁴⁴ His log indicates that he was in the vicinity of the Agate fossil quarries. On August 17, Warren's party continued upstream two or three more miles to "the place where the old road crosses and leaves Rapid River [Niobrara]."⁴⁵ Evidently, the Fort Laramie-to-Fort Pierre traders' trail that crossed the Niobrara near Agate Springs Ranch was still visible in 1857.

⁴² Hanson, *Little Chief's Gatherings*, 149-50; Robert's "Preliminary Sketch of the History of Agate Springs," 7; Schubert, "Introduction," in *Explorer on the Northern Plains*, xvi.

⁴³ Hanson, *Little Chief's Gatherings*, 149-57; Robert's "Preliminary Sketch of the History of Agate Springs," 7.

⁴⁴ Mark Hertig, Agate employee for several years.

⁴⁵ Hanson, *Little Chief's Gatherings*, 157; Schubert, "Introduction," in *Explorer on the Northern Plains*, xxiv-xxv.

Upon arriving at Fort Laramie on August 19, Lieutenant Warren decided to divide his party into two groups. Warren, along with Ferdinand Hayden, proceeded north toward the Black Hills. On September 12, Lieutenant McMillan and J. Hudson Snowden led their party from Fort Laramie to the Niobrara, recording observations as they went. On September 14, 1857, the day after the party reached the *L'eau qui Court*, Snowden surveyed the Niobrara in the vicinity of the crossing of the Fort Laramie-to-Fort Pierre traders' trail. Snowden spent the day recording a twelve-mile stretch of the Niobrara in his journal.

I followed a well worn Indian trail along the valley which varies in width from $\frac{1}{4}$ to $\frac{3}{4}$ of a mile, enclosed between rather low bluffs, composed of soft rock or indurated clay in places standing up in denuded masses. The stream is very crooked winding through the valley cutting first the bluffs on one then on the opposite side. The trail crosses the river seven times before I reached the road (some 16 miles from camp), at good fords, requiring a little repair. I went four miles beyond the place where the road crosses and from a hill could see 7 or 8 miles up the valley. The river turns more to the south. It would be impossible for wagons to follow the river beyond this point on account of the Bluffs which are about 120 ft. high and much broken. The stream is 8 or 10 ft. wide when I finished the survey.⁴⁶

Along this twelve-mile stretch of the serpentine Niobrara River, Snowden "saw no wood," although "the grass along the bottom is very good intermixed with rushes."⁴⁷

Snowden continued down the Niobrara recording observations of the river as his party traveled. One month later, the Warren party met the McMillan/Snowden party on the Niobrara just west of the Sand Hills. The united party continued east down the Niobrara and arrived at Fort Randall, at the mouth of the river, by the end of October.⁴⁸

Lieutenant G. K. Warren's 1857 expedition convinced him that the Niobrara River was not a suitable route for travel between Fort Randall (which had supplanted Fort Pierre in 1855) and Fort Laramie. He described the upper Niobrara in general terms in a January 1858 letter to Honorable George W. Jones.

The Niobrara, being a stream heretofore unknown, and one in which the people of Nebraska feel much interest, I shall describe it in detail. This river is about 450 [*sic*, 350] miles long. From its source to longitude $103^{\circ} 15'$, it is a beautiful little stream of clear running water, of a width of from 10 to 15 feet, gradually widening as it descends. Its valley furnished here very good grass, abounding in rushes or prele, but is for the most part destitute of wood even for cooking. After flowing thus far it rapidly widens, till in longitude $102^{\circ} 30'$, it attains a width of 60 to 80 yards; its valley is still quite open and

⁴⁶ Hanson, *Little Chief's Gatherings*, 181.

⁴⁷ *Ibid.*, 181.

⁴⁸ *Ibid.*, 157-69, 179-89; Roberts, "Preliminary Sketch of the History of Agate Springs," 7-8.

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easy to travel along, but destitute of wood except occasional pines on the distant hills to the north. . . . The region is a perfect paradise for savage life, and the Brules who now have possession of it, probably value it as highly as ever human being did a home. Their indignation was great at our intrusion among them. . . . Niobrara is a very shallow and 'swift flowing stream,' as the Canadians say 'Leau qui court,' abounding in rapids in two-thirds of its upper course.⁴⁹

Despite his appealing description of a clear-running stream, Warren concluded that the Platte River, rather than the Niobrara, provided the most practical route from Sioux City, on the Missouri River, across present-day Nebraska to Fort Laramie and on to the Pacific Ocean.

Without a doubt, these regions will yet be inhabited by civilized men, and the communications with the east will require railroads independent of the wants of an interior overland route to the Pacific. . . . The Niobrara apparently presents a more short and direct route to the interior than the Platte, but its natural features are not so favorable. . . . the valley of the Platte offers a route not surpassed for natural gradients by any in the world.⁵⁰

In conclusion, Warren declared that the Platte River was "best adapted for locating a railroad to connect the settlements to be formed in the mountains with those along the Missouri River."⁵¹ Warren's recommendation to build a transcontinental railroad along the Platte, completed twelve years later, ultimately slowed the process of Euro-American settlement along the upper Niobrara River and kept the Agate Springs area far removed and remote from development for nearly twenty-five more years.

Overland Emigrants Pass through Western Nebraska

Lieutenant G. K. Warren's assessment of northwestern Nebraska did nothing to encourage permanent settlement there. West of the 97th meridian, Warren declared that the unfavorable climate and the limited fertility of the soil would deter permanent settlement in the "Great American Desert." Additionally, Warren

⁴⁹ Lieutenant G. K. Warren, "Letter of Lieutenant G. K. Warren, Top. Eng., to the Hon. George W. Jones, Relative to His Explorations of Nebraska Territory" (Washington, DC: Corps of Topographical Engineers, January 29, 1858), 9-10, 11, 12; Lieutenant G. K. Warren, *Preliminary Report of Explorations in Nebraska and Dakota in the Years 1855-'56-'57*, reprint (Washington, DC: Government Printing Office, 1875), 40.

⁵⁰ Warren, "Letter of Lieutenant G. K. Warren," 15.

⁵¹ Quoted in Roberts, "Preliminary Sketch of the History of Agate Springs," 8. Also see Paul E. Cohen, *Mapping the West: America's Westward Movement, 1524-1890* (New York: Rizzoli, 2006), 172-75.

characterized the region as gloomy. "The scenery is exceedingly solitary, silent, and desolate and depressing to one's spirits," Warren wrote.⁵²

In fact, westward migrating emigrants never had any intention of traveling only as far as the arid short-grass prairie of the High Plains. Their destination was the relatively open rolling hills of the Willamette Valley and Puget Sound region of the Pacific Northwest. In 1841, a group of around 100 emigrants headed west from Independence, Missouri. The following year, more than 200 people and 18 wagons rolled west. In 1843, the year of the so-called Great Migration, an estimated 900 Anglo-Americans (including around 130 women and 610 children), 100 wagons, and some 700 oxen and cattle made the 2,000-mile, seven-month trip across the plains and over the mountains to the Columbia River. After the discovery of gold in California, the number of emigrants heading west—mostly single men bound for California—soared to around 30,000 in 1849 and about 55,000 in 1850. After 1852, the number of emigrants traveling to California dropped, as word of unrealized gold fortunes in California spread, and the Pacific Northwest regained its appeal, especially to families interested in farming. Overland migration to the Pacific Northwest dropped off after 1854. Periodic mineral discoveries elsewhere in the West—in the Colorado Rockies, in the Nevada Comstock, in Montana, and in the South Dakota Black Hills—caused surges in the flow of emigrants traveling overland. Their destination was never the arid High Plains; the goal was always to pass through the region as quickly as possible. By 1866 a staggering 350,000 people had migrated to the West, the majority traveling between 1849 and 1853.⁵³ With each passing year, more information about the routes west and travel conditions was gained and shared by an increasing number of emigrants.

The North Platte and Platte rivers, flowing eastward across Nebraska about forty miles south of Agate Springs, early on became the emigrant highway to the West. Known as the Great Platte River Road, the broad, flat, sandy Platte bottomland was the favored route of emigrants headed for Oregon Country and California (traveling on the south and later north sides of the Platte) and for Mormons destined for Salt Lake (traveling on the north side of the river). New cutoff routes from the Missouri River to the Platte opened up almost yearly, creating a fan-like configuration of wagon roads emptying into the Great Platte River Road. Farmers and merchants soon settled along waterways and emigrant routes in the much moister eastern half of Nebraska in the 1850s and 1860s. In the arid west few travelers stopped, settled down, and attempted to make a living. This was a region to pass through without pausing.⁵⁴ This was "a place on the way to somewhere else."⁵⁵

⁵² Quoted in Kurt M. Clark, "An Environmental History of the Niobrara River Basin" (M.A. thesis, University of Nebraska, Lincoln, 1997), 26.

⁵³ Merrill J. Mattes, *The Great Platte River Road* (Lincoln: University of Nebraska Press, 1969), 13-23. Susan Badger Doyle and Fred W. Dykes, *The 1854 Oregon Trail Diary of Winfield Scott Ebey* (Independence, MO: Oregon-California Trails Association, 1997), 1.

⁵⁴ Mattes, *Great Platte River Road*, 13-23; Olson and Naugle, *History of Nebraska*, 1-1-16.

⁵⁵ Frederick C. Luebke, *Nebraska: An Illustrated History* (Lincoln: University of Nebraska Press, 1995), 7.

Military and Trade Routes Traverse the High Plains

In the 1860s and 1870s, military and commercial endeavors perpetuated the precedent of passing through northwestern Nebraska's High Plains. Sioux City served as the jump-off point for one entrepreneurial exploit in 1865 to open a road across Nebraska, Wyoming, and Utah all the way to the gold and silver fields in western Nevada's Comstock mineral region. With the Civil War nearly over, Congress passed legislation, which President Abraham Lincoln signed in March 1864, calling for the construction of wagon roads in the territories of Nebraska, Dakota, Montana, and Idaho. This legislation reactivated the federal road surveys begun several decades earlier, which aimed to facilitate and protect the westward movement of emigrants. The March 1865 act provided for the construction of four wagon roads, one of which was to extend from the mouth of the Niobrara across northern Nebraska to the mining region centered on Virginia City, Montana. In the mid-1860s, the Niobrara-Virginia City Road was viewed as the most feasible and the safest route for emigrant trains traveling from the Central Plains to the Montana region. The army projected that the road would follow the Niobrara River before veering northwest and crossing the White River, then continue northwest and cross several tributaries of the Yellowstone River in northeastern Wyoming before heading west along the Yellowstone and crossing the upper Missouri River to Virginia City, Montana. An eastern branch of this road would lead to Omaha. Merchants and land promoters in towns near this road, especially those in Omaha and Sioux City on the Missouri River below the mouth of the Niobrara, eagerly welcomed the profits anticipated from the road's construction, and supported it wholeheartedly. The *Sioux City Journal* had, in fact, spearheaded the popular movement to secure federal funding for the Niobrara wagon road project. Although earlier federal road surveys had been funded and conducted by the U.S. Army's Corps of Topographical Engineers, these four roads were to be funded, surveyed, located, and constructed by the Department of the Interior.⁵⁶

James A. Sawyers of Sioux City, Iowa, was appointed to lead the Niobrara-Virginia City Road survey expedition. Sawyers came to the position with previous military experience, having served in the cavalry in the Mexican American War of 1846—1848, in the Sioux City, Iowa, volunteer cavalry in the early 1860s, and in the Northern Border Brigade of the Iowa militia. In early June 1865, Sawyers and his fifty-three men and fifteen supply wagons along with an escort train of twenty-five wagons assembled at the mouth of the Niobrara River. A private freighting company from Sioux City provided an additional thirty-six wagons with supplies. Sawyers's party left the Niobrara mouth on the Missouri on June 13. After following the Niobrara more than two-thirds of the way across the state to some point east of Agate Springs, the Sawyers expedition headed northwest toward the White River, and across the Yellowstone River tributaries. Sawyers completed such improvements as bridges and fording places across rivers and creeks, as his party

⁵⁶ W. Turrentine Jackson, *Wagon Roads West: A Study of Federal Road Surveys and Construction in the Trans-Mississippi West, 1846-1869* (New Haven, CT: Yale University Press, 1965), 281-87.

reconnoitered their route. After traveling a total of 1,039 miles, experiencing many delays, producing confused and contradictory travel reports, and confronting Indians, whose bison hunting territory Sawyers crossed, the party reached Virginia City. Sawyers led a second Niobrara-Virginia City road-building expedition in 1866, following much the same route as the previous year but shortening it by 100 miles and one and one-half months. The 1866 expedition proved to be the last one over this road. Progress on the transcontinental Union Pacific Railroad just eighty miles to the south destined the Niobrara wagon road to redundancy.⁵⁷

This transpired less than five years after Lieutenant G. K. Warren had penned his recommendation that a transcontinental railroad follow the Platte River. In June 1860, Congress authorized and appropriated money for the construction of a telegraph line from St. Joseph on the Missouri River to San Francisco—along the waterways of the Platte River. Two years later, Congress chartered the Union Pacific Company to build the eastern end of a transcontinental railroad from Omaha. Congress also gave financial assistance to the Central Pacific Railroad to complete the western end of the railroad. This 1862 congressional act further subsidized the railroad construction by giving the two railroads a government loan plus ten one-mile square sections of public-owned land for each mile of track laid. The Union Pacific began construction of the rail line west from the Missouri just as the Civil War ended in 1865. Many pioneer settlements sprang up along the railroad as it moved west along the Platte River. Indians who occasionally looted railroad supply wagons and attacked construction crews in western Nebraska slowed progress there. By late 1867, however, the Union Pacific reached Cheyenne, Wyoming. Only months earlier, the admittance of Nebraska to the Union as the thirty-seventh state on March 1, 1867, added impetus to the surge of permanent settlers west from the Missouri River along the Elkhorn and Platte rivers. Most settlers stopped halfway across the state, and few would arrive in northwestern Nebraska for another twenty years—when a railroad reached that remote corner of the state. On May 10, 1869, the Union Pacific rails joined those of the Central Pacific in Promontory Point, Utah, a few miles west of Ogden. In the 1860s and 1870s, the Union Pacific constructed various branches off its main line along the Platte River, while several smaller independent railroad companies built short rail lines usually from the Missouri River west to Lincoln, Kearney, Central City, Hastings, and Blair. Although distant from the Niobrara River, the shipment of people, goods, and animals by rails in eastern Nebraska and along the Platte would eventually encourage the arrival of permanent settlers along the upper Niobrara River to the north.⁵⁸

In the mid-1870s, the news of gold discovery in the Black Hills in 1874 caused the immediate rush of eager miners into the region. The subsequent transfer by treaty of the Hills from the Indians to the U.S. government spawned great unrest among Oglala and Brule Lakota Sioux Indians at Red Cloud and Spotted Tail agencies on the White River. Both events brought increased military and commercial

⁵⁷ Roberts, "Preliminary Sketch of the History of Agate Springs Ranch," 9-10; Jackson, *Wagon Roads West*, 287-96.

⁵⁸ Olson and Naugle, *History of Nebraska*, 112-16, 156-57; Luebke, *Nebraska*, 59-65, 88-92.

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freight traffic through northwestern Nebraska. In 1874, one military entourage came very close to the future Agate Springs Ranch. The so-called Sioux expedition, consisting of 402 infantry and 547 cavalry, left Fort Laramie on a cold March 2nd day and headed north across Raw Hide Creek and northeast to the Niobrara. The troops followed the still-visible fur traders' trail between the American Fur Company main posts of Fort William/Fort John and Fort Pierre, crossing the Niobrara just west of Agate Springs, sixteen miles upstream. From here the Sioux expedition continued northeast to the Red Cloud Indian Agency on the White River.

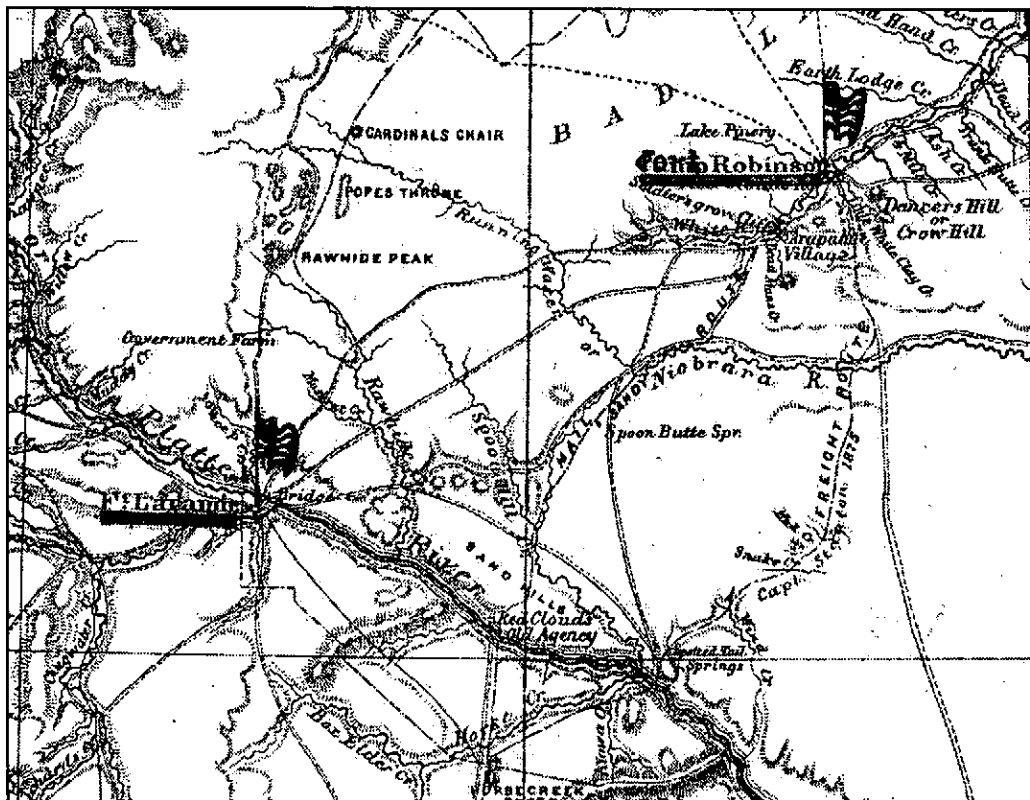


Figure 3.4 This section of an 1876 U.S. War Department map highlights Fort Laramie and Fort Robinson and the routes of travel between the two across the Niobrara River near Agate Springs. "Red Cloud's Old Agency" is shown on the Platte River. Source: "War Department Map of the Yellowstone and Missouri Rivers and Their Tributaries Explored by Capt. W. F. Reynolds," 1859-60, revised 1876. Courtesy of the Nebraska State Historical Society.

That same year, the completion of Camp (soon Fort) Robinson, near the Red Cloud Agency on the White River, prompted the regular passage of troops and supplies between Fort Laramie and Fort Robinson over a road that became known as the "soldier road." This wagon track crossed the Niobrara and passed directly through the future Agate Springs Ranch. The Fort Laramie-to-Fort Robinson Road may have followed some sections of the old traders' trail. In the late 1930s, James Cook recalled that the "old 'short-cut' pack trail between Fort Laramie . . . and Fort

Robinson, Nebraska, crossed the river” at the Agate Springs site, later selected by Elisha Graham for a cattle ranch.⁵⁹ In 1875 another military expedition, this one led by Captain W. S. Stanton, crossed the Niobrara River a few miles east of Agate Springs when he surveyed a mail road from Cheyenne to Red Cloud Agency on the White River.⁶⁰

Gold discovery in the Black Hills aroused an entrepreneurial spirit not only among miners but also among those supplying miners with necessary goods. Merchants and traders in every town within striking distance of the Black Hills developed plans to open roads to the Black Hills. Sidney, situated on Lodgepole Creek about thirty miles south of the North Platte River and on the Union Pacific Railroad one-hundred miles southeast of Agate Springs, received supplies directly from Omaha and Chicago. Merchants and commercial boosters in both Omaha and Sidney speculated that a road from Sidney to Red Cloud Agency and the nearby Fort Robinson, then on to the Black Hills would benefit everyone along the road as well as merchants and freighters in Omaha. During the winter of 1875—1876, ambitious Omaha merchants of financial means contacted veteran freighter and bridge builder Henry T. Clarke to investigate the feasibility of building a bridge across the North Platte River, thirty miles north of Sidney (at the future site of Camp Clarke Bridge and Military Post and, eventually, Bridgeport). After Clarke’s reconnaissance and report on the bridge project, construction of the bridge began. The 2,000-foot-long, sixty-one-truss bridge, completed in June 1876, became the first bridge in Nebraska to cross the North Platte River and it marked the substantial kickoff of the Sidney-to-Black Hills Road.⁶¹ From Sidney this freight road crossed the Camp Clarke Bridge over the North Platte, continued directly north across Snake Creek at the Snake Creek Ranch operated by long-time trader John W. Dear, and proceeded to “Running Water Station” on the Niobrara, about eighteen miles east of Agate Springs Ranch.⁶² From there the Sidney Road went on to Fort Robinson and the adjoining Red Cloud Agency before continuing to Buffalo Gap, Custer, and finally Deadwood in the northern Black Hills, a total of 260 miles from Sidney.

Bridge-builder Henry Clarke soon afterward initiated a small-scale pony express service that carried letters and newspapers over the Sidney Road. He operated his “Centennial Express,” named after the centennial of the signing of the Declaration of Independence, until 1877. Several stage lines, including the Sidney & Black Hills Stage, the Western Stage Line, and stages operated by John W. Dear, also transported goods in high-walled wooden freight wagons. The entire “Sidney Short Route,” as it was called, became well defined and had numerous road ranches for freighters’ and emigrants’ replenishment and rest. Railroad companies operating from Chicago and Omaha even began promoting the Sidney-to-Black Hills stages by

⁵⁹ James H. Cook, “Establishment of First Cattle Ranch on Niobrara River,” in *Pioneer Tales of Nebraska Panhandle*, edited by A. B. Wood (Gering, NE: Courier Press, 1938), 195.

⁶⁰ Roberts, “Preliminary Sketch of the History of Agate Springs Ranch,” 10-11; Harold J. Cook, *Tales of the 04 Ranch* (Lincoln: University of Nebraska Press, c. 1956), 1.

⁶¹ Guy P. Dorsey, “Pioneer Highways and City Pavements of Nebraska,” 1962, Vertical File: “Roads—Nebraska,” Nebraska State Historical Society, Lincoln.

⁶² Cook, “Establishment of First Cattle Ranch on Niobrara River,” 195.

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offering through tickets on rail and road tickets from Chicago and Omaha to the Black Hills. Freighters hauled millions of pounds of goods to Indian agencies, military posts, and Black Hills mining towns. Pratt & Ferris, the main freighting outfitter in Sidney, owned 70 wagons and 550 draft animals and shipped 9,230,560 pounds in 1876 over the Sidney Short Route. In 1878—1879, freighters transported between 22 and 25 million pounds over the Sidney-Black Hills freight route. For about five years, the Sidney road was a lively avenue of commerce, communication, and social engagement. By the late 1870s, however, a rail line completed to Fort Pierre and the emergence of powerful new competitively priced freighting companies there, plus the removal of the Red Cloud and Spotted Tail agencies, drastically reduced business over this road. In 1880, freight wagons leaving Sidney for the Black Hills by way of the Running Water Station on the Niobrara had all but ceased.⁶³

Arrival of Railroad Presages Permanent Settlement along the Upper Niobrara

The 1870s ushered in a period of vastly increased exposure of the upper Niobrara to Euro-Americans, who attempted to develop routes of commerce along and across its banks. This activity across northern Nebraska culminated in the late 1870s and 1880s with the construction of a railroad to the northwestern corner of Nebraska. Railroad track mileage in Nebraska increased from 1,868 in 1880 to 5,148 in 1890. Although mostly in the eastern part of the state, a few rails extended into northwestern Nebraska. This included the Fremont, Elkhorn and Missouri Valley Railroad, organized in 1869. The Fremont, Elkhorn and Missouri Valley Railroad, like most railroad companies in Nebraska, received a generous grant from the federal and state governments of free public land upon which to lay its rails. The United States government gave the company over 100,000 acres of land for railroad construction and for prospective sale, postulating that this would encourage settlement and commerce for many miles north and south of the rail line. Construction of the Fremont, Elkhorn and Missouri Valley Railroad began at Fremont, continuing up the Elkhorn Valley in northeastern Nebraska before moving gradually west to Wisner in 1871; here it stopped until 1879. In 1880, the line was extended to Neligh; two years later, it reached Valentine in the Sand Hills of northern Nebraska. When John Ross Buchanan, the general passenger agent of the Fremont, Elkhorn and Missouri Valley Railroad during much of the 1880s, visited northwestern Nebraska in the early 1880s, he found that “all that northern portion of the state [was] very sparsely settled or wholly unoccupied, and in fact but little known about it. . . . All that territory west of Holt county . . . and known as Sioux county . . . there were not five hundred people in all of them.”⁶⁴ The following year the company changed hands. In 1884, the new owner, Chicago and Northwestern

⁶³ William E. Lass, “From the Missouri to the Great Salt Lake: An Account of Overland Freighting,” *Nebraska State Historical Society Publications* 26 (1972), 189-213.

⁶⁴ J. R. Buchanan, “The Great Railroad Migration into Northern Nebraska,” *Proceedings and Collection of the Nebraska State Historical Society* 15 (1907), 29.

Railway Company, pushed the rail line farther west, veering north of and paralleling the Niobrara River. It reached Chadron in 1885. The following year, track was laid to Rapid City, South Dakota.

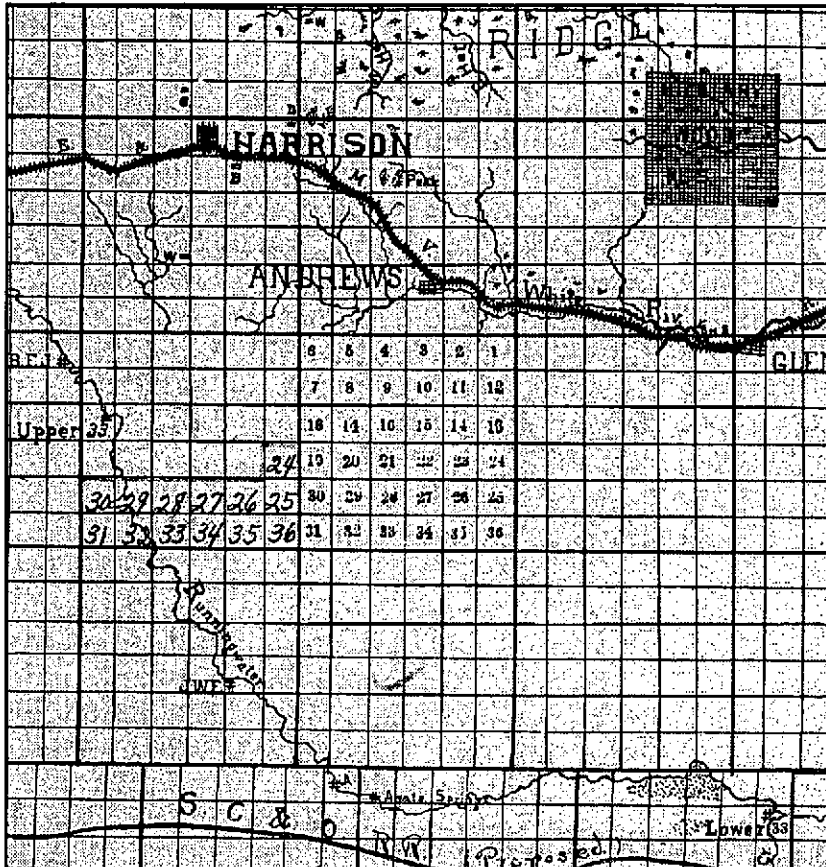


Figure 3.5 This turn of the twentieth-century map of the upper Niobrara River, sometimes known as the “Runningwater precinct,” shows the route of the original Fremont, Elkhorn and Missouri Valley Railroad route along the White River through Andrews and also the proposed but never built S. C. & O Railroad that would have come within two miles of Agate Springs. Source: Sioux County Courthouse, Harrison, Nebraska.

Another line was started in 1886 from five miles west of Chadron and pushed westward to depots at Fort Robinson, Glen, Andrews, and Summit (soon renamed Bowen, then Harrison, after President Benjamin Harrison), where it arrived in June 1886, before continuing on to the Wyoming state line and eventually Casper. Between 1881 and 1886, the Fremont, Elkhorn and Missouri Valley Railroad and its subsequent owner, the Chicago Northwestern Railway Company, had reached into and through the most remote part of Nebraska. Agate Springs and the Niobrara lay

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only twenty miles south of the rail line.⁶⁵ In the words of Isaiah Bowman, the railroad became “the forerunner of development, the pre-pioneer, the baseline of agriculture.”⁶⁶ The Fremont, Elkhorn and Missouri Valley Railroad indeed ushered in waves of permanent settlers in northwestern Nebraska.

A second railroad was proposed through this region between Hastings, Nebraska, and Billings, Montana. A map showing the existence of the original Fremont, Elkhorn, and Missouri Valley Railroad through Harrison in the early 1900s depicts the “SC & O R.R. (Proposed),” two to five miles south of the Niobrara and coming within less than two miles of Agate Springs. Little is known about the S.C. & O Railroad, possibly the Sioux City & Omaha Railroad. Its boosters may have hoped to ship cattle from ranchers along the Niobrara to busy stockyards in Omaha. There is no evidence that the line was ever built or, if it was, that it ever reached the vicinity of Agate Springs Ranch.⁶⁷

Traces of Traders, Explorers, and Entrepreneurs across the Landscape

Only faint tangible evidence remains on the Agate Fossil Beds National Monument landscape today of trails used by trappers, traders, military expeditions, and commercial entrepreneurs during the mid- and late 1800s. Signs of the old traders’ trail between Fort Laramie and Fort Pierre, used first by fur traders in the 1820s and 1830s and subsequently by other groups, is not discernable in the area near the Agate Springs Ranch, where the road crossed the *L’eau qui Court* (Niobrara) River. Lieutenant G. K. Warren’s 1855 and 1857 incursions through the area and across the river are not visible. Maps and images created by Warren’s U.S. Army Corps of Topographical Engineers expedition in the 1850s, however, are singularly significant for bringing the upper Niobrara River into the consciousness of westward emigrants and commercial entrepreneurs. These maps and others made at the time, remain along with the written descriptions and artistic renderings of several geographic landmarks along the upper Niobrara River and in the vicinity of Agate Fossil Beds National Monument.

The road or wagon track to Red Cloud Agency and nearby Fort Robinson from Fort Laramie, that crossed the Niobrara River at the future Agate Springs Ranch beginning in the mid-1870s, was still visible in the 1950s, according to Harold Cook, “after many years of hard use by the cavalry and light transport.”⁶⁸ The

⁶⁵ *Ibid.*, 30-33; Albert Watkins, *History of Nebraska from the Earliest Explorations to the Present Time with Portraits, Maps, and Tables, Volume III* (Lincoln, NE: Western Publishing and Engraving Company, 1913), 351, 449; Ruth Van Ackeren, editor, *Sioux County: Memoirs of Its Pioneers* (Harrison, NE: Harrison Ladies Community Club, 1967), 2; Clark, “An Environmental History of the Niobrara River Basin,” 35; Olson and Naugle, *History of Nebraska*, 163-68.

⁶⁶ As quoted in David J. Wishart, “Settling the Great Plains, 1850-1930: Prospects and Problems,” in *North America: The Historical Geography of a Changing Continent*, edited by Robert D. Mitchell and Paul A. Groves (Rowman & Littlefield Publishers, 1987), 256.

⁶⁷ Untitled township, range, and section map of Sioux County, no date (but after 1886). Sioux County Courthouse Clerk’s Office, Harrison, Nebraska.

⁶⁸ Cook, *Tales of O4 Ranch*, 1.

passage of fifty more years of ground-disturbing agricultural and other activity around the ranch complex have erased discernable evidence of its existence. Four 1881 surveyor's maps of the roads existing in the Agate Springs area—the old Fort Laramie Road from the southeast, the road to Fort Robinson along the north side of the Niobrara, and separate roads to the northwest along the Niobrara and the north—depict them all as “wagon roads.”

A circa-1890 hand-drawn map of the area clearly shows a road veering off of the Fort Robinson Road, about thirteen miles north of the Agate Springs Ranch, to the Andrews station depot on the Fremont, Elkhorn, and Missouri Valley Railroad. Portions of this road can still be deciphered on the ground, twelve miles north of the park boundary. As recently as the mid-1960s, when the park was created, a wagon road between Fort Laramie and Fort Robinson, used for freighting lumber and moving troops northwest of Agate Springs, could be located by long-time residents along the Niobrara River. Even in the 1960s, local ranchers abandoned the graded highway during severe winter storms and used this old trail that followed the high ridges above the Niobrara River. Generally, however, it is historic maps, illustrations, descriptions of the countryside, and even photographs (beginning in the 1880s) that tell us more than any imprints on the ground about the methods and routes used by people passing through the upper Niobrara area on their way to somewhere else.

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Chapter 4

EURO-AMERICANS SETTLE ALONG THE NIOBRARA, 1854 – 1886

Introduction

Euro-Americans began to settle in the eastern portion of Nebraska Territory, in the 1850s. This process accelerated after 1854 primarily due to actions on the part of the federal government. In mid-March 1854, chiefs of the Omaha, Otoe, and Missouri Indian tribes signed treaties with the U.S. government ceding their rights to five million acres bordering the Missouri in the eastern part of contemporary Nebraska. As part of the federal public domain, this vast new area was now available for sale and distribution to Euro-Americans who coveted the land for farming and commercial enterprises. Only two months later in 1854, President Franklin Pierce signed the Kansas-Nebraska bill into law, marking the second step toward transforming Indian country into a land of sedentary farming and homebuilding. By 1860 a narrow strip of Euro-American population with two or more people per square mile followed the winding course of the Missouri River at Nebraska Territory's eastern border. When Nebraska statehood came in 1867, this band of mostly agricultural settlements had broadened and pushed one finger up the Platte River. Permanent settlement continued to wash over Nebraska in waves from the Missouri River to the "panhandle" in the northwest. In 1880, this same population density of two people per square mile had spread nearly halfway across the state to the 98th meridian, where the rainfall dropped to under 20 inches per year, and even farther along the Platte and Republican rivers. By 1890 all but an inverted arc of land including the Sand Hills and the upper Niobrara River in northwestern Nebraska had attained a population of two Euro-Americans per square mile. Even here, a few families and individuals had spied opportunities that resonated with their needs and dreams and decided to settle on this semiarid land. In the mid-1880s, the Niobrara in the vicinity of Agate Springs had a handful of Euro-American settlers, living on a seasonal or permanent basis.

Graham Family Moves West

Among the earliest of the Euro-Americans to live on the upper Niobrara River in the vicinity of Agate Springs was the family of Elisha Barker Graham and Mary Eliza Hutchison Graham. Elisha, or "Lish" as he was known, was born to Samuel Graham and Lydia Barker Graham on January 28, 1840, in the town of Italy, Yates County, New York (in the glaciated Finger Lakes region of upstate New York). Elisha's parents had a sizeable farm on which they raised stock and an assortment of farm animals and crops. Mary Eliza Graham later recalled that the Graham farm had so many buildings of all sizes and descriptions that it looked like a small town. A long hall or shed, with many shelves and small rooms, connected an older portion of the house with a newer larger home. Many sheds and barns scattered around the

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yard provided shelter for the dairy cows, stock, sheep, and other farm animals. The Grahams, like most farmers in their area, made their own cheese and butter, canned their own vegetables and fruits, dried the apples from their orchard, and even harvested maple sugar from their large stand of sugar maple trees, or “sugar bush,” in the early spring. Elisha Graham spent his boyhood observing and developing the broad knowledge and multiple skills needed to farm. His two half brothers, Washington Graham and Gilbert Graham, both older and married, had farms nearby. As Elisha matured, his father’s health deteriorated, making it necessary for Elisha and other family members to care for the farm. Elisha’s own bronchial problems, which disqualified him from military service at the outset of the Civil War, perhaps engendered in the young farmer a greater interest in health and medicine. Additionally, Elisha’s uncle, Stephen Mumford, pursued a successful homeopathic practice; this too may have encouraged Elisha to acquire an education leading to a medical career.¹

As a young man, Elisha attended Franklin Academy in Prattsburg, New York, not far from the Graham farm. Elisha presumably met Mary Eliza Hutchison in Prattsburg, possibly at Franklin Academy. Mary had been born on February 20, 1840, less than a month after Elisha Graham, in the small village of Italy Hill, also in Yates County, New York. She was the fourth of five children (John, born in 1832; Smith, in 1835 or 1836; Clarisa, or “Clara,” 1838; and Agnes, 1845) born to Lyman Hutchison and Jane Conley (or Conly) Hutchison. Mary Eliza was named after the only sister of her mother (Mary) and the only sister of her father (Eliza).² Mary’s father was a cooper who, in a shop across the lane from their house, made hardwood barrels for storing pork, beef, sauerkraut, soap, and rainwater; he also made firkins (small wooden tubs about one-quarter the size of standard barrels) for butter and sweet applesauce. While still quite young, Mary met Susan B. Anthony, a native of nearby Rochester, New York, who was entertained in the Hutchison family home when she came to Italy Hill to lecture on women’s suffrage, property rights, and women’s control over their children. This experience, and the apparently more

¹ Mary E. Graham reminiscences, April 8, 1933, transcribed by Eleanor Cook Naffziger, Box 92, Cook Papers, Agate Fossil Beds National Monument (hereafter cited as “Cook Papers,” AFBNM); Albert Watkins, “Graham, Elisha Barker,” in *History of Nebraska: From the Earliest Explorations to the Present Time with Portraits, Maps, and Tables, Volume III* (Lincoln: Western Publishing and Engraving Company, 1913), 756-57.

² Mary Eliza Hutchison’s maternal grandfather, Luke Conley (or Conly), a native of Ireland and orphaned at a young age, immigrated to the United States around age twelve. After marrying Polly Robeson, the Conley couple moved from a farm near Harrisburg, Pennsylvania to a farm near Penn Yan, New York, not far from Italy, Mary Eliza Hutchison’s birthplace. Mary’s mother, Jane Conley, was born in 1804, soon after the Conley couple arrived on their new farm in upstate New York. Jane was the oldest of nine Conley children, consisting of: Jane, Luke, John, William, David, Bartholomew, James, Mary, and Michael. Mary Eliza Hutchison’s paternal grandfather, John Hutchison, married Sophia, and together they had five children: Lyman, Henry, George, Eliza, and Chauncey. John Hutchison fought in the Revolutionary War and never returned, leaving Sophia to raise their young children on the family farm in upstate New York. Mary Eliza Graham reminiscences, April or May 1929, for Harold Cook, Box 92; Mary Eliza Graham to Harold Cook, handwritten Graham family genealogical notes, no date, “Family History,” Box 1, both in Cook Papers, AFBNM.

progressive views of her parents, convinced Mary, in later years, to work for women's suffrage and temperance. At age fifteen, Mary and her older sister Clara attended Franklin Academy in Prattsburg, and the Hutchison family soon moved to a home only three blocks from the academy. Mary and Clara began teaching at Franklin Academy during the summer months; Mary continued teaching in summer school for four years. At age twenty, Mary Eliza Hutchison married Elisha Barker Graham. It was April 7, 1861, and the nation was just becoming consumed by civil war.³

Mary and Elisha Graham often lived apart during the first few years of their marriage. Mary lived with Elisha's parents on their farm in Italy, New York, during the first year of their marriage, while Elisha studied homeopathic medicine with his uncle, Stephen Mumford. Homeopathic medicine, a method of treating disease by using minute doses of drugs and medicinal substances that produced symptoms of that disease, was a new field of medicine in the United States at that time. Few people practiced it and only a handful of places taught it. Homeopathy (from the Greek terms *homeo*, or similar, and *pathy*, or suffering) originated in Germany in the late 1700s, when physician, scholar, scientist, and teacher Christian Friedrich Samuel Hahnemann (1755—1843), considered the father of homeopathy, discovered that the products of disease could be used in the cure of those diseases, similar to the theory behind vaccinations. Hahnemann's preparation of Psorinum was, in fact, the first vaccine ever made. Homeopathy began to be practiced in the United States in the mid-1820s by Dr. Hans Burch Gram. Its success in cholera epidemics over the next twenty years led to the founding of the first homeopathic college in Ohio in 1850. Elisha Graham's practice of this branch of medicine coincided with its rise in popularity, which peaked between 1880 and 1900.⁴

Mary and Elisha's first child, Clara, was born on the Graham family farm in Italy, New York on December 21, 1861. Mary continued to live with the Grahams for extended periods while Elisha was away. Elisha pursued his homeopathic studies and, in 1864, graduated from Hahnemann College in Cleveland, Ohio. At that time, Mary was living with her parents in Prattsburg, New York. Elisha continued his homeopathic studies, graduating from the Cleveland Homeopathic Medical College in 1866. Soon afterward, Elisha, Mary, and their young daughter Clara moved to Three Rivers, in southwestern Michigan (about 15 miles north of the Indiana border, around 100 miles east of Chicago, and 200 miles west of Cleveland), where Mary's brothers John and Smith,⁵ plus her father's brother Harry Hutchison, all lived. Elisha and Mary bought a small home in Three Rivers across the street from Mary's

³ Mary Eliza Graham reminiscences, no date and also May 14, 1933, transcribed by Eleanor Cook Naffziger, Box 92, Cook Papers, AFBNM); "History of Agate Springs Ranch," attached to Mrs. Grayson (Dorothy Cook) Meade, oral history interview with Ron Cockrell, May 22, 1986, AFBNM.

⁴ Graham reminiscences, no date, also January 3, 1936, and June 6, 1933, both transcribed by Eleanor Cook Naffziger, Box 92, Cook Papers, AFBNM.

⁵ John Hutchison founded the John Hutchison Manufacturing Company at nearby Jackson, Michigan, which made milling machinery. Smith Hutchison split rails and made barrels, among other things and is remembered as being seriously religious. Harold J. Cook, *Tales of the 04 Ranch* (Lincoln: University of Nebraska Press, c. 1956), 2-3.

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brother John. For the next decade, Elisha built up his homeopathic practice from his office, which occupied the entire first floor of their house. The Graham couple purchased a second larger house on the adjoining lot, and acquired several horses that Elisha used to visit patients. Dr. Graham was invited to become the consulting doctor at the mineral springs in Three Rivers. Mary became an active member of the Women's Christian Temperance Union (WCTU) while living there.

The Grahams made many good friends while in Three Rivers. One of their new friends, Sarah Day, the sister-in-law of the Baptist minister in Three Rivers, lived with her mother in the house earlier occupied and still owned by the Grahams on the neighboring lot. Day eventually married Mr. Bassett, who, after contracting tuberculosis, decided to move to a drier climate for his health and to invest in cattle in Nebraska. Sarah Bassett arrived in Cheyenne, Wyoming, in the late 1870s, not long before her husband's death; she eventually was appointed a Baptist missionary for Sioux County, Nebraska. Bassett remained a life-long friend of Mary Graham as well as the Cook family (of Agate Springs), whom she met through Mary Graham. The Grahams' second daughter, Katherine, or "Kate," was born in Three Rivers, Michigan, on June 28, 1867.⁶

In June 1876, while attending a homeopathic convention in Cleveland, Ohio, Elisha Graham received an invitation from an older homeopathic doctor to join him as a partner in his practice in Albany, New York. He immediately decided to accept this offer, and within a few weeks the Graham family moved into a large four-story house in Albany across the street from a medical college. Elisha Graham quickly built up a large practice in Albany. Soon the Grahams purchased additional land and built two rental houses. While the Grahams made many new friends in Albany, the stress of a large practice soon became too taxing on Elisha Graham's health. In 1878, Dr. Graham decided to trade his homeopathic practice for a smaller one owned by a Dr. Gorton in Cheyenne, Wyoming, where the climate was much drier. Graham left for Cheyenne, shortly before Dr. Gorton arrived at the Graham residence in Albany to take up Graham's practice and occupy his residence there. The November 1, 1878, issue of the *Cheyenne Daily Leader* newspaper noted Elisha Graham's arrival: "Dr. E. B. Graham, late of Albany, New York, arrived yesterday and will at once enter into the practice of his profession."⁷ Once in Cheyenne, Graham purchased a seven-room house with a brick office and barn on the same lot. Several weeks later, Mary Graham and her two teenage daughters arranged to have the family piano, library, and household goods freighted to Cheyenne on the train; they made the train trip themselves shortly after. As their train moved westward, Clara and Kate complained bitterly that the western landscape they passed through looked dry, dusty, desolate, and "dreadful." It looked "worse and worse every day,"

⁶ Graham reminiscences, no date, also January 3, 1936, and June 6, 1933, both transcribed by Eleanor Cook Naffziger, Box 92, Cook Papers, AFBNM; Dorothy C. Meade, *The Story of Agate Springs Ranch* (N.p.: Meade, 1990), 4; Cook, *Tales of the 04 Ranch*, 2-3; Watkins, "Graham, Elisha Barker," in *History of Nebraska*, 756.

⁷ "History of Agate Springs Ranch," attached to Mrs. Grayson (Dorothy Cook) Meade, oral history interview, AFBNM.

they told their mother.⁸ Mary Eliza, Clara, and Kate arrived in the frontier town of Cheyenne, Wyoming, in December 1878,⁹ where the family took up residence in the house Graham had bought. Elisha Graham had already opened his medical practice and begun attracting new patients. Two of Elisha's new patients were Cheyenne Mayor Hugh N. Orr and former trader John (nicknamed "Portugee") Phillips,¹⁰ who owned ranches in eastern Wyoming and western Nebraska. They advised Elisha to invest in cattle and locate them on a bend in the Niobrara River in northwestern Nebraska, where the grass was lush and water abundant.¹¹

Cattle Ranching Arrives in Western Nebraska

The arrival of beef cattle in western Nebraska coincided with and, indeed, was prompted by several developments. The extermination of the bison between 1870 and 1885 (more in Chapter 5) made space and lush prairie grasses available for cattle. Also, after the Civil War ended in 1865, the markets for beef cattle reopened and a brisk new demand for beef arose in the North and in Europe. Longhorn cattle, first introduced to the American Southwest by the Spanish in the early 1700s and later to the southern Atlantic seaboard by the British, had been raised and grazed in Texas for decades before the Civil War. The open range of large Mexican and Spanish government land grants was favored by the cattlemen. Before the Civil War, two clusters of cattle ranching had emerged in the Lone Star state. One lay in the coastal bend of the Gulf of Mexico, along and between the lower Guadalupe, San Antonio, and Nueces rivers, while the other was in the central-western frontier of Texas.¹² Cattle were driven to ports on the Gulf of Mexico and to Cincinnati and Chicago, where they were shipped to populated centers of demand. The war between the North and South disrupted, if not extinguished, the movement of cattle from Texas to northern markets. Longhorns, consequently, ran wild on the Texas prairies and, by 1866, had increased to approximately five million head. After the war, the cattlemen's empire emerged in a region of south Texas bounded by San

⁸ Graham reminiscences, no date, but presumably 1933 or 1934, both transcribed by Eleanor Cook Naffziger, Box 92, Cook Papers, AFBNM.

⁹ There are inconsistencies in the date that Elisha Graham arrived in Cheyenne. James Cook, around 1938, reported that Elisha Graham purchased cattle at Cheyenne in 1878, while Mary Eliza Graham, noted that she and her two daughters arrived in Cheyenne a few months after Elisha, in 1880. Since there is documentation of Elisha purchasing cattle at Cheyenne in 1878, 1879, and 1880 it seems more credible that he would have arrived in 1878. James H. Cook, "Establishment of the First Cattle Ranch on Niobrara River," in *Pioneer Tales of the North Platte Valley and Nebraska Panhandle*, edited by A. B. Wood (Gering, NE: Courier Press, 1938), 195; Cook, *Tales of the 04 Ranch*, 7-8.

¹⁰ John Phillips, a trader, gained notoriety when, after Captain William J Fetterman and his entire force had been killed by Indians, Phillips rode from Fort Kearny to Fort Laramie to get aid for the few survivor troops at Fort Kearny. Cook, "Establishment of First Cattle Ranch," 195.

¹¹ Cook, *Tales of the 04 Ranch*, 8; Cook, "Establishment of First Cattle Ranch," 195.

¹² The origins of cattle herding and ranching in the United States is superbly presented by cultural geographer Terry G. Jordan in *Trail to Texas: Southern Roots of Western Cattle Ranching* (Lincoln: University of Nebraska Press, 1981) and *North American Cattle-Ranching Frontiers: Origins, Diffusion, and Differentiation* (Albuquerque: University of New Mexico Press, 1993).

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Antonio, Corpus Christi, and Laredo. Here, grasslands and water abounded, predatory animals were few, and herds expanded. It was not long before Texas cattle owners began looking for additional grazing lands and expanding the cattle range northward. Cattle ranchers also sought to get the highest possible market price per head. After the Civil War, Chicago slaughterhouses and meat-packing plants, as well as other markets in the east, where the demand for beef was great, paid as much as \$50 per head rather than the \$7 paid in Texas.¹³

Two developments addressed the need for expanding existing cattle grazing regions and getting cattle to markets with the highest prices. First, the progressing construction of the transcontinental railroad and other railroads across the Great Plains of Nebraska and Kansas in the 1860s provided a means of transporting beef to Chicago and Omaha. Second, cattlemen developed new trails between the Texas cattle ranges and shipping stations on the Kansas Pacific and the transcontinental Union Pacific railroads. Between 1866 and 1885, the long cattle drive became the most widespread and important means of moving cattle to market. Great cattle trails at first often followed Indian or pioneer trails. During this twenty-year period, several near-mythic cattle trails were cut out: the Goodnight Trail (between Fort Worth and Fort Sumner, New Mexico); its extension to Loving, Colorado; the Chisholm Trail (between San Antonio and Abilene, Kansas); the Eastern Trail (between several places in Texas and Abilene, Kansas); and the Western Trail (from San Antonio to Dodge City, Kansas, and beyond); as well as other shorter trails in the Southwest and trails between Oregon and Montana and Wyoming. These trails and others served as major arteries that transported hundreds of thousands of cattle to market and became a legendary icon of the frontier ranching culture of the West.¹⁴

Trail drives made good economic as well as ecological sense. Southern ranges in Texas that had mild winters and excellent breeding grounds complemented the northern ranges, where cattle fattened well on short- and mixed-grass prairie but severe winters held down calving. A two-year-old-longhorn steer could add as much as 200 pounds in two years on a northern Texas rangeland at a minimal cost per year. A four-year-old steer might be worth \$25 to \$45 at a railroad trailhead. As the twenty-year period of open-range cattle ranching progressed, railroad shipment points moved farther and farther north and west.¹⁵

Before 1870 only about 6 percent of cattle (around 15,000 head) had been driven from Texas as far north as Nebraska. Most of these cattle had been purchased by the federal government to feed Indians on reservations in Nebraska and Dakota to fulfill treaty agreements, and had been driven over trails to eastern Nebraska. But as farmers settled and filled up lower valleys of Missouri River

¹³ James C. Olson and Ronald C. Naugle, *History of Nebraska* (Lincoln: University of Nebraska Press, 1997), 186-89; Frederick C. Luebke, *Nebraska: An Illustrated History* (Lincoln: University of Nebraska Press, 1995), 107; Joseph A. Stout, Jr., "Cattle Industry," in *The New Encyclopedia of the American West*, edited by Howard R. Lamar (New Haven: Yale University Press, 1998), 176.

¹⁴ Stout, "Cattle Industry," 178.

¹⁵ David J. Wishart, "Settling the Great Plains, 1850-1930: Prospects and Problem," *North America: The Historical Geography of a Changing Continent*, edited by Robert D. Mitchell and Paul A. Groves (Totowa, NJ: Rowman & Littlefield, 1987), 269-70.

tributaries, they increasingly invoked the provisions of Nebraska's 1870 Herd Law, which made cattle drivers liable for damages done by their stock to farmers' crops. As a result, cattle trails shifted to rail stations in unpopulated areas farther west in Kansas and Nebraska. Newly established shipping points on rail lines—Abilene, Wichita, Dodge City in Kansas, and Ogallala in Nebraska—sprang into existence as vibrant frontier cattle towns. Access to lucrative cattle markets provided a tremendous incentive for people to take up cattle ranching in western Nebraska. By 1871 about 300,000 head of cattle were moving into the northern and central Plains each year. Between 1866 and 1885, nearly six million cattle were driven from Texas to railroad shipping points and rangelands in the central and northern Great Plains. By 1890, an estimated ten million head of cattle had been driven out of Texas over long cattle trails.¹⁶

Ogallala, Nebraska, on the South Platte River about fifty miles west of its junction with the North Platte River, became a prime transport point for many Texas cattle in the mid-1870s. Originally Ogallala seemed destined to become no more than a way station, comprising a section house for repairing and storing rail cars and a water tank on the Union Pacific Railroad. In the summer of 1874, however, the Union Pacific built a cattle pen and loading chute just west of town, hoping to stimulate trade and transport on the railroad. One year later, cattlemen from San Antonio, Texas, drove between 60,000 and 70,000 cattle through the Ogallala cattle pens. By 1876 the number of cattle had jumped to 100,000. The cattle trail into Ogallala, known as the "Jones and Plummer Trail," originated in the south Texas coastal cattle-raising nucleus along the Gulf of Mexico and extended north over the Western Trail to Dodge City on the Arkansas River and the Atchison, Topeka and Santa Fe Railroad. The Western Trail supplanted cattle drives over the old Chisholm Trail to the railroad at Abilene, Kansas. Ogallala, Nebraska, along with Dodge City, Kansas, were the main cattle shipment points on the railroad during the last years of open-range cattle ranching. Cattle drives over the Western Trail and its extension to Ogallala over the Jones and Plummer Trail continued into the mid-1880s. By that time, an estimated 7.5 million cattle grazed on the Great Plains between Oklahoma and the Canadian border.¹⁷

Other factors brought the cattle industry to life in western Nebraska. In the mid-1870s, a huge swath of land comprising nearly all of the Nebraska panhandle north of the North Platte River fell into the hands of the U.S. government. The destructive Sioux wars of 1875 and 1876 led to the forced transfer of nearly twelve million acres of land belonging to the Sioux, Northern Cheyenne, and Arapaho to the federal government. Chief Red Cloud and many other Indian leaders reluctantly agreed to this secession of land in the Treaty of 1876.¹⁸ (See Chapter 5 for more

¹⁶ Olson and Naugle, *History of Nebraska*, 187-89; Luebke, *Nebraska*, 107; Wishart, "Settling the Great Plains," 268; Stout, "Cattle Industry," 178.

¹⁷ Olson and Naugle, *History of Nebraska*, 189-90; Wishart, "Settling the Great Plains," 270; Stout, "Cattle Industry," 178.

¹⁸ Addison E. Sheldon, "Land Systems and Land Policies in Nebraska," *Publications of the Nebraska State Historical Society* 22 (1936), 12-14, 19-23.

details.) The U.S. government immediately gave this land away to certain big businesses (such as the railroads) or sold it to individuals under existing land laws.

Following the Civil War, technological developments related to managing and marketing cattle also boosted the cattle industry. In 1867, Joseph McCoy invented special pens to receive and load steers for shipment on trains. Around the same time, specialized train cars that supplied cattle with food and water for the long trip to stockyards in Chicago and Omaha began to be used. In 1868, the first refrigerated train car delivered processed beef to market. That same year, Philip Armour designed a superior meat-packing plant for preparing beef cattle for the market. Five years later in 1873, technological advances enabling the mass production of steel made it possible to manufacture various practical forms of barbed wire. This made it possible for ranchers as well as farmers to protect their herds of cattle and their crops in a region where wood was not readily available for fencing. Barbed-wire fences also became a potent means of controlling land and water resources.

Promotional propaganda, weather, and economics also contributed to bringing the cattle business to western Nebraska. Railroad propagandists, town boosters, and real estate speculators enthusiastically extolled the unlimited potential of Nebraska's prairie paradise west of the 98th meridian. Additionally, the late 1870s witnessed an increase in rainfall in western Nebraska after several years of drought, typifying the wide fluctuation in annual precipitation in that part of the state. This occurrence prompted some scientists to mistakenly speculate that rain followed the plow, which was turning over more and more turf and sod in eastern and central Nebraska. Increased rainfall, insisted Professor Samuel Aughey of the University of Nebraska, was a permanent trend in Nebraska that would continue across the state. Also, by the mid-1870s Nebraska and the other Great Plains states began to recover from the economic malaise of the Panic of 1873 and the invasion of grasshoppers, whose voracious appetites devastated corn and other crops in central Nebraska. Finally, by the late 1870s, Nebraska farmers and ranchers began to buy or build self-governing windmills, which adjusted to changes in speed and direction of the wind, which was especially strong and unpredictable on the open grassy Plains of western Nebraska.¹⁹

Incentives for Homesteading Attract Elisha Graham

All these developments encouraged some cattlemen to decide that it made far more sense to eliminate the long cattle drive from Texas altogether and graze their cattle on the wide-open, bison-free and sparsely populated prairies of western Nebraska and eastern Wyoming and Colorado. Cattle ranches on the open range sprang up along creeks, since cattle need to graze within six miles of water. By the late 1870s and early 1880s, a few smaller ranchers began to move into Nebraska's open ranges in the Sand Hills and the northwestern panhandle. The arrival of smaller railroads in the western part of Nebraska, such as the Fremont, Elkhorn and

¹⁹ Wishart, "Settling the Great Plains," 273; Luebke, *Nebraska*, 113-22.

Missouri Valley Railroad that had reached Valentine in the Sand Hills by the mid-1880s, further stimulated cattle ranching there. By this time, as the open-range era of ranching came to an end, stock owners began to use fencing to maintain more control over their cattle's water supply.²⁰

Elisha Graham was further encouraged to take the advice of Hugh Orr and John Phillips and start a ranch on the Niobrara because of the well-publicized notion that cattle ranching would bring enormous riches. Author James S. Brisbin, in the early 1880s, proclaimed that great wealth awaited entrepreneurs who dared to buy a herd of Texas cattle, buy a small tract of land near a creek that could provide water and would serve as a ranch headquarters, and take advantage of federal laws and the wide open range to raise beef cattle. Brisbin's book was part of a genre of books that idealized the Great Plains, in contrast with literature that perpetuated the myth of the "Great American Desert," introduced more than half a century earlier by explorer Stephen Long's chronicler, Edwin James. On the eve of the Civil War, writer William Gilpin devoted a chapter in his book, *The Central Gold Region: The Grain, Pastoral, and Gold Regions of North America*, to painting a different image of the Great Plains, not as a dusty desert but as an "empire of pastoral agriculture."²¹ James Brisbin elaborated on this mythic Great Plains image. His book, *Beef Bonanza, or How to Get Rich on the Plains* (1881), presented detailed facts about how an inexperienced neophyte could quadruple his outlay of money in only a few years by investing in cattle. Brisbin's promise of achieving far greater wealth from cattle ranching than from general farming in the humid east became wildly popular. *How to Get Rich on the Plains* encouraged many easterners and Europeans to fanaticize about becoming wealthy cattle barons; they poured millions of dollars into cattle ranching on the Great Plains. Regions in Nebraska that were once considered dry, windy, and dusty agricultural wastelands—the southwestern corner, the Sand Hills in the north, and the panhandle—for the first time looked economically promising.²²

The reality of cattle ranching on the Great Plains did match the propaganda, at least for a while. Beginning in the late 1870s and early 1880s, the cattle industry entered a boom period equivalent to mineral bonanzas in California, Colorado, Montana, and the Black Hills to the north. This was the "golden age of ranching," according to historian Louis Pelzer, when use of the open range went unchallenged, beef prices remained high, and overhead was very low.²³ The stock-raising entrepreneur had several advantages: free grass and water (known collectively as "free air") in the public domain; liberal land laws that could be manipulated to acquire more land and water; and several years of greater than average rainfall on the semiarid Plains that nurtured grasses. Additionally, the demand for cattle to stock

²⁰ Luebke, *Nebraska*, 107; Wishart, "Settling the Great Plains," 270.

²¹ Martyn J. Bowden, "Great American Desert" *Encyclopedia of the Great Plains*, edited by David J. Wishart, (Lincoln: University of Nebraska Press, 2004), 389; G. Malcolm Lewis, "Pastoral Region," *Encyclopedia of the Great Plains*, 393-94.

²² Nellie Snyder Yost, *The Call of the Range: The Story of the Nebraska Stock Growers Association* (Denver: Sage Books, 1966), 121-37; Luebke, *Nebraska*, 107; Olson and Naugle, *History of Nebraska*, 192-93; Lewis, "Pastoral Region," *Encyclopedia of the Great Plains*, 394.

²³ Quoted in Wishart, "Settling the Great Plains," 270.

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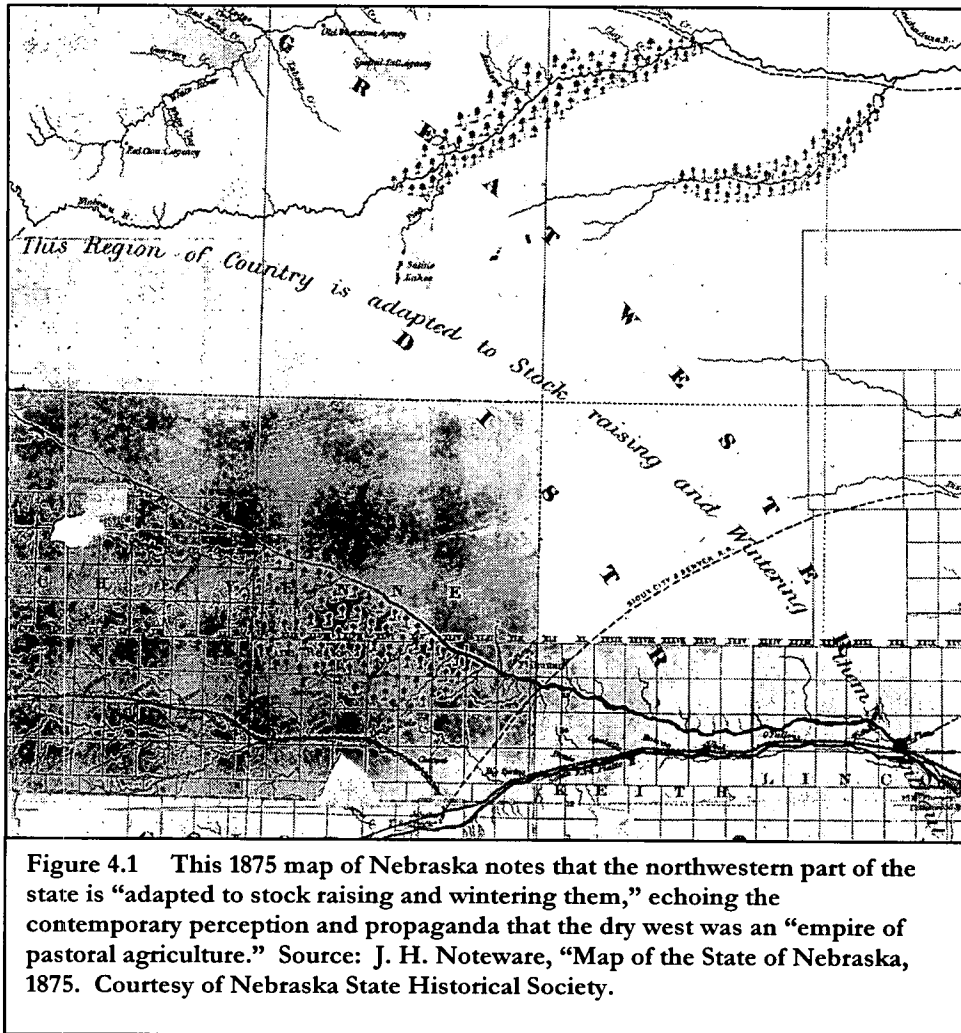
the ranges in the northern Plains increased in the early 1880s. “Many a cattle baron started with little more than a few cowhands, a branding iron, and a herd rounded up on the prairie and nurtured in the public domain,” according to historian Joseph Stout.²⁴ The prospect of immediate wealth attracted investment capital from Canada, Australia, Great Britain, and the eastern United States. In 1881, a parliamentary committee in England assured readers of a 33 percent return to stockholders investing in the American cattle industry, thus encouraging even more British investment, as well as the arrival of some would-be cattle ranchers from England. During the boom years, British or Scottish financiers across the Atlantic owned the very largest cattle companies in the United States. Entrepreneurial industrial investors from the East Coast of the U.S. also contributed to the cattle industry boom. In one year, twenty U.S. corporations invested a total of \$12 million in the cattle industry in Wyoming alone. In the Nebraska panhandle, the thirteen ranchers that controlled the range in 1880 had, by 1885, sold their interests to two corporations—the Ogallala Land and Cattle Company and the Bay State Live Stock Company. Consolidation of cattle ranches into corporate entities occurred across the High Plains, a process that made great fortunes for many enterprising men. Even when harsh weather, declining prices, and overstocking began to deplete rangelands of their lush grasses in the early 1880s, the profits made in the cattle industry were so great that most investors could absorb the losses.²⁵

Elisha Graham undoubtedly learned of the buoyant image and lucrative reality of the cattle ranching boom on the Great Plains soon after he had arrived in Cheyenne. In the spring of 1879, John Phillips and Hugh Orr guided Graham to the site of Agate Springs on the Niobrara River. That summer, Graham followed Orr and Phillips’s advice. On August 1, he purchased from Orr 500 head of cattle driven north from Texas on the Western and Jones and Plummer trails to the shipping station at Ogallala, Nebraska. All were marked with the “04” brand, recorded at Sidney, Nebraska. The next year, E. B. Graham purchased an undivided one-third interest in 1,000 cattle and 20 head of horses. Thomas Snyder joined Graham in purchasing and managing these cattle, under the name of the Graham & Snyder Cattle Company. In 1883 or 1884, Elisha Graham traveled to Michigan to buy a trainload (about 2,000) of yearling calves, which traveled on the Fremont, Elkhorn, and Missouri Valley Railroad as far as Valentine, Nebraska (in the Sand Hills), the end of the rail line at that time. Men from Michigan came with the cattle on the train and, once unloaded at Valentine, drove them to Graham’s ranch on the Niobrara, which he had named “04.” Graham had been advised that the upper Niobrara grasslands would develop a “perfect hoof and good lung power” in blooded horses that Elisha wanted to raise.²⁶

²⁴ Stout, “Cattle Industry,” 176.

²⁵ Wishart, “Settling the Great Plains,” 270; Stout, “Cattle Industry,” 179.

²⁶ “History of Agate Springs Ranch,” attached to Mrs. Grayson (Dorothy Cook) Meade, oral history interview with Ron Cockrell, May 22, 1986, AFNM; Bills of sale of cattle to Elisha Graham, August 1, 1879 and August, c. 1880, Box 61; Graham reminiscences, December 9, 1933, Box 92, both Cook Papers, AFBNM; “Testimony of Claimant,” Elisha B. Graham, 31 May 1887, Dena Sanford files, Midwest Regional Office, National Park Service.



Land Laws Provide Additional Incentives for Elisha Graham

Acting on the advice of Hugh Orr and John Phillips, Elisha and Mary Eliza Graham, in 1879, made a squatter’s claim on 160 acres of treeless bottom land at Agate Springs on the Niobrara, also known at the time as “Running Water.” The claim was at the river crossing of the old “soldier road” and pack trail between Fort Laramie and Fort Robinson. Squatter’s rights gave Graham almost unlimited grazing for stock; they could range for miles unrestricted. This remote, inaccessible region of Nebraska had not yet been surveyed by the U.S. General Land Office. A GLO surveyor would eventually complete a survey of the township section lines in the vicinity of the 04 Ranch in the summer of 1881.²⁷

Surveyors used the rectangular survey system to measure, map, generally describe, and divide northwestern Nebraska and most of the vast territory in the West. Inspired by centuries-old European precedents that were, in turn, founded on

²⁷ Sheldon, “Land Systems and Land Policies in Nebraska,” 35; Meade, *Story of Agate Springs Ranch*, 5.

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the Roman system of land division, the rectangular survey had its origins in the United States with the Ordinance of 1785. The system, advocated by Thomas Jefferson for the new nation as a way to divide and sell or give away the vast public domain, took hold in an era of eighteenth-century rationalism. In the United States, the rectangular survey system was first adopted and used in southwestern Ohio in the late 1700s; then it became the principal method for surveying and mapping the entire rest of the continent to the Pacific Ocean. The rectangular system organized land into square townships, six miles on a side; each square mile was a section, so a township had thirty six sections. An entire six-square-mile township consisted of 640 acres; one quarter section encompassed 160 acres. Each township was measured and named for its position north or south of an imaginary east-west line, called a "base line," and also east and west from a north-south imaginary line called a "meridian." The General Land Office drew several of these imaginary base lines and meridians on a map of the United States to help prevent greater and greater inaccuracies that would arise in measuring and mapping as surveyors moved farther away from the reference base line and meridian. The 04 Ranch headquarters, when surveyed in 1881, was located in the northwest quarter of Section 7 in Township 28 North (of the Base Line) and Range 55 West (of the Meridian), 6th Principal Meridian. Surveyors used various materials at their disposal to mark section corners or quarter section corners. On the short prairie grass land of northwestern Nebraska where wood was scarce, surveys marked these corners with mounds of stone or dirt. The ordered regularity that the rectangular survey system imposed on the land, combined with existing land laws that determined the number and configuration of acres, compelled farmers and ranchers to be extremely creative in assembling the acreage they needed to make a living. Putting together as many parcels as possible close to or along the Niobrara River required the ingenious adaptation of straight survey lines to a winding natural feature. Ranchers like Graham made a rigid survey system more flexible by acquiring fragmented and discontinuous, or barely contiguous, parcels of land in one or more cadastral sections.²⁸ "Early cattle ranches in the Great Plains effectively used fragmented holdings within the rectangular

²⁸ Hildegard Binder Johnson, *Order Upon the Land: The U.S. Rectangular Land Survey and the Upper Mississippi Country* (New York: Oxford University Press, 1876), 53-82; Terry G. Jordan, "Division of the Land," in *This Remarkable Continent: An Atlas of United States and Canadian Society and Cultures*, edited by John F. Rooney, Jr., Wilbur Zelinsky, and Dean R. Louder (College Station, TX: Texas A & M University Press, 1982), 54-70. The literature on the history and methodology of surveying is large. Among the more informative books are: Frederick C. Luebke, Frances W. Kaye, Gary E. Moulton, editors, *Mapping the North American Plains: Essays in the History of Cartography* (Norman: University of Oklahoma Press, 1983); William D. Pattison, "Beginnings of the American Rectangular Land Survey System," 1784-1800 (Ph.D. dissertation, University of Chicago, 1957); Lola Cazier, *Surveys and Surveyors of the Public Domain, 1785-1975* (Klamath Falls, OR: Oregon Institute of Technology, c. 1975); Lowell O. Stewart, *Public Land Surveys: History, Instructions, Methods* (Ames, IA: Collegiate Press, Inc., 1935); C. Albert White, *A History of the Rectangular Survey System* (Washington, DC: Bureau of Land Management); Francois D. Uzes, *Chaining the Land: A History of Surveying in California* (Sacramento: Landmark Enterprises,); C. Barron McIntosh, "Pattern from Land Alienation Maps," *Annals of the Association of American Geographers* 66: 4 (December 1976), 570-82.

survey system to gain control of huge acreages,” according to cultural geographer Terry Jordan.²⁹

Graham used existing land laws to acquire acreage for his new ranch. Graham filed for ownership of land along the upper Niobrara under the existing Homestead Act, supplemented by the Preemption Act. The Homestead Act of 1862 presented settlers like Elisha Graham with a truly free land measure. This act, signed into law by President Abraham Lincoln, in May 1862, allowed a male or female citizen, or someone who had filed a declaration of intention to become a citizen, to select any surveyed but unclaimed land owned by the federal government, up to 160 acres (one quarter section). The applicant had to be twenty years of age or the head of a family. Ownership of the land could be achieved by residing on the land for five years immediately after filing, making improvements to it (such as buildings, fences, canals, etc.), and paying a small processing fee of \$10. If a homesteader wanted to own the land after only six months of residence on the land, he or she could change the homestead entry to an entry under the Preemption Act, pay \$1.25 per acre, and receive title to it immediately.³⁰ In 1841, Congress had passed the so-called Preemption Act, which permitted a man or woman to acquire one quarter section (160 acres) of land for \$1.25 per acre after five years of residency and improvements on that land. Originally all lands claimed under this act must have been surveyed. In the 1850s, however, the preemption was expanded to apply to unsurveyed lands.³¹ Elisha Graham took advantage of this preemption option in 1885 in order to obtain speedier ownership to his 04 Ranch land along the upper Niobrara.³²

In the drier regions of the Great Plains, like northwestern Nebraska, settlers found that 160 acres were not enough for productive farming and cattle grazing. In 1873, one solution to the problem of inadequate acreage came in the form of the Timber Culture Act. This land policy was designed for the homesteading rancher who wanted to acquire an additional 160 acres (beyond the 160 acres allowed under the Homestead Act and Preemption acts). To qualify for this additional acreage, the homesteader must plant trees on at least 50 acres of the 160 acres allowed; the trees must be planted within four years and tended for ten years thereafter. In 1878, Congress reduced the minimum requirement of acreage planted to 10 acres and the time of tending to eight years. It was a senator from Nebraska, Phineas W. Hitchcock, who introduced the Timber Culture legislation, believing that it would provide incentive to homesteaders to plant trees on the sparsely settled Plains in northwestern Nebraska and elsewhere across the western Great Plains. Other tree-planting efforts, like Arbor Day, were being made in Nebraska around the same time. Elisha Graham used the Timber Culture Act to acquire additional 04 Ranch land

²⁹ Jordan, “Division of the Land,” 57.

³⁰ Paul Wallace Gates, “Homestead Act,” in *New Encyclopedia of the American West*, edited by Lamar, 492-93. For the definitive source on public land laws and policies see: Paul W. Gates, *History of Public Land Law Development* (Washington, DC: Government Printing Office, 1968).

³¹ Paul Wallace Gates, “Land Policy, 1780-1896,” in *New Encyclopedia of the American West*, edited by Lamar, 613-14; Sheldon, “Land Systems and Land Policies in Nebraska,” 103-104.

³² “Testament of Claimant,” Elisha Graham, 1887, Dena Sanford files, Midwest Regional Office, National Park Service.

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along the upper Niobrara in Sections 6 and 7 of Township 28 North, Range 55 West, of the 6th Principal Meridian.³³ Settlers who filed for land under the Timber Culture Act, the Homestead Act, and the Preemption Act could acquire as much as 480 acres of the public domain at a minimum cost. More than 65,000 individuals acquired around ten million acres under the Timber Culture Act before its repeal. In 1904, the maximum acreage that could be acquired in Nebraska's dry Sand Hills, under various land policies, was raised to 640, the equivalent of an entire section. In 1916, a full section could be homesteaded everywhere in the United States on land suitable for grazing.³⁴

The Homestead Act provided an important means for some individuals to start farms and ranches. However, this act and other land policies designed to attract settlers fell far short of their intended goal of individual private land ownership for millions. Only 52 percent of original homestead entries (or applications) in Nebraska resulted in actual ownership; just 68,862 acres were assigned in Nebraska by 1900, despite the fact that 1,623,700 homestead applications were filed. The reasons for this were multiple. First, many people attempted to acquire more land than permissible under the Preemption, Homestead, and Timber Culture acts for the purpose of farming and especially ranching, as well as for speculative investing. To do this, a person filing for land under any of these laws might pay or persuade someone else to file for a parcel; then, six months later, he would purchase it from that person for \$1.25 an acre. Elisha Graham apparently used this strategy to add acreage to the 04 Ranch. Property ownership records show that Washington Graham, Elisha's half-brother living in New York State, filed for 160 acres of public domain land adjoining Elisha's claim and along the Niobrara River just one month after Elisha filed for his claim of land.³⁵ Since cattle ranching required abundant grassland near water, many applicants who seriously intended to develop a ranch undoubtedly persuaded family members and friends to also file for adjoining or nearby parcels.³⁶

There were other reasons for the failure and abuse of land laws. Many individuals or employees of companies filed for land claims with no intention of farming or ranching but for the purpose of speculative resale. Additionally, the federal government used millions of acres of the public domain for purposes other than individual farms or ranches. The public domain was given to military veterans as bounties, to railroad companies for rail construction and investment and sale, to school districts for schools, and for a variety of other internal improvements. In Nebraska alone, the federal government granted railroad companies about 16.6

³³ Graham's Timber Culture Act acreage was Lot 7 in the SE $\frac{1}{4}$ of the SW $\frac{1}{4}$ of Section 6 and also Lot 1 in the NE $\frac{1}{4}$ of the NW $\frac{1}{4}$ of Section 7, T28N, R55W. "Testament of Claimant," Elisha B. Graham, 1887, Dena Sanford files, Midwest Regional Office, National Park Service.

³⁴ Sheldon, "Land Systems and Land Policies in Nebraska," 94- 97; Rod Nash, "Timber Culture Act," *New Encyclopedia of the American West*, edited by Lamar, 1115-115; Olson and Naugle, *History of Nebraska*, 159.

³⁵ Sections 7 and 8, Township 28 North, Range 55 West, 6th Principal Meridian, "Numerical Index," Clerks Office, Sioux County Courthouse, Harrison, Nebraska.

³⁶ Olson and Naugle, *History of Nebraska*, 158.

percent of the public domain for construction and for real estate investments. Finally, the requirements of laws like the Timber Culture Act were difficult and costly to meet. In many areas of the semiarid West it was impossible to grow trees; applicants filed for land with no intention of making the effort or going to the expense of tree planting. For this reason the Timber Culture Act was especially vulnerable to flagrant abuse.³⁷ In 1885, a special inspector working for the General Land Office commissioner observed:

I have traveled over hundreds of miles of land in western Kansas, Nebraska, and central Dakota, nearly one-fourth of which had been taken under the 'timber culture act,' without seeing an artificial grove even in incipiency, and can scarcely recall an instance in any one day's travel where the ground had been more than scratched with the plow for the purpose of planting trees. . . . As to the proportion of land entered under the timber culture act that is not improved as required by that act, . . . in Kansas, Nebraska, and Dakota the proportion is 90 per cent. . . . A more vicious system of fraudulent entries has not been successfully practiced by and in the interest of cattlemen and stock corporations.³⁸

Flagrant abuses of the Timber Culture and Preemption acts led to their eventual repeal by Congress in 1891. By repealing these two land laws, Congress expressed its strong opposition to the indiscriminate alienation of the public domain.

Origins and Early Development of the 04 Ranch on the Upper Niobrara

The "04 Ranch," named for the brand on the Elisha Graham cattle purchased in August 1879, was established on the Niobrara that same year. Graham selected a man named John D. ("Charley") Russell as foreman to oversee his ranch operation as well as several good cowhands to build corrals for the horses and buildings for human habitation. Rudimentary buildings were soon erected at the 04 Ranch for the foreman and cowboys. Since the ranch had no trees whatsoever, Graham's ranch hands rode twenty miles north to the nearest source of wood at Pine Ridge (just north of present-day Harrison) to fell logs for buildings and fences as well as for firewood. Graham had his cowboys build at least one log cabin, a small stable, sheds, and a large corral, using heavy log poles as gates. In the spring of 1880, Elisha and Mary Graham traveled by wagon the 150 miles from Cheyenne to the 04 Ranch to assess the progress being made on the building and corral construction and the preparedness for the ranch's first roundup. Then, in the spring of 1881, Elisha and Mary Graham and their nineteen- and fourteen-year-old daughters began spending several weeks on their ranch.³⁹

³⁷ Sheldon, "Land Systems and Land Policies of Nebraska," 75-78, 84-93, 116-18.

³⁸ *Ibid.*, 116-17; Olson and Naugle, *History of Nebraska*, 162.

³⁹ Watkins, "Graham, Elisha Barker," 756; Dorothy C. Meade, "Graham Family," in Harrison Community Club, *Sioux County History: First 100 Years, 1886-1986* (Dallas, TX: Curtis Media

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The 04 Ranch on the Niobrara River was just a stone's throw from a road paralleling the east-west road located on the north side of the Niobrara River. In May 1881, the house of the "Dr. E. Graham" was recorded by surveyor W. F. Benson as he traversed this remote area of Sioux County surveying township and section lines. Benson's survey notes described the location of Graham's house as "Southwestern $\frac{1}{4}$ of the southwestern $\frac{1}{4}$ of Section 6, Township 28 North, Range 55 West of the 6th Principal Meridian." Benson marked several section and quarter section corners in the vicinity of Graham's ranch with mounds of stone.⁴⁰ According to surveyor Benson, the landscape in the vicinity of the Graham house was "mountainous," the soil "3rd grade," and the vegetation predominantly "bunchgrass." Herds of pronghorn antelope came to the river for water and grazed on the short prairie grass in the so-called 04 Flats, a mile or two south of the ranch. The Grahams witnessed a sole bison traversing the landscape above and west of the ranch in the early 1880s. Sheep, driven by men from Wyoming, occasionally could be seen moving through the valley on their way to market.⁴¹ These were but a few of the observations made by surveyor Benson and the Grahams around the 04 Ranch during this time.

The Graham family continued to spend several weeks every summer at the 04 Ranch through the mid-1880s. In 1885, the Nebraska agricultural census for Sioux County (which acquired its present boundaries that year) reported that Elisha Graham and Thomas Snyder,⁴² Graham's partner and probably part-owner of the cattle, had a total of 160 acres of improved land: 25 acres that were "tilled, including fallow and grass in rotation" and 135 acres that were in permanent pastures, permanent meadows, vineyards, or orchards. The 04 Ranch was then valued at a total of \$77,300 including, \$75,000 worth of cattle (owned at least in part by Thomas Snyder and Oscar Millard), \$2,000 in buildings, and \$300 in farm machinery. In June 1885, the 04 Ranch kept over 500 head of cattle and over 300 horses. John Russell still served as the foreman of the ranch in the mid-1880s. Working under him in June 1885 were about eighteen cowboys and a cook, who hailed originally from

Corporation, 1986), 429; Mary E. Graham reminiscences, December 9, 1933, transcribed by Eleanor Cook Naffziger, Box 92, Cook Papers, AFBNM; "History of Agate Springs Ranch," attached to Mrs. Grayson (Dorothy Cook) Meade, oral history interview with Ron Cockrell, May 22, 1986, AFBNM; Cook, "Establishment of First Cattle Ranch, 195; Cook, *Tales of the 04 Ranch*, 9-10; Ruth Van Ackeren, *Sioux County: Memoirs of Its Pioneers* (Harrison, NE: Harrison Ladies Community Club and the Harrison Sun-News, 1967), 15.

⁴⁰ "Exterior line of Tp. 28 North between Ranges 55 & 56 West," Survey Field Notes, May and June 1881, p. 92, Agate Fossil Beds National Monument Archives.

⁴¹ Graham reminiscences, December 9, 1933, Box 92, Cook Papers, AFBNM; surveyor's notes, T28N, R55W, 6th Principal Meridian, July 6, 1881, Dena Sanford files, Midwest Regional Office, National Park Service, Omaha, Nebraska; "Sioux County," *Sioux County History: First 100 Years, 1886-1986* (Harrison: Harrison Community Club, Inc., 1986), 3.

⁴² J.W. Snyder, a brother of Thomas Snyder, drove cattle north from Texas between around 1868 and the mid-1880s. R. Snyder, probably another Snyder brother, helped Graham establish the 04 Ranch. Coffee, "Speculators, Early Ranchers and Sioux County Grass," 81.

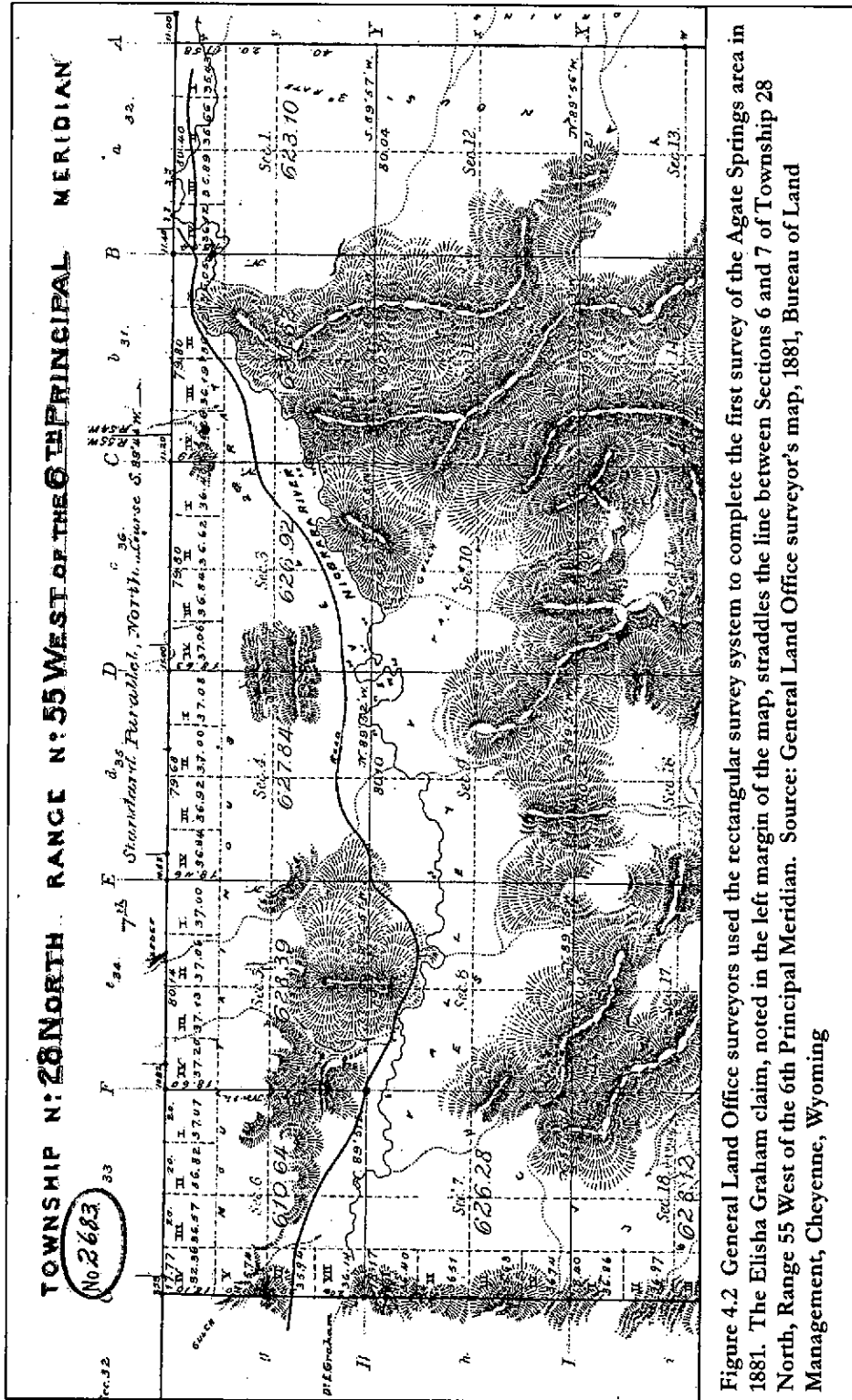


Figure 4.2 General Land Office surveyors used the rectangular survey system to complete the first survey of the Agate Springs area in 1881. The Elisha Graham claim, noted in the left margin of the map, straddles the line between Sections 6 and 7 of Township 28 North, Range 55 West of the 6th Principal Meridian. Source: General Land Office surveyor's map, 1881, Bureau of Land Management, Cheyenne, Wyoming

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England and states as far-flung as Maryland, Pennsylvania, Wisconsin, Michigan, Illinois, Iowa, Texas, Colorado, and New Mexico.⁴³

In June 1885, the 04 Ranch was one of seven ranches in Sioux County recorded by the census taker. The other six ranches included those owned by: McGinley & Stover, on the Niobrara; Bartlett Richards's Lower 33 Ranch, on the Niobrara at Whistle Creek (Richards also managed the Lakota Cattle Company Upper 33 Ranch, on the Niobrara near Hat Creek); Coffee & Brothers, at the O 10 Bar Ranch on Hat Creek; Ferris & Company (including Pratt), on Spring Creek; Brewster & Brother (also with S. F. Emmons, as Emmons and Brewster), at the Warbonnet Ranch on Warbonnet Creek; and B. Irvine.⁴⁴ In 1885, the Wyoming Stockgrowers Brand Book listed a total of twelve brands for ranchers in Sioux County (apparently just before it had been reduced in size and acquired its present boundaries). Among these new cattle owners were: Hunter and Evan's Runningwater Land and Livestock Company on Cottonwood Creek, R. S. Van Tassel on the White River and upper Niobrara, and E. S. Newman's Niobrara Cattle Company on the lower Niobrara River.⁴⁵ Within a year or two, Joseph Willis Earnest had a ranch about five miles northwest of the 04 Ranch on the Niobrara. Roughly fifty people resided in Sioux County at that time, most of whom were cowboys. Only three wives and their children lived there then. The Graham family was not included in the June 1885 population census,⁴⁶ probably because they came and went from the 04 Ranch only during the summer. Many if not most people recorded in the 1885 population census were probably temporary ranch employees and seasonal residents of the county.

The 04 Ranch continued to receive small improvements. By the spring of 1887 the ranch consisted of an assortment of buildings, furnishings, and constructed features: one log house, 36' x 15,' with three rooms, 4 doors and 4 windows, a sod roof that sprouted sunflowers, and board floor (occupied by the ranch hands)

One log house, 15' x 15,' with 1 door and 2 windows, roof with sod over canvas, and board floor (occupied by the Grahams in the summer), one log stable, 14' x 25,' two sheds constructed of logs and boards, 14' x 25' and 14' x 75,' fencing that enclosed Graham's entire 160-acre claim. Eliza Graham later recalled that the ranch hands occupied the three-room log house, which included a kitchen, a middle room used as a storeroom, and an end room for sleeping. The 04 Ranch buildings were furnished with three stoves, three tables, two bedsteads, one folding bed and

⁴³ "Agricultural Census" and "Schedule 1—Population," Nebraska, Sioux County, June 1885, microfilm, Nebraska State Historical Society, Lincoln.

⁴⁴ By 1878, B. E. Brewster and S. F. Emmons, both from Boston, Harvard University graduates, and enamored with the West, started Warbonnet Ranch. By the mid-1880s, Brewster eventually returned to Boston, but returned to Nebraska and Wyoming in the spring and fall for many years. Virginia Coffee, "Speculators, Early Ranchers and Sioux County Grass," in Harrison Community Club, *Sioux County History: First 100 Years, 1886-1986* (Dallas, TX: Curtis Media Corporation, 1986), 81.

⁴⁵ Joe Nunn, *History of Brands and Branding in Sioux County* (?), 4-5.

⁴⁶ "Agricultural Census" and "Schedule 1—Population," Nebraska, Sioux County, June 1885; Van Ackeren, *Sioux County*, 2 and map showing Sioux County ranches around 1885; Louis Berger Group, Inc., *Sioux County Nebraska*, 20.

one bureau (both in the one-room house), and a variety of smaller furnishings and décor. Graham had equipped the ranch with various farm implements: two drags, two plows, one mowing machine, one horse rake, two lumber wagons, one buggy, three sets of harnesses, and several minor implements. In early 1887, the 04 Ranch had an assortment of livestock and domestic animals in addition to the commercial cattle and horses: ninety head of polled Angus, heifers, and calves; eighteen head of horses; three hogs; fifty chickens and ducks; an interest in several cows, steers, and a horse, cared for by neighbor A. McGinley. In 1887, Elisha Graham declared that 35 acres of the ranch were under cultivation, planted with crops such as potatoes, peas, sweet turnips, and oats. The Grahams succeeded in raising these crops by “sub-irrigating” land at the bend in the Niobrara River.⁴⁷

Despite the reasonably substantial appearance of the 04 Ranch in the mid-1880s and Elisha Graham’s 1887 land claim testimony that he had occupied the land more or less permanently since the spring of 1881, the Graham family lived at the ranch only during the summer months. In the early summer, Elisha and Mary traveled the 150-mile distance in a buckboard wagon, while their two daughters rode ponies.⁴⁸ Their house cook, John Geiger, whom they had known earlier in Three Rivers, Michigan, accompanied them and drove the freight wagon. The trip sometimes took five days. “The Grahams remained on their ranch only a few weeks in the summer, having a home in Cheyenne,” according to Elisha Graham’s biographer. Mary Graham and James Cook confirm this in their writings. Elisha Graham apparently continued to practice homeopathic medicine in Cheyenne, until around 1887.⁴⁹

Neighbors along the Upper Niobrara River, 1878—1887

Although the Grahams were part-time settlers at the bend of the upper Niobrara in the early 1880s, they had a small number of neighbors who lived more or less permanently in the vicinity of the 04 Ranch. Twelve miles east was their neighbor, Edgar Beecher Bronson, owner of the sparse cluster of buildings on the so-called Lower 33, at the confluence of Whistle Creek and the Niobrara. After Bronson left the Niobrara around 1882, Bartlett Richards operated the Lower 33 Ranch at Whistle Creek and managed the Upper 33 Ranch, to the northwest on the Niobrara. A few individuals claimed land much closer to the Grahams. Adjoining the 04 Ranch claim was the claim of Elisha Graham’s half brother, Washington (“Wash”) Graham, and his wife. Immediately to the west of the 04 Ranch was a ranch belonging to Andrew

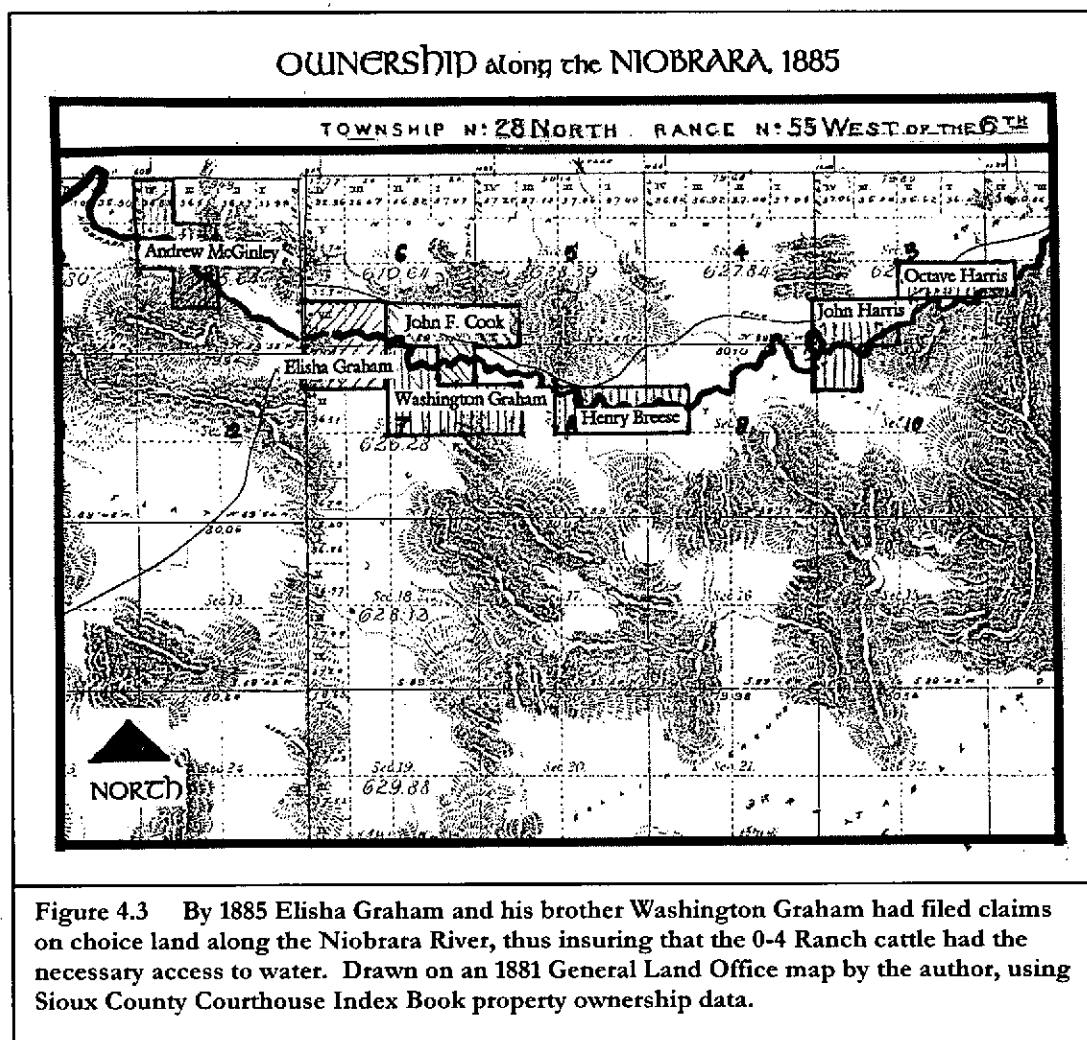
⁴⁷ “Testimony of Claimant,” Elisha B. Graham, 31 May 1887, Dena Sanford files, Midwest Regional Office, National Park Service; Graham reminiscences, December 9, 1933 and “Notes of Grandmother Graham,” taken by Margaret C. Cook, December 2, 1936, both in Box 92, Cook Papers, AFBNM.

⁴⁸ Cook, *Tales of the 04 Ranch*, 8; Van Ackeren, *Sioux County*, 15; Graham reminiscences, December 9, 1933, Box 92, Cook Papers, AFBNM).

⁴⁹ Watkins, “Graham, Elisha Barker,” 756; History of Agate Springs Ranch,” attached to Mrs. Grayson (Dorothy Cook) Meade, oral history interview, AFBNM; James H. Cook, *Fifty Years on the Old Frontier* (Norman: University of Oklahoma Press, 1980), 233.

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McGinley and his wife, who lived in a solid house of hewn logs. William C. Stover became McGinley's partner shortly after McGinley claimed a quarter section of Niobrara bottomland. Robert Neece worked for McGinley for several years and lived on the McGinley property with his wife Margaret Neece, after the McGinleys moved into Harrison.⁵⁰



By 1886, several others had claimed land in the vicinity of the 04 Ranch. Immediately to the east, John F. Cook filed claims for several hundred acres along the Niobrara, as did Henry Breese, about one and one-half miles east of the Grahams' land. Two miles farther east of the 04 Ranch, Arthur M. Green claimed

⁵⁰ Graham reminiscences, December 9, 1933, Box 92, Cook Papers, AFBNM; Roberts, "History of Agate Springs," 284.

land along the Niobrara.⁵¹ Two Harris brothers, Octave and John, also claimed land to the east along the Niobrara. To the west, Mary MacLachlan filed a claim for nearly two sections of land, located south of the McGinley and Stover ranch land.

During the summers, the Grahams also had occasional visitors.⁵² James Cook, who had met the Graham family in Cheyenne around 1881, occasionally stopped by the 04 Ranch. "When the family would make their annual trip to their ranch I would manage at times to happen along for a two- or three-day visit," Cook wrote many years later. While at the 04 Ranch, mail arrived twice a week from Fort Robinson, fifty miles away. Clara and Kate Graham sometimes collected the mail at Edgar Beecher Bronson's Lower 33 Ranch outpost at the juncture of the Niobrara River and Whistle Creek, about twelve miles away.⁵³

Edgar Beecher Bronson was among the very first to experiment with cattle ranching in the upper Niobrara River drainage. Before coming west, Bronson, the nephew of minister and writer Henry Ward Beecher, worked as a reporter for the *New York Tribune*. After coming west, Bronson compiled survey records in 1874 for Clarence King, first director of the United States Geological Survey and owner of large cattle and mining operations in the West. Bronson worked for King as a cow puncher after compiling survey records. Bronson also worked a season for Wyoming cattlemen N. R. Davis. King, along with U.S. Congressman Abraham S. Hewitt, New York City Mayor Edward Cooper, James T. Gardiner, Raphael Pumpelly, and Reuben Rickard, helped finance Bronson's early venture into cattle ranching, which adopted the name "Lakota Cattle Company." In the fall of 1877, Bronson followed the advice of Wyoming cattle buyer Alex Swan and bought over 700 cattle, wintering them on Cottonwood Creek northwest of Fort Laramie. In early 1878, Bronson took a couple of men to reconnoiter the upper Niobrara to the north and east of Fort Laramie, in search of unclaimed range for his cattle. He eventually found a site about five miles south of Fort Robinson on Deadman's Creek, a tributary of the Niobrara, to build his log ranch headquarters. Bronson's cattle, displaying the Three Crows brand, wandered widely over his open-range ranching operation, which at that time occupied an area from the source of the White River (north of Agate Springs) east to Fort Robinson and south as far as the Niobrara River. Over the next five years, Bronson enlarged his herd to between 6,000 and 8,000 cattle. The Grahams considered Bronson a neighbor since their ranches adjoined and their cattle occasionally mingled, especially near the juncture of Whistle Creek and the Niobrara at a place known as the "Lower 33." Bronson and stockholders in the Lakota Cattle Company sold out after about five years, around 1882, as they grew increasingly apprehensive about the passing of the open cattle range, the arrival of the railroad and railroad ownership of millions of acres of land, the overstocking of the range, the encroachment of grangers on the best sections,

⁵¹ "Numerical Index" of chain of title, Township 28 West, Range 55 North and Township 28 West, Range 56 North, Clerk's Office, Sioux County Courthouse, Harrison, Nebraska.

⁵² Graham reminiscences, December 9, 1933, Box 92, and "Notes from Grandmother Graham," by Margaret C. Cook, Box 92, both in Cook Papers, AFBNM; Cook, "Establishment of the First Cattle Ranch," 196; Van Ackeren, *Sioux County*, 15; Cook, *Tales of the 04 Ranch*, 42

⁵³ Cook, "Establishment of the First Cattle Ranch," 195.

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and the grave possibility of devastating dry summers and frigid winters. Bronson left the upper Niobrara, later becoming a well-known writer (and author of *Cowboy Life on the Western Plains*) as well as a big-game hunter in Africa.⁵⁴

Around 1882, Bartlett Richards took over management of Edgar Beecher Bronson's Lakota Cattle Company at the Upper 33 Ranch. He also later operated the Lower 33 at Whistle Creek, about eleven miles east of the 04 Ranch along with the Upper 33 Lakota Company ranches, located about fifteen miles northwest of the 04 Ranch. The Upper 33 Ranch stood on the Niobrara River at the crossing of the more northerly of the two roads between Fort Laramie and Fort Robinson. Born in Vermont in 1862, Bartlett Richards had received his high school education at the prestigious private school, Phillips Academy, in Andover, Massachusetts. Just before he was due to enter Williams College, he yielded to his great fascination with the West and, in August 1879, boarded a Union Pacific passenger train headed to the cattle and cowboy mecca of Cheyenne, Wyoming. He was soon working for cattle ranch owner B. E. Brewster, a Harvard University graduate, who owned a ranch in Sioux County, Nebraska. By 1881 nineteen-year-old Richards was managing a few Wyoming and northwestern Nebraska ranches with thousands of cattle ranging freely over an area equal in size to the state of Vermont. In 1882, Bronson and his ranch stockholders decided to turn over the operation of the Lakota Cattle Company Ranch to Bartlett Richards.⁵⁵ According to Bronson in the last chapter of his book, *Reminiscences*, Bartlett Richards was a "good friend of mine and one of the cleverest of the younger set of Eastern men then on the Wyoming range."⁵⁶

Andrew McGinley, who had been a lumberjack in Maine, came to the Niobrara River and built his first house of sturdy logs to the west of the 04 Ranch around the same time as Elisha Graham claimed squatter's rights to his land. In 1880, McGinley and partner William Stover paid Octave Harris to drive cattle to their land on the Niobrara (called the "Running Water" by the early settlers). Not long after arriving on the upper Niobrara, probably by the mid-1880s, McGinley and Stover began to develop on their property one of the first flood irrigation systems on the upper Niobrara. The system diverted water from the river by damming the flow and directing it into individual lateral ditches or channels branching out from the river. The inundated laterals would overflow their banks and drench, or irrigate, a wide swath of surrounding area. A few constructed flumes carried the water over or under existing roads or other waterways. This irrigation system, just west of the 04

⁵⁴ Bartlett Richards, Jr., and Ruth Van Ackeren, *Bartlett Richards: Nebraska Sandhills Cattleman* (Lincoln: University of Nebraska Press, 1980), 39-45; Cook, *Fifty Years on the Old Frontier*, 233; Coffee, "Speculators, Early Ranchers and Sioux County Grass," 79-81; Nellie Snyder Yost, *The Call of the Range: The Story of the Nebraska Stock Growers Association* (Denver: Sage Books, 1966), 98-100; R. Jay Roberts, "A Preliminary Sketch of the History of Agate Springs Ranch," August 1965, Midwest Regional Office Library, National Park Service, Omaha; "History of Agate Springs Ranch," attached to Mrs. Grayson (Dorothy Cook) Meade, oral history interview, AFBNM; Graham reminiscences, December 9, 1933, Box 92, Cook Papers, AFBNM; Louis Berger Group, Inc., *Sioux County, Nebraska: Historic Buildings Survey* (Lincoln: Nebraska State Historical Society, August 2005), 19-21.

⁵⁵ Van Ackeren, *Sioux County*, map showing Sioux County ranchers, c. 1885.

⁵⁶ Richards, Jr., and Van Ackeren, *Bartlett Richards*, 45.

Ranch, became known as the “McGinley and Stover Ditches.” It undoubtedly inspired other ranchers in the area, including the Harris family and James Cook, who followed Graham at the 04 Ranch, to construct flood irrigation systems on their own ranches. In addition to raising cattle, Andrew McGinley kept a wide assortment of other creatures: ducks, geese, doves, pigeons, guinea hens, and even a peacock at one time. He also had a pack of hounds that he took with him everywhere. The Grahams and Andrew McGinley were never particularly neighborly and visits between the two families were rare. The McGinley couple eventually moved into Harrison. Their adopted daughter Minnie and her husband, Lewis, the McGinleys’ ranch foreman, moved onto the McGinley place. Many years later, Mary Graham recalled that Andrew McGinley was a man who, in her words, was “fat, pussy, red in [the] face, [a] blow hard [who] drank. . . . Old McGinley was a rake, [but] popular.”⁵⁷ Harold J. Cook, Mary Graham’s grandson, remembered McGinley as a rather vindictive person always ready for a good argument or fight.⁵⁸

Robert F. Neece, who had passed through Sioux County in 1872 driving a cattle herd from Missouri to Colorado, returned to the county in 1879, the same year Elisha Graham founded the 04 Ranch. For eight years, Neece worked as the foreman at the McGinley & Stover Ranch, just west of the 04 Ranch. In 1882, Robert Neece married Margaret (“Maggie”) Downey at La Porte, Colorado. The June 1885 county census showed that Maggie, in residence with her husband at the McGinley & Stover Ranch, was one of the few women living in Sioux County at that time. In their effort to homestead, the Neece couple built a shingle roof house (later occupied by the young James Cook family). Within a year or two, the Neeces homesteaded on land east of Agate Springs along the Niobrara River next to the Octave and Caroline Harris homestead, and built a log house with a sod roof on the south side of the Niobrara River, where they began raising their four children.⁵⁹

Around 1879, McGinley and his partner W. C. Stover put nineteen-year-old Octavius Joseph Harris in charge of a string of ranch horses. Known as “Octave,” Harris spent his first winter on the Niobrara in a rudimentary log shack about four miles west of the Grahams’ 04 Ranch. Born in Biddeford, Maine, to a French Canadian mother from Quebec Province (Josette [Josephine] Boisverre) and a farming father of English descent (John B. Harris), Octave Harris moved to California with a sister when he was about nine years old. Within a couple of years, he went to La Porte, near Fort Collins, Colorado, where a community of French Canadian families had settled and taken up farming on the La Poudre River. Here, Harris was introduced to ranching and he began working in Colorado as a cowboy, and then as a ranching “rep” (a person who found and gathered stray livestock)

⁵⁷ Mary Eliza Graham reminiscences, December 2, 1936, transcribed by Eleanor C. Naffziger, Box 92, Cook Papers, AFBNM.

⁵⁸ Angeline Harris Morava, “Harris, Octave and Caroline,” *Sioux County History*, 446; *Cook Tales of the 04 Ranch*, 70-71; Howard, “Hello There,” 16, Cook Papers, AFBNM; “McGinley and Stover Ditches,” Township 29, Range 55, 6th Principal Meridian, no date, map, Box 117, Cook Papers, AFBNM.

⁵⁹ Nora Millburn, “Robert Neece and His Daughter, Nora Neece Hughes,” Van Ackeren, *Sioux County*, 29; “Schedule 1—Population,” Nebraska, Sioux County, June 1885; Robert M. Howard, “Hello There,” *Nebraska Cattleman*, July 1967, 18.

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along the Powder River in northeast Wyoming and southeast Montana and many other western streams. He reportedly herded cattle from Texas to Nebraska and from the rail depots at Ogallala and Valentine. He may have met and worked with James Cook in the late 1870s. He also worked as seasonal roundup cook in Wyoming and Nebraska for Andrew McGinley. Harris soon gained a thorough familiarity with the country and ranches throughout western Nebraska. It was undoubtedly during this period that Andrew McGinley offered Octave Harris a job on the McGinley & Stover ranch on the upper Niobrara. Harris arrived on the banks of the upper Niobrara River, just around the time that Elisha Graham founded the 04 Ranch to the east of McGinley & Stover. By 1882 Andrew McGinley had put Octave Harris in charge of keeping records on his ranch; Harris recorded the number of mares breeding, items sold from the supply wagon, and the names and wages of other McGinley & Stover employees in the ranch's daybook. For his work, Harris received \$40 a month. In June 1885, Harris, still employed by Andrew McGinley, was recorded on the Nebraska population census as a "cowboy." By then he apparently knew that he wanted to live and invest in a ranching life in Sioux County, so Harris filed a claim for his own land along the south side of Niobrara River about four miles east of the Graham's 04 Ranch. In September 1885, Octave began to ranch for himself.⁶⁰ North of his selected homesite rose a rocky butte with a discernible hole near the top resembling a turret in a castle, inspiring Harris to name his new home "Castle Rock Ranch." Soon, Octave's brother John Harris located a homesite nearby on the Niobrara River. Since no trees grew anywhere in the short-grass prairie, the two brothers went to Pine Ridge twenty-five miles north, to cut and haul logs back to the Niobrara River, where they constructed long, narrow log homes with low-sloping sod roofs.⁶¹

Like their neighbors to the west, the Elisha and Mary Graham family, Octave and John Harris may have left the area during the bitter cold and windy months. During the winters, they probably returned to their home and extended families in La Porte, Colorado, for several weeks. It was here that Octave Harris became acquainted with Caroline Mary Louise Abler, born in 1867 in Virginia City, Montana, to French-native carpenter and wheelwright Louis Abler and Swiss-born Mary Ann Abler. Caroline Mary Louise Abler and Octave Harris married in La Porte on March 7, 1885. Caroline Harris is not listed in the June 1885 Sioux County population census, although she probably arrived at the Harris brothers' new ranch from Colorado sometime that summer. Caroline, like so many early upper Niobrara settlers, probably spent several weeks each year elsewhere, possibly with her family in Colorado. Around 1892—1893, Octave and Caroline Harris moved farther east to

⁶⁰ Octave Harris, "Homestead, Pre-Emption, and Commutation Proof," May 7 1887, Box 61, Cook Papers, AFBNM.

⁶¹ Angeline Harris Morava, "Harris, Octave and Caroline," *Sioux County History: First 100 Years, 1886-1986*, 446; Howard, "Hello There," 16-19, 43; Van Ackeren, *Sioux County*, 20-21; "Schedule 1—Population," Nebraska, Sioux County, June 1885; Tyler Skavdahl, "The River: Days of the White Man" and Jessi Morava, "From a Butte's View," both in *Along the Road: by the Students of Dist. 43* (Marsland, NE: Pink School House Press, 1995; Angeline Harris Morava, interview with the author, 12 April 2007, Crawford, Nebraska, transcript at Agate Fossil Beds National Monument.

establish a new homestead (about nine miles east of the 04 Ranch at Agate Springs), on land deeded to Caroline Harris by her mother. In 1896, Octave and Caroline built a substantial two-story brick home on their ranch, then known as the "LaBelle Stock Farm." Here they raised five children (Louis Phillip, James L., Frederick A., Frank, and Addie Marie) to adulthood. Within the next several years, the LaBelle Stock Farm grew in acreage, ranch and domestic buildings, and livestock. Octave Harris, following the example of Andrew McGinley to the west, very early built an irrigation canal to water his fields.⁶²

The last person to buy property near the Grahams, John Franklin Cook, filed a claim immediately to the east of the 04 Ranch. John Franklin Cook was the older brother of James H. Cook, who would eventually take over the 04 Ranch. A native of Kalamazoo, Michigan, he was born on July 26, 1856 (just thirteen months before his brother), and went west at a young age. He first traveled to California, where he worked in fields associated with prospecting in and around San Francisco for a few years. He later prospected in the Tombstone, Arizona, area. He then went to southwestern New Mexico, where he worked as a cowboy for his brother, James Cook, at the WS Ranch, and joined him in the Apache campaign in 1885. In the fall of 1886, he filed a claim for several hundred acres along the Niobrara, just east of the 04 Ranch headquarters, and began homesteading and ranching.⁶³

Early Ranch Constructions on the Landscape

Buildings constructed and occupied by the first ranchers on the upper Niobrara went through an evolution of materials, methods, and style. Similar to all western frontiers, the first buildings constructed were generally rudimentary structures that were inexpensive, easy to build, and few in number. They symbolized the uncertain, temporary, often seasonal occupancy of the earliest ranchers in the region. Early ranch headquarters were usually small tight clusters of just a few buildings that were little more than remote outposts on an open, windswept, prairie landscape.

Wood even more than water was a scarce commodity on the upper Niobrara. Sod served as a basic easily obtainable building material in the vicinity of Agate Springs. Blocks of hard-packed earth were cut into rectangular bricks and piled vertically to create walls. A very limited amount of wood was used for framing the walls. Sod, with or without canvas or tarpaper beneath, was also often used for the low-pitch gable roofs characteristic of sod houses. Hard-packed earth usually served as the floor. Although sod could be piled around small window openings, sod house interiors were invariably dark as well as damp and often inhabited with fleas, mice, and other vermin. Occasionally, inside walls were whitewashed and ceilings

⁶² Angeline Harris Morava, "Harris, Octave and Caroline," *Sioux County History: First 100 Years, 1886-1986*, 446; Van Ackeren, *Sioux County*, 20-21; Tyler Skavdahl, "The River: Days of the White Man" and Jessi Morava, "From a Butte's View," both in *Along the Road: by the Students of Dist. 43* (Marsland, NE: Pink School House Press, 1995; "Schedule 1—Population," Nebraska, Sioux County, June 1885.

⁶³ "John Franklin Cook," *Harrison Sun*, October 23, 1941 Cox 118, Cook Papers, AFBNM; Dorothy C. Meade, "History of the Agate Post Office," Box 118, Cook Papers, AFBNM.

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stretched with newspapers or cloth to lighten the dank interior. Even though cool in the summer and warm in the winter, the sod houses were replaced as soon as the ranchers could afford to do so, with either log or frame houses.⁶⁴

Some of the first ranch buildings on the upper Niobrara were built of log or a combination of log and sod. Early ranchers on the upper Niobrara lived in a transition zone, barely within easy and affordable reach of yellow (ponderosa) pine on Pine Ridge, about twenty-five miles north of the river. Since men transported these felled logs in wagons with beds not much longer than fifteen feet, the length of logs was limited by the size of wagons used to haul them. Often houses consisted of an adjoining sequence of rooms, each roughly 14 or 15 feet square. Clean log building construction was much preferred over sod, but it required certain tools, skills, financial resources, human energy, and means of transport. Since logs were a limited and precious commodity, sod roofs often capped log houses.

The Grahams, Andrew McGinley, and the Harrises constructed their first houses of log. In the early 1880s, the 04 Ranch had two log buildings. One, occupied by the ranch hands, consisted of three connected log sections, each fifteen feet wide, which was capped by a sod roof. This long log house stood northwest of the present Cook two-story house, where the slough/pond on the ranch property arcs to the west. The other one-room house used by the Grahams during their summer sojourns was also constructed of logs, fifteen feet square, with a sod roof over canvas to help prevent mud from dripping down after rain storms. It may have stood farther to the west of the ranch hands' house, near the farthest west loop of the slough.⁶⁵

The cultural features at the 04 Ranch in the mid-1880s were just the beginning of many more human constructions soon to come. Near the two dwellings were outbuildings also built of log. By the mid-1880s, the 04 Ranch had a log stable and a couple of sheds of log and boards. A combination of logs and boards were used for corrals and fences. The Grahams' original vegetable garden, which always included potatoes, lay north of the ranch hands' log house. Alfalfa and some corn and oats also were grown. As much as 40 acres may have been plowed at least once by the Grahams between 1881 and 1887. Before Elisha and Mary Graham sold the 04 Ranch in 1887, fencing of barbed wire affixed to wood poles presumably enclosed the entire acreage owned by the Grahams and also divided the grassland into smaller grazing and watering areas. Cattle and horse grazing would have been clearly evident by the shortened prairie grass and compacted soil. One wagon road—the southerly wagon road from Fort Laramie to Fort Robinson—passed just to the north of the ranch headquarters. The entire ranch headquarters, as depicted in a general photographic view taken around 1890, was devoid of trees.⁶⁶

⁶⁴ Olson and Naugle, *History of Nebraska*, 208-10.

⁶⁵ Graham reminiscences, December 2, 1936, Box 92; also, photo of the Agate Springs Ranch, c. 1890, No. AGFO 5852, both in Cook Papers, AFBNM.

⁶⁶ Octave Harris, "Homestead, Pre-Emption, and Commutation Proof, Testimony of Witness," May 7, 1887 and Joseph F. Pfost, "Homestead, Pre-Emption, and Commutation Proof, Testimony of Witness," May 31, 1887, both in Box 61, Cook Papers, AFBNM.

Close of the Cattle Boom and the Seasonal Tenancy of Elisha Graham

Elisha Graham encountered many challenges during his eight years as an entrepreneurial cattle rancher on the upper Niobrara River. During the winter of 1880—1881, heavy storms descended over the best range in the West, killing thousands of cattle. Soon afterward, beef prices began to decline due to an oversupply at markets. In 1884, 1,000 pounds of beef brought \$5.60 at the mammoth Chicago market; a year later the same pounds fetched only \$4.75 in Chicago. By 1889, the price plummeted to \$3.75 per 1,000 pounds. Also, Graham apparently struggled with the mismanagement of the 04 Ranch. “Ranch affairs were soon in a muddle,” wrote Harold Cook many years later about Graham’s early ownership of the ranch. “Rustlers stole cattle and butchered them, burying the hides.”⁶⁷

Additionally, by the mid-1880s, the cattle drives over the Western Trail and the Jones and Plummer Trail from Texas to Ogallala, Nebraska, had slowed to a trickle. Settlers in western Nebraska, who were attempting to grow crops, including grains and grasses, were invoking new herd laws to keep cattle out, which virtually closed the open range. The movement away from the long cattle drives across public land, along with concerns about the spread of cattle-borne disease from Texas, snuffed out the 1884 cattlemen’s proposal to receive congressional approval to build a National Cattle Trail. If completed, this six-mile-wide swath of land, reserved from private ownership, would have branched off the Western Trail south of Dodge City, traversed the Nebraska panhandle and passed near the 04 Ranch, before continuing northward all the way to the Canadian Prairie Provinces. Since Graham had fenced his fields by that time, the National Cattle Trail would have been a welcome avenue to transport his cattle to the nearest railroad depot. The National Cattle Trail, however, never materialized as the wave of homesteaders seeking private ownership of their land washed farther and farther west across the Great Plains. Ranchers like Graham erected more and more barbed wire fences across their claimed land. The flow of longhorns from Texas was also blocked in the middle 1880s when northern cattlemen insisted on quarantine laws prohibiting the spread of Texas splenic fever by cattle traveling over the Western Trail. By this time, overstocking of cattle on the northern Plains had caused the quality of the beef to deteriorate.⁶⁸

In addition to problems related to his cattle, Graham also confronted the devastating challenge of losing some of his horses. He lost his prize mare after her throat was cut on a fence nail, according to Graham’s granddaughter, Dorothy Cook Meade. Graham also lost yearlings when several of them contacted a wire fence during a lightning storm and were electrocuted.⁶⁹

⁶⁷ Cook, *Tales of the 04 Ranch*, 8.

⁶⁸ Olson and Naugle, *History of Nebraska*, 190-93; Wishart, “Settling the Great Plains,” 269-71; Stout, “Cattle Industry,” 179.

⁶⁹ Dorothy C. Meade, *The Story of Agate Springs Ranch* (Scottsbluff: Print Express, 1990), 9.

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The capstone challenge for Graham as a cattle rancher came between 1885 and 1887. During the winters of 1885—1886 and 1886—1887, frigid cold temperatures and high winds for extended periods devastated cattle herds across the Plains. The winter of 1886—1887 brought snow, icy winds, and subzero temperatures that took a high toll on cattle stranded on the open range. The worst winter on record, the series of storms between November and April “sent herds drifting aimlessly with no food or water; huddled in masses, the livestock died by the thousands.”⁷⁰ Some ranchers lost as much as 80 percent of their herds; in general, herds were reduced by 40 to 60 percent. Although there is no known record of



Figure 4.4 Elisha B. Graham after his second marriage, lived with his daughter Clara Graham Heath, and operated a vineyard at Cucamonga, California. Courtesy of the National Park Service (AGFO 6120.2).

Elisha Graham’s loss of cattle, it is likely that it was great, especially if the ranch was suffering from mismanagement at that time. Between these two ferocious winters, the summer of 1886 was extremely dry across the northern High Plains. Drought returned to the High Plains in 1887 (and lasted with only brief respites until 1896). Finally, homesteaders as well as sheepherders (in some parts of the High Plains) began to invade the cattle kingdom around this time. All of these circumstances, both natural and of human origin, signaled the end of the open range and the demise of the cattle boom.⁷¹

This sequence of sobering events in the mid-1880s undoubtedly strained the financial coffers of the 04 Ranch. For Elisha Graham, the earlier prophesies and predictions of James Brisbin in his *Beef Bonanza* had proved to be far from true over the long term. Even the most progressive cattle ranchers in northwestern Nebraska, who invested in the best cattle, who fenced herds, and who irrigated at least some of the land, which Graham had begun to do on the 04 Ranch, could not be guaranteed instant wealth. In addition, the

contextual backdrop of cattle ranching as well Elisha’s personal circumstances had changed radically since he first established his ranch. The booming days of long cattle trails, “free air” on the open range, and high profits at markets were all over by 1887. Graham’s own family life had dramatically changed when his two grown daughters left home. On Christmas Eve December 1885, Graham’s older daughter, Clara, married Robert Newton Heath and they moved to Camp Carlin, Wyoming, (just outside Cheyenne), where Robert Heath worked as the chief quartermaster clerk. In the fall of 1886, his younger daughter, Kate, married James H. Cook and

⁷⁰ Stout, “Cattle Industry,” 179.

⁷¹ Luebke, *Nebraska*, 108; Olson and Naugle, *History of Nebraska*, 190-93; Wishart, “Settling the Great Plains,” 269-70, 273; Stout, “Cattle Industry,” 179.

together they left the High Plains of eastern Wyoming and western Nebraska. Summer ranching on the wide-open, clear-skied, wind-swept prairies along the Niobrara had come to an end as a cherished and adventurous family enterprise.⁷²

Elisha Graham's Life after the 04 Ranch

After selling the 04 Ranch to James H. Cook in 1887, Elisha Barker Graham did not remain in Cheyenne for more than four or five years. In addition to his daughters' departures from the Graham home there, he and his wife Mary became estranged. They eventually divorced. Elisha later moved to Utah, then California. Although Elisha's precise pursuits and movements are not known, it is likely that he traveled frequently to visit family in rural upstate New York and friends in Albany, New York, and in southern Michigan. He also traveled overseas to Japan, China, and very possibly other countries in Asia.⁷³ In July 1893, fifty-three year-old Elisha Graham married Mittie T. (or H.) Hayden, a native of Michigan, in Cook County, Illinois (possibly in Chicago), only about one hundred miles from the Grahams' former home in Three Rivers, Michigan. Within the next ten years, Elisha and Mittie moved to Cheyenne County, Nebraska (about seventy-five miles south of Agate Springs). By 1910, his marriage to Mittie had ended and Elisha, then seventy years old, traveled often from his home in southern California, where he bought and managed a vineyard at Cucamonga and lived with his daughter's family, Clara and Robert Heath and their two sons.⁷⁴ In May 1910, he sailed on the *Siberia*, to Honolulu, Hawaii and Japan, where he traveled by train from the port city of Yokohama to many cultural sites across the country. He described his Asian travels in a letter to Harold Cook.⁷⁵ Elisha Graham remained in contact with all his family after separating from Mary Eliza. He occasionally visited his old 04 Ranch, renamed the Agate Springs Ranch by its new owners—his daughter Kate and her husband James H. Cook. As James Cook aged and his son Harold increasingly took over the responsibility of operating the ranch, Cook often spent winters in southern California with Graham family members, reminiscing about life on Wyoming's frontier and as a cattle rancher on the 04 Ranch. Graham had periodic contact with

⁷² Photo of Clara Graham and Robert Newton Heath in carriage in front of Heath's quarters at Camp Carlin and caption, AFBNM 5882.2, Box H, Cook Papers, AFBNM.

⁷³ Elisha B. Graham, letter to Harold Cook, 14 May 1910, from Yokohama, Japan, mentioned a previous trip to China.

⁷⁴ Extracted marriage record, Elisha B. Graham, 5 July 1893, <http://www.familysearch.org>; Mittie H. Graham, born in 1857 in Michigan, is listed in the 1900 census as wife of Elisha Graham and both are living in Cheyenne County, Nebraska. "Twelfth Census of the United State, Schedule No. 1—Population," Cheyenne, Nebraska, <http://persi.heritagequestonline.com>; The 1910 census shows Elisha Graham living at the time of the census, in Italy, New York, apparently visiting or staying with family members. "Thirteenth Census of the United States, 1910—Population," Italy, Yates, New York, <http://persi.heritagequestonline.com>. Meade, *Story of Agate Springs Ranch*, 14. Cucamonga, California is noted as the location of Graham's vineyard on the back of series of photos taken of Mary Graham's bungalow in California during 1916—1917, Cook Papers, Agate Fossil Beds National Monument.

⁷⁵ Elisha B. Graham, letter to Harold Cook, 14 May 1910, from Yokohama, Japan; *Siberia* ship passenger list, "Elisha B. Graham," AncestryLibrary.com.

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his grandsons Harold and John Graham Cook as well as James Cook for the remainder of his life. Elisha Graham died in California on December 11, 1923.⁷⁶

Existing Cultural Landscape Features of the Graham's Early Cattle Ranching

In the early twenty-first century, the cultural imprint of the Grahams' era of early cattle ranching at the 04 Ranch is faint but real. None of the original log structures built on the ranch is known to still exist, although materials from them may have been recycled and reused in later structures. Decisions made about the location of the ranch headquarters along the east side of the arcing slough south of the Niobrara River are evident to this day. Early fence lines that followed section or quarter section lines, particularly the fence along the north-south section line separating Range 55 West from Range 56 West (Township 28 North), between the Graham property and the adjoining property to the west, may still be roughly intact. The remains of a few of the surveyors' mounds of stone or rock, marking section corners, also may be barely discernable upon very close scrutiny. The founding of the 04 Ranch created the basic cultural footprint at this bend in the Niobrara River upon which the next era of ranching would build and leave a lasting imprint on the landscape.

⁷⁶ Correspondence between Grahams and Cooks during their year in Inglewood, Cook Papers, AFBNM.

Chapter 5

CLASH OF NATIVES AND NEWCOMERS, 1804—mid-1870s

Introduction

Lakota Sioux and all Great Plains Indians experienced tumultuous upheaval during the 1800s. Although devastated earlier by diseases introduced by European visitors to North America, the Oglala and Brule, who migrated to the Plains in the 1700s, still pursued a life of nomadic hunting and gathering and practicing many ancient cultural traditions. With horses and weapons introduced earlier by European traders, they hunted bison, dug roots, beaded garments, lived in tepees, and practiced sacred ceremonies. The upper Niobrara River was part of a vast area visited by the Oglala and Brule in their pursuit of bison. Certain landforms acquired sacred meaning over time. Lakota life began to change radically and rapidly with the arrival of emigrant settlers heading west, the U.S. Army, and the railroad, and the accompanying precipitous decline and near extinction of bison by the mid-1870s—the staple of all Sioux life. Attempting to resist white intrusions on their land and their life, many Lakota bands clashed with emigrant and army visitors in violent confrontations beginning in the mid-1800s and reaching a crescendo in 1876. No American government policies attempted to slow these changes or stop the annihilation of the bison and with them the Sioux.

Red Cloud—warrior, Lakota Sioux leader, and diplomat to the American government—roamed throughout the upper Niobrara watershed with his people from the time of his birth in 1821 and witnessed cataclysmic changes to his world. His life straddled the widening gulf between the old familiar world of his people and the new world introduced by intruders on Indian lands. And, in an effort to continue and survive in this rapidly evolving world, he stepped forward to play an important role in events that unfolded between the 1850s to the 1870s and later.

Red Cloud

Red Cloud was considered among the most influential of Native American leaders living on the Great Plains in the late nineteenth century. It is thought that he was born on Blue Water Creek, a tributary of the North Platte River (in present-day Garden County, Nebraska) in May 1821. Red Cloud's ancestors had migrated from the woodlands of Minnesota to the northern Plains a few decades earlier. Red Cloud's father, Lone Man,¹ was a Brule Lakota Sioux. His mother, Walks-as-She-Thinks, belonged to the Oglala Lakota, another western Sioux tribe. After losing his father to alcoholism, Red Cloud, as a young child, went with his brother and sister to

¹ Red Cloud at one time stated that his father's name was "Red Cloud," as was his grandfather's; it was a family name, he said. However, individual Sioux usually earned their name by some trait or action of the individual. Robert W. Larson, *Red Cloud: Warrior-Statesman of the Lakota Sioux* (Norman: University Oklahoma Press, 1997), 33.

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live with his mother's brother, Chief Old Smoke of the Bad Faces band of the Oglala.² Red Cloud, known as *Makhpīya-luta* to his own people, grew up with other Oglala boys, eager to become part of a warrior culture learning to hunt, fight, shoot, and ride. During his youth, Red Cloud and the Bad Faces band rarely spent more than two months in any one place except when winter snow and cold prohibited safe travel; he and his people hunted widely throughout much of the northern High Plains, moving seasonally across territory encompassing the upper Niobrara River in present-day northwestern Nebraska and the Yellowstone Valley in northeastern Wyoming. Red Cloud, like all Lakota Sioux, became well-versed in the geography, topography, natural history, and biology of the region.³ The Lakota homeland and hunting grounds during much of the 1800s became the future home of the 04 Ranch (later the Agate Springs Ranch) and the Agate Fossil Beds National Monument on the upper Niobrara River.

Red Cloud lived through the nineteenth century and into the early twentieth. During his lifetime he observed and experienced a tumultuous upheaval in his world. Red Cloud's life spanned the most triumphant years in Oglala history when the Lakota dominated the northern High Plains. He also saw the tragic decline of his people in the late nineteenth century. During the 1800s, he and his people lost their homeland, their primary food source (the bison), much of their population, their traditional culture, and their history which was inscribed on the land. Red Cloud not only witnessed but participated in events, such as the 1868 Treaty of Fort Laramie, that transformed the way of life of the Lakota Sioux and Plains Indians for eternity. As he matured, Red Cloud became a respected warrior and war party leader (*blotahunka*) among the Oglala, a wise leader of his people as chief (*Itan-chan*), and a sage statesman and Oglala representative to Euro-American newcomers.⁴ "He did everything in his power to hold his bands together and to oppose the coming of the whites," wrote his long-time white friend James H. Cook.⁵

Arrival of the Sioux on the High Plains

² There has been considerable disagreement among Red Cloud scholars and others about the date and place of Red Cloud's birth, based on Red Cloud's seemingly contradictory explanation of this event. Some contend he was born in 1822 and that his birth place was on the Platte River. Red Cloud's parentage is equally uncertain. James C. Olson, *Red Cloud and the Sioux Problem* (Lincoln: University of Nebraska Press, 1965), 15-17.

³ Olson, *Red Cloud and the Sioux Problem*, 19; Robert W. Larson, "Red Cloud," in *The Great Plains*, edited by David J. Wishart (Lincoln: University of Nebraska Press, 2004), 834; Larson, *Red Cloud*, 30-38; Richard E. Jensen, editor, *Voices of the American West, Volume I: The Indian Interviews of Eli S. Ricker, 1903-1919* (Lincoln: University of Nebraska Press, 2005), 344.

⁴ Goodyear, Frank H. III, *Red Cloud: Photographs of a Lakota Chief* (Lincoln: University of Nebraska Press, 2003), 1, 11-12.

⁵ James H. Cook, *Fifty Years on the Old Frontier* (Norman: University of Oklahoma Press, 1980, new edition), 187.

Red Cloud's people, the Sioux, arrived on the Great Plains near the end of a period of dynamic change that unfolded on the western High Plains—an area now encompassing Agate Fossil Beds National Monument in northwestern Nebraska.⁶ The Sioux are part of a linguistic family known as “Siouan”; this was among the most widespread language groups north of Mexico at the time of contact with the first Europeans. The name “Sioux” had its origins in the seventeenth century, when French traders and trappers transformed the Ojibwa name for the Sioux, *Na-dou-esse*, meaning “Snakelike Ones” or “Enemies,” to *Naudousioux*. English-speaking visitors later shortened this to “Sioux.”⁷

The Great Sioux Nation, known as “Seven Council Fires” (*Oceti Sakowin*), was a confederation of three major, closely allied bands. This Sioux alliance evolved into three main divisions, distinguished by the geographic region they occupied and by the mutually comprehensible Siouian dialect they spoke. The Dakota (also known as Isantis, or “Santee” Sioux) lived in the east. The Yankton-Yanktonai (also known as Wiciyelas, or “Nakota”) lived in the middle, between the Dakota and Lakota. The western division of the Sioux Nation, now the largest of all the Sioux divisions, was the Lakota (sometimes called Titunwans, or “Teton” Sioux⁸), meaning “The People.”

Over time, the three Sioux divisions broke into smaller bands and sub-bands, each occupying a different geographic area. The Dakota speakers in the east consisted of four council fires: the Mdewakantunwan, the Sisitunwan, the Wahpetunwan, and the Wahpekute. The Nakota speakers were divided into two council fires: the Ihanktunwum (Yanktons) and the Ihanktunwanna (Yanktonais).⁹ Finally, Lakota Sioux to the west consisted of seven sub-bands. Furthest north, ranging from the Missouri River up the Cannonball and Grand rivers, were the Sicasapa (Black Feet). South of them, on the Moreau and Cheyenne rivers, lived the Mnikowojou or Minneconjou¹⁰ (Those Who Plant by the Stream), the Itzipco or Sans Arcs (Without Bows), and the Oohenunpa (Two Kettles). The southernmost Lakota territory was occupied by the *Sichangu* (Brules) and the Oglala, who, in the first half of the 1800s, ranged from the eastern fringe of the Black Hills across western Nebraska and into eastern Wyoming and Montana.¹¹

The origins of the Seven Council Fires extend back to the Sioux's late-prehistoric ancestral homeland in the mixed fir and deciduous forests west of the Great Lakes in present-day Minnesota and northwestern Wisconsin and the tall-grass prairies of western Minnesota. The prehistoric Sioux belonged to the Woodland

⁶ A thorough discussion of the prehistory of the Sioux, from 11500 years ago to AD 1650 can be found in “Chapter Two” of Guy Gibbon's *The Sioux: The Dakota and Lakota Nations* (Malden, MA: Blackwell Publishing, 2003), 17-46.

⁷ Guy Gibbon, “Sioux,” in *Encyclopedia of the Great Plains*, edited by David J. Wishart (Lincoln: University of Nebraska, 2004), 601; Gibbon, *The Sioux*, 1-2. For a thorough discussion of the synonymy of the word “Sioux” see Raymond J. DeMallie, “Sioux Until 1850,” in *Handbook of North American Indians: Plains, Volume 13, Part 2* (Washington, DC: Smithsonian Institution, 2001), 749.

⁸ DeMallie, “Sioux Until 1850,” 718.

⁹ Gibbon, “Sioux,” 601.

¹⁰ “Minneconjous” is occasionally spelled “Minneconjouys.”

¹¹ *Ibid.*, 601. Also see Raymond J. DeMallie, “The Nomads: The Lakota, a New Power,” *NEBRASKAland: The First Voices* 62: 1 (January-February 1984), 24.

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cultural tradition whose people practiced horticulture and lived in villages. It is believed that the Sioux formed a loose alliance in the late 1200s or early 1300s, when many scattered and extended families congregated in dozens of villages, each enclosed by wooden palisade walls, centered on that region's numerous lakes and streams. There the Sioux lived relatively sedentary and seasonally cyclical lives, making maple sugar in the spring, hunting deer in the summer and fall, and harvesting wild rice in the fall. Occasionally, the Sioux ventured onto the prairies to the west to hunt bison.¹² In 1660, the French explorer Pierre Esprit Radisson described the Sioux as "the nation of the Beef," because of their consumption of bison.¹³

It was around this time that Sioux homelands became part of a vast French fur-trading territory called the *pays d'en haut*, which encompassed thousands of square miles surrounding the Great Lakes. There the Algonquians and various Europeans came together in a sphere of exchanging fur and friendship for trade goods of all kinds. The process of exchange created a new world of cultural and economic accommodation lying somewhere between the pre-existing Indian and European cultures—a "middle ground," as described by historian Richard White. In this middle ground of opportunity and stress the Sioux became increasingly pressured to look elsewhere for places to live and subsist.¹⁴

In the mid-1600s, the Sioux began moving away from their ancestral home and drifting to the west. In turn, social and political upheaval among Indian groups in the eastern Great Lakes region pushed tribes west around Lakes Michigan and Superior. As European fur trappers-traders moved up the Saint Lawrence River from the Atlantic Ocean and through the eastern Great Lakes country of present-day United States and Canada, many indigenous groups found themselves competing with one another and the Sioux for furs and the benefits of trading with the French (for guns, ammunition, horses, and trade goods). The politically unified Five Nations, occupying the eastern Great Lakes region at the present-day U.S.-Canadian border, used weapons acquired from French trappers-traders to aggressively push back the Sioux toward the western Great Lakes. The Ojibwas gradually moved into the Sioux's homeland in Minnesota and pushed them to the south and west. The Sioux were also pulled in that direction by the promise of greater game and obtaining horses. By the early 1700s the eastern division of the Sioux, the Dakota, had moved to the forests in the southern third of present-day Minnesota, where they settled along the Minnesota and upper Mississippi rivers. The middle Sioux, the Yankton-Yanktonai, and the western division, the Lakota, had by then crossed the Red River (named for its distinctive reddish-brown silty waters), which flows north along the present-day Minnesota-Dakota borders into Manitoba's Lake Winnipeg. They settled in the eastern portions of the present-day Dakotas. By the late 1700s all three

¹² Gibbon, *The Sioux*, 2-3; Carlson, *Plains Indians*, 34. See also E. P. Wilson, "The Story of the Oglala and Brule Sioux in the Pine Ridge County of Northwest Nebraska in the Middle Seventies," *Nebraska History* 21: 4 (October-December 1940), 259-60.

¹³ Quoted in DeMallie, "Sioux Until 1850," 719.

¹⁴ Richard White, *The Middle Ground: Indians, Empires, and Republics in the Great Lakes Region, 1650-1815* (Cambridge: Cambridge University Press, 1991), xi-xvi, 50-93.

divisions of Sioux had left their ancestral mixed fir and hardwood homeland in upper Minnesota and northwestern Wisconsin. As each division of Sioux adapted to its new and different natural environment, the Dakota, Yankton-Yanktonai, and Lakota each developed its own dialect of Siouan, its own cultural characteristics, and its own subsistence economy.¹⁵

The Sioux of the west were described in the early 1700s by the French trader Le Sueur. He wrote that the Sioux roamed on the prairies between the upper Mississippi and the Missouri rivers, practiced no horticulture, did not gather rice, and lived “only by the hunt.”¹⁶ The Lakota Sioux, by the mid- to late 1700s had moved farther westward into western Nebraska, pushing the Kiowa-Apache to the south. Although they had acquired only a few horses as of 1707, by mid-century they possessed hundreds of horses and had fully integrated them into their lives. Unlike the eastern branches of the Dakota and Yankton-Yanktonai who pursued more sedentary horticultural lives and occupied earth-lodge dwellings, the Lakota became known as bison-hunting, tepee-dwelling, nomadic horsemen roaming the mixed- and short-grass High Plains. With the horse for transportation and for hunting the enormous herds of bison, the Lakota Sioux became a big-game-hunting culture, similar to that of the Apaches who had occupied the High Plains two to three hundred years earlier and who also had acquired horses (as early as 1630).¹⁷

Fully engaged in trading beaver pelts, then buffalo robes and pemmican, with European visitors, the Lakota thrived on the Plains in the second half of the eighteenth century. They soon outnumbered all other Sioux divisions and tribes combined and came to dominate a region extending from the upper Missouri River in western Minnesota west to the Yellowstone River in Wyoming and south to the Republican River in southern Nebraska. By the late 1700s the Oglalas were vying with neighboring tribes (Kiowa, Arapaho, Crow, and Cheyenne) for the short- and mixed-grass prairie of the High Plains, including those of western Nebraska. They soon emerged as the most powerful tribe on the High Plains. The Oglala ranged over a vast territory extending from the Platte River across present-day southern Nebraska north to the Heart River and from the Missouri in the east across western Nebraska into the Bighorn Mountains in Wyoming.¹⁸

Traditional Lakota Life and Culture on the High Plains

The Lakota Sioux’s spiritual and social life, their political organization, and their relationship to the natural environment were highly ordered. In their social hierarchy, the Lakota consisted of seven subdivisions, noted above. Each of these seven bands consisted of several sub-bands, usually composed of a bilateral extended

¹⁵ Gibbon, *The Sioux*, 3-4; DeMaillie, “Sioux Until 1850,” 720-22.

¹⁶ DeMaillie, “Sioux Until 1850,” 725.

¹⁷ Gibbon, *The Sioux*, 4-5; White, “Winning of the West,” 319-27; DeMaillie, “Sioux Until 1850, 727; Carlson, *Plains Indians*, 34-36; Ludwickson, “Historic Indian Tribes,” 144.

¹⁸ DeMaillie, “Chapter Three: The Buffalo,” 64; Gibbon, “Sioux,” 601.

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family and ranging in size from 50 to 500 people. This small group of related kin, known as the *tiyospaye*, served as the basic unit of Lakota society.¹⁹

A single man or sometimes a pair of brothers provided leadership for each band. Each of the seven Lakota sub-bands had *akicitas* (police) and *nacas* (civil leaders), adult men recognized for their accomplishments in hunting, warfare, and medicine. *Nacas* from each sub-band formed a tribal council, which met whenever matters of group concern arose, such as camp movements, plans for war or peace, trade, and spiritual rituals. Holy men and medicine people were also consulted about important matters, revealing the importance ascribed to spiritual and ceremonial life in Lakota Society.²⁰ Each council chose a *Itan-chan* (chief), who usually was one of the oldest and most competent males in the band and assumed to have expansive wisdom and the ability to effectively lead the people in the band. Red Cloud eventually assumed such a role among the Oglala for many years. This chief had no authority over his own people, but carried out the will of the council. The leader was appointed to carry out certain tasks, such as keeping order within the band, looking after the general welfare of the group, and reporting on council decisions to the band. When several bands came together, all their councils met, made decisions for the joined bands or entire tribe, and appointed a number of special leaders to look after the welfare of the entire group.²¹

Lakota Sioux politics was democratic. Usually anyone could fill the council offices, but the leader's role most often passed from father to son. Anyone unhappy with the leader's decisions or behavior could leave and join another band or form his own band. Many Lakota bands were spawned in the first half of the 1800s, as splintering occurred due to population growth within a band or dissatisfaction and subsequent departure of individuals. Each new band took the name of its leader or chose a nickname.²²

The Lakota camp was the physical manifestation of Lakota life. The form of the circle was repeated throughout the village. In a formal camp, the Lakota erected their tepees in a circle that surrounded a larger tepee used by the band's council. A fire symbolizing the life of the band burned perpetually in the center of the council lodge. The leader of the band occupied a tepee west of the council lodge. Smaller, less formal camps comprised several scattered tepees. Each individual tepee repeated the circle form. Constructed of several poles covered by buffalo cow skins, each tepee was conical in shape and measured about fifteen feet in diameter. The tepee door faced east. Women entered the door and moved to their side of the tepee on the right, while men moved to the left side of the tepee. Inside the tepee the father of the family occupied a place of honor behind the central fire pit and opposite the door. Light and compact when disassembled and rolled up, and easy to pack, a tepee could be erected by a single person in about fifteen minutes. The tepee was perfectly suited to the Lakota's nomadic life and to the High Plains

¹⁹ Gibbon, "Sioux," 602.

²⁰ *Ibid.*, 602.

²¹ DeMallie, "The Nomads, 27.

²² *Ibid.*, 27.

environment. In the summer, with the bottom edges of the buffalo skin rolled up, the tepee maintained a cool, well-ventilated temperature inside. In winter, with the buffalo cow skin rolled down and with an inner liner installed to contain the heat of the fire, the tepee remained warm and comfortable.²³

The natural environment of the High Plains, with its seasonal cycles and variable climatic conditions, strongly influenced the camping locations, movements, and interaction of the nomadic horse-oriented Lakota with their surroundings. Daily and seasonal tasks were performed by members of the society, according to gender. As early spring approached, tepee covers and poles were disassembled and packed, and the winter camp of each Lakota band began to move as men from various camps converged and hunted for bison and other game, which were grazing on the fresh new prairie grass. Spring also brought the harvesting of native roots called Indian turnips, dug by the Lakota in large quantities for immediate consumption or for drying to eat later. The arrival of summer marked a time when many bands met at prearranged locations to celebrate together the annual Sun Dance ritual. Appointed hunters provided food for each camp during the two- to three-week ceremonial period. After the dance, the larger camps moved to a new location, which became the base for early fall bison hunts, so important for harvesting the principal food supply for the cold winter months. Fall also was a time for gathering additional food and repairing worn-out tepee materials; new tepee poles were selected from straight yellow pines in the Black Hills, and wild fruits and berries were collected and dried for winter use. Once the supply of food and needed materials for winter were secure, each camp broke up into smaller camps and moved again to new more protected locations for the winter. Late fall and early winter was also the season for the Lakota to avenge past wrongs with other bands or tribes by engaging in raids or outright warfare with one's enemies.²⁴ Unquestionably, Lakota life and its physical and spiritual health were inseparable from the natural world around them.

Subsistence tasks defined the separate roles of men and women of different ages within a *tiyospaye*, the basic unit in Lakota society. Adult women gathered wild resources, such as turnips; they processed and tanned bison and other hides; and they cooked, sewed, did quillwork, and managed the household. Women were responsible for breaking camp, packing the household belongings on a travois, and setting up camp again. Women bore children and cared for them. A woman's value in the community was measured by her proficiency in work skills and productivity, particularly in skin work, and her ability to maintain a smoothly running household. Young girls tended to be less privileged than young boys. Adult women were also unequal to men in community affairs, having no direct role in the governing of the community. No women could hold a public tribal office.

Adult men hunted bison and other game, made tools and weapons, and carried out raids. They might also spend time engaging in trade, tribal councils, ceremonies, and leisure games and activities, like wagering on footraces and horse races. In Lakota society, men, generally men of high status in the *tiyospaye*, were

²³ *Ibid.*, 26, 27-28.

²⁴ Gibbon, *The Sioux*, 90-91; DeMallie, "The Nomads, 28-29.

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permitted to have more than one wife. Red Cloud, according to the popular press, had as many as six wives, reportedly from the same *tiyospaye*; but in reality Red Cloud maintained a monogamous household. Red Cloud and his wife Pretty Owl raised one son, Jack Red Cloud, and five daughters. Children often gathered firewood and water and looked after the horses and domesticated dogs. Grandparents and elders took primary responsibility for caring for infant children and helped the women with household tasks.²⁵

The bison occupied a place of great significance in the social, spiritual, and cultural life of the Lakota. Not only was it at the heart of their subsistence economy and material well-being, but it figured largely into their spirituality, lore, and legends. In Lakota tradition the bison originated in the womb of Mother Earth, just as humans had. The Lakota believed that the Great Spirit, *Wakan Tanka*, had created them and they had emerged from Wind Cave in the Black Hills, *Paha Sapa*, of South Dakota.²⁶ In ancient times, the bison were at war with humans. Later, however, the bison felt pity for the Lakota and sent sacred White Buffalo Woman to make an agreement with them. White Buffalo Woman brought the Lakota a sacred Buffalo Calf Pipe to be used to send their prayers to the *Wakan Tanka*. The bison people pledged to allow the Lakota to hunt them only if they remained good; if they were evil and behaved badly, thus displeasing *Wakan Tanka*, the bison would go back into the earth. This legend placed the pipe at the center of Lakota religion. The gift of the pipe and the act of smoking it came to symbolize the relationship between humankind and all Powers of the Universe (*Wakan Tanka*).²⁷

Certain sacred rituals pursued in the 1800s were the outward expression of Lakota religious life. The process of purifying the soul in a dome-shaped sweat lodge, filled with warm steam created by drenching hot rocks with cold water, prepared the Lakota for all other religious rites. The vision quest, which gave individuals sacred knowledge and power in all aspects of life, especially wars and healing, involved taking the pipe to a hilltop and praying to the four directions for guidance from the Powers. The Sun Dance, among the greatest Lakota rituals, was a request to the Powers of the Universe for aid. Participants in the ceremony begged for the actualization of the great relationship between humankind and the *Wakan Tanka* in an effort to share in the Universal Power that makes all things possible. The Lakota practiced many other rituals aimed at bringing power, solace, and contentment to the people. "When the Lakota people practiced their religion they lived in harmony with creation, enjoying an inner harmony that comes from the certainty of spiritual strength."²⁸

Lakota culture was expressed in their clothing and hairstyles as well as their practical crafts and decorative artwork. Throughout the 1800s, men wore breechcloths of soft hide or cloth and moccasins crafted of two pieces—a tough rawhide sole and a softer leather upper decorated with quill or beads. Pant leggings

²⁵ Gibbon, "Sioux," 601-602; Gibbon, *The Sioux*, 72-75; Goodyear, *Red Cloud*, 108, 145.

²⁶ Gibbon, "Sioux," 601.

²⁷ DeMallie, "The Nomads," 24-25.

²⁸ *Ibid.*, 26-27.

were made of hide, often antelope, decorated with fringe and a long quilled or beaded strip extending from the belt to the ankle. Shirts designed like a poncho and made of whole hides of mountain sheep or antelope were decorated down the sleeves and across the shoulders and back with strips of quill or beadwork and fringe. Later shirts were painted blue on the top half and yellow below. Men sometimes wore a robe made of furred buffalo cowhide. Men usually wore their hair long, with braids on both sides of the head. A scalplock braided separately, was wound around the crown of the head. Feathers and feather bonnets signifying honors won at war were occasionally worn.²⁹

Women wore dresses made of two skins of antelope, deer, or elk that extended below the knees. A cape was attached to the shoulder yoke and fringe adorned the bottom of the skirt. Decorative dentalium shells or beads made of glass and seed decorated the dresses worn on special occasions. A sheath holding a butcher knife, an awl case, and other small bags were commonly suspended from a woman's rawhide belt, which was decorated with metal studs. Under their dresses, women wore leggings, which extended only to the knees and were held in place with garters tied to the top of the calf. Women's moccasins replicated those of men. Women wore their hair long, parted in the middle, and braided on both sides of their head. Elaborate dentalium shell earrings were worn on special occasions. As the century progressed, cloth increasingly replaced the hide clothing of both women and men. Wool blankets replaced buffalo robes.³⁰

In her succinct summary of Lakota Sioux culture, Sioux authority Mildred P. Mayhall has written that:

Their chief traits were dependence on the buffalo, limited use of roots and berries, absence of fishing, lack of agriculture, the movable tipi transportation by land only, use of the dog and travois (later the horse), no basketry or pottery, no true weaving, clothing of buffalo and deerskins, a special beading technique, high development of work in skins, special rawhide work (parfleches, cylindrical bags, etc.), circular shields, and weak development of work in wood, stone, and bone. Their art was strongly geometric . . . Their social organization was the simple band; they had a camp-circle organization, societies for men, Sun Dance ceremony, sweat house, and scalp dance.³¹

Changing Lakota Sioux Life on the High Plains

The Brule and Oglala, the western bands of the Lakota Sioux, moved onto mixed- and short-grass prairies of western Nebraska and southern South Dakota east of the Black Hills in the first half of the 1800s. There, they remained quite removed

²⁹ Raymond J. DeMallie, "Teton," in *Handbook of North American Indians, Vol. 13, Part 2, Plains*, edited by Raymond J. DeMallie (Washington, DC: Smithsonian Institution, 2001), 810.

³⁰ *Ibid.*, 810.

³¹ Mildred P. Mayhall, *The Kiowas* (Norman: University of Oklahoma Press, 1962), 96-97, as quoted in Moul, "Prairie Grass Dividing," 72. Moul's dissertation focuses on Sioux County history and information in it pertains to that county.

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from most direct contact with the Euro-Americans for a number of years. In fact, the Lakota may have had no knowledge of the acquisition of a huge swath of territory by the new nation of the United States. In 1803, President Thomas Jefferson finalized negotiations with France leading to the purchase of the Louisiana Territory, a vast landmass stretching from the Gulf of Mexico in the south to the 49th Parallel at the present US-Canadian border that included the new homeland of the Sioux. This international exchange of land had profound effects on the Sioux over the next century, most tragically expressed by the gradually westward movement of settlers in the newly, expanded United States. By the end of the 1840s the U.S. government, vigorously pursuing the national doctrine of imperialistic expansion known as Manifest Destiny, had annexed the Republic of Texas (in 1845), the Oregon Territory (in 1846), and much of present-day New Mexico, Arizona, and southern California (in 1848) following the brief Mexican War. The gradual opening of the new U.S. lands to settlement brought irreversible changes to all Indians, including the Lakota Sioux bands of Brule and Oglala.

Manifest Destiny started benignly enough, with President Jefferson's Corps of Discovery sent out to explore the new purchase. William Clark and Meriwether Lewis met various Sioux tribes as they traveled up the Missouri River in the summer and fall of 1804. Sioux winter counts, annual Sioux pictorial calendars that present a chronological history of each year's key events, memorialized their encounter with Lewis and Clark in 1805—1806 as the "The Winter the People Came Together with Many Flags." Lewis and Clark's trip to the Pacific Ocean and back stimulated an increase in the number of white traders and trappers who came into Sioux country laden with trade goods and an eagerness to exchange them for fur and hides procured and processed by the Sioux. The number of British fur traders in the upper Missouri River valley also increased, as they moved south from Canada after the War of 1812. More and better trade goods became accessible to the Lakota through trade networks. Additionally, beginning in the 1820s, the U.S. government sent exploration parties to the northern Plains. In 1825, an American expedition led by U.S. Army officer Henry Atkinson brought the first steamboat up the Missouri River to Sioux-occupied country on his way to the Yellowstone River in Wyoming. The federal government also set up Indian agencies at certain locations in the upper Missouri River drainage in order to protect the small number of Americans living there and to quell conflicts between tribes in the region, and to introduce its "civilization policy" that aimed at converting Native Americans into Americans. In 1832, the steamboat *Yellowstone* first plied the waters of the upper Missouri River, opening the northern Plains to the most advanced mode of transportation of the day. For the next two decades, the fur trade, dominated by the American Fur Company, reached its peak on the northern Plains. Although these European and Euro-American advances onto the western frontier were relatively distant from the core of the Lakota homeland, the influence of the new culture was certainly felt by

the Lakota Sioux as they migrated south and west toward the Niobrara River Valley.³²

Increased contact with Euro-Americans and their trade goods brought waves of smallpox, cholera, and influenza, which continued to ravage the Plains Indians. These pathogens had already decimated thousands of Plains Indians in the previous century. In 1831, smallpox once again arrived on the Great Plains, wiping out as much as 50 percent of many tribes. Only six years later in 1837—1838, the High Plains tribes, including some Sioux tribes, were struck down by yet another smallpox epidemic. This time an American Fur Company steamboat traveling up the Missouri River carried the deadly pathogens that quickly broke out at Sioux Agency, Fort Pierre, Fort Clark, and Fort Union—all along the upper Missouri River in Dakota country. By the end of the summer, traders reported mortality among Indians in the region to be 70 to 80 percent. The Mandans, in present-day central North Dakota, lost over 90 percent of their population, and the Crow population declined by nearly half. “No single disease episode since the 1780s left so wide a trail of death,” according to historian William R. Swagerty.³³ These tremendous losses contributed to shifting the balance of power toward the Lakota and other Sioux, who were partially protected from some diseases by their geographic location away from major routes of white passage and by their non-sedentary, nomadic lives. Some members of the Sioux population also had access to immunizing inoculations, which further protected them.³⁴ Finally, the Oglala and Brule Lakota, then based east of the Black Hills, received advance warning from the American Indian agent on the upper Missouri River about the course of the infectious disease moving up the Missouri in 1837.³⁵

Other diseases continued to strike particular Plains Indian tribes in the 1840s, as more and more white travelers passed through or settled in the region. Smallpox arrived among the Plains Apache and Comanche in 1839-1840, and measles hit the Arikara, Plains Cree, Cheyenne, and some Sioux tribes like the Blackfoot Lakota in 1845. Another measles attack returned in 1847. The Sioux did not escape some of these slightly later diseases. Beginning in 1848, a major epidemic of cholera spread over the entire Plains cultural area, reaching far up the Platte River Valley and infecting a sizeable population of Lakota Sioux, then occupying the area of southeastern Wyoming and western Nebraska. By 1850 when the disease had run its course, half of the Cheyenne, one-fourth of the remaining Pawnee, and an untold number of Lakota Sioux were dead. Red Cloud was among those Lakota who escaped the ravages of disease in the late 1830s and 1840s. The effects of this pathogenic devastation were profound, even among the survivors. In the Sioux and other Indian populations suicide increased, fertility may have declined, and refugee

³² Raymond J. DeMallie, “Chapter One: The Nomads, The Lakota, A New Power,” *NEBRASKAland* 62: 1 (January-February 1984), 24; Gibbon, *The Sioux*, 91-92.

³³ William R. Swagerty, “History of the United States Plains Until 1850,” *Handbook of North American Indians: Plains, Volume 13, Part 1 of 2*, edited by Raymond J. DeMallie (Washington, DC: Smithsonian Institution, 2001), 258.

³⁴ Gibbon, *The Sioux*, 89.

³⁵ Swagerty, “History of the United States Plains Until 1850,” 258.

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populations of one tribe or band were compelled to join with other Indian bands, regardless of their different dialects or cultural traditions.³⁶

Like most tribes who engaged in trade with whites, the Lakota encountered other difficult challenges that accompanied the influx of Euro-Americans. Whiskey was one of the most destructive influences. A common trade item that passed easily along trade networks on the Plains, alcohol began to erode the life and culture of Lakota society. Still, despite these challenges, the western division of Sioux experienced a population growth in the first half of the 1800s due to the relative freedom from disease and a reasonably high birth rate.³⁷ In the 1830s and 1840s, the Brule and Oglala Lakota each numbered about 3,000 members.³⁸

In 1834, a significant year for the future of the Oglala and Brule Lakota bands, the American-owned Rocky Mountain Fur Company established a trading post named Fort William (after fur traders William Sublette, William Anderson, and William Patton) on the bank of the Laramie River about a mile upstream from its junction with the North Platte River in present-day southeastern Wyoming. Eager to capture the trade with the Lakota from the American Fur Company, William Sublette and Robert Campbell, the post's head traders, followed the Sioux in their westward migration from the eastern side of the Black Hills toward the more plentiful bison-hunting grounds up the drainage of the Teton River.³⁹ Sublette and Campbell invited more than one band of Oglala to establish their main camp in the vicinity of Fort William on the North Platte. Bull Bear, the chief of the Koyas band, arrived near the North Platte in the fall of 1834. Old Smoke's Bad Faces band, to which Red Cloud and his mother belonged, soon followed. The success of this move for the Oglala along with the abundance of bison in the Platte River drainage and the trading possibilities at Fort William, induced the Brule Lakota to also move farther west. From the White River country, southeast of the Black Hills, the Brule migrated to the upper Niobrara in present-day Sioux County, Nebraska, only about 100 miles northeast of Fort William.⁴⁰

In 1834, Red Cloud, then a thirteen-year-old member of Old Smoke's Oglala band, was part of the migration of the Oglala people to Fort William, a migration led by the domineering Sioux leader Bull Bear. For more than two decades, Red Cloud and Old Smoke's band often camped near Fort William (later renamed Fort Laramie), which grew larger as a trading center. Between the mid-1830s and the late

³⁶ *Ibid.*, 258.

³⁷ Richard White, "The Winning of the West: The Expansion of the Western Sioux in the Eighteenth and Nineteenth Centuries," *Journal of American History* 65: 2 (September 1978), 328-29, 333; Thomas Dunlap, "Chapter Four: Blue Water to Wounded Knee," *NEBRASKAland: The First Voices* 62-1 (January-February 1984), 72-73.

³⁸ Guy Gibbon, *The Sioux: The Dakota and Lakota Nations* (Malden, MA: Blackwell Publishing, 2003), 87.

³⁹ White, "Winning of the West," 333-35.

⁴⁰ The name of the fort was later changed to Fort John, presumably after John B. Sharpy, before being purchased by the U.S. government in 1849 and being changed to Fort Laramie. DeMallie, "The Nomads," 27; Gordon B. Dodds and Richard N. Ellis, "Fort Laramie," in *Encyclopedia of the American West*, edited by Howard R. Lamar (New Haven: Yale University Press, 1998), 384-85; Robert W. Frazer, *Forts of the West* (Norman: University of Oklahoma Press, 1965), 181-82.

1840s, Red Cloud also became a great warrior in battles with hostile Indian tribes, including the Crows, Pawnees, Utes, and Shoshones. At age sixteen, Red Cloud killed and scalped his first enemy, a Pawnee, in combat.⁴¹ In 1841, at age twenty, Red Cloud became embroiled in a bitter quarrel that resulted in the death of Oglala chief Bull Bear; Red Cloud claimed to be Bull Bear's killer. Year after year Red Cloud's reputation as a warrior grew larger.⁴² According to James Cook, Red Cloud "was a terror in war with other tribes."

During this period, Red Cloud had a chance to closely observe the ways of the Euro-Americans. At age thirty, he had a lesson in the Euro-American practice of making treaties with Indians when he witnessed the signing of the 1851 Fort Laramie Treaty. In the early fall of that year, U.S. government commissioners met with many bands of the Oglala and Brule Lakota Sioux, as well as Indian delegations representing the Cheyenne, Arapaho, Crow, Eastern Shoshone, Assiniboine, Arikara, Mandan, and Hidatsa. Ten thousand Indians gathered at Horse Creek, Scotts Bluff County, in southwestern Nebraska, for two weeks during the treaty proceedings. After six leaders of the Oglala, Brule, and Yankton Sioux tribes signed the treaty, Red Cloud and all the Indians present received twenty-seven wagon loads of gifts from the U.S. government. The Sioux winter count depiction of that year's significant events showed a pictographic representation of a bale of blankets and the designation "big distribution." Red Cloud observed all this.⁴³

In exchange for annuities (limited income and goods given by the federal government) for fifty years, the Lakota Sioux and other tribes agreed to allow the United States to build roads and military forts on their territorial hunting grounds, thus providing a legal basis for the establishment of forts along the Oregon-California Trail. The 1851 Fort Laramie Treaty marked the first time that specific boundaries were established for territories to be used by the tribes attending the treaty council, thus circumscribing the Sioux and other Plains tribes and controlling their movement on ancestral lands. Red Cloud and the signatory tribes experienced many firsts with this treaty: Indians encountered the concept of artificial political boundaries drawn on a map; Indians were told by the U.S. government to stop fighting with each other; and, finally, Indians were told to stop harassing white emigrants traveling over the "White Man's Road." Where, the Sioux wondered, did white men get the power to tell Indians where land should begin and end? Where did they get the power to tell Indians to stop being who and what they were? For Red Cloud, the western tribes of Sioux, and for the other Indian tribes affected, the treaty was a turning point in their existence on the High Plains.⁴⁴

The consequences of the 1851 Fort Laramie Treaty were not immediately apparent. During the early 1850s, Red Cloud and his Oglala people, along with the Brule Lakota, continued to hunt throughout western Nebraska, following the upper

⁴¹ Cook, *Fifty Years on the Old Frontier*, 234.

⁴² Larsen, "Red Cloud," in *Great Plains*, 834; Olson, *Red Cloud and the Sioux Problem*, 19-20.

⁴³ De Mallie, "Teton," 794-95.

⁴⁴ *Ibid.*, 795; John Marshall III, *On Behalf of the Wolves and the First Peoples* (Santa Fe, New Mexico: Red Crane Books, 1995), 84-85.

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Niobrara River as well as north to the Yellowstone River drainage. In the mid-1850s, US Army Lieutenant G. K. Warren reported that two Lakota Sioux groups lived in present-day Sioux County, Nebraska: the “Minikanyes or Minni-kaw-jous [Minneconjous]” and the “schangus [Brules].” The Minneconjous numbered about 200 lodges, while the Brule occupied about 380 lodges and lived on the Niobrara and White rivers, ranging from the Platte to the Cheyenne rivers. When Warren traveled through the area, the Brule had split into two groups—the Upper Brules, who moved to the South Platte River in search of more abundant bison herds, and the Lower Brules, who remained in the more northerly White River country. Although not mentioned by Warren, the Oglala Sioux also had extended camps in northwestern Nebraska in the mid-1850s. The Oglala and Brule Lakota favored the rolling mixed- and short-grass prairie of present-day northwestern Nebraska as a hunting and camping place.⁴⁵

Pressures Mount on the Lakota Sioux

The impact of Euro-Americans on the lives of the Lakota and other Plains Indians remained relatively slight until the mid-nineteenth century, when western migration and treaty-making put great pressure on the native cultures. The small trickle of emigrants traveling west in the late 1830s had begun to swell in 1843, the year of the so-called Great Migration, when 1,000 aspiring farmers and merchants traveled overland to Oregon country. And with the discovery of gold in California in 1848, the succeeding half-dozen years saw a veritable unrestrained flood of hundreds of thousands of westward migrating travelers. Subsequent discoveries of gold and/or silver in the Pike’s Peak region in the late 1850s, in the Comstock Lode of western Nevada in the late 1850s and the 1860s, and in Montana between 1862 and 1864, stimulated new surges of Euro-American emigrant traffic across the Great Plains.⁴⁶ Whether destined for Oregon, California, Colorado, Montana, or Nevada, most travelers followed the Oregon-California Trail along the Platte River. The so-called Great Platte River Road, the major “highway” west to Fort Laramie, was where overland emigrants split up and followed separate routes. The Lakota Sioux, both the Oglala and the Brule bands, occupied a wide swath of land located directly in the path of westward migration.

Euro-Americans were not only migrating to the Far West, they were settling farther and farther west on the tall-grass Plains east of the Missouri River, increasing pressure on the Sioux. By 1850 the colonization had crossed over the Mississippi River and reached the Missouri River at the eastern periphery of present-day Kansas and Nebraska. In 1854, both Kansas and Nebraska were opened to European American settlement. A few entrepreneurial ranchers settled farther west up the Platte River Road, extending across western Nebraska, in order to take advantage of

⁴⁵ Moul, “Prairie Grass Dividing,” 73-75, 81.

⁴⁶ Russell R. Elliott, “Gold and Silver Rushes,” *Encyclopedia of the American West*, edited by Howard R. Lamar (New Haven, CT: Yale University Press, 1998), 433-37.

the emigrant traffic using that road. These road ranches offered travelers—primarily emigrants and freighters—some minimal supplies and a place to rest and refresh.⁴⁷

The growing number of emigrants pulling wagons and traveling with livestock in the 1840s and 1850s severely impacted the life of the Lakota Sioux. The passage of emigrants and their livestock totally altered the grazing places and migration patterns of bison, the central supply of food, a source of spiritual and economic well-being for the Lakota, and a valuable trade commodity for all Plains Indians. Along the Great Platte River Road, which cut through the heart of prime bison range, emigrants' draft animals pulling wagons and farm animals ate grass on which bison as well as Lakota horses were dependent. Additionally, the transient travelers shot some of the bison and other game for food and sport.

The relationship between the bison and the Lakota themselves was changing. After the Plains beavers had been hunted out and the once-profitable market in beaver pelts closed down around 1830, commerce in bison robes expanded. Between 1840 and the late 1860s, nomadic Plains Indians, including the Lakota Sioux, traded more than 100,000 robes annually to merchants on the Missouri River. The former Sioux method of bison hunting in groups was supplanted by individual hunters hunting buffalo on horseback. The Sioux no longer hunted bison only for subsistence use but also for the economic rewards and the enjoyment of trade goods—metal pots, knives, guns, metal arrowheads, and cosmetic products. This unprecedented economic prosperity for the Lakota was at the expense of the bison population. Both the bison and the Lakota's traditional lifeways were threatened as the number of emigrants swelled and as Plains Indians became increasingly dependent on trade with whites for horses and manufactured goods. Now enmeshed in the market-driven economy of whites, the Lakota Sioux and other nomadic tribes began to severely deplete the bison herds in western Nebraska and across the Plains.⁴⁸

In the mid-1800s, Lakota Sioux began to experience a significant deterioration of the environment upon which they depended for their existence, commercial livelihood, and cultural life. As early as 1837, Indian agents on the Plains noted the Plains nomads' increasing dependence on a dwindling number of bison. From then on, nearly every annual report of the commissioner of Indian Affairs made reference to the growing desperation of the nomadic Plains tribes who struggled to sustain themselves in the changing environment. By the 1850s, the upper Platte River—hunting grounds for the Sioux and the Cheyenne—had been stripped bare of its bison. White commercial hunters greatly accelerated the demise of bison; between 1872 and 1874, hunters on the southern Plains alone shipped 1.3 million bison hides east for sale. The slaughter of bison moved from the southern Plains to the north. By the 1870s, the number of bison across the northern and southern Plains had been reduced to a few hundred. The Lakota Sioux of western Nebraska and other Plains Indians who relied on bison for food were forced to

⁴⁷ Gibbon, *The Sioux*, "6.

⁴⁸ Isenberg, "Toward a Policy of Destruction," 235; Gibbon, *The Sioux*, 90.

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abandon the hunt and reconcile themselves to a different way of life.⁴⁹ Red Cloud was keenly aware of the diminishing number of bison across the Lakota hunting grounds.

“The buffalo was the ‘staff of life’ to the Plains Indians,” wrote historian Everett Pitt Wilson in *Nebraska History’s* 1940 *Sioux Memorial Issue*. More than this, Wilson continued. “The bison was the symbol of leadership and the type of long life and plenty. His skin furnished shelter and clothing, his flesh, food; his sinews furnished bowstrings, his bones were transformed into implements of agriculture, his hooves and horns supplied drinking vessels and spoons.”⁵⁰ No animal gave the Lakota Sioux so much in such vast quantities as the bison.

During the 1860—1865 Civil War years and thereafter, new and more intense pressures threatened the lives and lifeways of the Brule and Oglala Lakota Sioux of western Nebraska and the High Plains of eastern Wyoming and Colorado. After the war ended, a new wave of Americans and visitors from many other countries surged westward over an expanded network of overland trails and their cutoffs. Passage of several generous land laws, such as the Homestead Act in 1862, encouraged migration west and settlement on unclaimed land. New mineral strikes in the 1860s in the Rocky Mountains provided additional incentive for westward migration. The Platte River Road, along both the north and south sides of the Platte and North Platte rivers, remained the principal route west to Fort Laramie. Beyond the fort, however, new routes opened up for travel for wagons and livestock. The Bozeman Trail veered north from the Oregon-California Trail northwest of Fort Laramie through Wyoming’s Powder River country and the Yellowstone River Valley. This road, opened by emigrants in the mid-1860s, was a shortcut to Montana goldfields.⁵¹

Construction of the transcontinental railroad along the Platte River Valley and emigrant roads placed additional pressures on the Lakota. Not only did railroad construction bring additional Chinese and Euro-American workers to the Plains, but, more importantly, the railroad itself contributed to the final destruction of the bison, the staple of Lakota sustenance and spiritual lifeways. After completion of the Union Pacific Railroad in 1869, wholesale slaughter of bison began in earnest. Boxcar loads of hides were shipped eastward—as many as three million hides from the southern Plains alone in the late 1860s. The slaughter was hastened when non-Indian hunters began using high-powered rifles around 1870. Bison became nearly extinct on the central and High Plains by the mid-1870s, and they disappeared completely from the northern Plains by 1885. The disappearance of the bison eradicated the Sioux’s nomadic way of life.⁵²

⁴⁹ Isenberg, “Toward a Policy of Destruction,” 227-28, 235-37; Dunlap, “Blue Water to Wounded Knee,” 73.

⁵⁰ Everett Pitt Wilson, “The Story of the Oglala and Brule Sioux in the Pine Ridge Country of Northwest Nebraska in the Middle Seventies,” *Nebraska History* 21: 4 (October-December 1940), 260.

⁵¹ Gibbon, *The Sioux*, 114; Jay H. Buckley, “Bozeman Trail,” in *Encyclopedia of the Great Plains* by David J. Wishart (Lincoln: University of Nebraska, 2004), 800; DeMallie, “The Nomads,” 37.

⁵² Gibbon, *The Sioux*, 6, 114.

The U.S. government did little to prevent the demise of the bison and the Indian cultures that depended on it; in fact the government contributed to and abetted the downward spiral. The construction of the transcontinental railroad, culminating in 1869 with the pounding of the final spike in Promontory Point, near Ogden, Utah, was subsidized by the federal government as a way to efficiently transport people and goods across the vast expanses of the West. That it led to the destruction of food sources and to conflict with tribes was a perhaps unintended side effect. Still, despite clear evidence that the number of bison was dropping precipitously after 1850 and that this situation was creating dire conditions among Plains Indians, policymakers passed no legislation to protect bison herds until much later when they numbered only a few hundred. The extermination of bison seemed natural in the minds of the late-nineteenth-century Americans and a clear sign that the West was being “tamed” and “civilized.” Moreover, some government officials saw potential benefits from the destruction of the bison. In 1872, Secretary of the Interior Columbus Dalano concluded that: “The rapid disappearance of game from the former hunting-grounds must operate largely in favor of our efforts to confine the Indians to a smaller area, and compel them to abandon their nomadic customs.” Eliminating the bison was viewed by many government officials as an effective way to control the Lakota Sioux and other nomadic Plains Indians.⁵³ Such attitudes and activities further inflamed relations between the Sioux and the U.S. government, perpetuating animosity and fueling continued conflicts.

Violence Erupts

Conflicts invariably arose as whites encroached on the Lakota territorial spheres. And the strife wasn't always between Indians and whites. The gradual depletion of bison-hunting grounds in the Missouri and Platte river valleys exacerbated existing intertribal warfare. Before that, as early as the 1820s, the acquisition of the horse had stirred intertribal warfare. The Lakota bands, the Yanktonai, the Northern Cheyenne, and the Northern Arapaho formed a powerful “Sioux Alliance” that made northward raids on some of the more vulnerable horticultural river tribes—the Mandan, Hidatsa, and Arikara—along the upper Missouri River. As the Oglala and Brule migrated farther south, the Sioux allies came into conflict with the Ponca, Omaha, and Pawnee. Then, as the Lakota pushed west onto the Platte River bison-hunting grounds of western Nebraska, Colorado, and Wyoming, they pushed the Crows from their land along the Powder River and around the Black Hills. Ongoing intertribal warfare, waves of disease, the diminishing supply of bison, and the increasing number of Americans took an enormous toll on the physical well-being and the spirit of all Indians on the Plains, including the Lakota Sioux bands occupying present-day northwestern Nebraska and the upper Niobrara River Valley.⁵⁴

⁵³ As quoted in Isenberg, “Toward a Policy of Destruction,” 236; see also pages 227-28.

⁵⁴ Gibbon, *The Sioux*, 88-89, 113, 115; White, “Winning of the West,” 336-43.

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In the last half of the century, the Lakota Sioux and their Cheyenne and Arapaho allies attempted to defend and protect their homelands and subsistence economies against increasing incursions not only by emigrants but by the U.S. government. It was a clash between two great powers—the Sioux and the United States—and it was a virulent and destructive outcome of the U.S. government's control over Lakota life and lifeways. Between 1854 and 1890, a series of battles broke out between the Lakota Sioux and the U.S. government, collectively known as the "Sioux Wars." Major conflicts included the: Grattan Massacre (1854), Fetterman Fight (1866), Battle of Rosebud (1876), Battle of Little Bighorn (1876), and the Wounded Knee Massacre (1890). All of these incidents (except the more distant Little Bighorn battle in Montana) took place within 200 miles of the upper Niobrara River and the future Agate Fossil Beds National Monument. These bloody conflicts changed forever the existence of the Lakota Sioux in northwestern Nebraska and extinguished their presence on the land of Agate Fossil Beds National Monument.⁵⁵

Increased travel along the Oregon-California Trail along the Platte and North Platte rivers—the Great Platte River Road—directly contributed to a series of events leading to the Grattan Massacre in 1854. That year, the theft of an emigrant's cow by a young Lakota prompted Lieutenant John Grattan to organize twenty-nine men to recover the stolen cow from the village of Conquering Bear (or Brave Bear) along the North Platte River. A misunderstanding between the two groups, fueled by the belligerent, unyielding stance taken by Grattan, a fresh West Point graduate, erupted into violence, resulting in the death of Grattan and all of his men. Conquering Bear and a few other Lakota were killed in the skirmish. After the conflict, the majority of Sioux withdrew from the Platte to the Niobrara River. Determined to retaliate, the U.S. military sent Colonel William S. Harney the next year to destroy a Sioux village at Ash Hollow in the valley of Blue Water Creek (in present-day Garden County, Nebraska). On September 3, 1855, Harney and his 600 men killed more than 100 Sioux men, women, and children in what became known as the Battle of Blue Water Creek. Harney's invasion of the Sioux homeland and his massacre caused the Sioux to move away from army forts, soldiers, and roads used by Euro-Americans. The U.S. government soon afterward became distracted by events leading to the Civil

⁵⁵ Numerous books recount the general history of the Sioux Wars and interpret their significance for Indians and whites alike. Among the more recent and reliable books are: R. Eli Paul, *Blue Water Creek and the First Sioux War, 1854-1856* (Norman: University of Oklahoma Press, 2004); John D. McDermott, *A Guide to the Indian Wars of the West* (Lincoln: University of Nebraska Press), 1998; R. Eli Paul, editor, *The Nebraska Indian Wars Reader, 1865-1877* (Lincoln: University of Nebraska Press, 1998); Catherine Price, *The Oglala People, 1841-1879: A Political History* (Lincoln: University of Nebraska Press, 1996); Charles M. Robinson III, *A Good Year to Die: The Story of the Great Sioux War* (New York: Random House, 1995); Robert M. Utley, *The Indian Frontier of the American West, 1846-1890* (Albuquerque: University of New Mexico Press, 1984); Fred H. Werner, *With Harney on the Blue Water: Battle of Ash Hollow, September 3, 1855* (Greeley, CO: Werner Publications, 1988); Paul L. Hedren, *Fort Laramie in 1876: Chronicle of a Frontier Post at War* (Lincoln: University of Nebraska, 1988).

War between 1860 and 1865.⁵⁶ Red Cloud played no role in the Grattan Massacre or the Blue Water Creek battle, but would lead another resistance.

At the close of the Civil War, trouble between the Sioux and the U.S. military flared up again. In the mid-1860s, emigrants eager to reach newly discovered gold fields in Montana took the Bozeman Trail through the heart of Lakota Sioux bison hunting grounds in eastern Wyoming. (The Bozeman Trail took its name from John M. Bozeman, who, with Jim Bridger, had led parties north from the upper North Platte River in the vicinity of Fort Fetterman in 1864). The Lakota strongly opposed this intrusion on their hunting grounds and the threat to their food source and their way of life. Furthermore, this incursion of Euro-Americans violated the 1851 Fort Laramie Treaty, which recognized the area north of the Oregon-California Trail as tribal territory. Repeated Lakota raids against settlers and soldiers traveling on the Bozeman Trail prompted the federal government to build several forts (Forts Reno, C. F. Smith, and Phil Kearny) along the trail to protect emigrant travelers and freighters, further violating the 1851 Fort Laramie Treaty. Attacks on Bozeman Trail travelers continued.⁵⁷ In his 1865 summary of conditions among the Indians, ex-officio Superintendent of Indian Affairs Newton Edmunds reported that “a considerable portion of them are still regarded and treated by the military authorities as hostile to the government. I understand, however, and believe, that they desire to make peace and resume friendly relations to the government.”⁵⁸

In the second half of 1866, Red Cloud and another Oglala warrior, Crazy Horse, led the Lakotas and their allied Cheyenne warriors against federal troops on the Bozeman Trail. On December 21, 1866, this “Powder River War” culminated in a clash between the Lakotas and regiments led by Captain William Fetterman near Fort Phil Kearny, Wyoming Territory. Fetterman and eighty of his men were killed that day, near the end of what came to be known as “Red Cloud’s War,” since Red Cloud had masterminded the hostilities on the Bozeman Trail. Despite the public outcry for harsh, punitive treatment of the Sioux, Congress voted to negotiate peace in a treaty with the Indians.⁵⁹

Fort Laramie Treaty of 1868 and Creation of the Great Sioux Reservation

In April 1868, an assembly of members of the Indian Peace Commission, created by Congress in July 1867, converged on Fort Laramie with a treaty document. Gradually, various Sioux leaders arrived at the fort and signed the treaty.

⁵⁶ Terry Smythe, “Sioux Wars,” in *The Great Plains*, edited by David J. Wishart (Lincoln: University of Nebraska Press, 2004), 836-37; Dunlap, “Chapter Four: Blue Water to Wounded Knee,” 74-77.

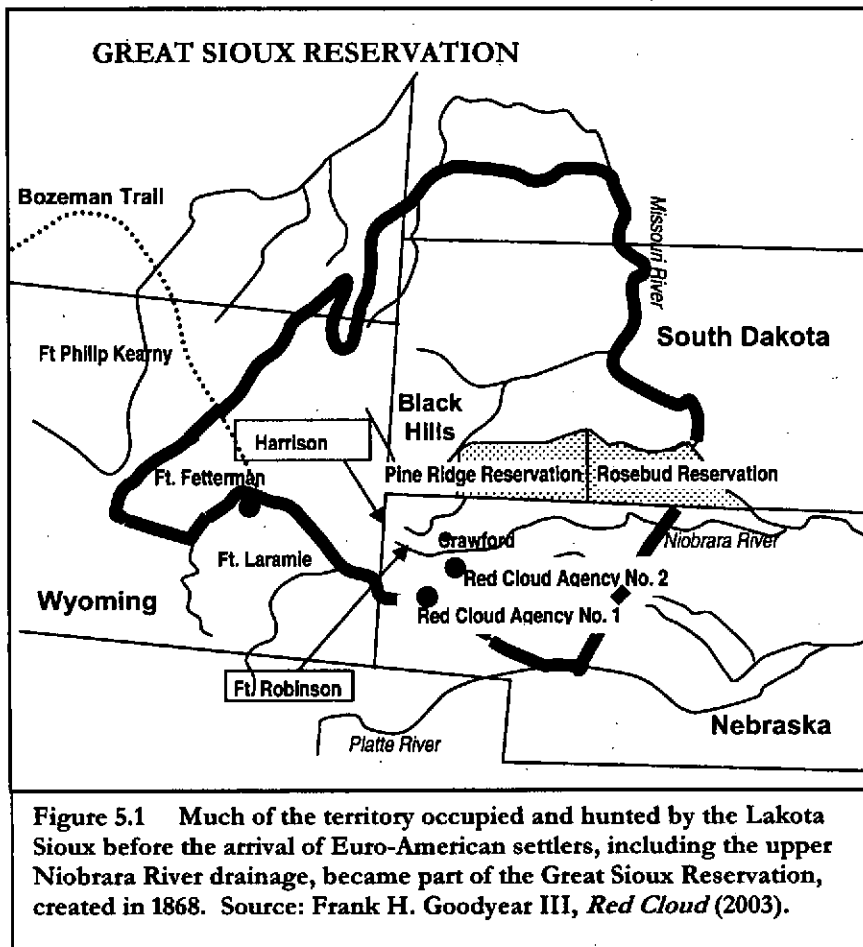
⁵⁷ Smythe, “Sioux Wars,” 837; Buckley, “Bozeman Trail,” 800; LeRoy R. Hafen and Francis Marion Young, *Fort Laramie and the Pageant of the West, 1834-1890* (Lincoln: University of Nebraska Press, 1938), 351-52; Dunlap, “Chapter Four: Blue Water to Wounded Knee,” 78-79.

⁵⁸ Newton Edmunds, Governor and Ex-officio Superintendent of Indian Affairs, “Sioux of the Upper Missouri,” *Report of the Commissioner of Indian Affairs* (Washington, DC: Government Printing Office, 1865), 375.

⁵⁹ George E. Hyde, *Red Cloud’s Folk: A History of the Oglala Sioux Indians* (Norman: University of Oklahoma Press, 1937/1945), 134-61; Smythe, “Sioux Wars,” 837; Hafen and Young, *Fort Laramie*, 352-53; Udey, *Indian Frontier*, 104-10.

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Red Cloud, however, held back for many weeks, adamantly resisting the governments' invitations to come to the fort and sign the treaty. "We are on the mountains looking down on the soldiers and the forts," Red Cloud reportedly said. "When we see the soldiers moving away and the forts abandoned, then I will come down and talk."⁶⁰ Disheartened, the commissioners left Fort Laramie in May. Many more weeks passed before Red Cloud and his followers appeared at the fort in early



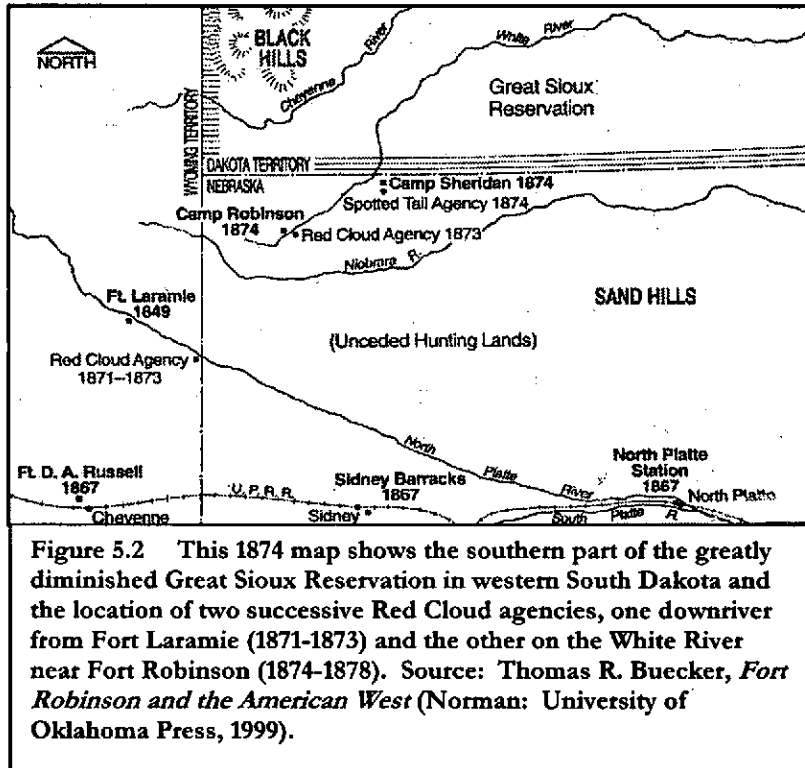
October, after their fall buffalo hunt. Over the next month, Red Cloud debated each element of the treaty and argued forcefully about the location of a new Indian agency, where his people would live and receive annuities and food rations. On November 6, 1868, Red Cloud and others finally agreed to the treaty by signing with their marks. The U.S. Senate ratified the treaty on February 16, 1869.⁶¹

In the 1868 Fort Laramie Treaty the Indians and the U.S. government agreed to several terms. The federal government promised to abandon forts (C. F. Smith, Phil Kearny, and Reno) on the Bozeman Trail and to close it to emigrant travel. It

⁶⁰ Quoted in Hedren, *Fort Laramie in 1876*, 3.

⁶¹ *Ibid.*, 2-3; Hyde, *Red Cloud's Folk*, 162-84; Hafen and Young, *Fort Laramie and the Pageant of the West, 1834-1890* (Lincoln: University of Nebraska Press, 1938), 345-61; Carlson, *Plains Indians*, 151-55.

promised to turn the Sioux into farmers by introducing the tools and techniques of farming on a newly established reservation—the Great Sioux Reservation, encompassing more than half of present-day South Dakota, including the Black Hills. The treaty required the Sioux to relinquish the right to occupy all lands outside this new reservation, including thousands of acres north of the North Platte River in northwestern Nebraska and eastern Wyoming. For these 48,142,000 acres ceded to the federal government, the Sioux received no payment.⁶² This land became part of



the public domain and was soon sold or given away by the federal government to Euro-American settlers, railroad companies, and schools. The future Agate Springs Ranch stood on Lakota Sioux land taken by the federal government by the terms of the 1868 Fort Laramie Treaty.

The treaty also stipulated that the Sioux stop opposing the construction of the railroad, and harassing white travelers, and capturing white women and children. Despite the treaty's requirement that the treaty signers live on the new reservation, it permitted the Sioux to hunt bison in western Nebraska north of the North Platte River, on the Republican fork of the Smoky Hill River, and in Wyoming's Powder River country as long as the "buffalo may range thereon in such numbers to justify

⁶² With lots valued in claims cases at 91 cents per acre, the fair market value of this land amounted to \$43,949,700. David J. Wishart, "Compensation for Disposition: Payments to the Indians for Their Lands on the Central and Northern Great Plains in the 19th Century," *National Geographic Research* 6: 1 (1990), 94-109. Also see Charles C. Royce, *Indian Land Cessions in the United States* (New York: Arno Press and the New York Times, 1971), 527-643, 786-889.

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the chase.”⁶³ The treaty also provided annuities and rations for the Sioux, desperately in need of both economic relief and food in their world of rapidly shrinking bison herds. After signing the 1868 Fort Laramie Treaty, Red Cloud and his people were not seen for months. In March 1869, he appeared at Fort Laramie and stayed briefly before leaving for Wind River County. Red Cloud and his people remained off reservation lands until nearly three years after Red Cloud signed the Fort Laramie Treaty. The uncommon scarcity of game and the destitution that accompanied it in the late 1860s contributed to Red Cloud’s decision to finally move his followers to a location about thirty-two miles downstream from Fort Laramie on the north bank of the North Platte River, where the Oglalas agreed to locate an agency, sometimes called the Sod Agency. In contrast, Crazy Horse, Sitting Bull, and Gall, who did not sign the 1868 treaty, continued to resist Euro-American encroachment and the reservation system. They continued to pursue their traditional subsistence lives.⁶⁴ The 1868 treaty, in effect, had divided the Lakota community in two. The 1868 Fort Laramie Treaty also proposed the establishment of agencies to carry out the terms of the treaty, including the distribution of annuities and food rations. Five separate agencies were established in 1868, most of which were at different points on the navigable Missouri River on the eastern side of the Great Sioux Reservation. Oglala Chief Red Cloud and Brule Chief Spotted Tail, however, forced the creation of additional agencies far from the cheap transportation corridor of the Missouri. Before the end of 1868, one Indian agency operated at Fort Laramie and provided supplies for those Lakota Sioux who had historically made their home in the vicinity of Fort Laramie.

The Brule went all the way to the Whetstone Agency near Fort Randall, at the confluence of the Niobrara River and the Missouri River. In 1870, Red Cloud selected a new site for the Red Cloud Agency about thirty miles southeast of Fort Laramie on the north bank of North Platte River in southeastern Wyoming. In 1872, the Brule’s Whetstone agency was moved from Fort Randall to a place about thirteen miles south of the Great Sioux Reservation in northwestern Nebraska along the White River, where it was known as the Spotted Tail Agency. The Red Cloud Agency remained downstream from Fort Laramie from 1871 to 1873.⁶⁵ In September 1872, U.S. Indian Agent J. W. Daniels reported that three tribes were in residence at the Red Cloud Agency: 1,515 Cheyenne, 1,342 Arapaho, and 6,320 Sioux, most of which belonged to the Oglala band. Members of all the Oglala were represented at the agency, according to Daniels, “excepting about thirty lodges, [which] are hostile and remain North and a part of the Brules.” Since the Bureau of

⁶³ Quoted in DeMallie, “The Nomads,” 29.

⁶⁴ Hedren, *Fort Laramie in 1876*, 1-5; Larson, *Red Cloud*, 105-45; Smythe, “Sioux Wars,” 837; Dunlap, “Chapter Four: Blue Water to Wounded Knee,” 83-84; Guy Gibbon, “Sioux,” in *The Great Plains*, edited by David J. Wishart (Lincoln: University of Nebraska Press, 2004), 602; Gibbon, *The Sioux*, 116; Stan Hoig, *White Man’s Paper Trail: Grand Councils and Treaty-Making on the Central Plains* (Boulder: University Press of Colorado, 2006), 85-97, 154-63.

⁶⁵ Hedren, *Fort Laramie in 1876*, 7-8; Hyde, *Red Cloud’s Folk*, 187-204; Charles E. Hanson, Jr. and Veronica Sue Walters, “The Early Fur Trade in Northwestern Nebraska,” *Nebraska History* 57: 3 (Fall 1976), 309.

Indian Affairs considered this agency's location to be temporary, Red Cloud went into consultation with tribal members about the best location for a new Red Cloud Agency.⁶⁶

In August 1873, the Red Cloud Agency was moved to the White River in northwestern Nebraska, about forty miles west of the Spotted Tail Agency and twenty miles from the Great Sioux Reservation in South Dakota, near the future site of Fort Robinson and about forty miles northeast of the future Agate Springs Ranch. Red Cloud Agency stood in the bend of the White River about two miles from newly

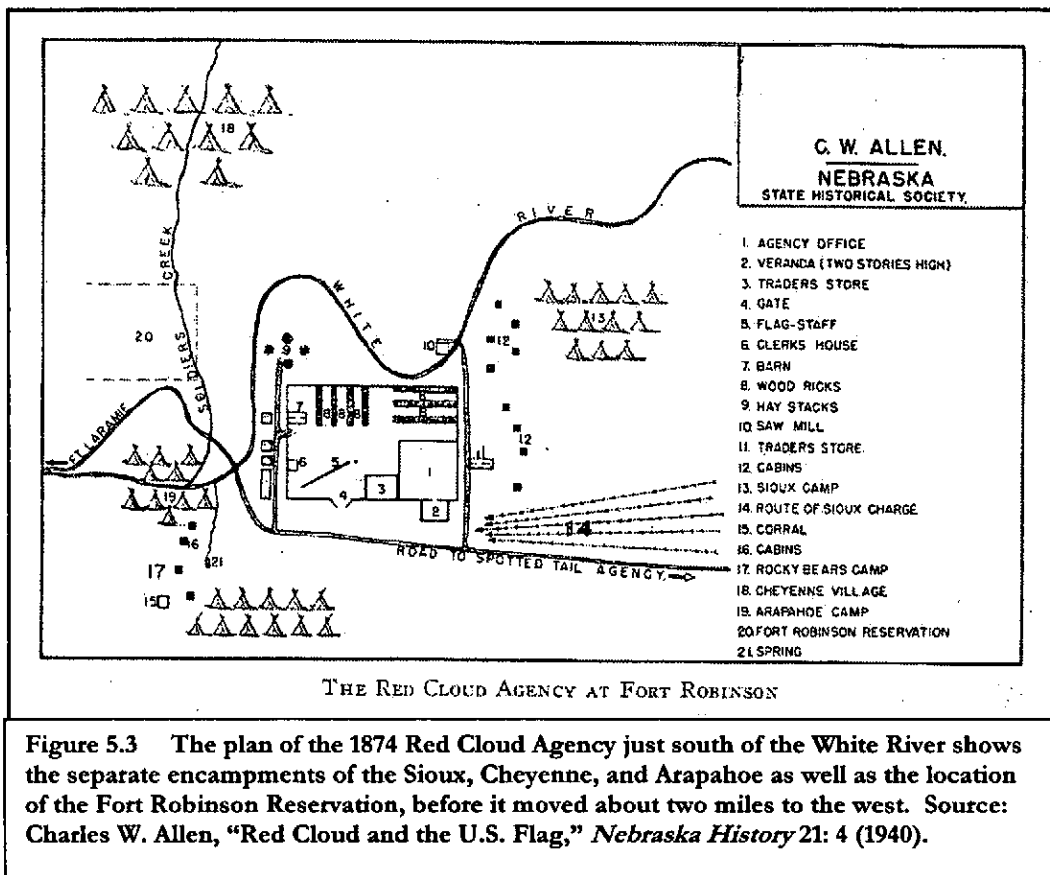


Figure 5.3 The plan of the 1874 Red Cloud Agency just south of the White River shows the separate encampments of the Sioux, Cheyenne, and Arapahoe as well as the location of the Fort Robinson Reservation, before it moved about two miles to the west. Source: Charles W. Allen, "Red Cloud and the U.S. Flag," *Nebraska History* 21: 4 (1940).

constructed Camp Robinson. This was about a mile from the present town of Crawford, Nebraska. The agency town was square in shape, situated on level ground with its main side facing south.

Inside a high vertical-board palisade (or stockade-like fence) stood the main administrative building plus residences. A long, log trading post was inside the palisade on each side of the enclosed agency complex of buildings. The trading posts stocked white man's clothing, such as suits, coats, pants, and hats, as well as

⁶⁶ J. W. Daniels, "Red Cloud Agency, Wyoming Territory, September 15, 1872," *Commissioner of Indian Affairs to the Secretary of the Interior for the Year 1872* (Washington, DC: Government Printing Office, 1872), 267-69.

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items popular with the Indians—yellow natural leaf tobacco, red and blue cloth, brass wire tacks, Chinese vermilion, brass buttons, ribbon, beads, bells, and ear bobs. In exchange, Indians traded cattle hides they had prepared and bread they had learned to make.⁶⁷ North of the agency stockade were wood and hay fields; a barn and large barnyards stood on the crest of a hill above the agency center. Below the hill on the bank of the White River, stood the sawmill that had cut the native white pine used in constructing the tall fence encircling the main agency buildings. In 1874, the Red Cloud Agency was home to an estimated 9,000 Oglala Sioux, 1,200 Northern Cheyenne, and 1,500 Northern Arapaho; nearby Spotted Tail Agency claimed 8,000 Brule Sioux ration-recipients and residents.⁶⁸

Three years later, in the summer of 1877, Red Cloud Indian Agent James Irwin reported that about 6,700 Indians (Northern Cheyenne, Arapaho, and Sioux) were camped within a three-mile radius of the agency center. Many of the residents were trying to cultivate small patches of land along streams adjacent to the agency, Irwin reported. "It appears to me," Irwin continued, "that there is little opportunity to improve them in industry and morals. . . . There is not enough tillable land to cultivate. The seasons are too dry, and irrigating impracticable."⁶⁹ The Red Cloud Agency remained on the White River until 1878.

The federal government's 1868 treaty agreement that allowed Sioux to hunt bison in western Nebraska was short-lived. Troubled by the departure of Indians from the agencies during buffalo hunts, the federal government tried to settle the Indians down by persuading Oglala chiefs Pawnee Killer and Whistler to surrender their hunting rights in Nebraska. In the fall and winter of 1875—1876, the Oglalas, Brules, and some Cheyenne, numbering in the thousands, made their final buffalo hunt in Nebraska. The winter count for that year recorded the event as "The winter they went across for the last time." Despite the great significance of this hunt, no more than 100 buffalo were killed during the entire winter due to the greatly depleted herds. In the spring of 1876, when the Indians returned to the confinement of the reservations, they fully realized that their old way of life was gone forever.⁷⁰

Violations of the 1868 Fort Laramie Treaty by Indians were also numerous. Skirmishes between soldiers and Indians at Fort Laramie broke out repeatedly. Elsewhere on the northern Plains, no fewer than fifty-one armed encounters between soldiers and Indians took place from 1869 to 1876. During the winter of 1873—1874, the numerous northern Sioux who had moved to the Red Cloud and Spotted Tail agencies created a situation of near anarchy. The agent at the Red Cloud Agency was unable to carry out his duties during these unsettled times, and

⁶⁷ Tom Buecker, "Red Cloud Agency Traders, 1873-1877," *The Museum of Fur Trade Quarterly* 30: 3 (Fall 1994), 609.

⁶⁸ Charles W. Allen, *From Fort Laramie to Wounded Knee in the West That Was*, edited by Richard E. Jensen (Lincoln: University of Nebraska Press, 1997), 18; Hedren, *Fort Laramie*, 1876; Hafen and Young, *Fort Laramie*, 363-66.

⁶⁹ James Irwin, "Red Cloud Agency, Nebraska, August 25, 1877," *Annual Report of the Commissioner of Indian Affairs to the Secretary of the Interior for the Year 1877* (Washington, DC: Government Printing Office, 1877), 62-63.

⁷⁰ DeMallie, "The Nomads," 29.

influential Indian leaders such as Red Cloud refused to intervene. After an Indian war party raided the agency in February 1874, Fort Laramie troops were sent to quell disturbances.⁷¹

The mid-1870s witnessed still more conflict between the Lakota and recent Euro-American arrivals on the High Plains. Euro-American encroachment on the Great Sioux Reservation, following confirmed reports of gold discovery in the Black Hills, led to an eruption of new hostilities between the Sioux and the U.S. military. In an attempt to avert conflict and to obtain the valuable gold fields, the federal government in 1875 offered to buy the Black Hills from the Indians. The Sioux overwhelmingly rejected this proposal. During his third visit to Washington, D.C. in the spring of 1875, Red Cloud forcefully argued for seven generations' worth of financial support in exchange for the Black Hills:

Maybe you white people think that I ask too much from the government, but I think those hills extend clear to the sky—maybe they go above the sky, and that is the reason I ask for so much. I think that the Black Hills are worth more than all the wild beasts and all the tame beasts in the possession of the white people. I know it well, and you can see it plain enough that God Almighty placed those hills there for my wealth, but now you want to take them from me and make me poor. So I ask so much that I won't be poor.⁷²

Lakota Landscape Signs and Sacred Geography

Physical evidence of Lakota camping places have all but disappeared from the upper Niobrara landscape, particularly the ephemeral encampments and places used by Lakota on buffalo hunts. A potential tepee ring site, with four circular stone rings along with nearby scatters of rock that may have once formed additional tepee rings, is located on a gently south-sloping terrace north of River Road and one-half mile west of the park visitor center. This cultural site is not visible and only discernable with laser technology. The age and origin of this site are still in question.⁷³

Other material evidence of Native American presence on the land during the 1800s exists in discrete, mostly invisible forms. Some lithic material consisting of chipped stone flakes (most often local moss agate, quartzite, and chert) dating from the historic period can be found near ridge tops and on elevated river terraces near the Niobrara. Rock cairns, each constructed of anywhere from six to thirty rocks stacked in an orderly pile, stand on a few ridge tops. Burial mounds, usually oblong-shaped mounds of soil about 1.6 feet high, also exist on a small number of ridge tops

⁷¹ Hedren, *Fort Laramie in 1876*, 6-9.

⁷² As quoted in Goodyear, *Red Cloud*, 29-30.

⁷³ Diana Rose Angelo, "Archeological Condition Assessment of Agate Fossil Bed National Monument, Sioux County, Nebraska, 2004," Draft. (No publisher, September 2004), 11-12.

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in the park. Finally, small rock shelters usually located under the overhangs of rocky buttes or bluffs, exist in a few places in the park and provide evidence of camping.⁷⁴

In Lakota Sioux religion, like all Great Plains religions, nature has a sacred geography written on the land. "All of nature is regarded as being sacred," according to Great Plains Indian historian Kari Forbes-Boyte, "yet certain geographical features and areas figure more prominently than others on the sacred map."⁷⁵ Forbes-Boyte goes on to explain that:

Sacred places have multiple levels of meaning to indigenous cultures. First, sacred places are acts of creation, usually designed by a World Maker. The[se] places [are] revealed through society's mythology (sacred truth). . . . Second, Great Plains Indians hinge both their religious perceptions and their religious ceremonies on sacred places. . . . Last the religious perceptions that Plains Indians have of their physical environment lead to a psychological stability evident in a condition referred to as "existential insideness."⁷⁶

The histories and associated traditions of many Plains Indians are located in real geographic places. Sacred places are repeatedly consecrated through rituals. The Lakota religion has seven sacred ceremonies that are performed at specific geographic sites. The vision quest, *hanbleceya*, is but one of these rituals that is carried on at precise locations, especially at Bear Butte in western South Dakota. Additionally, natural landforms such as buttes and ridge tops, and certain human-manufactured structures such as a circular rock formation can serve as symbols of the cosmos. Their shapes embody the power that they symbolize. In Lakota society religion cannot be practiced without physical access to places of power in their sacred geography. If access to sacred sites is severed through loss of traditional lands, cultural disintegration can follow.⁷⁷

Certain inorganic and static landscape features in the vicinity of Agate Fossil Beds National Monument have had and still have cultural significance to Lakota Indians and are part of the Native American cultural landscape. Such natural features or formations found in Agate that may have had cultural significance for the Lakota Sioux include: prominent ridgelines, solitary high hilltops or buttes, natural formations of stone that exist on ridges, cliffs, hillsides, and level terraces, or an isolated tree or grove of trees. Such features were sometimes deemed sacred sites or offering sites and chosen as a place for a vision quest, for a sun dance, for altar sites, for setting out spiritual offerings, or for gathering together. Other organic sites typically used by the Lakota also exist at Agate Fossil Beds. Certain plant and

⁷⁴ Angelo, "Archeological Condition Assessment of Agate Fossil Beds National Monument," 6-42; LuAnn Wandsnider and George H. MacDonell, *Agate Fossil Beds Prehistoric Archaeological Landscapes, 1994-1995* (Lincoln: University of Nebraska, 1997), Appendix H (AFBNM sensitive location information), 1-6.

⁷⁵ Kari Forbes-Boyte, "Sacred Geography," in *Encyclopedia of the Great Plains*, edited by David J. Wishart (Lincoln: University of Nebraska Press, 2004), 599.

⁷⁶ *Ibid.*, 599.

⁷⁷ *Ibid.*, 599.

vegetation species at Agate are known to have been picked, gathered, and dug by the Lakota.⁷⁸

Several specific features in Agate Fossil Beds National Monument have been identified as having possible cultural meaning to the Lakota. On top of Carnegie Hill, there are two rock formations that have been identified as altars. A circular depression atop Carnegie Hill has also been identified as a possible sacred site to the Lakota. Carnegie Hill itself, because of the fossil remains of prehistoric animals that exist, is imbued with great cultural meaning and spiritual significance for the Lakota. According to Sebastian LeBeau, Carnegie Hill is significant because of what “occurred there far back in the cultural past during the period the Lakota called *Wico’icage Pe’ta* (the Fire Age).” This site is the origin of the “Stinging Ceremony” in Lakota story-telling. According to the story, the bones found inside the hill belong to monsters and creatures that once roamed the earth before the coming of man.⁷⁹ Several other landscape features with possible Lakota cultural significance—rock formations, depressions, cairns, and a couple of sites relating to the *Daemonelix*—the fossilized spiraling underground burrow of a prehistoric beaver—are located in an arc south to southwest of Carnegie Hill.

⁷⁸ Sebastian C. LeBeau II, “Wico’Cajeyate: Traditional Cultural Property Evaluation Agate Fossil Bed National Monument,” prepared for Agate Fossil Beds National Monument, c. 2002, 1-4.

⁷⁹ *Ibid.*, quote and information both from 11.

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Chapter 6

RED CLOUD AND JAMES COOK: MERGING WORLDS, mid-1870s – 1909

Introduction

During his lifetime that spanned much of the nineteenth century, Red Cloud had taken long and twisting trails alone and with his people. At one of its turns, Red Cloud met James Cook, near the end of the fifty-year-old chief's political influence among his people. James Cook, less than twenty, had by then traveled widely throughout the West and experienced much in life, but had still a long trail and full life ahead. It was at this moment in both men's lives that they met in the mid-1870s. Many years later, Cook explained the basis for their friendship: "I met him on the common ground of a hunter and dweller in the Plains country, and in a different manner from most white men. . . . [This] had much to do . . . with the establishing of a friendship that grew with the passing years."¹

Over the next thirty-five years, as both men aged, their friendship founded on loyalty and respect grew stronger. At the same time, U.S. government presence and policies in Lakota territory gradually but effectively eroded the livelihood and culture of Red Cloud's people. The stunning Lakota victory at the Battle of Little Big Horn in 1876 was followed twenty years later with the tragic massacre of Lakota at Wounded Knee. At these two events, significant in the history of both nations, Red Cloud and James Cook observed the outcomes with great pathos.

In the late 1880s, Red Cloud began making annual visits with his followers from their reservation in South Dakota one hundred miles to see James Cook at the Agate Springs Ranch, in territory that Red Cloud and the Lakota had once pursued a nomadic life on the Plains. Near the end of Red Cloud's life, the old chief urged James Cook to keep a portrait of Red Cloud, done at the Agate Springs Ranch by a friend of Cook's, Chicago artist Bessie Sandes Butler. Red Cloud, with the aid of a nephew, shared with James Cook his perceptions of the Sioux people at that time and urged him to keep and display the painting prominently so that both of their children could see and know about the Lakota's former life—the old trails they both had followed. "Always Go and look at the face of one of the Last of the old Chiefs that Lived before the white men come to take over lands and turn us from the old trails we had followed for so many hundreds of years," Red Cloud encouraged.² During the last thirty-five years of his life, Red Cloud's old trails and those of James Cook became intertwined as Red Cloud's life and culture faded and James Cook's became deeply rooted along the upper Niobrara.

¹ James H. Cook, *Fifty Years on the Old Frontier* (Norman: University of Oklahoma Press, 1980, new edition), 187.

² Quoted in Robert W. Larson, *Red Cloud: Warrior-Statesman of the Lakota Sioux* (Norman: University of Oklahoma Press, 1997), 4.

Red Cloud and James Cook Meet

Fifty-three-year-old Red Cloud met seventeen-year-old James Cook in 1874, just around the time that gold had been discovered in the Black Hills on the Great Sioux Reservation.³ At the time, Cook and a few other cowboys, after driving a herd



Figure 6.1 Red Cloud in 1877, not long after he and James Cook met. The pipe in Red Cloud's hand signifies his belief that he played an important diplomatic role for his people. Courtesy of the National Anthropological Archives, Smithsonian Institution, Washington, DC (3237-D). Photograph by Daniel S. Mitchell.

of cattle from Texas to railheads in Kansas, decided to continue north to Fort Laramie in southeastern Wyoming, and on to the Red Cloud Agency, near Camp Robinson on the White River in northwestern Nebraska, just miles south of the Black Hills and beyond. At Red Cloud Agency, renowned paleontologist Professor O. C. Marsh, from Yale University, was collecting fossil bones on Indian lands. This greatly disturbed Red Cloud and the Oglala, who thought that Marsh was digging for gold. Cook, who understood Marsh's scientific endeavors, communicated with Red Cloud and convinced him and the other Indians that the interest was in bones and not gold. Although Red Cloud spoke no English and always traveled with an interpreter, Red Cloud and Cook, who knew some sign language and Lakota, communicated with each other directly. Red Cloud's lifelong friendship of mutual trust, respect, and loyalty with Cook

³ Red Cloud noted meeting Cook seventeen years before 1891, which would be 1874. Cook noted in his book *Fifty Years on the Old Frontier* that Red Cloud had been his friend for thirty-five years; since Red Cloud died in December 1909, this means that Cook met Red Cloud in 1874. At different places in his book, Cook gives both years, 1874 and 1875, as the year he met Red Cloud. Historian R. Jay Roberts, on the other hand, wrote that Cook's friendship with Red Cloud began in 1875, even though Cook had visited Fort Laramie and Red Cloud Agency in 1874. Larson, *Red Cloud*, 296; Cook *Fifty Years on the Old Frontier*, 186; R. Jay Roberts, "The History of Agate Springs," *Nebraska History* 47: 3 (September 1966), 275.

began at that moment.⁴

Over the next decade, the trails of Red Cloud and James Cook undoubtedly crossed. Cook continued to drive cattle north from Texas, sometimes to Indian agencies like the Red Cloud Agency, on contract with the Bureau of Indian Affairs. Red Cloud and his people continued to hunt buffalo on the prairies between Fort Laramie and Red Cloud Agency for a few more years.

Red Cloud and James Cook remained friends for nearly thirty-five years. After James and Kate Cook moved to the Agate Springs Ranch in 1887, Red Cloud and some of his followers visited the ranch annually from Pine Ridge Agency, 100 miles to the northeast. There, they erected their tepees and later their tents at various locations around the main ranch house and adjoining fields.

Military Forts Assert U.S. Government Presence

The U.S. government did become increasingly present and involved in the lives of the Lakota Sioux from the late 1840s on. After the 1851 Fort Laramie Treaty, the U.S. government initiated an increasingly aggressive military policy aimed at ending Indian threats to the Euro-American emigrants traveling on overland trails across the High Plains to farmland and mines in the Far West. The appearance of the military and fortifications was one sign of change. Beginning in the late 1840s, the government established forts from the Midwest farther and farther west along emigrant routes of travel. In 1848, the federal government established Fort Kearny on the Platte River in central Nebraska (about eight miles southeast of the present town of Kearney) to police the overland trail. A year later the government purchased Fort William on the Laramie River and converted it to a military post. Fort Laramie became a major place of replenishment and refreshment for emigrants heading to all points west. On the Oregon-California Trail in Nebraska, Fort Grattan, named for Brevet Second Lieutenant John L. Grattan, killed in 1854 by the Oglala near Fort Laramie, was established in 1855 south of the North Platte River at the mouth of Ash Hollow.⁵

⁴ Cook, *Fifty Years on the Old Frontier*, 85-86, 115; Roberts, "History of Agate Springs," 275; Harold J. Cook, *Tales of the O4 Ranch: Recollections of Harold J. Cook, 1887-1909* (Lincoln: University of Nebraska Press, 1956), 26.

⁵ Robert Frazier, *Forts of the West* (Norman: University of Oklahoma Press, 1965), 86-87.

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The 1860s, despite the cost and distraction of the Civil War raging in the eastern United States, witnessed the establishment of several additional forts along the Oregon-California Trail in western Nebraska and eastern Wyoming—all within 150 miles of the future Agate Springs Ranch on the upper Niobrara River. In September 1863, the U.S. Army built Fort McPherson, located on the north bank of the South Platte River, eight miles upstream from its confluence with the North Platte River. Fort Mitchell, located on the south bank of the North Platte above Scotts Bluff, just twelve miles east of the Wyoming border, was established in August

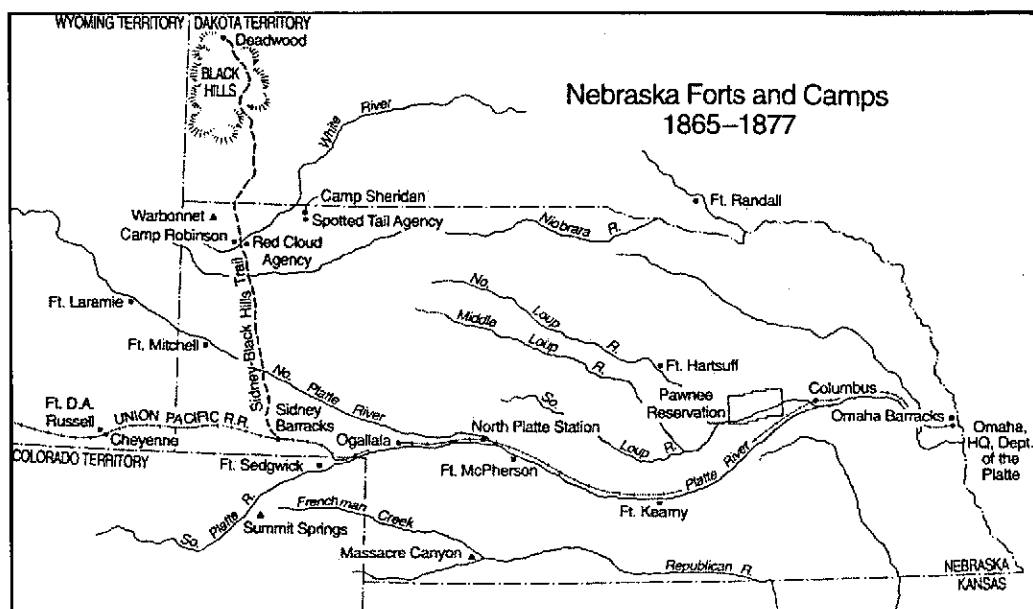


Figure 6.2 Numerous military forts and camps were established across the High Plains, including Camp, then, Fort Robinson, to protect Euro-American emigrants who trespassed on Indian territory. Reprinted from *The Nebraska Indian Wars Reader* edited by Eli Paul, by permission of the University of Nebraska Press. © 1998 by the University of Nebraska Press.

1864 by order of Brigadier General Robert B. Mitchell. In November 1867, Sidney Barracks (Fort Sidney after 1879), was built on Lodgepole Creek in southwest Nebraska to protect Union Pacific Railway construction crews from Indian attacks. That same year, Fort Fetterman (named for Major William Fetterman who was slain by Sioux in 1866 at Fort Phil Kearny) was built northwest of Fort Laramie in Wyoming on the sagebrush plateau above the south bank of the North Platte River. Fort Fetterman was intended to protect miners heading to Montana over the Bozeman Trail.⁶

One of the last forts constructed by the U.S. Army in Nebraska was located in the northwestern part of the state. Camp Robinson about fifty miles from the future Agate Springs Ranch was established in March 1874 on the White River (just

⁶ *Ibid.*, 86-88, 90, 180-81.

west of present-day Crawford, Nebraska). It was named after First Lieutenant Levi H. Robinson of the 14th U.S. Infantry, killed by Indians in Wyoming in February 1874. Difficulties between Indians and Euro-Americans prompted the establishment of the fort during the Sioux Wars. For a couple of weeks after it was first established, Camp Robinson was called Camp Red Cloud Agency, because of its close proximity to Red Cloud Agency. In January 1878, it became Fort Robinson. When first constructed, very few Euro-Americans inhabited the semiarid but beautiful prairies and pine-topped hills of western Nebraska. The Oglala and Brule Sioux, Northern Cheyenne, and Arapaho lived and hunted buffalo throughout this area in the early 1870s before settling on the Red Cloud Agency, just a mile from Fort Robinson. During the fort's first years of existence, its role was to protect the Red Cloud Agency; but when the agency closed and the Indians left the area, its role evolved into guarding the Great Sioux Reservation in nearby South Dakota. The arrival of the railroad at the fort in the mid-1880s made Fort Robinson more accessible and elevated its importance as a military troop station. Between 1885 and 1898, Fort Robinson also became home to "buffalo soldier" garrisons, the famed African American Ninth Cavalry. The role of all troops at the fort broadened to encompass civilian activities, such as providing a domestic police force, protecting property during labor strikes, and keeping the peace during civil unrest in the region. In the 1880s and 1890s, Fort Robinson became a source of supplies, services, and even labor, as former soldiers became available for work for area ranchers, including the Cook family fifty miles away at Agate Springs Ranch.⁷

Sioux Wars End at the Little Bighorn

Resigned to a military showdown after years of conflict with the Plains Indians, the federal government demanded that all Sioux report to an Indian agency by the end of January 1876 or be regarded as hostile. Living in small camps scattered around the winter landscape of southeastern Montana and northeastern Wyoming, the Sioux who were loosely allied with Sitting Bull refused. In May 1876, the army launched a three-pronged campaign, led by Colonel John Gibbon and Generals George Crook, Alfred Terry, and George Custer, to bring the Lakota led by Sitting Bull and Crazy Horse onto the Great Sioux Reservation. In mid-June 1876, Crazy Horse's band successfully resisted Crook's advance at the Battle of Rosebud.⁸

Then, on June 25-26, 1876, in the most famous fight of the campaign, General Custer and his Seventh Cavalry, after attacking an enormous Sioux encampment on the Little Bighorn (Greasy Grass) River, were soundly defeated. Custer and 210 men in the five companies under his command were killed. Although Red Cloud did not participate in the battle, his son Jack Red Cloud and Lakota leader American Horse did. In retaliation, Congress legislated to remove the

⁷ Thomas R. Buccker, *Fort Robinson and the American West, 1874-1899* (Norman: University of Oklahoma Press, 1999), 1-42; Frazier, *Forts of the West*, 90.

⁸ Terry Smythe, "Sioux Wars," in *The Great Plains*, edited by David J. Wishart (Lincoln: University of Nebraska Press, 2004), 837.

Black Hills from the Great Sioux Reservation and open the area to Euro-American mining and settlement. The government also launched a series of attacks on Sioux villages located in western South Dakota and on the Yellowstone River in Wyoming. This series of events, including the bayoneting of Crazy Horse at Fort Robinson in September 1877, marked the end of the Sioux Wars.⁹

James Cook happened to be near the Little Bighorn when the infamous battle broke out. After the cattle drive to Dakota in the spring of 1876, Cook went to Fort Laramie, where he and other hunters decided to go north into Montana and look along the base of the Big Horn Mountains (on the Little Big Horn and Tongue rivers and Goose Creek) for good trapping and hunting grounds. In June 1876, Cook was hunting on the Little Bighorn River as Custer's troops moved west from the Dakota Black Hills toward their last battle. Familiar as they were with the country and the Sioux, Cook and some of his hunting companions were called upon by U.S. Army's Fourth and Fifth Cavalry to serve as guides, scouts, and dispatchers of information from one command to the other in the field. Cook was with some of the first troops to arrive at the Little Bighorn battlefield after the massacre. Cook then worked with General George Crook for a period in the summer and fall of 1876. Cook and Crook remained friends for many years afterward.¹⁰

Treaty of 1876 and its Aftermath

Political relations between the Oglalas and the U.S. government reached a profound turning point after the Battle of Little Bighorn in 1876. Three months after that battle, former commissioner of Indian Affairs George Manypenny brought a group to the Red Cloud Agency to discuss with Red Cloud the future status of the disputed Black Hills, which had been besieged by gold miners and business entrepreneurs over the last two years. Government authorities pressured Red Cloud to sell the Black Hills or receive no further rations and face starvation. Under this threat, Red Cloud agreed to cede the sacred area in the "Black Hills Treaty" of 1876, much to the consternation of many Lakota leaders. A month later, those who militantly disagreed with the decision to let go of the Black Hills were asked to disarm. Although Red Cloud's decision to let go of the Black Hills had compromised his reputation among the Lakota Sioux, after the disruption and agitation of the past year's events had settled somewhat, the Oglala chief remained the leading voice of his people.¹¹

⁹ The literature on the Battle of Little Bighorn, the Indian success in the battle, and Custer's defeat is voluminous. Among the more recent and reliable secondary sources are: Robert M. Utley, *Custer and the Great Controversy: Origin and Development of a Legend* (Pasadena, CA: Westernlore Press, 1962); James Welch with Paul Stekler, *Killing Custer: The Battle of the Little Bighorn and the Fate of the Plains Indians* (New York: W. W. Norton & Company, 1994).

¹⁰ Cook, *Fifty Years on the Old Frontier*, 105-106; Erwin H. Barbour, "James Henry Cook," in *History of Nebraska, Volume III*, edited by Albert Watkins (Lincoln: Western Publishing and Engraving Company, 1913), 479; James Cook, letter to Harold Cook, 1 November 1911, Barbour Papers, University of Nebraska Archives.

¹¹ Frank H. Goodyear, *Red Cloud: Photographs of a Lakota Chief* (Lincoln: University of Nebraska Press, 2003), 28-35.

Although the military's efforts to hunt down the Sioux who had dispersed after the Little Bighorn battle and not returned to the Great Sioux Reservation were not particularly successful, Crazy Horse surrendered at Fort Robinson in May 1877. Four months later, he was killed while reportedly trying to escape from the fort. Sitting Bull and 2,000 followers fled to Canada. When he returned to the United States in 1881, Sitting Bull and all remaining Lakota bands went to live on

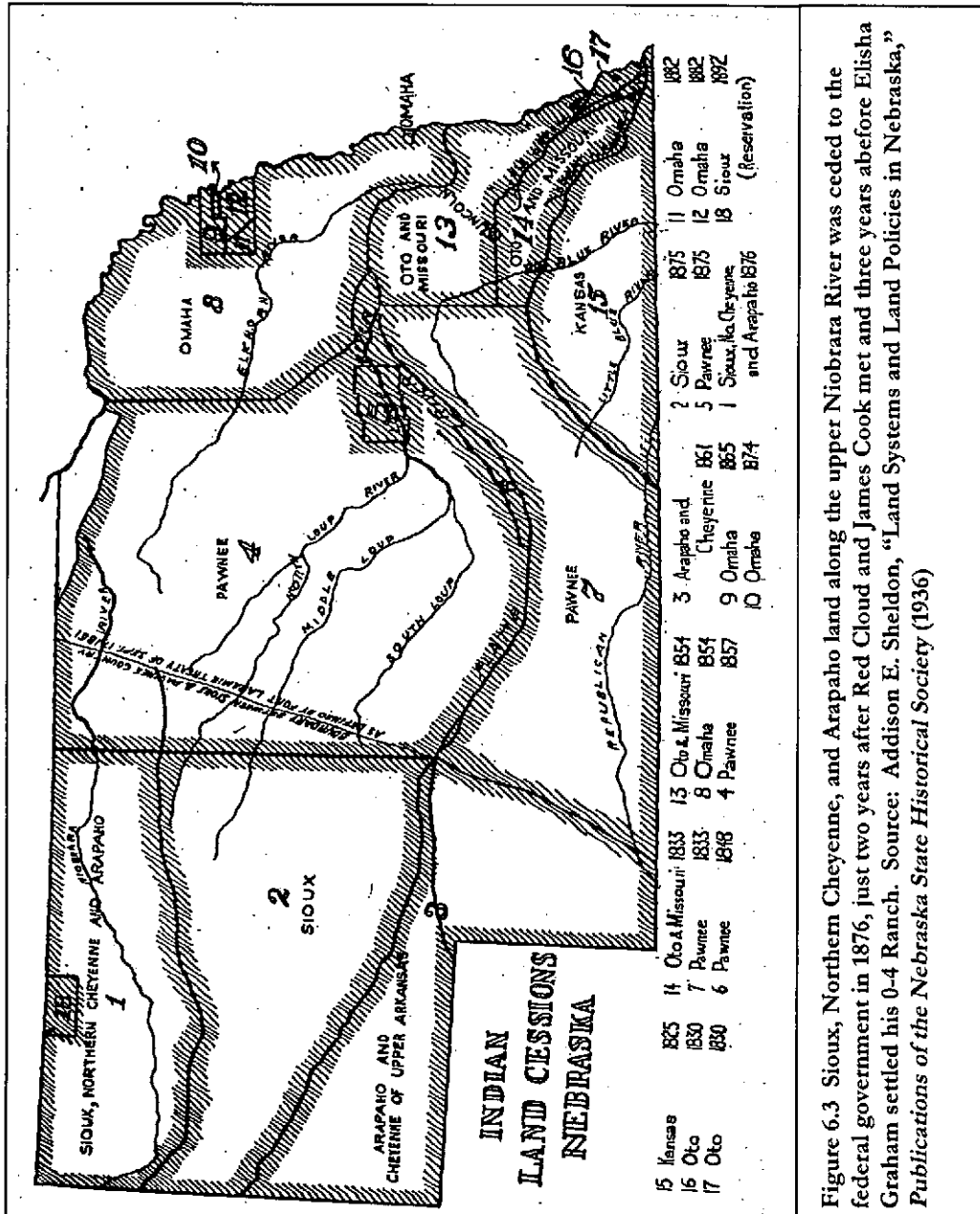
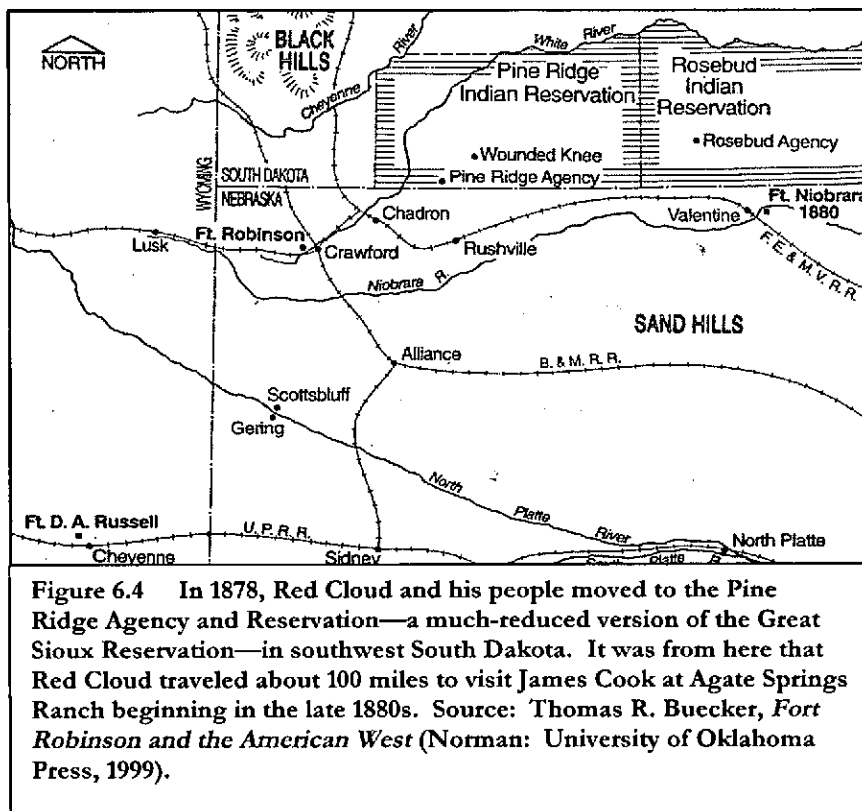


Figure 6.3 Sioux, Northern Cheyenne, and Arapaho land along the upper Niobrara River was ceded to the federal government in 1876, just two years after Red Cloud and James Cook met and three years before Elisha Graham settled his 0-4 Ranch. Source: Addison E. Sheldon, "Land Systems and Land Policies in Nebraska," *Publications of the Nebraska State Historical Society* (1936)

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reservations. Lakota Indian resistance to the U.S. government had effectively ended.¹²

The future disposition of the Red Cloud Agency exemplified the greatly weakened position of Red Cloud and the Oglala, Northern Cheyenne, and Arapaho with respect to the U.S. government. Following the Little Bighorn Battle in 1876 and the Lakota's cession of the Black Hills in 1877, federal authorities insisted that the Red Cloud and Spotted Tail agencies be dismantled and moved. Although Red Cloud refused at first to accept the government's proposal to move the Red Cloud Agency eastward more than 200 hundred miles to a location near the Missouri River in the fall of 1877, he finally acquiesced.



After Indian Bureau authorities promised the Oglala food and supplies for the winter, 8,000 agency residents began the overland trek toward the Missouri River. Insufficient supplies, low morale, and severe winter weather prevented them from reaching their destination. In the meantime, Red Cloud's ideas about resettlement changed and he mustered what clout he had left. In the summer of 1878, Red Cloud insisted that his people not be moved so far east and forced the Bureau of Indian Affairs to consider and finally approve removal of the Red Cloud Agency to the

¹² Smythe, "Sioux Wars," 837; Guy Gibbon, "Sioux," in *The Great Plains*, edited by David J. Wishart (Lincoln: University of Nebraska Press, 2004), 602; Guy Gibbon's *The Sioux: The Dakota and Lakota Nations* (Malden, MA: Blackwell Publishing, 2003), 116-17.

southwestern corner of the Pine Ridge Reservation. This new Pine Ridge Agency was 60 miles northeast of the old Red Cloud Agency and about 100 miles northeast of Agate Springs Ranch.¹³

The move to the Pine Ridge Agency was the final one for Red Cloud and his Oglala people, after several previous forced moves since Red Cloud's removal from Fort Laramie in 1863. The new agency had access to a saw, planing, and shingle mills on the south fork of the White River about seven miles from the agency, an Episcopal Church, and agricultural implements and tools, according to an 1879 report by Indian Agent Valentine T. McGillicuddy. Between May and October 1879, McGillicuddy oversaw a great deal of construction at Pine Ridge: a 38' x 40' two-story dwelling for physician and farming families; one two-story 27' x 40' dwelling for the Indian agent; four shop buildings for a wagon-maker, blacksmith, harnessmaker, and carpenter; a large warehouse; a substantial dwelling for Chief Spotted Tail; and several smaller dwellings for other Sioux chiefs, including Red Cloud. By 1883, about 625 log houses stood on the entire Pine Ridge Reservation.¹⁴

Confinement on reservations, dependency on government food and supplies, and additional federal legislation further impoverished Lakota livelihoods and liveways during the 1880s. The Oglala leader Crazy Horse captured the significance of their traditional methods of food gathering when he said: "You tell us to work for a living, but the Great Spirit did not make us to work, but to live by hunting."¹⁵ Hunting virtually ceased with the extinction of the bison and the creation of reservations. In place of hunting, the Bureau of Indian affairs attempted to force Indians to farm. This



Figure 6.5 Aging Red Cloud is photographed here in the mid-1890s with his son Jack Red Cloud (standing right), Chief Knife (standing left), and Baptiste Garnier ("Little Bar"), a trader and friend of both Red Cloud and James Cook. Courtesy of Nebraska State Historical Society.

¹³ Goodyear, *Red Cloud*, 35-36, 41-43.

¹⁴ V. T. McGillicuddy, "Pine Ridge Agency, Dakota, October 15, 1879," *Annual Report of the Commission of Indian Affairs to the Secretary of the Interior for the Year 1879*, 37-40; V. T. McGillicuddy, "Pine Ridge Agency, Dakota, August 10, 1883," *Annual Report of the Commissioner of Indian Affairs to the Secretary of the Interior for the Year 1883* (Washington, DC: Government Printing Office, 1883), 34-39.

¹⁵ Quoted in Joseph M. Marshall III, *On Behalf of the Wolf and First Peoples* (Santa Fe, NM: Red Crane Books, 1995), 49.

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proved futile at the new Pine Ridge Agency. "This is not an agricultural country," wrote Indian Agent V. T. McGillicuddy in 1881, principally on "lack of rainfall at the proper season and the hot scorching winds that prevail during the summer months." The Indians had, however, had some success raising cows and bulls, whose numbers had increased to 1,500 breeding stock over the past two years. Some Indians living around the agency had also started a freighting enterprise.

Although he continued to live at the agency, Red Cloud openly rejected the efforts made by McGillicuddy to "assimilate" him and other reservation residents into American society through education, Christianity, medicine, police and farming, and the denial of sacred Indian practices like the Sun Dance. In his 1885 annual report to the secretary of the Interior, McGillicuddy wrote:

The majority of the Sioux have continued . . . adopting civilization and abandoning their old customs. In marked contrast to this majority, however, is Red Cloud and his immediate closely congregated band and scattered retainers among other bands, who, with the support and sympathy of a few misguided or scheming white people in Washington and elsewhere, are as determined as ever in their opposition to schools, farming, stock-raising, and civilization generally.¹⁶

Red Cloud viewed all "civilizing" activities as tempered by "race antagonism." None of the children in Red Cloud's band were sent to school; as punishment for this, Red Cloud was denied some of his rations.¹⁷

In 1887, additional U.S. federal legislation constricted and eroded the Oglala way of life. That year, Congress passed the Dawes Severalty Act (or the General Allotment Act), which forced families and individuals to accept generally 160-acre allotments with the expectation that this would help speed the process of Indian assimilation into Euro-American culture through eventual land ownership. Much of the remaining reservation lands (referred to as "surplus lands") were opened to sale and settlement by non-natives. In 1889, Congress broke up the Great Sioux Reservation into several smaller reservations in North and South Dakota. Over the years, even the smaller reservations were reduced to a fraction of their original size because of the Dawes Act. The breakup of tribal land and tribalism forced the fragmentation of a communal society into individual families living separately.¹⁸

Final Clash at Wounded Knee Ends an Era

One final momentous conflict between the Lakota and the U.S. government occurred in 1890 at Wounded Knee Creek (over one hundred miles northeast of Agate Fossil Beds) on the Pine Ridge Indian Reservation in South Dakota. Defeated

¹⁶ V. T. McGillicuddy, "Pine Ridge Agency, Dakota, September 10, 1885," *Annual Report of the Commissioner of Indian Affairs to the Secretary of the Interior for the Year 1885* Washington, DC: Government Printing Office, 1885), 34.

¹⁷ McGillicuddy, "Pine Ridge Agency, September 10, 1885, 34.

¹⁸ Gibbon, "Sioux," 602.

militarily, many Sioux adjusted to their new humiliating and desperate reality by adopting the Ghost Dance religion and its retaliatory, militaristic slant. Many practitioners of the Ghost Dance religion believed that their fervent dancing and praying might drive the Euro-Americans from their country. The passionate adherence of believers to the ritualistic practices of the Ghost Dance frightened many Euro-Americans—and ultimately led to a military confrontation with federal troops. On the bitter cold morning of December 29, 1890, the Seventh Cavalry, after failing to disarm Big Foot's band of fleeing Lakota, shot and killed more than 250 members of the band in their encampment. Most were women and children. The deadly outcome of this Wounded Knee Massacre, plus the killing of Sitting Bull by Indian policemen earlier that year, brought a devastating end to the freedom, nomadic life, and seasonal subsistence associated with the traditional lifeways of the Lakota and other western Sioux bands and tribes.¹⁹

Following the Wounded Knee Massacre, James Cook once again became intimately involved in Lakota affairs, joining efforts to bring calm and peace to the territory encompassing the Pine Ridge Reservation. In March 1891, Red Cloud tried unsuccessfully to have James Cook appointed agent to the Oglala on the Pine Ridge Reservation.

You told my people to come home and hold a council and agree on some man whom all wanted for agent. All my people—men, women, and children—have agreed on one man. That man is James H. Cook of Harrison, Nebraska. He is the choice of us all. We have known him for seventeen years. He is a Western man. He has been among us when we were wild. He knows our nature, our history, and what we want. He is our friend.²⁰

Bureau of Indian Affairs officials rejected Red Cloud's request.

A year later in March 1892, hundreds of residents of Sioux, Dawes, Box Butte, and Sheridan counties in western Nebraska made a similar attempt. They signed a petition submitted to President Benjamin Harrison requesting that James Cook be appointed agent of the Pine Ridge Indian Reservation. Their justification for selecting Cook was threefold. First, the petitioners fully acknowledged that their families and property were in jeopardy whenever Indian outbreaks occurred. Second, the petitioners argued that a more safe and settled state could be achieved by appointing a person as agent who understood the Indians and met with their approval. Third, Cook was a man of good character who did not seek the job for himself. As his supporters urged in their petition,

that in James H. Cook the government finds a man most especially and particularly fitted for this position. Not seeking the position by his own

¹⁹ Smythe, "Sioux Wars," 837; Gibbon, "Sioux," 602; Elaine Goodale Eastman, "The Ghost Dance War and Wounded Knee Massacre of 1890-91," *Nebraska History* 26: 1 (January-March 1945), 26-42.

²⁰ Quoted in Goodyear, *Red Cloud*, 145.

desire or wish, but urged and petitioned by the Indians, he would, if appointed, accept, and your petitioners believe that he being a man of full knowledge of the habits, customs and traditions of the Indians, having spent most of his life in the west . . . treatment, and in whom they have unbounded confidence, besides being a man of great force of character.²¹

Aging Red Cloud and the Agate Springs Ranch

Red Cloud lived a long life of nearly nine decades. As a young man, Red Cloud became a feared warrior—perhaps the most feared warrior—until the rise of Crazy Horse and Sitting Bull during their victory over George Custer at the Little Bighorn battle in 1876. As a consequence of well-publicized and photographed visits to Washington, D.C. and his leadership role in treaty negotiations, Red Cloud had emerged as a skillful political leader and a prominent spokesperson for the Lakota people. Red Cloud helped orchestrate resistance to American policies. He tirelessly strived to educate American authorities and the general public about the dire straits of his people. Although never willing to accept white culture for himself, he recognized that it would dominate his people and steal from them their traditional lifeways. He acquired the ability to “balance the demands of two separate cultures.”²² His success at stalling federal policies that eroded Lakota culture probably extended their traditional way of life by almost a decade, according to Red Cloud biographer Robert W. Larson. At the height of his influence he had become among the most powerful and best known Indians in the country.²³

Red Cloud’s effectiveness as a leader diminished as he aged. He failed to take action in 1876, the year of the Battle of the Little Bighorn, to diminish the subsequent harsh retribution of the U.S. federal government. Some charged the aging Red Cloud of being self-serving and too comfortable with whites. In 1889, he worked diligently but unsuccessfully to kill anti-Sioux legislation proposed by Congress. And in 1890, he was unable to defuse the Ghost Dance movement, ending in the tragic Wounded Knee Massacre. During his last visit to Washington, D.C. in 1897, the seventy-six-year-old Red Cloud’s testimony before Congress was largely ignored (in contrast to his 1870 visit, when government officials and others greeted him like a great Indian celebrity). At the same time, Red Cloud took a decisive stand on several important issues that affected the future of his people, and he succeeded in accomplishing some things of merit as he grew older. After the slaying of Crazy Horse in 1877 and the rise of the uncompromising Sitting Bull, Red Cloud re-emerged as an important spokesperson for the Oglala in dealing with the U.S. government. In 1878, he successfully resisted the removal of his people to the Missouri River. In the 1880s, his feuds with Great Sioux Reservation Agent

²¹ Petition requesting that James Cook be appointed agent at the Pine Ridge Reservation, March 1892, Agate Fossil Beds National Monument, Cook Papers, Box 116. Also see Cook, *Fifty Years on the Old Frontier*, 173-79.

²² Goodyear, *Red Cloud*, 7.

²³ Robert W. Larson, *Red Cloud: Warrior-Statesman of the Lakota Sioux* (Norman: University of Oklahoma Press, 1999), 3, 302.

McGilycuddy attracted national attention and kept Indian reservation conditions in the public spotlight. He argued vehemently against the loss of half the Great Sioux Reservation in 1889. In 1903, Red Cloud, then eighty-two years old, made an impassioned plea to South Dakota Congressman E. W. Martin for returning the Black Hills to the Lakota.²⁴

Even in his old age Red Cloud remained vitally interested in the future of his people and the direction of the Oglala tribe. A mark of his concern and commitment to the Oglala is evident in a speech he gave on the Fourth of July 1903 at the Pine Ridge Reservation, when he formally abdicated his leadership as Oglala chief. With great poignancy and pathos he spoke:

I was born a Lakota and I have lived a Lakota and I shall die a Lakota. Before the white man came to our country, the Lakotas were a free people. They made their own laws and governed themselves as it seemed good to them. Then they were independent and happy. Then they could choose their own friends and fight their enemies. Then men were brave and to be trusted. The white man came and took our lands from us. They put [us] in bonds and made laws for us. We were not asked what laws would suit us. But the white men made the laws to suit themselves and they compel us to obey them. This is not good for an Indian. The white men try to make the Indians white men also. It would be as reasonable and just to try to make the Indians' skin white as to try to make him act and think like a white man. But the white man has taken our territory and destroyed our game so we must eat the white man's food or die. . . . Taku Skanskan [the supernatural patron of moving things] is familiar with my spirit [nagi] and when I die I will go with him. Then I will be with my forefather. If this is not in the heaven of the white man, I shall be satisfied. The Sun [Wi] is my father. The Wakan Tanka [supernatural power] of the white man has overcome him. But I shall remain true to him. Shadows are long and dark before me. I shall soon lie down to rise no more. While my spirit is with my body the smoke of my breath shall be towards the Sun for he knows all things and knows that I am still true to him.²⁵

Weary, no doubt, of all the tragedies, changes, and accommodations he had witnessed over his lifetime, Red Cloud most enjoyed his trips to James Cook's Agate Springs Ranch. According to Robert W. Larson, "he and his family probably felt more contentment camping along the wooded banks of the Niobrara River as Cook's guests than they did anywhere else."²⁶ In May 1908, the half-blind, stooped, and wrinkled Red Cloud journeyed with his son Jack Red Cloud and his daughter-in-law to the wooded banks of the Niobrara River at Agate Springs Ranch a final time

²⁴Larson, *Red Cloud*, 296-300.

²⁵ Recorded on July 4, 1903 by James R. Walker, government doctor assigned to the Oglalas at Pine Ridge and quoted in Goodyear, *Red Cloud*, 172-75.

²⁶ Larson, *Red Cloud*, 295.

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for what became a nine-day affair of great nostalgia. Red Cloud urged Cook to keep a painting of the chief so that Red Cloud's and Cook's children could be reminded of the "old trails" that he and his people had traveled over for hundreds of years. Red Cloud died a year after his last trip to Agate Springs Ranch, on December 10, 1909.²⁷ He was buried in the Holy Rosary Mission Cemetery at Pine Ridge Agency in South Dakota.²⁸ At the time of his passing, the *Chadron [Nebraska] Journal* commented that "No Indian chief of the rank of Red Cloud has lived to such an old age as he or witnessed such significant changes upon this continent. Nor have they so long maintained his leadership in war and peace."²⁹ His son, Jack Red Cloud, died less than a decade later in 1918 during the influenza epidemic. James Cook lost his own son, John Graham Cook, to influenza and pneumonia in December 1918.

James Cook's respect for Red Cloud, his understanding of their life close to



Figure 6.6 This is the campsite of Red Cloud's band at Agate Springs Ranch around 1900. Rectangular wall tents as well as tepees were used during the Indians' one-to-two-week visits at Agate Springs Ranch. Red Cloud's campsite was set up in different locations at the ranch. Courtesy of National Park Service (AGFO 6059.23).

nature, and his empathy for the plight of the Lakota in the late 1800s is best expressed in Cook's own words.

These people smoked a pipe of peace with me; they were my friends. We understood each other. I was never an 'Indian lover.' Some Indians needed killing, just as some white men did. But among Indians there were great hunters and brave warriors whose leadership and fearlessness were recognized by officers of the U.S. Army who opposed them. When white men came and took their hunting grounds, they naturally fought to protect them. If I had happened to be born an Indian, I would have done the same. In fact, I strongly suspect that I would have been a very bad Indian, from the white point of view.³⁰

²⁷ *Ibid.*, 3-4, 298-99.

²⁸ Richard E. Jensen, editor, *The Indian Interviews of Eli S. Ricker, 1903-1919* (Lincoln: University of Nebraska Press), 344.

²⁹ As quoted in Goodyear, *Red Cloud*, 172.

³⁰ Quoted in Dorothy Cook Meade, *Heart Bags & Hand Shakes: The Story of the Cook Collection* (Lake Ann, MI: National Woodlands Publishing Company, 1994), 18.

Landscape Remnants of Merging Worlds

In the 1800s, the Lakota Sioux (Brule and Oglala) regularly crisscrossed the upper Niobrara River in the vicinity of present-day Agate Fossil Beds National Monument during their buffalo hunting, food gathering, and war making. Erosion and, later, American activities have erased all visible traces of the earliest Indian trails. A few later trails and rough roads in northern Sioux County that were associated with Native Americans traversed land near the Agate Springs Ranch. Native Americans traveled over the roads that had supplanted pathways they had used between Fort Laramie and both Red Cloud and Spotted Tail agencies, and from Fort Laramie to Fort Robinson. A close inspection of historical maps and examination of the faint physical remains on the landscape can help identify the general location of one or two of these roads traversing Agate Fossil Beds National Monument.³¹ The route between Fort Laramie and Red Cloud Agency on the White River as well as the path taken by Red Cloud and his followers from the White River to the Agate Springs Ranch (which probably both followed the same course in places) is probably the most recent Lakota/Cheyenne route followed. Material evidence of this path is minimal.

Some early photographs of the Agate Springs Ranch dating from the late 1800s and early 1900s depict tepees, and later wall tents, clustered together at various locations around the periphery of the ranch complex of buildings and corrals, though no tangible evidence remains on the ground. Continuous ranching activities, including cattle and horse grazing, haying, and plowing and gardening, over the past 125 years, along with perpetual high winds and seasonal water erosion from the periodic flooding of the Niobrara, have removed all traces of Lakota camping presence from the landscape. Campsites occupied by Red Cloud and/or his family and followers, dating from the early 1900s, are depicted in several locations. One campsite used by Red Cloud and his family and followers in the early 1900s, now marked by a short pile of rock and a piece of metal farm machinery,



Figure 6.7 Red Cloud at age eighty-eight, shortly before his death in 1909, holds a peace pipe. Courtesy of Nebraska State Historical Society (RG 2063: 35-13/I392: 35-13). Photographer: Frederick Weygold.

³¹ Francis Moul, "Prairie Grass Dividing: The Land, Life, and People of Sioux County Nebraska" (Ph.D. dissertation, University of Nebraska, 1998), 81-82.

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implanted by Harold, is located east of the ranch complex and state highway 29. Some Cook family descendents report that most of the actual Red Cloud encampment site is actually under highway 29.³² Niobrara River is just north of the campsite. Along the river small highly degraded bone fragments have been found in a dark layer of dirt in the river bank. Lithic scatters, a few of which might possibly date from the same time period, have been found near the river and the campsite.³³

³² Gretchen Meade, interview with the author, 10 June 2007, Surrey, British Columbia, Canada, transcription at Agate Fossil Beds National Monument.

³³ Angelo, "Archeological Condition Assessment of Agate Fossil Bed National Monument," 30-31; John R. Bozell, *Archeological Overview and Assessment of Agate Fossil Beds National Monument, Sioux County, Nebraska*. (No publisher, 2004), 21.

Chapter 7

CREATING AGATE SPRINGS RANCH, 1887—1909

Introduction

The man who took over the 04 Ranch on the Niobrara and transformed the treeless prairie into a lush green oasis and working ranch in the late 1800s was as idealistic as he was ambitious. As a teenager James H. Cook was captured by the adventurous, romantic, outdoor life in the West. Cattle ranching and driving, hunting and trapping, Native Americans struggling with the transition to captivity, fossil remains around the Badlands, and the crisp, semiarid dramatic landscapes of the West—all enthralled James Cook. James Cook let his natural curiosity and keen intellect lead him from cattle drives into running a hunting and guiding business, then to managing an immense cattle ranch in New Mexico, before he discovered the prairie-grass range along the upper Niobrara in the early 1880s. During his travels, he met teenager Kate Graham in Cheyenne, with whom he developed a close romantic relationship as they both matured in the early 1880s. In 1886, the two married. The next year, James and Kate began a new life together as they poured themselves into building up the small 04 Ranch along the banks of the upper Niobrara River into their own viable ranch operation—Agate Springs Ranch.

James Cook enjoyed the fascinating challenge of developing the physical ranch enterprise. He began by building a large new barn, only to soon move it from its knoll beyond the reach of the spring flooding Niobrara to make way for a two-story ranch house on the foundation of the barn. He and Kate played equal roles in designing and decorating their new home and spared no expense to make it a place of comfort and warm sociability. Other smaller buildings were moved or built anew around the ranch house to create a perfect arrangement of space for a working ranch and a lively home environment. A pond for ice-cutting, fishing, and duck-hunting was created near the house, new ranch roads were built, irrigation ditches dug, and hundreds of cottonwood trees, transported from the North Platte River fifty miles away, planted and faithfully watered in the 1890s.

After twenty-five years of development, the Cooks' Agate Springs Ranch enveloped thousands of acres, mostly fenced, owned or leased by them or by family and friends who had homesteaded adjoining parcels of land along the Niobrara. A flood irrigation system built or bought ("upper Agate") by the Cooks watered nearly 1,000 acres of alfalfa and potatoes, and, importantly, watered the huge grove of maturing cottonwood trees that shaded the nucleus of the ranch operation. Cattle marked with the Cooks' "C" brand grazed on fenced ranch land before being driven fifteen miles to the nearest rail depot at Andrews for shipment to Omaha stockyards. By 1909 the Agate Springs Ranch presented a physically impressive vignette of prosperity to the world. Underlying this apparently robust healthy landscape, however, lay a mounting debt that plagued and would grow to distract and deeply trouble some of the Cooks for decades to come.

James Cook Grows to Manhood as Cattle Driver, Hunter/Trapper, Guide

James Henry Cook was born on August 26, 1857, in Kalamazoo, Michigan. An older brother, John Franklin Cook, was born just thirteen months earlier in 1856. Their father, Henry Cook, a captain in the Royal British Navy, had immigrated to the United States from Great Britain. He pursued a naval career in the United States, plying the waters of the Great Lakes, just a few miles west of Kalamazoo. Their mother, Elizabeth Shaw, was a native of Scotland. When James Cook was two Elizabeth left the family,¹ prompting Henry, often away from home, to place his two sons in the care of separate adoptive Kalamazoo families. James Cook went to live with the Titus family.² The Titus family of seven brothers had earlier settled in what became Titusville, Pennsylvania, where the first oil in the country had been found. Cook's foster father, E. P. Titus, then in his early thirties, was a carpenter in Kalamazoo. "This family was one of the oldest and most respected in the country," James Cook recounted many years later. "Its members had been raised after the severest models of order, industry, frugality, integrity, and every Christian virtue."³ When James Cook was a small child in the years just before and during the Civil War, the Titus family members were officers of the Underground Railroad and did all they could to give runaway slaves an opportunity to become free. "The people I lived with as a boy," Cook later wrote, "were certainly anti-slavery."⁴ The Tituses' egalitarian social views influenced James Cook's attitudes toward employees and others at Agate Springs Ranch, as well as his Indian neighbors.

The Titus family, who had pioneered in Michigan, attained a great knowledge of basic outdoor skills and tools, such as the axe, rifle, fishing pole, and spear. James Cook learned and gained proficiency with a muzzle-loading rifle at a young age. At age eleven, Cook developed into an expert marksman; his skill with a rifle was almost

¹ Despite the several sources that note Elizabeth Shaw died, Gretchen Meade has learned on good authority that Elizabeth Shaw Cook left her family. For the young Cook boys, Elizabeth Shaw did die. Elizabeth reportedly wrote to James Cook not long after his book, *Fifty Years on the Old Frontier*, was published by Yale University Press in the early 1920s. The letter she wrote has never been found. Gretchen Meade, interview with the author, 10 June 2007, Surrey, British Columbia, Canada. Transcript at Agate Fossil Beds National Monument (hereafter cited as AFBNM).

² "State of Michigan, Circuit Court of the County of Kalamazoo, Declaration of Intention to Become a Citizen of the United States," Henry Cook, 24 April 1856, Box 61, Cook Papers; also Mrs. E. P. Titus, letters to James Cook, 17 December 1900, 22 July 1912, and 23 March 1915 and to Mary Graham, 24 March 1915, Box 53, Cook Papers, all at Agate Fossil Beds National Monument (hereafter cited as Cook Papers, AFBNM); James H. Cook, "Science, James Henry Cook," Vertical File: Cook, James H., Nebraska State Historical Society, Lincoln, Nebraska; "Schedule No. 1—Population, Twelfth Census of the United States," Runningwater Precinct, Sioux County, Nebraska, June 1900, Nebraska State Historical Society, Lincoln, Nebraska; Erwin H. Barbour, "James Henry Cook," in *History of Nebraska, Volume III*, edited by Albert Watkins (Lincoln: Western Publishing and Engraving Company, 1913), 477; R. J. Roberts, "The History of Agate Springs Ranch," *Nebraska History* 47: 3 (September 1966), 279.

³ James H. Cook, *Fifty Years on the Old Frontier as Cowboy, Hunter, Guide, Scout, and Ranchman* (Norman: University of Oklahoma Press, 1954), 3.

⁴ James Cook manuscript, no date, Box 92, Cook Papers, AFBNM.

legendary after he became a cattle herder, then a big-game hunter and guide in the 1870s. The young, impressionable Cook was also influenced by wonderful stories he heard from California emigrants, returning to Michigan, about the West and Southwest. "These tales filled me with a desire to see the country of big game and wild Indians," Cook later reminisced.⁵ Other experiences intervened before Cook embarked on such an adventure. After completing his public school education, James Cook worked for a while in a machine shop in Comstock, just west of Kalamazoo. Then, yielding to a desire to follow in his father's footsteps, twelve-year-old Cook became a sailor under Captain Charley Sands for several months, sailing on Lake Michigan out of St. Joseph, Michigan.⁶

At age thirteen, in 1869, James Cook and a friend planned and saved money for a trip to the West.⁷ After arriving in Fort Leavenworth, Kansas, on the Missouri River, they were told by some cattlemen that if they wanted to get broken in they should go to Sedgwick or Sumner County, in the vicinity of Wichita, a vibrant cattle town and crossroads of the Chisholm Trail and the Atchison, Topeka, and Santa Fe Railroad. Both young men worked briefly at Fort Harker, Kansas, as cattle herders.⁸ Cook then decided to join some cowboys who were returning to cattle country in southwestern Texas. On the way to San Antonio, Cook had a "good chance to see wild Indians, buffalo, cowboys, freighters, stage drivers, emigrants, whiskey peddlers, desperadoes, and about all that moved in the regions through which we traveled," Cook wrote many years later.⁹

Cook soon met many notable Texas ranchers engaged in driving cattle over trails from Texas to Kansas and eventually Nebraska at a time when open-range conditions, robust northern markets, and investment capital made cattle ranching a lucrative business. The completion of the Union Pacific Railroad was one more factor that caused a tremendous explosion in the cattle industry, just at the time Cook joined in Texas cattle drives.¹⁰ One large cattle driver, Ben Slaughter of southwestern Texas, hired Cook to round up wild maverick cattle and, in the spring, drive them north to Kansas over the Chisholm Trail. Between 1874 and 1877, Cook participated in three major cattle drives between Texas and Kansas, learning the ropes of the cattle business and demonstrating to his associates his competence and reliability. In 1874, he helped drive the first herd of Longhorn cattle from Texas to Fort Robinson and the Red Cloud Agency nearby. When not on spring cattle drives, James Cook spent considerable time working for the Ellison and Dewees outfits in

⁵ Cook, *Fifty Years on the Old Frontier*, 5.

⁶ James H. Cook, "An Old Hunter's Story," manuscript, 1933, Vertical File: Cook, James H., Nebraska Historical Society; Harold J. Cook, *Tales of 04 Ranch* (Lincoln: University of Nebraska Press, 1956), 4; Barbour, "James Henry Cook," 477.

⁷ Mark Hertig, *Agate Fossil Beds National Monument*, 2007.

⁸ Cook, "Science, James Henry Cook," Vertical File: Cook, James H., Nebraska State Historical Society.

⁹ Cook, *Fifty Years on the Old Frontier*, 5.

¹⁰ For more on markets for Texas cattle in Nebraska see: Norbert R. Mahnken, "Early Nebraska Markets for Texas Cattle," *Nebraska History* 26: 1 (January-March 1945), 3-25; Harold E. Briggs, "The Development and Decline of Open Range Ranching in the Northwest," *Mississippi Valley Historical Review* 20: 4 (March 1934), 521-36.

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the cow country of southwestern Texas, at Fort Laramie, and at Red Cloud Agency, or hunting and traveling throughout present-day eastern Wyoming and northwestern Nebraska.¹¹ On several occasions when not driving cattle, James Cook guided rangers commanded by Captain McNally, in Frio and LaSalle counties, Texas, in their search for desperadoes or Indians. In the fall of 1874, Cook also worked very briefly as a brakeman and then a fireman for the MK and T Railroad. This temporary diversion from a life of outdoor activity had no appeal to him whatsoever; he left this job without even collecting his final wages.¹²

It was during a visit to the Red Cloud Agency on the White River in 1874 (or possibly 1875) that Cook, then seventeen, met fifty-three year-old Red Cloud and their long friendship began. They were introduced by Baptiste "Little Bat" Garnier, well known and greatly respected army scout, big-game hunter, and Indian interpreter, who had been born at Fort Laramie of a French father and Sioux mother. The middle-aged Chief Red Cloud invited the teenage Cook into his lodge, where Cook was asked to talk with many of Red Cloud's sub-chiefs and warriors about the country, wildlife, and Indian tribes inhabiting the vast territory between the North Platte River and the Gulf of Mexico. Among those who gathered to hear Cook were Little Wound, Young-Man-Afraid-of-His-Horses, and American Horse. Cook told his audience about his love of traveling over the plains and mountains, of the wildlife, and all the wonderful works of the Great Spirit. Red Cloud, himself a student of nature with a vast knowledge of the plants and animals inhabiting the Great Plains, must have delighted in Cook's descriptions. Cook also shared his observations about the declining herds of buffalo and his fear that the last big herds would soon be wiped out forever. Cook's knowledge of nature, his understanding of the radical changes unfolding in the Sioux's home territory, and his empathy for the meaning of these momentous changes for the Sioux must have impressed Red Cloud and his sub-chiefs. Reflecting on this meeting nearly fifty years later, Cook wrote:

The fact that I met him on the common ground of a hunter and dweller in the Plains country, and in a different manner from most white men, had much to do, I think, with the establishing of a friendship that grew with the passing years.¹³

The friendship that began between Red Cloud and James Cook in 1874 would continue for the next thirty-five years.¹⁴

¹¹ Cook, *Fifty Years on the Old Frontier*, 6-81, 105; Cook, "Science, James Henry Cook," Vertical File: Cook, James H., Nebraska State Historical Society; R. Jay Roberts, "The History of Agate Springs," *Nebraska History* 47: 3 (September 1966), 275; James Cook, letter to Harold Cook, 15 October 1911, Barbour Papers, University of Nebraska Archives.

¹² R. Jay Roberts, "A Preliminary Sketch of the History of Agate Springs Ranch," typescript, 14, Agate Fossil Beds National Monument, Midwest Regional Office Library, National Park Service, Omaha, Nebraska; James Cook, letter to Harold Cook, 1 November 1911, Barbour Papers, University of Nebraska Archives.

¹³ Cook, *Fifty Years on the Old Frontier*, 186-87.

¹⁴ *Ibid.*, 166-67, 186-87, 195-96, 85,

In the spring of 1876, eighteen-year-old James Cook helped drive about 2,500 cattle from the Nueces River near Corpus Christi, Texas, to the Missouri River in Dakota country.

The Department of the Interior had purchased these cattle to supply beef to a number of Indian agencies in the Dakota region, including the Red Cloud Agency on the White River in northwestern Nebraska.¹⁵ According to Cook, this was the first large herd of cattle driven through western Nebraska into Dakota. Cook and the other cowboys took the herd across the South and North Platte rivers just east of Ogallala, Nebraska, the railhead town for the Western and Jones and Plummer trails. They continued on to the headwaters of the Dismal and Loup rivers, and north through the Sand Hills and across the Niobrara River into South Dakota. This route took Cook only about 100 miles east of his future Agate Springs Ranch on the upper Niobrara. Cook would soon have another close encounter.¹⁶

James Cook made his last cattle drive to Ogallala in the spring of 1877. That year, Cook, along with other cowboys, drove a large herd belonging to Bishop and Halff of Texas to the rangeland of Ross & Thomas, about eighteen miles east of Greeley, Colorado. Cook then went to Cheyenne and the mountains nearby for rest and relaxation after the long cattle drive.¹⁷ While hunting and fishing here for a month, he gave great thought to his future and what he might do besides cattle driving.

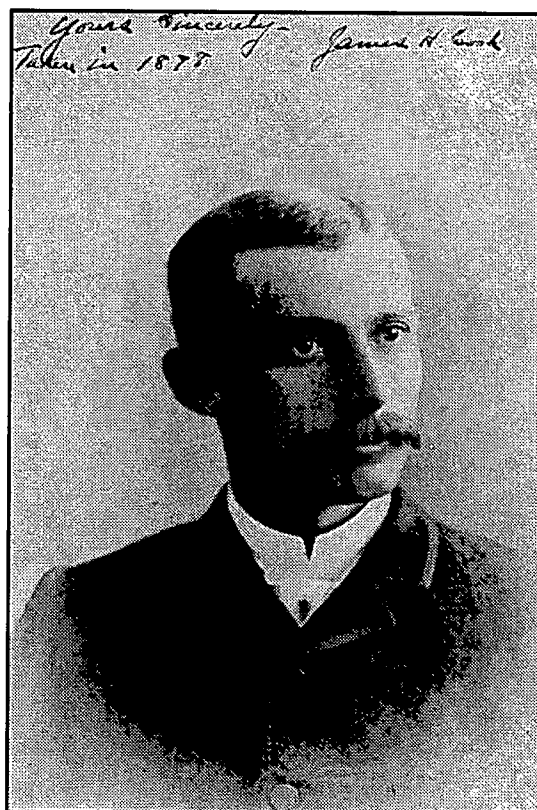


Figure 7.1 This portrait of James H. Cook was taken in Cheyenne, Wyoming, in 1878 as he embarked on a new career as a hunter and guide at age twenty-one. Courtesy of National Park Service (AGFO 6094.3).

¹⁵ James H. Cook, "Trailing Texas 'Long-horn' Cattle Through Nebraska," *Nebraska History* 10: 4 (October-December 1927), 339-43; James H. Cook, as told to Judge E. S. Ricker, "The Texas Trail," *Nebraska History* 16 (1935), 229-40; Cook, *Fifty Years on the Old Frontier*, 81-87; Barbour, "James Henry Cook," 477-79.

¹⁶ James H. Cook, "Early Days in Ogallala," *Nebraska History* 14: 2 (April-June 1933), 86-87; Cook, *Tales of the O4 Ranch*, 3.

¹⁷ Cook, *Fifty Years on the Old Frontier*, 106-108; Cook, "Early Days in Ogallala," 86.

Cook Evolves into a Hunter and Guide

After four years of rounding up and driving “wild cows,” Cook turned to his great love of hunting and trapping. As Cook tells it, in the summer of 1878, at age twenty-one, “I broke the invisible fetters that bound me to the life of a Texas cowboy, and evolved rather suddenly into a sure-enough hunter and guide.”¹⁸ In Cheyenne, he met Charles W. Alexander, who invited Cook to join him as a hunting partner. Cook had, by then, achieved quite a reputation as a marksman, with no equal as a game shot. Alexander and Cook began their partnership as market hunters; they killed and sold large quantities of game (black- and white-tailed deer,



Figure 7.2 In 1884, WS Ranch manager James Cook, mounted on his horse “Curley” and wearing a sombrero, is dressed somewhat like a Mexican cowboy, or gaucho (South American herder). Courtesy of National Park Service (AGFO 6094.6).

elk, antelope, and mountain sheep) to the Union Pacific Railroad Hotel and other hotels in Cheyenne, as well as to the Union Pacific for marketing from New York City to San Francisco. Cook and Alexander also stretched, cured, and sold the hides of their game at a fur house in Chicago (Oberne, Hosick & Company, with branches all over the West). Demand for their meat and hides became so great that Cook and Alexander took in another partner, Seldin D. (“Billy”) Martin. For about a year, the trio hunted in Wyoming and Colorado. Arthur Sparhawk was hired as the chief packer for the pack train used to transport loads of meat and hides to various railside depots. They delivered their fresh meat (in barrels of brine) and the stretched hides to various stations along the Union Pacific (UP) Railroad whose rails traversed southern Wyoming; if hunting far from the UP’s rail line, they smoked and dried their

game before delivering it to a UP railroad station. Cook’s record take for one month was 500 antelope, plus assorted other game.¹⁹

In the fall of 1879, after the manager of the Union Pacific Railroad Hotel in Cheyenne began to refer parties of English sportsmen to James Cook and his two hunting partners (who soon went their own ways), Cook combined market hunting with guiding visitors on hunting trips and outdoor adventures. Cook later fondly remembered his first experience with big-game hunters he guided. “They were ardent young sportsmen—Oxford men, athletic, full of life, and with all the

¹⁸ Cook, *Fifty Years on the Old Frontier*, 106.

¹⁹ *Ibid.*, 106-18; Cook, *Tale of the 04 Ranch*, 5; Barbour, “James Henry Cook,” 479-80; Dorothy Meade, *Story of Agate Springs Ranch* (Scottsbluff, NE: Business Farmer Printing, 1990), 8.

education necessary to make anyone fully enjoy living close to Mother Nature.”²⁰ This general description fit quite well a small but growing group of avid outdoor sportsmen in England and the United States who were avid big-game hunters and fishermen, and who increasingly noticed the depletion of game. In the 1870s and 1880s, these sportsmen, first in England and then in the United States, formed outdoor hunting clubs that championed and spearheaded a movement to preserve big game for future hunters. The elite and politically influential Boone and Crockett Club, founded in 1887 by Theodore Roosevelt and others, gave form and shape to some of the earliest government policies aimed at preserving different elements of nature. The Boone and Crockett Club was one of many sportsmen’s clubs that followed the British example of creating animal preserves for wealthier English sportsmen in order to maintain the ecosystems of large areas where game roamed. The desire to perpetuate game and its habitat heightened in the late 1800s, as settlement of new lands increasingly encroached on game ranges. The focus of the Boone and Crockett Club, however, went beyond the preservation of big game to conserving forests and grasslands, waterways, birds, and stunning scenery.²¹ Cook, who rubbed shoulders with several wealthy English big-game hunters in the late 1870s and early 1880s, undoubtedly was exposed to some of these notions of wildlife conservation just as they took hold in the U.S.

Over the next three years, James Cook guided hunters and recreationists from all parts of the United States and the world. In addition to big-game hunters, Cook also guided some scientists, paleontologists, and surveyors. On several occasions, he gave assistance to paleontologists O. C. Marsh and E. D. Cope. Cook had first met Yale University Professor O. C. Marsh at the Red Cloud Agency in 1874, when the agency was located on the White River in northwestern Nebraska. Cook’s and Marsh’s paths again crossed at Red Cloud Agency, when Marsh arrived from Fort Laramie to ask the Sioux permission to hunt for fossils in their territory. It was then, Cook later recounted, that he first

learned of the bones of strange creatures, which had once lived in the land of the Sioux—bones now turned to stone. I was shown some of the petrifications. A piece of gigantic jawbone containing a molar three inches in diameter was shown to me. American Horse explained that it had belonged to a ‘thunder horse,’ which had lived a long time ago, and that the creature would sometimes come down upon the earth in a thunderstorm and chase the buffalo, striking and killing some of them with his great hoofs.²²

It was during this 1874 encounter between Marsh and Cook that Cook explained to Red Cloud in his lodge that Marsh had not come to dig for yellow lead (gold) but for stone bones. Marsh befriended Red Cloud and the Sioux, who gave him a Sioux

²⁰ Cook, *Fifty Years on the Old Frontier*, 115.

²¹ John F. Reiger, *American Sportsmen and the Origins of Conservation* (Norman: University of Oklahoma Press, 1986), 97-100.

²² Cook, *Fifty Years on the Old Frontier*, 196.

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name meaning “Man-That-Picks-Up-Bones.” Around 1884, when Cook was living in New Mexico and managing the WS Ranch, he provided Cope with useful paleontological information and assistance about southwestern New Mexico.²³ Many years later, Cook later acknowledged that “conversations with professors Marsh and Cope, and talks which I heard them give, aroused in me a desire to know more about such things; and I was always on the lookout for any fossil material which I might find exposed.”²⁴

James Cook also gave some assistance to U.S. government surveyors and scientists Ferdinand V. Hayden and Clarence King. Despite his abbreviated formal schooling, Cook was ever curious, observant, and eager to absorb much about science and natural history, and he learned much from the men he guided. His interest and their expertise gave Cook a serious specialized knowledge of select natural history topics. Many years later, Cook humbly observed:

The benefit which I derived from hunting trips with such people and, whenever possible, from men of science, did not come to me in the form of money. Nearly all of the men with whom I associated in camp could well be called nature’s noblemen—scholars of high attainments. Many had had every educational advantage which the world had to offer and were further favored by having inherited wealth which enabled them to pursue the life or study most interesting to themselves. . . . If ever I attained any fruit from the tree of knowledge—even from its lowest branches—I [realized I] should have to take advantage of every opportunity offered me of association with those who possessed attainments and talents far superior to mine.²⁵

Cook’s hunting and guiding career and his personal education by “nature’s noblemen” continued for three years until the fall of 1882. He guided England’s Sir Grey and Sir Eustace Downey as well as Lord Brassey, Gordon Cummins, and Paul DuChillen.²⁶ That summer, an article in the Cheyenne, Wyoming Territory, newspaper, briefly described an upcoming hunting trip led by Cook, and conveyed great confidence in his skill as a guide. “A party of English gentlemen arrived here yesterday, and in a few days will leave for the Yellowstone country. . . . guided by Mr. Cook, [it] cannot fail to have a most enjoyable time and one free from those annoyances attending a tour in a strange country without the assistance of some reliable person familiar with the routes to be traversed.”²⁷ When he finally left Wyoming, James Cook had not only a stalwart reputation but also a very complete hunting-guiding outfit, consisting of 100 saddle horses, work horses, and packhorses,

²³ *Ibid.*, 115-16, 196-97, 216-17, 221.

²⁴ *Ibid.*, 116.

²⁵ *Ibid.*, 118.

²⁶ Erwin Barbour, letter to Harold Cook, 18 November 1911, and Harold Cook, letter to Barbour, 20 November 1911, Barbour Papers, University of Nebraska Archives.

²⁷ Quoted in Reid Miller, “Agate Fossil Beds National Monument and the Cook Collection,” *Cultural Resources Management* 15: 1 (1992), typescript

numerous wagons, complete pack outfits, a cook, a steward, camp tenders, tents, and camping equipment of all sorts.²⁸

James Cook's exploits as a guide for big-game hunters opened up a new opportunity for him in the fall of 1882 and gave him the money to pursue it. Several Englishmen, whom Cook had taken on big-game hunting expeditions in Wyoming's Big Horn Mountains, asked Cook to join them in purchasing and managing a large ranch in New Mexico. Cook, who had made his first \$10,000 as a sport-hunter and guide, along with Englishmen Harold C. Wilson and Montague F. S. Stevens bought the WS Ranch, located on the San Francisco River in Keller Valley in southwestern New Mexico near the Arizona border, about eighty miles northwest of Silver City. Several of Cook's English sport-hunting friends eager to invest in cattle during the boom period of ranching, bought large ranches within a fifty-mile radius of the WS Ranch. Cook also agreed to help them manage their ranches. Cook joined with two other sports-hunting friends in purchasing the flourishing "White House Ranch" (with gleaming white walls), located on a tributary of the Gila River thirty-five miles southeast of the WS Ranch. Within four years, the WS Ranch grew to an enormous size; it ran about sixty thousand cattle and became the first large ranch in



Figure 7.3 Buckskin-clad James Cook in 1886 is depicted in this studio photograph as a hunter and a friend of the Indians, suggested by the Winchester 22 rifle and the Indian blankets at his feet. Courtesy of National Park Service (AGFO 5854).

²⁸ Some of the more noted Englishmen Cook guided were: Sir Eustace Downey; Sir Guy Downey; Lord Brassey; Gordon Cummins; Lord Fairbairn; Reverend Foakes Jackson; Paul du Chaillu; Harold C. Wilson, a noted African explorer; Montague F. S. Stevens; Upcher; and Mark Firth. Cook also guided several well-known U.S. sportsmen, such as Dr. Charles P. Murray, and Washington Augustus Roebling, son of John Augustus Roebling who had begun the construction of the Brooklyn Bridge in New York City; and J.M. ("Monte") Ward, one of the greatest baseball players of his day. Cook, *Fifty Years on the Old Frontier*, 115-122, 139; Cook, *Tales of the O4 Ranch*, 3-4; Barbour, "James Henry Cook," 477-80.

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southern New Mexico. Cook hired and supervised dozens of cowboys at the ranch, including his brother John F. Cook. He developed an irrigation system on the ranch, complete with ditches, concrete diversion dams, and three small reservoirs. James Cook also advanced the cattle industry, generally, in that region. He helped organize the first stockmen's association in the region and he supervised the first two years of the association's roundups in Socorro and Grant counties. James Cook gained enormous experience over this four-year period in managing a large and complex ranch operation—experience that would be put to use later at Agate Springs Ranch.²⁹

Cook's activities on the WS Ranch as well as with the stockmen's association gave him great familiarity with the country in southwestern New Mexico, the territory occupied by the Apache tribes. In 1885, many bands of Apache, some led by Geronimo, attacked settlers, freighters, and the U.S. Army in the region. The WS Ranch became the headquarters of the Eighth Cavalry, commanded by Major S. S. Sumner. For about sixteen months James Cook guided men of the Eighth Cavalry in their attempts to quell the Indian hostilities in the Mogollon Mountains and elsewhere in the vicinity of the WS Ranch. Cook's brother, John F. Cook, also worked as a scout for the Eighth Cavalry during the 1885—1886 Geronimo campaign. As an army scout, James Cook went ahead of the troops to assess any dangers, observe the movements of Indians, and to locate water, grass, and fuel for the command. On one occasion, Cook carried dispatches over 120 miles of dangerous and difficult trail between the commanding officers (Captain Allen Smith and Lieutenant Charles B. Gatewood) of the Fourth and Sixth U.S. cavalries. Twenty years later, retired Brigadier General S. W. Fountain of the Eighth Cavalry sent "Captain Jim" a letter praising him for his skill as a scout during the Geronimo campaign of 1885 and 1886. "In those trying days, I saw [that] once your eye or nose . . . got the trail it was never lost. With you it seemed to me that the intelligence and the training of the white man united with the instinct of the Indian had mastered him in his own pursuits. Your services to us in those days were invaluable."³⁰ The Apache disturbances abruptly halted with the capture and transport of Geronimo and his warriors to a prison in Florida in 1886.³¹

²⁹ Cook, *Fifty Years on the Old Frontier*, 120-21, 139-60, 215, 227-28; Cook, *Tales of 04 Ranch*, 5-6; Margaret C. Cook, "The Cook Family in Sioux County," *Sioux County: Memoirs of Its Pioneers*, edited by Ruth Van Ackeren (Harrison, NE: Harrison Ladies Community Club and the Harrison Sun-News, 1967), 15; Barbour, "James Henry Cook," 480; Map of WS Ranch, Colfax County, New Mexico, Box 117, Cook Papers, AFBNM.

³⁰ Quoted in Barbour, "James Henry Cook," 482.

³¹ Officers of the Eighth Cavalry included: Major S. S. Sumner, Lieutenants S. W. Fountain, A. G. Hammond, DeRosey C. Cabell, C. W. Farber, and Captain Williams. Cook, *Fifty Years on the Old Frontier*, 138-60, 163-64; Barbour, "James Henry Cook," 480-82; James Cook, letter to Harold Cook, 1 November 1911, Barbour Papers, University of Nebraska Archives.

James Cook and Kate Graham Courtship

Beginning in 1879, then twenty-two-year-old James Cook had been drawn to Cheyenne, Wyoming. Not only was his market hunting and guide service based there, but a woman of growing interest to Cook lived in Cheyenne. In 1879, Cook met Dr. Elisha B. Graham and his family of three: his wife Mary Eliza and his two daughters, Clara, age eighteen, and Kate, age twelve. Over the next six years, a friendship between James Cook and the Graham family, especially Kate, developed and grew. The Grahams began to invite James Cook to their home on holidays and other occasions. Cook quite often encountered Kate Graham at the stables in Cheyenne, where she spent time riding and training horses. Cook visited the Grahams in the summer at the 04 Ranch. Often James Cook and Kate went riding across the prairie together. As Cook and the Grahams became close, the Grahams soon began calling James by his familiar nickname, "Jim." In addition to her equestrian skills, Kate's musical ability (she was an avid pianist) and her high-spirited temperament undoubtedly attracted Cook. Recalling his youthful romantic encounters with Kate, Jim Cook wrote fifty years later that he

managed to happen in at the [04] ranch more than once while [Elisha] and his family were making their annual visit there. A horseback trip of three or four hundred miles meant little to me then. . . . At the end of these journeys one of the greatest blessings ever given to man awaited me—a noble girl whose love for me was genuine and steadfast. My sweetheart and I used to take long rides on horseback over the great open range, which surrounded her father's ranch.³²



Figure 7.4 Kate Graham is depicted here in 1886, around the time of her marriage to Jim Cook on September 28, 1886. Courtesy of National Park Service (AGFO 4123.1).

"Like shining match pearls, the long slow days of mid-summer slid by," Jim Cook poetically wrote. "The rainbow embroidery of wild flowers on the green carpet of the hills made soft footing for their sure-footed ponies, and Jim and Kate took long rides into the hills."³³

Jim Cook enjoyed taking the Graham women on excursions into the countryside. While with the family at the 04 Ranch one summer, at their request, he took them by wagon to Pine Ridge to visit the Indians. He took the family or just Kate on outdoor adventures around Cheyenne as well. In the summer of 1886, a Cheyenne newspaper delighted in reporting the activities of the young courting couple and their family and friends.

³² Cook, *Fifty Years on the Old Frontier*, 233.

³³ James Cook manuscript, no date, Box 92, Cook Papers, AFBNM.

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A picnicking party with Kate Graham. J. H. Cook spent the 5th of July in a romantic spot called Gearcy's Canyon. . . . They left the city early in the forenoon in several conveyances which were gaily bedecked with the national colors. . . . Mr. J. H. Cook, who is a scout for the Eighth Cavalry, acted as guide. One of the principal amusements of the day was rifle shooting.³⁴

After several years of courtship across great distances, twenty-nine-year-old Jim Cook and nineteen-year-old Kate Graham married on September 28, 1886, in Cheyenne's Presbyterian Church. Dr. R. E. Field officiated at their wedding.³⁵

The newlyweds then traveled by train from Cheyenne to Denver and Colorado Springs, where they spent a short time before continuing on to the WS Ranch in New Mexico. Kate soon became pregnant, and as the baby's birthdate approached, the Cooks decided to leave the WS Ranch. They had stayed at the WS Ranch for no more than four months; in December 1886, a Cheyenne newspaper reported that Jim Cook had sold his entire interest in the ranch to his partner Harold Wilson, and the young couple had left for Oakland, California, where they intended to live. Little is known of their time in California; within a few months the Cooks had returned to Cheyenne. On July 31, 1887, the Cooks' first child, Harold James Cook, was born in the Grahams' home in Cheyenne. Harold was named after Harold C. Wilson, Cook's English friend and partner. The young Cook family arrived at the 04 Ranch in mid-September 1887. Mary and Elisha Graham soon joined them and stayed at the ranch for the first time through the winter.³⁶

Creating a Home at Agate Springs Ranch, 1887—1909

Jim Cook purchased his first acreage from his father-in-law in the fall of 1887. The previous year, Cook had discussed the details of this land transaction and the purchase of 04 Ranch stock with Elisha Graham and Elisha's brother, Washington Graham, and may have agreed upon a price. In early September 1887, Jim Cook bought his first land—120 acres along the Niobrara—from Washington Graham for \$800.³⁷ This acreage (in the NE quarter of Section 7, T28N, R55W) was apparently grazing land, possibly for cattle or horses that Cook bought before arriving at the ranch. Five months later, in early February 1888, Jim Cook bought from Elisha Graham, over 300 acres and the 04 Ranch headquarters (in the NW quarter of Section 7 and the adjoining SW quarter of Section 6) for a total of \$5,000.

³⁴ Roberts, "History of Agate Springs," 280.

³⁵ Cook, *Fifty Years on the Old Frontier*, 235; James Cook manuscript, no date, Box 92, Cook Papers, AFBNM; Cook, *Tales of the 04 Ranch*, 6; Meade, "Story of Agate Springs Ranch," 7-8, 10; Roberts, "History of Agate Springs," 285; Cook, "Cook Family in Sioux County," 14.

³⁶ Cook, *Fifty Years on the Old Frontier*, 235; Cook, *Tales of the 04 Ranch*, 6; Meade, "Story of Agate Springs Ranch," 7-8, 10; Cook, "Cook Family in Sioux County," 14; Roberts, "History of Agate Springs," 280-82.

³⁷ James Cook has written that he purchased the 04 Ranch and stock from Elisha Graham in 1886 and took possession of the ranch in September 1887. James H. Cook, "Establishment of First Cattle Ranch on Niobrara River," *Tales of Pioneer Days*, edited by A. B. Wood (1938), 195-96; James Cook, letter to Harold Cook, 15 October 1911, Barbour Papers, University of Nebraska Archives.

By this time, John F. Cook, Jim's brother, had already filed claims, under Preemption and Homestead acts, for nearby pieces of land along the Niobrara (in sections 5, 6, and 7) equaling nearly 640 acres.³⁸

Jim and Kate Cook decided to change the name of the 04 Ranch to "Agate Springs Ranch," for the moss agate found in the ledge under the caprock of the north hills, and for the many springs existing in the area. When the Cook family moved to Agate Springs Ranch it consisted of a large herd, a relatively small acreage, and only a few buildings: two log houses, a log stable, and two log-and-board sheds. Fencing enclosed some of the ranch acreage; however, many years of buffalo habitation followed by open-range cattle ranching had reduced the prairie grass to stubble. No trees or shrubs existed anywhere on the ranch. The ranch was "practically without grass," due to over-grazing and trampling "by the great western herds," Erwin Barbour recalled after first visiting Agate Springs in 1891.³⁹

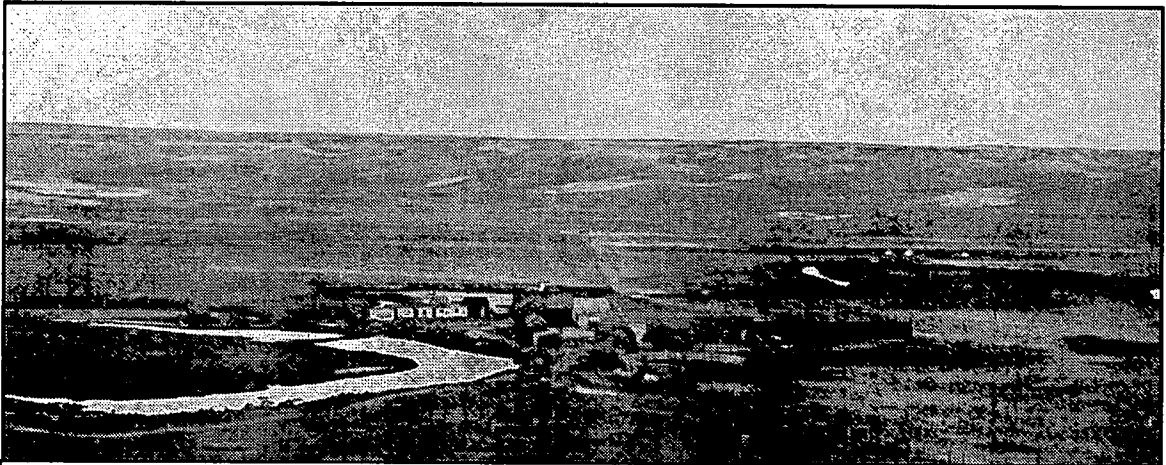


Figure 7.5 This is one of the earliest general views of Agate Springs Ranch headquarters, photographed around 1888 from Windmill Hill, looking northeast. Visible are, from left to right, John Cook's small house near the edge of the oxbow pond, the log ranch house with the parlor (darker tone) on the end of the two-room log portion, the large barn (disassembled in 1892 to make way for the new two-story ranch house), and sheds and corrals in an area called the Block. A vegetable garden is visible north of the ranch house. Indian tepees grouped together can be seen in the distance. Courtesy of National Park Service (AGFO 5852).

Jim Cook, drawing upon nearly five years experience managing the WS Ranch and other nearby ranches of his friends in New Mexico, immediately began to develop the Agate Springs Ranch. First, he began improving and adding to the few existing buildings at the ranch. Cook added a frame room of sawn native lumber with a shingle gable roof to the end of the existing log house. Harold, then a small

³⁸ Sections 5, 6, and 7, Township 28 North, Range 55 West, 6th Principal Meridian, "Numerical Index," Clerks Office, Sioux County Courthouse, Harrison, Nebraska.

³⁹ Barbour, "James Henry Cook," 481; Cook, *Tales of 04 Ranch*, 15.

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child, remembered that the sod portion of the house rained inside for a week after a good storm, while the new room, the parlor, remained dry. Jim Cook also added two other log houses to the small ranch headquarters, both of which had been disassembled and moved to the ranch from nearby land. Elisha and Mary Graham may have occupied one of these moved log buildings during their first winter's residence at the ranch.⁴⁰

In 1888, Cook directed the construction of a large barn on a small knoll just east of the crescent-shaped slough and south of the Cooks' log-and-frame claim house near the Niobrara River. Rocks hauled from the ranch fields to the site served as the foundation that supported heavy hewn logs, most likely cut and transported by wagon from Pine Ridge, twenty-five miles to the north. A hay loft occupied the

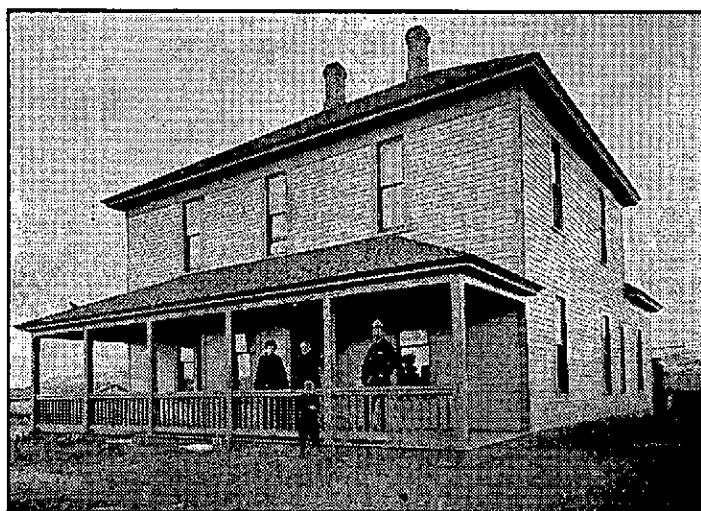


Figure 7.6 Kate, Mary Graham, and Jim Cook stand proudly on the front (north) porch of the new ranch house, completed in 1892-1893, while young Harold plays in the treeless front yard. Courtesy of National Park Service (AGFO 6287.4).

entire upper story. Attached to the barn were storerooms for horse teams, grain, harnesses, buggies, wagons, sulkeys, and farm implements. Sawn lumber used in the barn construction also came from the yellow pine forests at Pine Ridge. Harold Cook later recalled playing in the barn's hayloft with great delight. Cook's hired help also built new sheds and corrals. Just southeast of the barn stood a long building divided into stalls for the stallions and young stock and a house for

poultry. South of the house, stock sheds with room to shelter about 200 cattle were built, along with circular corrals enclosed by a vertical flush-board fence. An intricate system of runways and chutes augmented the corral. Even farther south, at the spring located near the southern end of the slough, stone mason C. L. Tubbs built a small, square, stone spring house capped with a hip roof, possibly as early as 1886—1887.⁴¹ Water from the spring was carried by a trough to the corral area, where it watered the stock. Around the same time, Tubbs apparently also built a stone "greenhouse" east of the new ranch house, and a stone chicken coop. In the 1890s, Swedish gardener George Goldberg, who had once worked in the King of Denmark's gardens, raised vegetable seedlings for the garden in the greenhouse. The greenhouse had a glass roof and a furnace with a brick chimney extending along the

⁴⁰ Cook, *Tales of the O4 Ranch*, 9-10.

⁴¹ Harold Cook, handwritten caption on photo AFBNM 6081.1, Cook Papers, AFBNM.

wall under the windows. A fire burned through the winter to keep plants from freezing, even in the bitterest cold of winter. Goldberg planted seeds as early as February in hotbeds on tables four feet high, separated by a passageway.⁴² Goldberg stayed at Agate for six or seven years. Charles Scott drilled a well. On the hill rising to the south of the ranch house, a windmill was built to pump water from the ground to a cistern; from here the water flowed by gravity to the house below. An 1888 article in a local newspaper, which described building developments at Agate Springs, concluded that Jim Cook's new layout of the ranch approached perfection.⁴³

Four years after the large barn was constructed, Cook realized he had erred in building it on a small knoll while leaving the log house on low ground close to the Niobrara River, subject to flooding. In 1892, Cook had the new barn partly disassembled, leaving only the heavy log underpinning in place. Some of the barn's lumber was used to construct smaller barns and sheds near the base of "Windmill Hill" (at the southern end of the ranch headquarters). This became the foundation for a new two-story, hip-roof, wood-frame house built to replace the rudimentary three-room log house constructed as a claim cabin twelve years

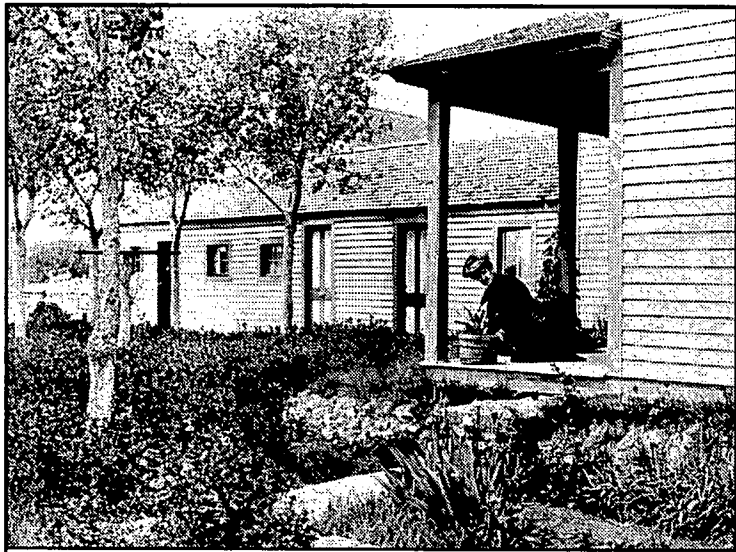


Figure 7.7 Kate sits on the rear (south) porch (before it was enclosed). Young cottonwood trees barely shade the rear yard, enclosed on the west by the wood-frame extension of single rooms (former stalls), added to the new house after its construction in 1892-1893. Courtesy of National Park Service (AGFO 6154).

earlier for the Grahams. Kate Cook, after consulting many magazines and books, actually sketched the design and interior layout of the vernacular style sixteen-room farmhouse.⁴⁴

Much of the foundation and even some of the milled lumber in the walls of the barn was incorporated into the house.⁴⁵ Jim Cook traveled to Omaha to select

⁴² Cook, *Tales of the 04 Ranch*, 214-15.

⁴³ *Ibid.*, 33-34; Meade, *Story of Agate Springs Ranch*, 16; Dorothy C. Meade, "Cook Family," in Harrison Community Club, *Sioux County History: First 100 Years, 1886-1986* (Dallas, TX: Curtis Media Corporation, 1986), 364; Cook, *Tales of the 04 Ranch*, 10; Roberts, "History of Agate Springs," 284; Cook, "Cook Family in Sioux County," 15;

⁴⁴ Cook, *Tales of the 04 Ranch*, 35-36, 38-39; Kate Cook, letter to Clara Heath, 11 April 1908, Box 13, Cook Papers, AFBNM.

⁴⁵ Meade, interview with the author, 10 June 2007, transcript at AFBNM.

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the lumber and trim, which was shipped by railroad to Pine Bluffs, Wyoming, then overland by wagon to the ranch. Plaster came by wagon from the Black Hills in South Dakota. Henry Wirtz (or Wertz) built the house.⁴⁶ The completed house featured an open porch extending across the front north side of the house; a shorter open porch was on the south side of the house, where a long and narrow one-story, wood-frame building extended southward from the house's rear wall. This extension had been constructed using several of the storerooms from the disassembled large barn. A dinner bell, with the clapper detached so that it could be struck by hand, was hung near the rear of the house.

After the house was completed in 1893, Kate and Jim Cook visited the World's Columbian Exposition in Chicago and, while on their trip, purchased

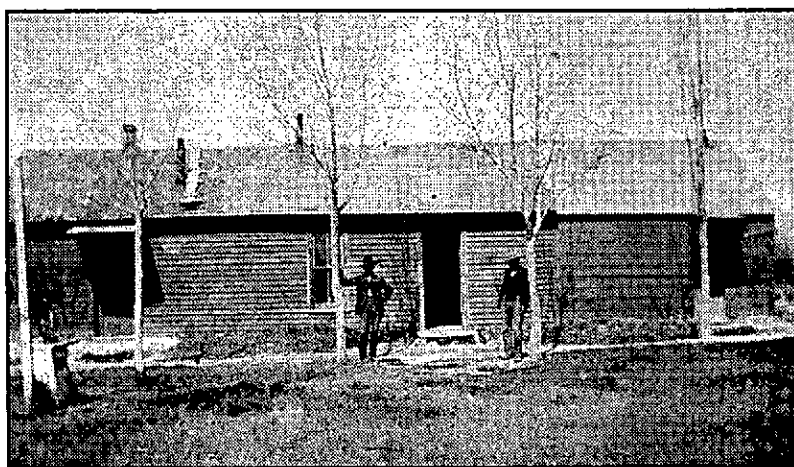


Figure 7.8 This 1897 view of the bunkhouse, located near the corral area called the Block, was home to the Cook's ranch hands. The darker toned right building is the former once attached to the end of the Grahams' original log ranch house. Courtesy of National Park Service (AGFO 5798.18).

furnishings (such as furniture, rugs, curtains, glassware, china, and silver) for their new house. While in Chicago, Jim Cook also learned about electrifying the house. He hired a Mr. Claghorn to come and wire electricity throughout the entire house (although kerosene lamps were used for several years until electric power became available),

along with a "punch bell" under the carpet. Coal- and wood-burning stoves provided heat for individual rooms. (In 1962, there was still no central heat in the house).⁴⁷

Upon completion of the new house, the log-and-frame claim cabin was pulled down by a team of horses. The frame parlor was moved about 100 yards to the south, where it became a part of the ranch bunkhouse. (This portion of the bunkhouse was removed in the 1990s when a new addition at the rear of the nearby

⁴⁶ Cook, *Tales of the 04 Ranch*, 39; Meade, *Story of Agate Springs Ranch*, 13; "History of Agate Springs," attached to Dorothy Cook Meade Grayson, oral history interview with Ron Cockrell, 22 May 1986, Midwest Regional Office, National Park Service, Omaha; Cook, "Cook Family in Sioux County," 16.

⁴⁷ Roberts, "History of Agate Springs," 285; Cook, "The Cooks of Sioux County," 16; Mary Graham, letter/manuscript to Harold Cook, no date, but around 1933 or 1934, Box 92, Cook Papers, AFBNM; Cook, letter to Baker, 5 March 1962, Box 1, File L58, General Files (1952-1963), RG 79, CPR, NARA.

foreman's house joined it to the bunkhouse.⁴⁸) Some of the stables were left standing and attached to the rear wall of the house, thus forming a long narrow extension comprised of several former stalls converted to storage rooms.⁴⁹ Poor drainage south and east of the new house, where the corral and stock sheds once stood, prompted Jim Cook to move the entire corral and shed complex south to the base of Windmill Hill overlooking the ranch. Cook never replaced the huge barn that had stood on the site of the new house, probably since his ranching emphasis by then had shifted away from horses to cattle. Soon the new corral area had several cattle sheds, fenced corrals and chutes, as well as a stone chicken house.⁵⁰

Over the next two decades, small changes were made to the ranch house. The porch at the rear southeast side of the house was enclosed quite early, presumably to enlarge the kitchen eating area. The open front porch on the Cooks'

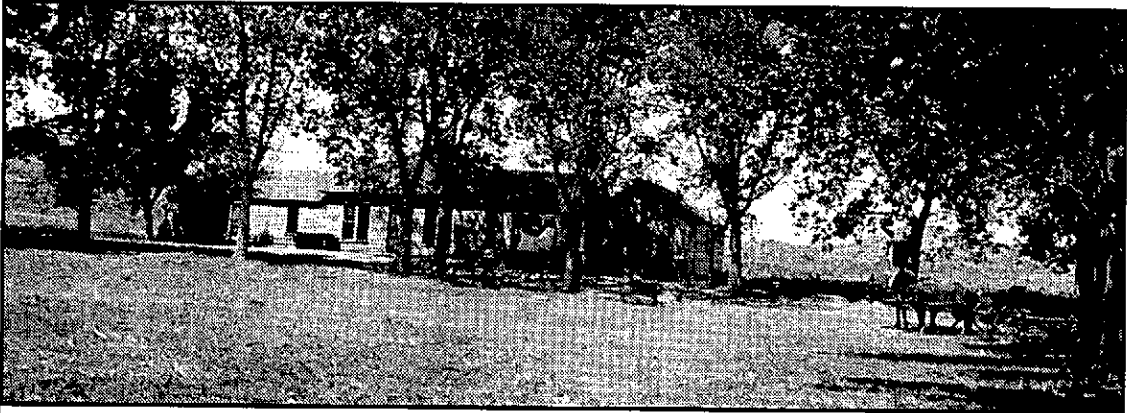


Figure 7.9 The foreman's house, located next to the bunkhouse in the Block near the corrals, dates from the early 1900s. The bunkhouse and foreman's house were joined in the 1990s and the old parlor removed. Courtesy of National Park Service (AGFO 6075.5).

residence became partially enclosed on the west end around 1904; around 1908 the enclosed portion may have been enlarged to accommodate Harold's den.

By 1921 the rest of the front north porch had been enclosed by glass.⁵¹ In the fall and winter of 1907 and 1908, in anticipation of important paleontologists coming to stay at the house in 1908, new wallpaper, rugs, and curtains, and a few furnishings were purchased and installed in certain rooms. Wood was oiled or varnished. Floors were refinished. (Redecorating and remodeling changes to the house presumably occurred

⁴⁸ Meade, interview by the author, 10 June 2007, transcript at AFBNM.

⁴⁹ *Ibid.*, transcript at AFBNM.

⁵⁰ Meade, *Story of Agate Springs Ranch*, 13, 17;

⁵¹ Photos of house and their captions indicate the front porch was not enclosed in 1901 and become enclosed with wood-frame walls on the west side and glass on the east side, by 1909. AFBNM 5760.3, 5918.3, and 5818.14, Box H and M; Photo 5-6-9-21, "Home of H.J. Cook, Agate, Nebr.," Erwin Barbour Collection, University of Nebraska Archives, Lincoln, NE.

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on a regular basis during the Cooks' residence in the house into the 1960s.)⁵²

Jim Cook continued to modify and add to the ranch complex between 1888 and 1910. In addition to the stone spring house and greenhouse, the corrals and cattle sheds, and the new residence, several other buildings joined the expanding ensemble. Cook added structures by constructing buildings on-site or moving pre-existing buildings to the ranch headquarters. A root cellar (presumably dug into the sloping Windmill Hill near the corrals) was probably constructed in the 1890s. The small gable-roofed building with a short, shed-roof porch over the front door appears in many old photos of the ranch alongside the river (and northwest of the two-story ranch house) and may have been moved to the ranch from another nearby homestead claim around 1887. It may have been the Grahams' house during the Cooks' first winter of 1887—88 at Agate Springs. By the mid-1890s, John Cook, Jim's brother, lived there. Slightly later, Mary Graham called it home. In the very early 1900s, it was moved to a site just east of the north-south dirt road running about 75 feet east of the ranch house, where it served as the Agate post office until the mid-1910s. Around 1914, another small gable-roofed building was constructed much farther to the east (and along present Highway 29) as the new Agate post office. (The former diminutive post office building, known as "Bath Biffy" in 2007, still stands east of the ranch house. The building was named "Bath Biffy" after it was converted to a bath house in the 1990s.)⁵³ In the late 1890s, when the Tenth Cavalry at Fort Robinson was ordered to the Philippines, Jim Cook bought and moved the fort's tall, narrow icehouse to a site beyond the end of the long narrow one-story extension at the rear of the house and the existing stone coal cellar.⁵⁴ An outhouse, probably for visitors and workers at the ranch, may have stood amidst the small group of sheds south of the icehouse. (These structures are extant in 2007.)

Around the same time, another small building traveled to Agate from elsewhere; John Cook's small gable-roof claim cabin, built on one of his patented claims three miles east of the ranch and covered with stamped metal, was moved to the ranch headquarters and set down just north of the new post office building, where John served as postmaster and small store owner.⁵⁵ By this time, a blacksmith shed, a hipped-roof tent sleeping house, a "kiddies cabin" built by Harold Cook's father-in-law Erwin Barbour directly behind the old post office, and temporary Indian tipis had been added to the collection of buildings between the ranch house and the post office near the road. (The "kiddies cabin" was later moved to a site just north of the ranch house.)

⁵² Kate Cook, letter to Clara Heath, 17 November 1907, and Kate Cook, letter to Clara Heath, 11 April 1908, both in Box 13, Cook Papers, AFBNM.

⁵³ Several photos and their captions in the Cook Papers at Agate Fossil Beds tell much of the story of this building's evolution. See photos: AFBNM 6081.1, 6284, 6092.17, 5759.7, Cook Papers, AFBNM.

⁵⁴ The ice house was so large it was only used in the coldest part of the winter when meat would freeze and then be sawed into pieces. Cook, *Tales of the 04 Ranch*, 97.

⁵⁵ Agate Fossil Beds photo and caption, AFBNM 6156.7, Cook Papers, AFBNM; Lynn Bain (James Cook descendent), e-mail correspondence with the author, 23 August 2007.

Several hundred feet south of the ranch house stood the bunkhouse, probably constructed around 1888, and nearby a separate foreman's house, dating from the early 1900s. (The two buildings were joined during a remodeling in the 1990s.) South of this and the southern irrigation ditch two or three elongated, three-sided cattle sheds opened onto feedlots and corrals, enclosed by side-by-side vertical boards.

Agate Springs Early Stock Farm Operation

Jim Cook's development of the Agate Springs Ranch impressed many visitors. R. E. Field, the officiating minister at the Cooks wedding visited the Cooks in 1889, and wrote a letter on June 25, describing developments at Agate Springs Ranch over the previous three years.

Twenty-six hundred acres with Cook's pastures, on either side of the stream, secure him against those losses, incident to the old method [of unfenced open range]. Commanding four miles of direct course of the stream, gives him practically unlimited range for stock, always under the eye of the herder.⁵⁶

Paleontologist Erwin Barbour of Lincoln, who first visited the Agate Springs Ranch in 1891, described Cook's herds in glowing terms. Agate Springs Ranch was stocked with "large herds of cattle and horses of uniform breeding. From the outset Mr. Cook has taken pride in stocking his ranch with the choicest breeds of horses and cattle, and to that end was a pioneer in importing high grade stock."⁵⁷

On April 7, 1888, Jim Cook registered the "C" brand and indicated its use on the left cheek of his horses and cattle. (In addition to the brand itself the placement of the brand on the animal was critical to identifying the owner.) Cook used other brands over the years as well. In 1894, Cook registered three parallel bars branded across the nose of cattle to indicate ownership by the Agate Springs Stock Ranch. That year the *Little Gem Brand Book* (1900) depicted Cook's "C" and the three parallel bars and their proper placement on horses and cattle. This brand book also indicated that Cook owned 3,000 cattle and 500 horses at that time. Cook later used brands such as "H" on the left hip and "22" on the right ribs. As late as 1962, Harold Cook still used the three parallel bars as the ranch brand along with a newer one he had adopted—a Folsom spear point, pointing down, which resembled a heart.⁵⁸

⁵⁶ Quoted in Roberts, "History of Agate Springs," 285.

⁵⁷ Barbour, "James Henry Cook," 48; Meade, *The Story of Agate Springs Ranch*, 9.

⁵⁸ *Little Gem Brand Book* (Kansas City, MO: Little Gem Brand Book Company, 1900), 41; Nunn, *History of Brands and Branding in Sioux County*, 5, 7.

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Jim Cook at first concentrated on breeding and raising racehorses. In August 1887, even before moving with Kate to the 04 Ranch, he bought forty good mares with the intention of making them the nucleus of a breeding operation for trotters and pacers trained to race sulkies (light, two-wheeled, one-person vehicles). Within a short time he had 100 graded and thoroughbred horses. Later, he also traveled to Michigan to buy a fine stallion for breeding. This stallion, Mendonian, was a grandson of Hambletonian 10 and valued at over \$5,000. A trainer, always known as "Dynamite," was hired to work with his horses. Cook built a half-mile long training racetrack in a meadow about a quarter-mile away from the house. In September 1889, Cook's horse Gopher won first place in a race for three-year-old trotters at the Crawford, Nebraska, district fair. His record time on the quarter-mile track was 2.04 minutes. In 1894, Cook also bought a large herd of horses belonging to Hale and Harmon of Ekalaka in southeastern Montana.⁵⁹ An advertisement for the Agate

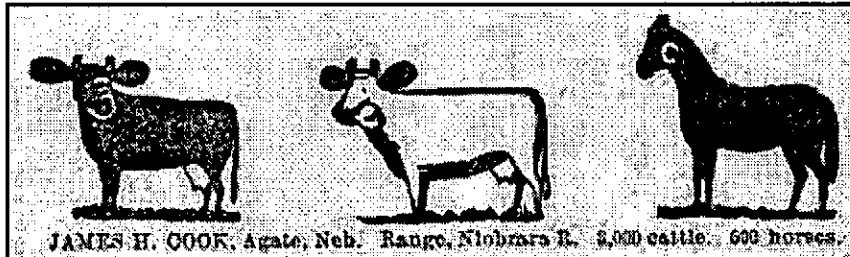


Figure 7.10 By 1900 Jim Cook used two different brands for his horses and cattle, the letter "C" on the left cheek near the neck and three parallel bars across the nose. Eventually, Harold Cook selected a third brand, an upside down Folsom point that resembled a heart. Source: *Little Gem Brand Book* (1900).

Springs Ranch that appeared in a local newspaper depicted the black silhouette of a horse's and a bull's head, each with a "C" brand on the left cheek. The ad read: "J. H. Cook, Agate Springs Ranch, Breeder of Roadsters, draft and saddle horses; also red and black Polled cattle. Range on the Running Water."

Cook was on his way to realizing his dream of raising a blooded stock when fate dealt him two devastating blows. First, he lost his prized mare when a nail in a gate cut her throat and eventually killed her. Then, a bolt of lightning struck a barbed-wire fence and killed several of his yearling racing stock that had crowded against it. Cook was forced to conclude that raising race horses was not a poor man's pursuit. In 1903, Cook sold his two stallions and most of his other horses and thereafter focused most of his attention on raising cattle that would withstand the windy, bone-chilling western Nebraska winters and on cutting hay. Cook bought

⁵⁹ Cook, *Tales of the 04 Ranch*, 55-56; Ron Cockrell, "Our Ranch Is Different": The Agate Springs Ranch on Nebraska's Niobrara River, paper for Seminar in Western American History, University of Nevada, Las Vegas, November 27, 1996, 3.

150 cattle from the Shorthorn and, his favorite, Polled Angus families. He also brought some young mules to the ranch.⁶⁰

Although the racehorses had proved to be unprofitable, Mendonian's bloodlines mingled with the hot-blooded horses from Harmon and Hale in Montana, and the progeny remained on the ranch for years. Cook sold some of his horses (along with some mules and hay) to cavalry officers and regiments at Fort Robinson, thirty miles to the northeast. Long after Jim Cook turned his attention away from horse-raising, he continued to keep several dozen horses at the ranch. In December 1904, he counted nearly 125 mares and other horses in his corral, plus many more in the meadow. Into the 1920s, as many as seventy-five horses roamed freely, in a semi-wild state, on the Agate Springs Ranch.⁶¹

Re-Creating the Agate Springs Ranch Landscape

Soon after the Cooks arrived at Agate Springs Ranch in September 1887, Jim and his ranch hands spent much time re-creating the landscape for practical purposes and aesthetic appeal. Cook realized the critical importance of water to the entire ranch operation. Drawing upon his experience building irrigation ditches on the WS Ranch in New Mexico, Cook began to develop an irrigation system that took water from the Niobrara River at two places downstream from the existing McGinley and Stover ditches northwest of the Agate Springs Ranch. The irrigation water flowed across some of the Agate Springs Ranch fields, ending slightly to the east of the ranch headquarters. According to Jim Cook's son, Harold, his father "immediately undertook the construction of dams and ditches, which he surveyed and designed himself; and acquired some of the oldest water rights on the Niobrara River" (after McGinley and Stover).⁶²

In order to build this system, Cook needed to acquire the land over which the ditches extended.⁶³ In 1892, Mary Graham, Cook's mother-in-law who lived at the ranch at that time, filed a claim for an entire quarter section of land traversed by the Niobrara River, just west of the ranch headquarters.

Cook probably began to divert water from the river and channel it through his first ditch across Graham's land to the northern part of the ranch headquarters by the early 1890s. (Cook actually purchased this quarter section five years later

⁶⁰ Meade, *Story of Agate Springs Ranch*, 9; Cook, "Cook Family in Sioux County," 15; Cockrell, "Our Ranch is Different," 3-4.

⁶¹ Meade, "Cook Family," 364; Meade, *Story of Agate Springs Ranch*, 9, 17-19; Cook, *Tales of the 04 Ranch*, 11, 15; Roberts, "History of Agate Springs," 283-84; Cockrell, "Our Ranch is Different," 8; Margaret C. Cook, "The Cook Family in Sioux County," *Sioux County: Memoirs of Its Pioneers*, edited by Ruth Van Ackeren, 15; Jim Cook, "Horses in Corral, Dec. 15, 1904," in Kate Cook's "Daily Record for 1905 [through 1908]," Cook Papers, AFBNM.

⁶² Harold J. Cook, letter to Howard W. Baker, 5 March 1962, Box 1, File L58, General Files (1952-1963), National Park Service, RG 79, Central Plains Region, National Archives (hereafter cited as: RG 79, CPR, NARA).

⁶³ In order to understand Jim Cook's legal rights to divert water from the Niobrara River, it is necessary to have a cursory understanding of water law in Nebraska, which can be acquired from James A. Doyle, "Water Rights in Nebraska," *Nebraska Law Review* 20: 1 (March 1941), 1-22.

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from Graham when she had met her five-year requirement for acquiring ownership of that land.) In 1895, Jim Cook purchased nearly all of the quarter section directly west of Mary Graham's, allowing him to construct a second irrigation ditch from the Niobrara that delivered water to the southern part of the ranch.⁶⁴ (Within a very few years, a third irrigation ditch, the Neece-Harris Canal, began to withdraw water from the Niobrara River about three miles downstream from the Agate Springs Ranch headquarters, in Section 3 of Township 28 North, Range 55 West.⁶⁵)

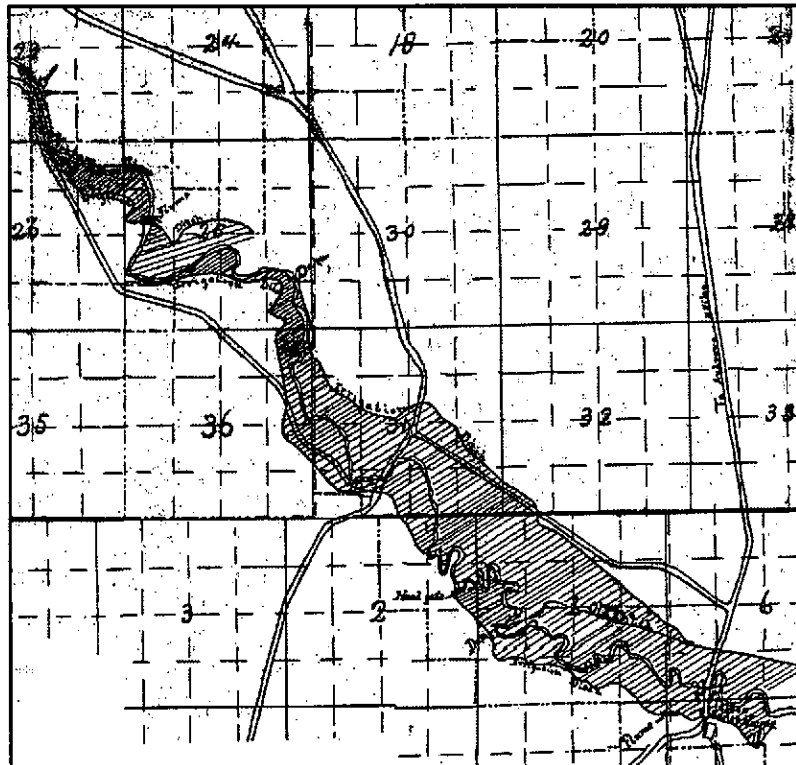


Figure 7.11 This sketch map shows the system of irrigation ditches dug by early ranchers McGinley and Stover (later known by the Cooks as the Upper Ranch) and by Jim Cook. Both systems, which watered about 1,000 acres, became part of the expanding Agate Springs Ranch in the 1890s. Drawn by Lieutenant George E. Price, 10th Cavalry, Fort Robinson, no date. Courtesy of National Park Service .

Cook surveyed and constructed the two ditches by using a homemade level to determine the precise route of the ditches so that they descended at the proper rate and overflowed across the desired areas. After each ditch was staked, it was dug

⁶⁴ "Numerical Index," Section 1, Township 28 North, Range 56 West, Clerk's Office, Sioux County Courthouse, Harrison, Nebraska.

⁶⁵ Cook, letter to Baker, 5 March 1962, Box 1, File L58, General Files (1952-1963), RG 79, CPR, NARA.

about three to four feet deep, gates at the entrance to each ditch were constructed, and flumes were built to carry water across or under any obstacles that interfered with the gradual descent in elevation of the ditch. Laterals (smaller ditches tributary to the two main ones) were also surveyed, staked, and dug. Once the water filled these ditches to the top, they overflowed and flooded the adjoining land below the ditches. Cook's irrigation system extended for about one mile northwest of the ranch house and continued through the ranch headquarters to a point about a quarter mile to the southeast of the corrals. Both of his irrigation ditches were probably completed between 1892 and 1896.⁶⁶



Figure 7.12 Jim Cook (left) is operating an irrigation ditch gate on the Agate Springs Ranch, 1912. Courtesy of National Park Service (AGFO 6210.29).

In December 1898, Jim Cook purchased much of the land and irrigation system on the McGinley and Stover ranch to the west of Cook's; this became known by the Cooks as the "Upper Ranch."⁶⁷ The Upper Ranch became a prime section of the ranch for growing potatoes and alfalfa under irrigation. "Our whole ranch operations and economy are based on the irrigated valley sections of this ranch, with its hub and operational center at Agate," Harold Cook later wrote.⁶⁸ By 1910, Cook

⁶⁶ Cook, *Tales of the 04 Ranch*, 11-12; Meade, *Story of Agate Springs Ranch*, 16; James Skavdahl, conversation with the author, 19 March 2007, at Agate Springs Ranch and 20 May 2007 (telephone communication).

⁶⁷ "Numerical Index," Section 1, Township 28 North, Range 56 West, Sixth Principal Meridian, Clerk's Office, Sioux County Courthouse, Harrison, NE.

⁶⁸ Cook, letter to Baker, 5 March 1962, Box 1, File L58, General Files (1952-1963), RG 79, CPR, NARA.

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used and maintained ten miles of irrigation ditches. Nearly 1,000 acres of Cook's land were under flood irrigation.⁶⁹

Jim Cook's flood irrigation system expanded his hay production many times. In 1886, no more than ten tons of hay could be grown, according to Harold Cook.⁷⁰ The development of the flood irrigation system enabled Cook to harvest more hay and also to grow more different kinds of crops that required water and that otherwise would not have survived the dry, hot, and windy summers and periodic drought years. His system had its first test during the drought in the early 1890s, which drove a number of settlers away from the upper Niobrara. "By persistent experimentation [Cook] has demonstrated that a wide range of field products can be successfully grown under irrigation in his region," according to Erwin Barbour in the early 1900s.⁷¹ Cook was among the first ranchers in the area to grow alfalfa under

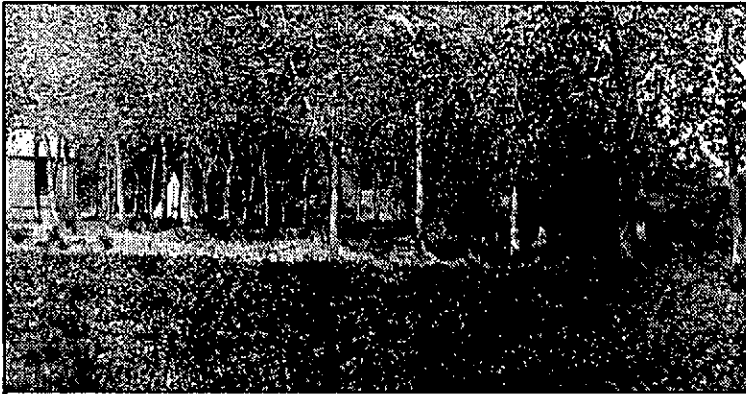


Figure 7.13 Flood irrigation allowed the Cooks to grow water-loving but nutrient-rich alfalfa in the early 1900s. This alfalfa is located near the planted cottonwoods and a small ranch building (possibly Jack Cook's early small house near the oxbow pond); a tepee is visible through the trees. Courtesy of National Park Service (AGFO 5918.17).

irrigation. Alfalfa hay became a staple crop, both for use on the ranch and for sale to other ranchers, especially during the cold winter months when the cattle required rich, nutritious forage. He also grew small grain crops and potatoes under irrigation, often on the "upper ranch," the former McGinley and Stover irrigated ranchland. Around the ranch house, Cook

planted bluegrass and clover on a terrace surrounded by shallow laterals fed by the southern ditch, making it possible for a wide lawn to grow.⁷² In the early 1900s, after Erwin Barbour sent the Cooks some plants and seeds from Lincoln, Cook wrote thanking Barbour for his gift. "We are having a very dry spring in this section of [the] country, but with our irrigation ditches we hope to make the valley of the Niobrara blossom."⁷³

⁶⁹ Cook, *Tales of 04 Ranch*, 117; Barbour, "James Henry Cook," 481.

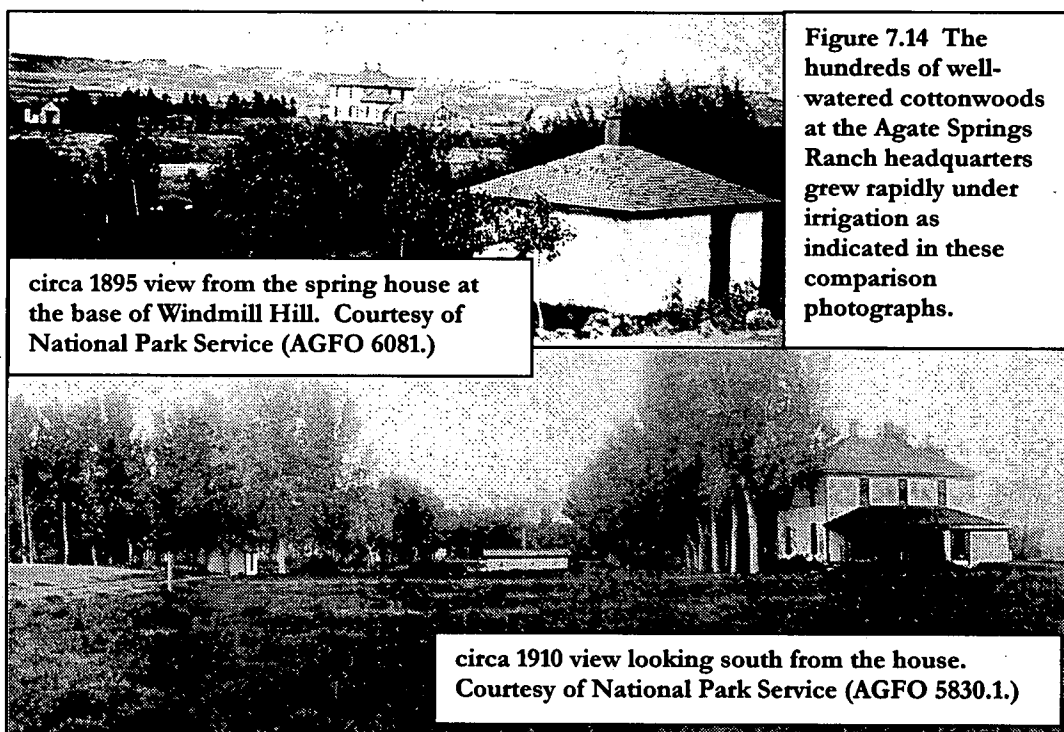
⁷⁰ Harold Cook, letter to Erwin Barbour, 13 December 1906, Barbour Papers, University of Nebraska Archives.

⁷¹ Barbour, "James Henry Cook," 481.

⁷² Cook, *Tales of the 04 Ranch*, 42; Kate Cook, "Daily Record for 1905 [through 1908]," Box 89, Cook Papers, AFBNM; Cockrell, "Our Ranch is Different," 4.

⁷³ James H. Cook, letter to Professor Barbour, c. 1908, Barbour Papers, University of Nebraska Archives.

Jim Cook clearly gave much thought to the overall plan and grand design of the Agate Springs irrigation system and its purpose of creating a tranquil oasis and profitable ranch operation. He was interested in watering not only crops for cattle, but also food for human consumption, and trees for winter wind protection, human comfort, and aesthetic appeal. Both Jim and Kate had grown up in southern Michigan and knew the delights and relief from summer's humid heat given by shade trees. Jim Cook's irrigation system ended near the lower south side of the ranch headquarters by design and not accident. When the Cooks and Grahams arrived at the ranch in September 1887, only one lone willow tree, which gave "no more shade than a knitting needle," grew on the west side of the slough near the claim house.⁷⁴



Soon Cook purchased willow trees from a Canadian firm and planted them near the Niobrara and the slough near the house. He also planted fruit trees around the ranch (some of which later died for lack of water).

By 1889 Jim Cook and some of his ranch hands had planted dozens of cottonwood trees, uprooted as small saplings from the North Platte River and transported under wet sacks by horse and wagon nearly forty miles to the ranch. All around the ranch complex he planted orderly rows of trees and groves. An 1888 newspaper article describing the Cook ranch noted that several thousand fruit and forest trees had been planted. He also planted a single row along the front of the log house, by 1892. Many years later, Harold recalled how, as a small child, he watched

⁷⁴ The "knitting needle" analogy was James Cook's, recalled by Harold Cook in *Tales of the 04 Ranch*, 12.

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his father "after he had come in from riding or working in the corrals, dog-tired and weary, carrying buckets of water to each tree, individually, hundreds of them, to keep the seedlings alive and growing until their roots could push down to water."⁷⁵ For this reason, Jim Cook often referred to his cottonwoods as his "bucket trees."⁷⁶

Cook must have been enormously relieved when the southernmost irrigation ditch was completed to the ranch headquarters, where young trees were then planted in a tight row on both sides of the ditch (just north of the corrals). This same southern irrigation ditch also probably flooded a vegetable and flower garden, located in a slightly depressed hollow southeast of the new house on the knoll. Potatoes, in particular, were grown in huge quantities at Agate, sometimes requiring the entire ranch workforce to plant each year in May. The irrigated land around the ranch house became fertile ground for asparagus, which went wild after being initially planted by Henry Cook, Jim's father, during his extended stay at the ranch in the mid-1890s.⁷⁷ As the trees grew over the years, they not only created a cool, shady oasis with lawns and gardens surrounding the house, but the thousands of trees provided "a splendid and valuable winter shelter for corrals and feedlots" located at the southern end of the ranch complex. The trees also provided wood for fence posts and other purposes. According to Harold Cook many years later, the grove of trees combined with the complex of cattle sheds, feed lots, corrals, and buildings at Agate Springs Ranch headquarters was "recognized as the best and most practical situation for ranch development in this region."⁷⁸

Another water feature that became an integral part of the Agate Springs Ranch headquarters was a slough just to the west of the ranch house and south of the winding Niobrara. This crescent-shaped loop in the meandering Niobrara River filled with water when the river flooded, but otherwise was a shallow, murky, mud-filled oxbow. When the Cooks moved to the ranch, the slough was condemned as a source of pesky, disease-carrying mosquitoes, but Jim came to see its pleasurable possibilities. He immediately set about creating a pond for pleasure and practical purposes. He first hired a homesteader named Hendricks to dredge the slough to solid rock or gravel with his ox team. The muck dredged by Hendricks was used to build a dike that totally separated the river from the pond, even during spring floods. The nearby spring trickled water into the pond. Jim had a milk house built near the cool waters of the pond, where cream and milk were kept cool in the summer heat, and where butter was made for the entire ranch. The pond soon became a nesting habitat for wild ducks, which the Cooks and visitors hunted in the fall. Near the pond, he also installed a machine that released tin birds, which he and others used for target practice. In winter the pond became a source of ice, cut into blocks and stored in the nearby icehouse for refrigeration of perishable goods. Jim Cook also stocked the pond with sunfish, bullheads, and chub. The fish ate the mosquito

⁷⁵ Cook, *Tales of the O4 Ranch*, 12.

⁷⁶ Roberts, "Preliminary Sketch of the History of Agate Springs Ranch," 24-25.

⁷⁷ *Ibid.*, 12; Roberts, *History of Agate Springs*, 284-85; Meade, *Story of Agate Springs Ranch*, 16; Kate Cook, letter to Harold Cook, 17 May 1907, Box 13, Cook Papers, AFBNM.

⁷⁸ Cook, letter to Baker, 5 March 1962, Box 1, File L58, General Files (1952-1963), RG 79, CPR, NARA.

larvae and provided pan fish for the family. The entire Cook family, as well as their guests, enjoyed fishing in the pond and duck hunting around it. Jim and Kate Cooks' two sons even enjoyed trapping water-loving muskrats around the pond. A mosquito-infested slough had been refashioned into a bucolic scene with numerous recreational pursuits possible.⁷⁹

⁷⁹ Cook, *Tales of O4 Ranch*, 13-14, 42-43; Mead, *Story of Agate Springs Ranch*, 16; "History of Agate Springs Ranch," attached to Dorothy Cook Meade oral history interview, May 22, 1986.

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Chapter 8

BONES OF AGATE, 1884–1942

Introduction

Twenty million years ago, during the Miocene Period, great quantities of mammal bones were deposited in the sandstone sediment of what is now Agate Fossil Beds National Monument. These fossils were not discovered by paleontologists until the late nineteenth and early twentieth centuries. But after a few short years of excavations, the fossil quarries at Agate became known worldwide for the abundance, variety, and completeness of their mammal bones and skeletons. Renowned paleontologist Henry Fairfield Osborn of Columbia University once referred to the Agate fossil quarries as the “most remarkable deposits of mammalian remains of Tertiary Age that have ever been found in any part of the world.”¹

James (nicknamed “Jim”) H. Cook and Kate Graham, while still courting in the early to mid-1880s, found the first of a rich cache of fossil bones on a hillside along the Niobrara just east of the 04 Ranch/Agate Springs Ranch. Though serious excavations would not begin until 1904, Jim Cook’s own interest in paleontology predisposed him to welcome anyone who wanted to investigate the fossil beds. Scientists from all over the country came to Agate to dig, representing such institutions as: University of Nebraska, Carnegie Museum, American Museum of Natural History, Yale University, Amherst College, Princeton, Chicago’s Field Museum of Natural History, Denver Museum, and Kansas University. A certain amount of rivalry existed among the institutions, and the naming of three of Agate’s fossil hills—Carnegie, University, and Amherst—was a byproduct of Jim Cook’s open-door policy.

What most fascinated the visiting paleontologists was the great concentration of fossil mammal bones buried in a two- to three-foot layer within a sandstone sediment known as the Harrison Formation, running through a pair of conical hills east of the ranch. It is thought that many animal carcasses were laid down at Agate during a prolonged drought during the Miocene Period. It is also postulated that the High Plains of the Miocene, under normal conditions, were covered by lush grass and deciduous forests, through which powerful rivers flowed east from the Rocky Mountains. Tremendous numbers of mammal species populated a sweeping territory extending from present-day Texas to Montana; most of these species are now extinct, but many modern mammals are considered descendents. Mammal bones commonly found at Agate’s fossil beds include those of *Menoceras*, *Moropus*, *Dinohyus*, *Daphoenodon*, *Temnocyon*, *Stenomylus*, and *Diceratherium*. Hundreds of skeletons of some of these prehistoric creatures—many totally intact—have been removed from Agate’s fossil beds and exhibited in nearly every important natural history

¹ “Preliminary Study of the Agate Springs Fossil Quarries Area, Nebraska,” 14 April 1961, General Files, 1952-1963, Record Group 79, Central Plains Region, National Archives, Kansas City, Missouri (hereafter cited as RG 79, Central Plains, NARA)

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museum in the United States. The first paleontologist to work at Agate was Professor Erwin Barbour of the University of Nebraska, who came in 1891 and 1892 at Jim Cook's invitation to investigate the fossil beds with a group of students. Intensive excavations and important discoveries were made by various institutions between 1904 and 1909, and again from 1911 to the mid-1920s. Periodic digging took place from the late 1920s to the late 1930s, but these efforts were small in scale and sometimes done by amateur collectors.

The heyday of the Agate fossil beds ended in the early part of the twentieth century, but the evidence—in buildings, photographs, and altered landscapes—exists to this day at Agate Fossil Beds National Monument.

First Discovery and Earliest Scientific Excavations

Jim Cook and Katherine (“Kate”) Graham are credited with discovering the first Agate fossil remains while riding horseback in the area, sometime in the early to mid-1880s.² Jim Cook later recalled and described the event in his book, *Fifty Years on the Old Frontier*.

Riding one day along the picturesque buttes which skirt the beautiful valley of the Niobrara, we came to two high conical hills about three miles from the ranch house. From the tops of these hills there was an unobstructed view of the country for miles up and down the valley. Dismounting and leaving the reins of our bridles trailing on the ground, . . . we climbed the steep side of one of the hills. About halfway to the summit we noticed many fragments of bones scattered about on the ground. . . . Happening to notice a peculiar glitter on one of the bone fragments, I picked it up, and I then discovered that it was a beautifully petrified piece of the shaft of some creature's leg bone. The marrow cavity was filled with tiny calcite crystals. . . . Upon our return to the ranch we carried with us what was doubtless the first fossil material ever secured from what are now known to men of science as the Agate Springs Fossil Quarries.³

Jim Cook may have immediately suspected the potential value of the bones that he and Kate found. In the 1870s, Cook had met Yale paleontologist Othniel C. Marsh and Edward Drinker Cope of the Philadelphia Academy of Sciences while they were on fossil excavation exploits in Colorado, Wyoming, and western

²Dena Sanford has noted that a Cook neighbor, Harold Skavdahl, reported in an oral interview with Sanford, 17 September 1997, that early rancher and nearby Niobrara River resident Octave Harris first learned of the existence of fossil bones and told Jim Cook about them. Dena Sanford, William S. Harlow, and Charles Trupia, *Historic Structures Report: Cook Homestead Cabin, HS-1, Agate Fossil Beds National Monument, Agate, Nebraska*, DRAFT, (Omaha: Midwest Region, National Park Service, 2004), 23.

³James Henry Cook, *Fifty Years on the Old Frontier as Cowboy, Hunter, Guide, Scout, and Ranchman* (Norman: University of Oklahoma Press, 1954), 234.

Nebraska. Later, Cope had stayed with Cook for months on the W. S. Ranch in New Mexico. These men had sparked and expanded Jim Cook's curiosity about ancient bones. After hearing talks about paleontology given by Marsh and Cope, Cook was constantly looking out for exposed fossil material so that he could pass along this information to experts in the field. Harold Cook later wrote that his father's early contacts with these famous natural scientists, plus his own deep interest in paleontology, "gave [Jim Cook] perspectives and information on geology and prehistoric life which caused him to appreciate and take the greatest interest in fossils found on this ranch, beyond what any ordinary ranchman would have done. . . . He

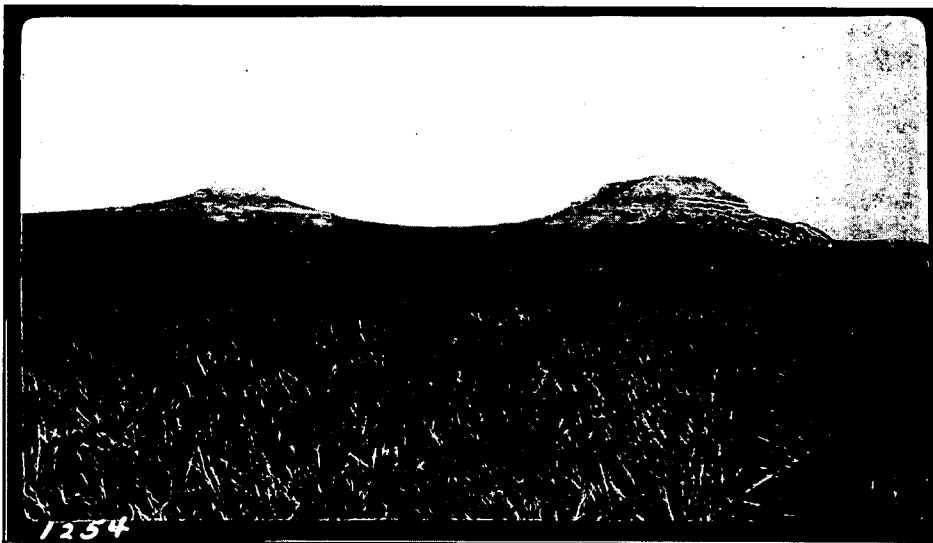


Figure 8.1 These two cone-shaped hills (later named University Hill and Carnegie Hill) south of the Niobrara River became the source of hundreds of fossils dating from the Miocene Epoch, which attracted paleontologists from around the world between 1904 and the mid-1920s. Courtesy: Central Plains Region, National Archives and Records Administration, Kansas City, Missouri.

read technical reports and understood and remembered them, as few non-college-trained men would have done.”⁴ A few years before Jim and Kate made their discovery, O. C. Marsh and an assistant gathered fossils on the Niobrara River downstream from the two conical hills that Jim and Kate had surmounted.⁵

Although years passed before serious study of the fossils at Agate commenced, Jim Cook encouraged and greatly facilitated the paleontological research done at the Agate fossil beds. At some point, Cook reported his and Kate's discovery to the Wyoming Territorial and Nebraska State Geologists. The Cook family ultimately played a significant role in the paleontological studies undertaken at

⁴ Harold J. Cook, letter to Howard W. Baker, 5 March 1962, General Files, 1952-1963, RG 79, Central Plains, NARA.

⁵ Cook, *Fifty Years on the Old Frontier*, 116, 236.

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the fossil hills; they acquired the two fossil hills, which came to be known as Carnegie Hill and University Hill, and permitted their land to be used for summer field camps and a staging area for organizing and packing fossils for shipment. The Cooks developed close long-term friendships with many of the nationally known scientists who conducted excavations at the fossil hills.⁶

In 1891, Jim Cook invited paleontologist Professor Erwin Hinkley Barbour to visit Agate Springs Ranch and inspect the fossil deposits. Barbour, a native of Oxford, Ohio, had received a doctoral degree from Yale University in 1887, where he had been a student of O. C. Marsh (first chair of paleontology established in the United States and an acquaintance of Jim Cook's). Barbour had worked as an assistant with a U.S. government survey from 1882 to 1888, before beginning his teaching career. He had just served as Stone professor of natural history and geology at Iowa College (1889-1891), when he first visited the Agate fossil beds at Cook's invitation. In the fall of 1891, he began teaching at Nebraska State University at Lincoln (forerunner of University of Nebraska, Lincoln).⁷ Cook showed Barbour the two conical hills, but Barbour had no money to conduct field work. In 1891 and 1892, Barbour did supervise some field work at his own expense. He reportedly sent his students to inspect the Agate fossil beds in 1891. In 1892 or 1893, University of Nebraska Regent Charles H. Morrill, greatly interested in paleontology, began financing expeditions to collect fossils and geologic samples. At Barbour's urging an expedition financed by Morrill did some field work at Agate in 1892.⁸ Harold Cook, only five years old at the time, watched with amazement as Barbour removed "part of a large fossil burrow, which he later called '*Daemonelix*,' or Devils Corkscrew, from a blown-out pocket about a half-mile north of the ranch house."⁹ During his visit,

⁶ This summary palontological history is based primarily on the following sources: Robert M. Hunt, Jr., *The Agate Hills: History of Paleontological Excavations, 1904-1925* (Lincoln: University of Nebraska Museum, 1984); George MacDonell, Draft "Carnegie Hill National Register of Historic Places Nomination Form" June 1998.

⁷ Erwin Hinkley Barbour married Margaret Roxana Lamson around 1886 and they had one daughter, Eleanor. Barbour spent the rest of his teaching career at the University of Nebraska. By 1913 he had published 112 papers on paleontology, geology, and zoology and was already a fellow of several professional associations. Albert Watkins, *History of Nebraska: From the Earliest Explorations to the Present Time, Volume III* (Lincoln: Western Publishing and Engraving Company, 1913), 516-17.

⁸ James Cook reported that Barbour came to Agate in both 1891 and 1892 and that the excavations made were only surface deep. Cook, *Fifty Years on the Old Frontier*, 236. In 1965, Park Ranger-Historian R. Jay Roberts wrote that: "The Morrill Geological Expedition of 1892, named after a patron of the University of Nebraska and who for a number of years was a contributor of funds for paleontological research under Dr. Barbour, was the first to collect from this remarkable area." R. Jay Roberts, "A Preliminary Sketch of the History of Agate Springs Ranch," (Omaha, NE: Midwest Regional Office Library, National Park Service), 27. Charles Morrill financed many of Barbour's expeditions to collect fossil and geologic specimens over the years and contributed greatly to the earth sciences building at the University of Nebraska, Morrill Hall, under Barbour's supervision.

Conservation and Survey Division, University of Nebraska, "CSD History Featuring Succession of Directors," web site: <http://csd.unl.edu/general/directors.asp>, June 2007.

⁹ Erwin H. Barbour, letter to Harold J. Cook, 23 May 1905, Barbour Papers, University of Nebraska Archives; Cook, *Tales of the 04 Ranch*, 185.

Barbour and his university students presumably stayed at the Cooks' Agate Springs Ranch. Eleven more years passed before active excavations began at the fossil hills.¹⁰

First Phase of Excavations, 1904—1908

Jim Cook remained interested in the fossils near their ranch and continued to mention them to whomever he thought might like to investigate. Whenever an opportunity arose, Cook invited research paleontologists from universities and science museums around the country to come. Eventually, many institutions sent teams of paleontologists to conduct excavations. Jim Cook welcomed them all.

The period between 1904 and 1908 proved to be a time of intense interest and activity at Agate fossil quarries. Field crews from Carnegie Museum, the University of Nebraska, Amherst College, the American Museum of Natural History, and Yale University and others converged on the fossil beds at the twin conical hills (Carnegie and University) and a third hill (Amherst), about one and one-half miles east. A chronology of the principal excavations during this period is summarized below.¹¹

<u>Year</u>	<u>Leader</u>	<u>Affiliation</u>	<u>Excavation Site</u>
1904	O. A. Peterson	Carnegie Museum	Beardog Hill, Carnegie Quarry 3 North Ridge, Quarry A
1905	O. A. Peterson	Carnegie Museum	University Hill, surface prospects Beardog Hill, Carnegie Quarry 3 Carnegie Hill, southwest excavation
1905	E. H. Barbour	Univ. of Nebraska	Carnegie Hill, northeast excavation University Hill, University Quarry
1906	W. H. Utterback	Carnegie Museum	Carnegie Hill, southwest excavation Carnegie Hill, northwest excavation Carnegie Hill, northeast excavation
1906	E. Riggs	Field Museum of Natural History, Chicago	University Hill, University Quarry
1906	E. H. Barbour	Univ. of Nebraska	University Hill, University Quarry
1906	?	Kansas University	? ¹²
1907	F. B. Loomis	Amherst	North Ridge, Amherst Point Carnegie Hill, northeast test pit Amherst Hill (Stenomylus Quarry)
1907	A. Thomson	American Museum	Carnegie Hill, northeast excavation
1908	W. H. Utterback	Carnegie Museum	Resigned and left before work began
1908	O. A. Peterson	Carnegie Museum	Carnegie Hill, southwest excavation
1908	E. H. Barbour	Univ. of Nebraska	University Hill, University Quarry
1908	R. S. Lull	Yale	University Hill, University Quarry Amherst Hill (Stenomylus Quarry)

¹⁰ *Ibid.*, 236.

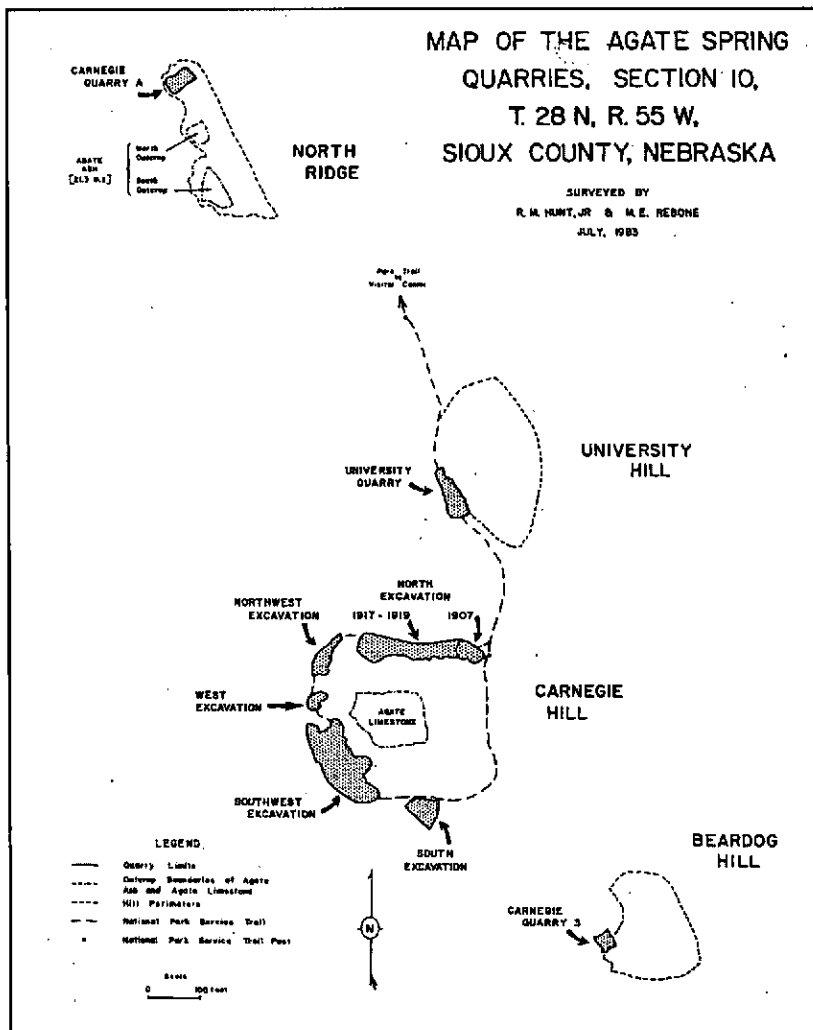
¹¹ This table is compiled from information presented in Hunt, *Agate Hills*, Appendix A, 158-61 and from Kate Cook, "Daily Record for 1905 [-1908]," Box 89, Cook Papers, Agate Fossil Beds National Monument (hereafter cited as Cook Papers, AFBNM).

¹² Harold Cook, letter to Erwin Barbour, 30 June 1906, Barbour Papers, University of Nebraska Archives.

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1908	F. B. Loomis	Amherst	Amherst Hill (Stenomylus Quarry)
1908	A. Thomson	American Museum	Amherst Hill (Stenomylus Quarry)
1909	O. A. Peterson	Carnegie Museum	Amherst Hill (Stenomylus Quarry)
1910	No one		

In 1904, Olaf A. Peterson of the Carnegie Museum in Pittsburgh first visited



the southernmost of the twin hills and is credited with identifying the great scientific value of the fossil discoveries near Agate. Three years earlier, paleontologist H. B. Hatcher also of Carnegie Museum, had sent Peterson, his brother-in-law, to Sioux County, Nebraska, to collect a large assortment of fossils from the Cenozoic Era, laid down from 5 to 37 million years ago. The Cenozoic fossils were known to be buried in a broad wedge sweeping from the eastern flank of the Rocky Mountain Front Range across northeastern Colorado, southeastern Wyoming, southwestern South Dakota, and

Figure 8.2 This map shows the location of various excavations on Carnegie Hill, University Hill, North Ridge, and Beardog Hill. Carnegie Hill became the most heavily excavated of all the hills. Courtesy of Robert Hunt, *The Agate Hills: The History of Paleontological Excavations, 1904-1925*, prepared for the Midwest Regional Office, National Park Service, 1984.

western Nebraska. For two field seasons, Peterson worked in an area of Sioux County not far from Agate Springs Ranch. One day in the early summer of 1904, John Hatcher and Olaf Peterson crossed paths with Jim Cook in Harrison. Cook

immediately told them about the fossil deposit near the ranch at Agate and encouraged them to stop by. In late July 1904, as the field season drew to a close, Jim Cook invited Olaf Peterson to visit the North Ridge, an exposed talus slope of fossilized bones on the north end of a low ridge extending northwest of the twin conical peaks. Peterson described his early discoveries at this bone pocket on North Ridge in a letter to W. J. Holland, director of the Carnegie Museum.

One day in the latter part of July, I decided to break camp [at a site farther up the Niobrara River] and go down river in search of new localities for fossils . . . As Mr. Cook's ranch was on our way down the stream, it was decided to pay him a visit, and accordingly we stopped at his ranch. [T]he preliminary work of prospecting the neighborhood was at once under way. A day or two later, Mr. Harold Cook [then seventeen]. . . accompanied the writer to a small elevation some four miles to the east of the farm buildings and immediately beyond the eastern limits of the land belonging to the ranch. The talus of this low hill was discovered to be filled with fragments of bones, and was afterwards designated as quarry A [at North Ridge].¹³

At Quarry A on North Ridge, Peterson collected fossil specimens of several different Miocene mammals, including two types of rhinoceros, a smaller, running type and a larger, heavier one.¹⁴

While conducting surface prospects at that site in early August, Peterson visited the nearby conical twin peaks, just south of the North Ridge, as well as Beardog Hill, southeast of the southern conical peak, and quickly recognized their paleontological research potential.

We had worked three or four days in [Quarry A], when I decided to visit the two buttes [later named Carnegie and University hills] which lie about three hundred yards to the south of the place where we were working. One may easily imagine the thrilling excitement of a fossil-hunter when he finds the talus of the hillsides positively covered with complete bones and fragments of fossil remains.¹⁵

Peterson's discovery was made between August 5 and 7, 1904, in the company of his two assistants T. F. Olcott and A. A. Dodd. Harold Cook later recalled the same event with animated exuberance. "I had seen the fossil bones many times while working with the cattle, but had not disturbed them. After preliminary inspection, Peterson was greatly excited. We rode back to the ranch immediately. . . he waved his arms wildly when we approached the ranch. 'Put the team in the barn,' he shouted, 'we aren't going anywhere.'"¹⁶ The material collected during Peterson's first

¹³ Hunt, *Agate Hills*, 9.

¹⁴ Cook, *Tales of the O4 Ranch*, 236; Hunt, *Agate Hills*, 11-12, 51.

¹⁵ Hunt, *Agate Hills*, 9.

¹⁶ Cook, *Tales of the O4 Ranch*, 185.

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short visit to the conical hills proved to be of such value that Carnegie Museum decided to send him back to Agate and excavate many more fossils. Olaf Peterson named these two prominent hills the “Agate Springs Fossil Quarry.”¹⁷

The next year, 1905, fossil excavations began in earnest by the Carnegie Museum and also the University of Nebraska. Erwin Barbour from the University of Nebraska thought it fitting, at this time, to name each fossil hill after the



Figure 8.3 Professor Erwin Barbour of the University of Nebraska directed the preliminary excavations at the fossil hills in the early 1890s, then returned in 1905, 1906, and 1908 for more intense additional digging at University Hill (which he named along with Carnegie Hill). Source: Albert Watkins, *History of Nebraska, Vol. III* (Lincoln: Western Publishing Company, 1913)

institution working on it; the southern hill became known as “Carnegie Hill” and the northern one became “University Hill.” Olaf Peterson, along with his field crew and T. F. Olcott, returned to Agate to continue his preliminary excavations at Carnegie Hill, arriving in mid-April and working into early October. Professor Erwin Barbour, who had remained disassociated from the fossil exploration at Agate since 1892, opened a fossil quarry on the newly named University Hill. The University of Nebraska worked from early July to the end of August that year. Although in charge of the activities at the quarry sites, both Peterson and Barbour were absent much of the time, leaving other people to oversee the excavations. Peterson and Barbour, plus their wives, were periodic guests at the Agate Springs Ranch, usually at different times.¹⁸

These designations of the two hills—Carnegie and University—signified an intense rivalry and competition between research institutions intent on collecting specimens for their own research and display projects. W. J. Holland, director of the Carnegie Museum, early on expressed concerns over institutional jurisdictions at the fossil hills. In a 1906 letter to Jim Cook, he appealed to the rancher to restrict access to Carnegie’s site “in the interest of science.”

The 1906 field season witnessed the return of field parties from both the Carnegie Museum and the University of Nebraska. W. H. Utterback oversaw excavations at three different quarry sites on Carnegie

Hill. The Carnegie Museum crew arrived in the spring and worked through at least August. Utterback uncovered and shipped nearly two dozen boxes of fossils from the southwest corner of Carnegie Hill that summer. The *Menoceras* was one of two rhinoceros found at the Agate fossil beds; both varieties were distinguished by two side-by-side horns on their noses.

¹⁷ Cook, *Fifty Years on the Old Frontier*, 236; Hunt, *Agate Hills*, 51-54.

¹⁸ Hunt, *Agate Hills*, 54-62; Cook, “Daily Record for 1905 [-1908],” Box 89, Cook Papers, AFBNM; Cook, *Tales of the O4 Ranch*, 186; Sanford, Harlow, and Trupia, *Historic Structures Report, DRAFT*, 35.

Olaf Peterson may have made a brief appearance at Agate Springs Ranch that summer, but he did not return to Carnegie Hill until 1908.¹⁹

At University Hill, Elmer S. Riggs from the Field Museum of Natural History, Chicago, spent two short weeks in late July and early August attempting to retrieve fossil material from the quarry opened by Professor Barbour. However, he was apparently sent away, probably by Barbour, who had been working in and out of Agate since mid-July. (Riggs, joined by Olcott, then explored north and west of Agate, where they discovered carnivore bones in the fossilized rodent burrows called "Devil's Corkscrews.") Although visiting often with the Cooks at Agate Springs Ranch and investigating other potential fossil sites in Wyoming, Barbour spent little actual time at University Hill, where his field crew continued to excavate the site he had opened on the west side of the hill. The Nebraska field crew, consisting of E. F. Schramm, P. R. Butler, and Edwin J. Davis, worked through the end of August 1906 and recorded 122 bones, most of which belonged to rhinoceros (*Menoceras*) and chalicothere (*Moropus*). *Moropus* was a large horse-like herbivore with three clawed toes on each foot.²⁰

In 1907, the Carnegie Museum sent no paleontologists to the fossil quarries at Carnegie Hill. But Frederick B. Loomis, from Amherst College in Massachusetts, arrived at the fossil quarries with a field team. That year, he directed excavations at a site, which he called "Amherst Point," on North Ridge, northwest of University Hill. Loomis's party also dug a test pit on the northeast side of Carnegie Hill. Most notably, in 1907, Loomis and his field crew made a remarkable discovery of camel-like *Stenomylus* skeletons at a place dubbed Amherst Hill,²¹ located about one and three-quarter miles east and slightly south of



FIG. 1. *Stenomylus altshani*, type specimen as seen lying in its original matrix. x 1/8.

Figure 8.4 An example of the camel-like *Stenomylus* specimen excavated at Amherst Hill (over a mile southeast of Carnegie Hill and University Hill) by Amherst College's Professor F. B. Loomis in 1907. Since the 1930s Amherst Hill has been known as the *Stenomylus* Quarry. Source: F. B. Loomis, "Osteology and Affinities," 1910.

¹⁹ Hunt, *Agate Hills*, 62-66, 71.

²⁰ Hunt, *Agate Hills*, 70-75.

²¹ The name "Amherst Hill" is not to be confused with Amherst Point, which is located just north of the two fossil quarries. "Amherst Hill" was often used as the name for the *Stenomylus* Quarry until the 1930, when it fell into disuse. The remainder of this chapter will use the more familiar *Stenomylus* Quarry.

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the two fossil hills. The Loomis party set up a bone camp on July 8 and left for Wyoming on August 10.²²

This same year, American Museum of Natural History, in the person of field director Albert (“Bill”) Thomson, began a twenty-year association with the Agate fossil quarries. The arrival of the American Museum came about from an invitation extended by Jim Cook. Around 1905 or 1906, while attending a meeting of the American Livestock Association in Omaha, Jim Cook met a fellow member, John Adams, who owned a ranch at Potter, Nebraska. Adams happened to be the uncle of renowned paleontologist Henry Fairfield Osborn, professor at Columbia University. In 1891, Osborn had helped organize the Department of Vertebrate Paleontology at the American Museum of Natural History, not far from Columbia. Osborn presided over the American Museum between 1908 and 1933, and remained associated with the museum for forty-five years.²³

An exchange of letters in 1906 and 1907 between Osborn and Cook, via Adams, ensued. On June 6, 1906, Cook wrote to Adams: “I would be pleased to have you write the Professor that it will give me great pleasure to have him come out and look over our ‘old bones.’ . . . If Prof. Osborn will write me, or better still, come and see me, I will do all in my power to assist him to secure some of the material here.”²⁴ Henry Osborn responded to Cook at the end of July, expressing the hope that he would be able to come personally to “look over your ‘old bone’ quarry.”²⁵ Meanwhile, he instructed his American Museum field director, Albert (“Bill”) Thomson, to leave the disappointing South Dakota Rosebud fossil beds site and take his field crew to Cook’s Agate Springs Ranch. Thomson and his crew arrived at Agate on August 25. On September 1, Jim Cook took Thomson and his crew to the fossil hills and invited them to excavate on the northeast corner of Carnegie Hill. This became the first quarry site of the American Museum of Natural History. (The American Museum probably expanded upon the work done by Utterback from Carnegie in 1906.)²⁶ Less than one month later, Henry Fairfield Osborn came to Agate Springs Ranch to inspect the fossil quarries. Osborn was a guest of the Cooks at the Agate Springs Ranch for five days before departing on September 26, 1907.²⁷

²² Susanne J. Miller, “The Agate Fossil Beds National Monument Stenomylus Quarry: Historic and Scientific Overview, Resource Management Plan, and Collections Database,” Draft, Report Submitted to Agate Fossil Beds National Monument, April 1905, 7-8. Kate Cook, who kept a daily record of visitors to the ranch from 1905 to 1908, made concrete references to Loomis’s presence at the ranch in July and August 1907. Cook, “Daily Record for 1905 [-1908],” Box 89, Cook Papers, AFBNM.

²³ Ronald Rainger’s *An Agenda for Antiquity: Henry Fairfield Osborn & Vertebrate Paleontology at the American Museum of Natural History, 1890-1935* (Tuscaloosa: University of Alabama Press, 1991) is one of several books that focus on Osborn and the American Museum.

²⁴ Hunt, *Agate Hills*, 75-77; According to Harold Cook, describing this meeting many years later, Adams told Cook that his nephew, Henry F. Osborn, was a paleontologist in New York City and might be interested in the fossils; Cook then wrote to Osborn directly inviting him to come to Agate. Cook, *Tales of the 04 Ranch*, 188.

²⁵ Hunt, *Agate Hills*, 77.

²⁶ Hunt, *Agate Hills*, 77-82.

²⁷ Cook, “Daily Record for 1905 [-1908],” Box 89, Cook Papers, AFBNM; Cook, *Tales of the 04 Ranch*, 188.

The field season of 1908 climaxed the period of early scientific interest in Agate fossil beds. Five institutions—Carnegie, University of Nebraska, Amherst, Yale, and the American Museum—sent field crews to excavate fossil quarries east of Agate Springs Ranch. The *Stenomylus* Quarry was visited briefly by four of the five institutions (Carnegie, Amherst, Yale, and the American Museum). In 1908, Carnegie Museum and the University of Nebraska made their last major effort to secure specimens from the two main Agate fossil quarries. Relations between two competitors at the quarries—the Carnegie Museum and the American Museum—became increasingly strained, as the head of the American Museum, Henry Fairfield Osborn, courted the Cook family for a place at Carnegie Hill. And while intense interest and activity swirled around the fossil sites east of Agate Springs Ranch, it was discovered that the Cooks owned none of the fossil hills—Carnegie, University, or Amherst. Regardless of this minor detail, which the Cooks addressed in 1908, relations between the Cook family and the American Museum (through Osborn), as well as the University of Nebraska (through the Barbour family), became cemented.²⁸

The field crew from the Carnegie Museum were the first to arrive at Carnegie Hill in the spring of 1908. W. H. Utterback stopped at Agate Springs Ranch in mid-April, according to Kate Cook's daily record book, but soon left (after resigning from the Carnegie Museum). Three weeks later, veteran Agate fossil quarry supervisor Olaf Peterson replaced him and supervised the work of his three-man crew throughout the summer. By June 1, Peterson's crew had expanded Carnegie's original quarry to 120 feet in length and 15-to-20 feet in width. Peterson and his men found great quantities of *Menoceras*, *Dinohyus*, and *Moropus* fossils, as well as a sampling of other mammals. (*Dinohyus* was a pig-like animal as large as a bison with a huge head and two hooves on each foot.) Sixty boxes were packed and shipped from this quarry during the field season. At the end of the season, Peterson took his crew to the new and interesting *Stenomylus* Quarry, "which yielded very fine material. Eight skeletons, more or less articulated, of a small species of camel, were found."²⁹ Ten boxes of fossils were packed from this quarry. During the summers of 1908 and/or 1909, Peterson and his wife stayed in the log claim cabin built by Octave and Caroline Harris in the 1880s along the Niobrara River about a mile east of the fossil quarries. The 1908 field season proved to be the most successful one for Carnegie Museum; Peterson collected more specimens than in any previous season.³⁰

The *Stenomylus* Quarry, initially discovered the previous year by Frederick Loomis from Amherst College, attracted the attention of three other institutions in July 1908. Bill Thomson from the American Museum may have supervised excavations in June. At the encouragement of Yale graduate Erwin Barbour, Yale geology Professor R. S. Lull and his assistant Hugh Gibb traveled west from New

²⁸ Hunt, *Agate Hills*, 83-85.

²⁹ Quoted in Hunt, *Agate Hills*, 93.

³⁰ Hunt, *Agate Hills*, 85-93; Cook, "Daily Record for 1905 [-1908]," Box 89, Cook Papers, AFBNM; Tyler Skavdahl, "The River: Days of the White Man," *Along the River Road*, edited by Moni Hourt (Marsland, NE: Pink School House Press, 1995).

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Haven, Connecticut, in mid-June; they joined F. B. Loomis from Amherst College in western Massachusetts, then continued on the train to Lincoln, where Professor Barbour guided them through the Agate collection of fossils at the University of Nebraska. Only hours after their arrival in Lincoln, Lull and Loomis took the overnight train to Crawford, where they were met by Jim and Harold Cook. The joint Yale-Amherst team spent about a month at Muddy Creek in the Hartville Uplift in southeastern Wyoming exploring for fossils before they made their way to Agate Springs Ranch. Kate Cook noted their arrival at the ranch in her "Daily Record" on July 14. Lull and Gibb worked first at University Hill, near the south end of the University of Nebraska's quarry. Lull then moved on to the *Stenomylus* Quarry where he joined F. B. Loomis's Amherst crew.

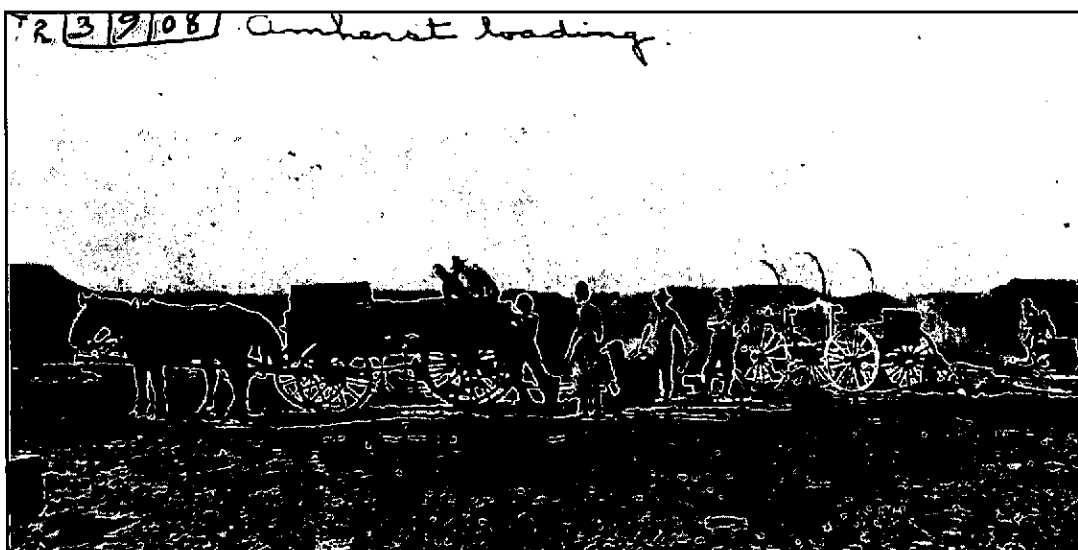


Figure 8.5 In 1908, the Amherst College field crew, under the direction of F. B. Loomis, loaded up crated fossils for transport to the rail depot at Andrews (fifteen miles north of Agate Springs Ranch) for shipment back to Amherst, Massachusetts. Courtesy of Barbour Collection, Archives and Special Collections, University of Nebraska—Lincoln Libraries (BE 2785).

Within a few short weeks, Loomis had excavated twenty-one camel-like *Stenomylus* skeletons. Olaf Peterson later credited Loomis with discovering the *Stenomylus* fossils at *Stenomylus* Quarry. Bill Thomson soon retrieved another nine skeletons from the same location in 1908. Lull of Yale found three *Stenomylus* skeletons, and Peterson unearthed and shipped about thirty *Stenomylus* skeletons in 1908 (and also 1909). By the end of August, Lull and Gibb were building and packing boxes for shipping their finds back to Yale. Lull and Gibb left Agate Springs Ranch in late August; Loomis and his Amherst crew had a farewell dinner at the ranch on September 2, before leaving for the East.³¹

³¹ Barnum Brown, "A Miocene Camel Bed-Ground," *Natural History* 29 (1929), 658-662; Miller, "Agate Fossil Beds National Monument *Stenomylus* Quarry," 6-9; Hunt, *Agate Hills*, 93, 98-102;

In 1908, Professor Erwin Barbour brought a crew to excavate at the University of Nebraska's original quarry site on the west side of University Hill for the last time. Barbour, as in previous seasons, spent considerable time away from the quarry visiting the Cooks and traveling to various places in western Nebraska. The most common fossils found at University Hill during that field season were the small rhinoceros (*Menoceras*), chalicothere (*Moropus*), and entelodont (*Dinohyus*). Erwin Barbour, his daughter Eleanor, and new crew members were given a farewell dinner by the Cooks on September 5, before leaving for Lincoln.³²

Although the American Museum of Natural History in New York City refrained from working any part of the two major fossil quarries east of Agate in 1908, Thomson may have supervised a crew at Stenomylus Quarry for two or three weeks. In July, American Museum director W. D. Matthew³³ organized a fossil expedition to the high divide between the North Platte and Niobrara river drainages in southern Sioux County. Harold Cook went with Matthew and worked with the museum to excavate the Sheep Creek and Snake Creek fossil beds.³⁴ (Just a few months later, Harold would organize and identify specimen fossils retrieved at Snake Creek while attending Columbia University and working at the American Museum's laboratory in New York City.)

By the end of the 1908 field season, Peterson of Carnegie Museum and Barbour of the University of Nebraska decided to discontinue work at the Agate fossil beds; they both apparently felt that they had collected an adequate number of specimens for their institutions. Also, money for continued excavations at Agate by the University of Nebraska, a perennial challenge for Barbour, may have run out. In addition, Peterson found that conditions working under the demanding and unsupportive head of the Carnegie Museum had become intolerable. (Peterson did return to the Stenomylus Quarry in 1909 for final excavation work for the Carnegie Museum.) The departure of the Carnegie Museum opened the door for the tentative arrival of the American Museum of Natural History at Carnegie Hill in 1909. Erwin Barbour's departure from Agate Springs Ranch in early September marked the end of the initial phase of exploration and development at the Agate quarries.

Cook, "Daily Record for 1905 [-1908]," Box 89, Cook Papers, AFBNM. The Amherst crew consisted of Leonard, Blanchard, Wiltisic, and Parmalee.

³² Barbour's crew consisted of Bumstead, Krake, VanOrsdel, and Davis. Hunt, *Agate Hills*, 93-98;

Cook, "Daily Record for 1905 [-1908]," Box 89, Cook Papers, AFBNM.

³³ Edwin H. Colbert, *William Diller Matthew, Paleontologist: The Splendid Drama Observed* (New York: Columbia University Press, 1992) presents a fascinating biography of Matthew, which includes information, in Chapter 15 about Albert Thomson and work undertaken at Agate fossil quarries.

³⁴ Hunt, *Agate Hills*, 83, 90, 93; Cook, "Daily Record for 1905 [-1908]," Box 89, Cook Papers, AFBNM.

Competition among the first institutions that vied for a place at the fossil beds also contributed to the departure of Carnegie Museum in 1908. During the early exploratory endeavors at Agate by the Carnegie Museum, director H. W.



Figure 8.6 In 1908, four individuals who played a key role in the history of the Agate fossil hills, pose at a Carnegie Hill excavation. From left to right are: Erwin Barbour, University of Nebraska; Harold Cook, Agate Springs Ranch; Albert Thomson, American Museum of Natural History; and Henry Fairfield Osborn, American Museum of Natural History and Yale University. Courtesy of National Park Service (AGFO5912.17).

Holland became obsessed with the notion that Carnegie Museum possessed its own private bone-hunting preserve at Carnegie Hill, despite the fact that Jim Cook had invited him to be there. Holland's grasping attitude annoyed Cook, who envisioned many institutions working side by side to excavate fossils that could be exhibited at museums throughout the country. In March 1908, Cook described his concept of shared knowledge to Columbia University scientist Henry Fairfield Osborn. "I tried very hard last year to have all of the three institutions that have worked on the two bone hills to work together in harmony in the interest of science in this locality as the amount of material and the labor required to secure it is so great. It now seems that my efforts along the lines of harmony have been a failure." Unfortunately, Cook's enthusiastic promotion and encouragement of all institutions had contributed to antagonistic strife between some of them. Soon afterward, Cook denied Carnegie Museum collecting privileges at Carnegie Hill past the 1908 season. Cook invited Osborn and the American Museum to take Carnegie's place at the productive southwest excavation. In November that year, Holland verbally relinquished what he considered to be Carnegie Museum's exclusive rights at Carnegie Hill to other institutions, specifically to the American Museum.³⁵

The departure of Carnegie Museum in 1908 had also been encouraged by Jim Cook's maneuvering to acquire the land on

which the two fossil hills stood. That year, Cook used the provisions of the new Kinkaid Act to begin the process of obtaining ownership for the Cook family. Four years earlier, President Roosevelt had signed into law a bill introduced by Nebraska

³⁵ Colbert, *William Diller Mathew*, 148-50.

Congressman Moses P. Kinkaid, a personal friend of the Cooks, a measure that enlarged the permitted homestead acreage from 160 to 640 acres, an entire section, in order to help make ranching possible in the semiarid western part of the state. The Kinkaid Act, known as the “One Section Homestead Act,” spiked the number of homestead claims filed during the decade following its enactment. In 1908, Jim Cook, fearing the loss of the fossil quarries to Holland or some other single institution in the future, encouraged Harold Cook to file a claim under the provisions of the Kinkaid Act for 640 acres that encompassed the two fossil hills. This Harold did in August 1908.³⁶ (Six years later, after Harold had made significant improvements to the claim, focused mainly on his homestead cabin and after he and his wife’s many months of residence on the claim, Harold Cook received a patent for ownership in April 1914).³⁷

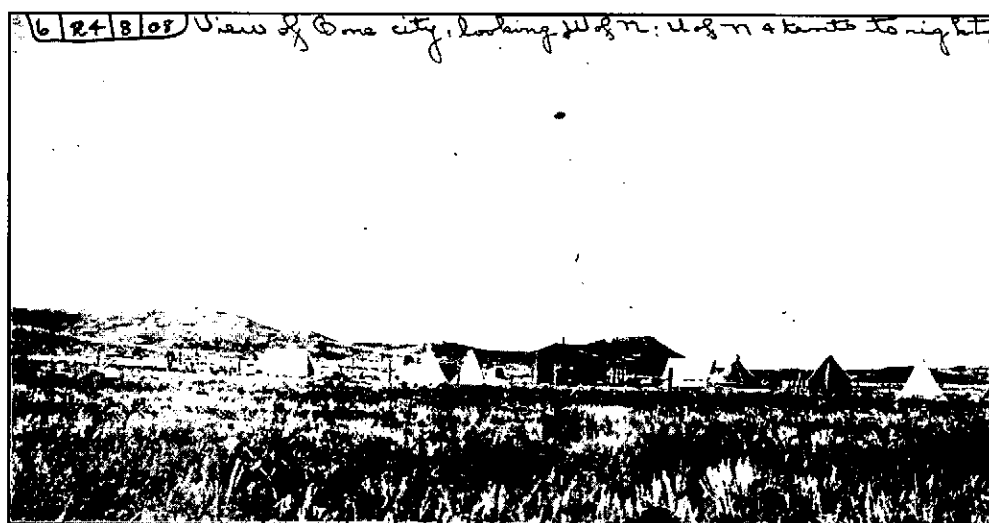


Figure 8.7 In the summer of 1908, Bone City, located north of the Niobrara River at that time, included the tents of field crews from several universities and museums—the University of Nebraska (on the right), Yale University (in front of the wooden shack), Carnegie Museum (occupying the wooden shack), and the American Museum of Natural History (left foreground). Courtesy of Barbour Collection, Archives and Special Collections, University of Nebraska—Lincoln Libraries (BE 2784).

Cooks Provide Hub for Paleontologists

The arrival of several groups of scientists between 1906 and 1909 created a lively and stimulating intellectual and social environment at Agate Springs Ranch.

³⁶ James Cook, on Agate Spring Stock Farm stationery, recorded the filing date of Harold’s claim as August 27, 1908 (Serial No. 0858; No. of land filing 85870). He described the land as: W ½ of the NE ¼, E ½ of the NW ¼, SW ¼ of the NW ¼, SW ¼, and the W ½ of the SE ¼ of Section 10; plus the NE ¼ of the SW ¼ and the SE ¼ of Section 9, T 28 N, R 55 W, 6th Principal Meridian, which contains 640 acres. “Filing made by Harold Cook,” James also wrote on the same stationery.

³⁷ Sanford, Harlow, and Trupia, *Historic Structures Report*, DRAFT, 42-44

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The ranch house was usually the first place that visiting paleontologists stopped before proceeding east to the fossil quarries. Often the Cooks invited prominent visiting paleontologists to come for lunch or dinner at the ranch house and even stay overnight (especially in the case of the Barbours and the Petersons). Special occasions, like the July 4th festivities and birthday celebrations for Harold and his cousin, Robert Heath, also provided another opportunity to invite supervising paleontologists to come to the ranch for socializing.

Between 1905 and 1908, Kate Graham kept a daily log of the comings and goings of people to the ranch house, as well as daily ranch activities, documenting the frequency and extent of the interaction between Cook family members and paleontologists who came to work at the fossil quarries. Excerpted from Kate Cook's "Daily Record" and presented below is a list of visiting paleontologists, along with the nature of their visits.³⁸

<u>Date</u>	<u>Paleontologists at Agate Springs Ranch House</u>
16 April 1905	Prof. Peterson of Carnegie Museum and Mr. Olcott arrived
19 April	Prof. Peterson and Mr. Olcott went into camp
22 April	Peterson and Olcott came for dinner; Peterson left for Pittsburgh
22 May	Mr. Olcott "filed" and took lunch with us
4 July	Prof. Barbour arrived
6 July	Prof. Barbour left
17 July	Prof. Barbour arrived with Miss Eleanor [Barbour]
22 July	Prof. Barbour and Mrs. Barbour came and Dr. Hermann
29 July	Prof. Peterson came for dinner
5 August	Prof. Peterson and Mrs. Peterson came
6 August	Prof. Peterson and Mrs. Peterson left
19 August	Prof. Bolton of Lincoln and Harold came
20 August	Prof. Bolton left
24 August	Prof. Peterson, Mr. Pepperberg and Steckleberg came
28 August	Mr. Pepperberg, Steckleberg, Miller, and Lee returned to Lincoln
28 August	Prof. and Mrs. Peterson and Dr. Hermann came
7 September	Prof. and Mrs. Peterson took supper with us
17 September	Petersons and Dr. Hermann came to dinner
28 September	Prof. Peterson and Mrs. Peterson and Dr. Hermann took dinner here
15 July 1906	Prof. Barbour, Eleanor, Mr. Schram, Mr. Butler and Davis came
21 July	Prof. Barbour left for Lincoln
26 July	Prof. Barbour returned
27 July	Prof. Barbour and Eleanor with Harold left for Wyoming
5 August	Prof. Barbour, Eleanor, and Harold returned from Wyoming with relics
9 August	Prof. Riggs and party left
18 August	Prof. Bruner, Prof. Olcott, and Prof. Barbour came
19 August	Prof. Barbour left for Lincoln
26 August	Prof. Barbour returned from Lincoln
27 August	Eleanor Barbour and Prof. Barbour left for Lincoln
29 September	Prof. Burnette and Prof. Smith came
30 September	Prof. Smith left

³⁸ Cook, "Daily Record for 1905 [-1908]," Box 89, Cook Papers, AFBNM. Spellings of names may not always be correct.

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1 October	Prof. Burnette left
8 July <u>1907</u>	Prof. Loomis of Amherst College and Mr. Hubbard came to establish camp in bone field
10 August	Prof. Loomis and party left for Wyoming (Harold left on 14 August to join them)
25 August	Prof. Osborn party [American Museum, including Albert Thomson] arrived
21 September	Prof. Osborn of New York came
22 September	Prof. Osborn and party here for dinner
26 September	Prof. Osborn left
16 April <u>1908</u>	Mr. Utterback of Carnegie Museum, Pittsburgh, arrived
10 May	Prof. and Mrs. Peterson of Pittsburgh came
12 May	Prof. Peterson left for Harrison; he returned on May 15
16 May	Mrs. Peterson and Mr. Peterson left for their camp
4 June	Dr. Matthew [American Museum of Natural History] arrived on wagon
2 July	Prof. Barbour arrived with party; also Mrs. Barbour and Eleanor arrived
4 July	I had invited the field parties—Carnegie, Lincoln, and New York—to come for afternoon and evening; all came but Jim stayed at Crawford; nineteen here in all; had tennis, wrestling, fireworks, lap supper . . .
9 July	Prof. Barbour left for trip to Marsland
10 July	American [Museum] party in for dinner
11 July	Prof. Matthew, Moody, Thomson, Hein?, and Harold left for prospecting trip to south Sioux County
13 July	Prof. Barbour returned from Marsland
14 July	Amherst and Yale scientific parties arrived
19 July	Profs. Loomis, Lull, and Leonard came . . . and took lunch with us
24 July	Dr. Matthew and Mr. Thomson came
25 July	Dr. Matthew left for the east. Mr. Thomson returned to camp
	Pittsburg, Amherst, Yale, and Lincoln parties were invited for the evening; all came but Prof. and Mrs. Peterson; served ice cream and cake
1 August	Prof. Lull, Prof. Loomis, and Prof. Tyler were invited for dinner along with Prof. and Mrs. Barbour and family; there were 14 at table
3 August	Prof. Lull and Loomis left for Spanish diggings
4 August	Mr. Thomson came
10 August	Prof. Loomis came in for late supper on horseback, having ridden over 40 miles from Wyoming
18 August	Mother [Mary Graham] and KGC [Kate] drove to see fossil camel in slab at Loomis quarry [Stenomylus Unit]
	Prof. Lull came at lunch time
23 August	Prof. Loomis and Dr. Moody took supper here
28 August	Prof. Lull and Mr. Gibb were to come for lunch
28 August	Prof. Barbour, Mr. Bumstead, and Davis came up in the evening
1 September	Loomis party returned from south trip
2 September	Prof. Loomis, Blanchard, Parmalee, Wiltsie and Leonard came for farewell dinner
3 September	Mr. Moody came for dinner at six and spent evening
5 September	Prof. Barbour, Miss Barbour, [etc.], and Mr. Davis were entertained for farewell dinner and spent the evening
6 September	Barbour party left bone camp for Andrews
7 September	Mr. Bumstead & Davis left on stage for Lincoln; New York party moved up to mother's house [near the main ranch house]

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8 September	Jim and Mr. Thomson left in carriage for Andrews; Prof. Osborn and party took baggage wagon
9 September	Dr. Moody took dinner with us
11 September	Prof. Osborn and Mr. Thomson left

The ranch continued to be the favored place for socialization between the Cook family and the various paleontology parties that came to the quarries. “Bone City,” the encampment site of different institutional parties, served as a secondary place to mingle.

Field crews working at Carnegie and University hills during the summer typically set up tents for sleeping, eating, and for conducting office work near Agate Springs Ranch. By 1906, modest frame shacks were also used by field crews from Carnegie Museum and the University of Nebraska. In 1906, the Carnegie Museum crew may have occupied a small wood-frame shack, later known as the Harold Cook Homestead Cabin, before it was moved to its present site on the lower western flank of Carnegie Hill. This shack could have been the claim cabin of John Harris or Arthur Green, who had filed for parcels of land on the adjoining sections and, in the 1890s, sold them to Jim Cook. A University of Nebraska field crew erected circular canvas tents around a frame, gable-roof shack. One year later, the American Museum of Natural History occupied what appears to be this same cabin. During the summer field season of 1908, the frame shack again served as the physical and social center of the fossil excavation crews’ activities. Crews from the University of Nebraska, Yale, Amherst, and the American Museum of Natural History established living quarters in quadrants around the wood shack.³⁹

Ebb in Excavation Activities, 1909—1910

Paleontology work dwindled in 1909. Only Olaf Peterson and his Carnegie Museum crew returned to investigate the previously excavated fossils at *Stenomylus* Quarry. Complementing the eight *Stenomylus* skeletons he found in 1908, Peterson unearthed complete or partial skeletons of an additional nineteen *Stenomylus* fossils. This field season proved to be the last one at Agate for the Carnegie Museum. Their departure left the fossil quarries wide open to the American Museum of Natural History.⁴⁰

The close of the first intense phase of excavations at Agate also provided a needed window of time during which to make changes at the field crews’ encampment area. Probably in February 1909, after Harold returned to Agate from his studies at Columbia University and the American Museum of Natural History in New York City, the bone shack was moved. Several photographs taken during the 1906—1908 field seasons depict the shack north of the Niobrara River in the general

³⁹ Sanford, Harlow, and Trupia, *Historic Structures Report*, DRAFT, 32-33, 35-37; Section 9, Township 28 North, Range 55 West, 6th Principal Meridian, “Numerical Index,” Clerks Office, Sioux County Courthouse, Harrison, Nebraska

⁴⁰ Hunt, *Agate Hills*, 103-107.

vicinity of the present Agate Fossil Beds National Monument Visitor Center/Headquarters. From there it was moved on skids about one mile southwest to the western base of Carnegie Hill, where Harold had filed a claim for 640 acres and began making “improvements” to that land.

Harold’s homestead cabin thereafter became the base of operations for future fossil excavations at the quarries. This relocation of the heart of Bone City—the bone shack—and the subsequent development of Harold Cook’s homestead cabin physically represented the end of the first phase of intense and competitive scientific investigations at Agate fossil quarries led by the Carnegie Museum and the University of Nebraska. And it marked the beginning of another phase of measured, methodical, and prolonged paleontological investigations dominated by the American Museum of Natural History.⁴¹

Harold Cook, an Ascending Paleontologist

Harold J. Cook, son of Jim and Kate Cook, participated in the excavations at the fossil quarries whenever he could break away from his work on the ranch during the busy summer months.

In fact, his own early development as a paleontologist and geologist paralleled events at the fossil quarries, which were a living classroom and laboratory for his educational enrichment and growth. Harold’s claim cabin, used as a base of operations for crews of paleontologists from 1911 to 1927, is a visual symbol on the Agate landscape of the way in which his own personal and professional history became intertwined with the history of institutional excavations.



Figure 8.8 At a very young age Harold Cook, seated here around 1898, became exposed to and expressed an interest in bones and fossils. Courtesy of National Park Service (AGFO 6104.4).

⁴¹ Sanford, Harlow, and Trupia, *Historic Structures Report*, DRAFT, 37-42.

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Harold J. Cook was born in 1887 in Cheyenne, Wyoming. His mother Kate gave him lessons in reading and writing at a young age. In the evenings, Kate and Jim Cook began reading to him aloud from books in their extensive parlor library. Harold became thoroughly exposed to the literary classics as well his father's favorite outdoor adventure stories by Theodore Roosevelt. Kate later hired a man named Valentine to tutor Harold at home on the ranch. Harold received an early exposure to fossils and became immediately aware of the fascination that they held for his father. The family took occasional outings to the fossil hills to look for fossilized bones. These outings and Jim Cook's own knowledge, acquired from hearing and reading about fossils from such scientists as Marsh and Cope, aroused in Harold an enduring passion for ancient life on earth. Also, at a young age, Harold met paleontologists like Erwin Barbour, who later gave young Harold tools, mounted specimens, and general encouragement to undertake more professional excavations at the fossil hills. After paleontologists began to arrive at Agate with great regularity from 1904 onward, Harold spent time with these experts at the fossil beds and learned all that he could from them. "I worked with Peterson every spare moment I could get away from the ranch work," Harold later explained.⁴² In Harold's opinion, Peterson was one of the most competent fossil bone collectors in the nation at that time. And Peterson came back to Agate's fossil quarries year after year. Some visiting paleontologists, like Peterson and Henry F. Osborn, sent boxes of books on paleontology and geology to Harold at the ranch. Osborn encouraged Harold to study both geology and paleontology, and to observe all in the outdoor world, since "nature was a good university."⁴³ "This background in my early home, plus meeting famous scientists, and getting into the field with them in such work, certainly was largely responsible for my early deep interest in such studies, even as a small boy, and long before I had the fine university and professional training that I later had," Harold recalled many years later.⁴⁴

⁴² Cook, *Tales of the O4 Ranch*, 185, 186-89.

⁴³ Kate Cook quoted some phrases that Osborn had written to Harold. Kate Cook, letter to Clara Heath, 2 December 1907, Box 13, Cook Papers, AFBNM.

⁴⁴ Harold J. Cook, *Tales of the O4 Ranch: Recollections of Harold J. Cook, 1887-1909* (Lincoln: University of Nebraska Press, 1956), 51, 55; Hunt, *Agate Hills*, 70; Colbert, *William Diller Matthew*, 150-52; Cook, letter Howard W. Baker, 5 March 1962, General Files, 1952-1963, RG 79, Central Plains, NARA; Dorothy Cook Meade, *Heart Bags & Hand Shakes: The Story of the Cook Collection* (Lake Ann, MI: National Woodlands Publishing Company, 1994), 7.

Harold Cook enrolled at the University of Nebraska in Lincoln to study with Professor Barbour, who hired him as an assistant with a stipend from the University of Nebraska regents, probably in the fall of 1906 or spring of 1907. So impressed was the Yale University-educated professor with Harold's knowledge, that Barbour invited him to instruct classes in beginning geology. In February 1908, Harold's mother, Kate, reported that "Harold is taking eight subjects and making the most of his opportunities. . . . He is working at a rate now that he will do two years work in one along some lines and hopes to get credits for the full time."⁴⁵ He completed his undergraduate coursework in June 1908.⁴⁶ In the fall of 1908, at the encouragement of paleontology professor Henry Fairfield Osborn, Harold went to New York City to study under Professors Osborn and W. K. Gregory at Columbia University. To gain additional experience and to earn some income, Harold also worked part-time as a research assistant identifying the Snake Creek Collection (from south Sioux County, Nebraska) for W. D. Matthew at the American Museum of Natural History. Taking a double course load of thirty-eight hours in one term, Harold managed to complete two years' of study in one. His daily schedule proved extremely rigorous. He was up at daylight, walking to Columbia and attending classes until noon or the early afternoon. He then walked twenty long blocks at high speed to the American Museum, where he worked until midnight with a break for dinner. Then he walked home and slept about four hours until this routine began again the next day. Harold lived on West End Avenue at the apartment of Mrs. Trowbridge, the sister of Sarah Bassett (long-time friend of Mary Graham and the Cook family, who often stayed at Agate Springs Ranch and in Andrews).⁴⁷



Figure 8.9 Harold Cook's self-taught knowledge of paleontology won him invitations to attend the University of Nebraska in 1908 and Columbia University and the American Museum of Natural History. This 1908 photo of twenty-one-year-old Harold was probably taken at the American Museum. Courtesy of National Park Service (AGFO 6102).

⁴⁵ Kate Cook, letter to "My dear" (probably Clara Heath, her sister), 12 February 1908, Box 13, Cook Papers, AFBNM.

⁴⁶ Kate Cook notes in a December 2, 1907 letter that Harold will have to "stay home from school" if their financial situation does not improve. Kate Cook, letter to Clara Heath, 2 December 1907, Box 13, Cook Papers, AFBNM.

⁴⁷ Cook, *Tales of the 04 Ranch*, 201-203.

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Family and ranch affairs compelled Harold to return permanently to Agate in February 1909.⁴⁸ Although Harold Cook's formal education ended then, he was able to maintain an ongoing association with the nation's leading research paleontologists at the Agate fossil quarries. His broad development as a paleontologist and geologist was fostered in his own backyard by the likes of Barbour, Peterson, Osborn, Matthews, A. Thomson, F. B. Loomis, R. S. Lull, E. Riggs, and W. J. Sinclair.

The fossil quarries at Agate brought not only the nation's foremost paleontologists to Harold, but they also attracted Erwin Barbour's daughter, Eleanor. In 1906, Harold first met eighteen-year-old Eleanor, when she accompanied her father to the fossil quarries east of the Cook ranch. During her own training at the University of Nebraska, Eleanor had obtained broad knowledge of geology and zoology, as well as music, art, and culture. Her high marks in coursework earned her Phi Beta Kappa distinction by the time she graduated. The courtship of Harold and Eleanor evolved over three years into an engagement in 1909. The young couple married a year later. Their October 13, 1910, wedding attracted several notable Nebraska residents who were friends of the Barbours. Among them was the prominent former U.S. Senator William Jennings Bryan, who advanced the cause of anti-Darwinism by aiding in the 1925—1926 prosecution of Tennessee biology teacher John T. Scopes, who had taught Darwinist evolution in his classroom.⁴⁹

Harold's Homestead Cabin and the Emergence of "East Agate"

Sometime after the 1908 field season and before spring 1909, the diminutive "bone shack" was moved from its site north of the Niobrara River (possibly in the location of the present Visitor Center of the park⁵⁰) to a new location on the lower southwestern flank of Carnegie Hill.

It seems probable that the cabin was moved in February 1909, after Harold Cook, who filed a claim for this parcel the previous year, arrived back in Agate from his studies in New York City. (Moving small buildings on skids was not uncommon at a time and place where wood and money were scarce. The Cooks moved several small buildings to the ranch headquarters in the late 1800s and early 1900s.) This site, near the joining of two sections (sections 9 and 10, T 28 N, R 55 W) and in the morning shadow of the fossil quarries became the cabin's permanent home and the new center of the paleontologists' "Bone City."⁵¹

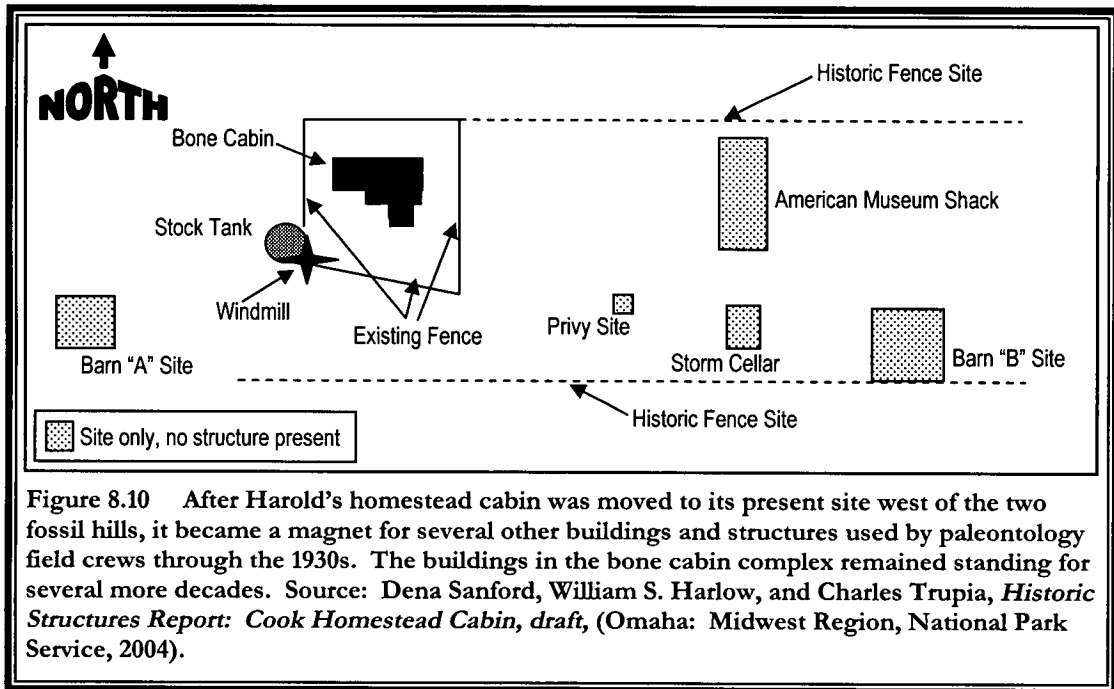
⁴⁸ Harold Cook, letter to Erwin Barbour, 6 January 1909, Barbour Papers, University of Nebraska Archives.

⁴⁹ Eleanor Barbour, the only child of Margaret and Erwin Barbour, was born February 22, 1888 in Lincoln, Nebraska. Sanford, Harlow, and Trupia, *Historic Structures Report*, DRAFT, 45; Zimmerman, "Cook Papers Collection," 16; Dorothy C. Meade, "Story of Agate Springs Ranch" (Harrison: Dorothy Meade, 1990), 28; Gretchen Meade, interview by the author, 10 June 2007, Surrey, British Columbia.

⁵⁰ Hunt, *Agate Hills*, photograph following 62 and 64.

⁵¹ Sanford, Harlow, and Trupia, *Historic Structures Report*, DRAFT, 42, 44.

As well as providing a social hub for the excavation work of field crews at the fossil quarries, the wood-frame “bone cabin,” also served until 1914 as the homestead cabin of Harold and Eleanor. In August 1908, Harold had filed an application for 640 acres that encompassed Carnegie Hill and University Hill (in Section 10). The 640-acre claim on which it stood also expanded the ranch holdings and contiguous cattle-grazing land along the Niobrara River.



During the Cook homesteading years, the cabin received several improvements and additions to accommodate the young couple’s needs and those of their small but growing family. A porch swing under the east-sloping roof overhang was the first of a series of improvements made, beginning in 1911. Over the next year, Harold made two small additions to the cabin, a bedroom and a summer kitchen. In 1912, he also added a small shed-roof woodshed to the south wall of the cabin outside the kitchen. Finally, Harold also added a small baby crib for daughter Margaret on the north exterior wall of the bedroom. Outside the cabin other cultural features expanded the cabin’s amenities by the summer of 1912. A privy, a 25-foot well, a root cellar, a garden patch, a considerable length of fencing, and a three-sided barn covered with brick-patterned pressed metal with an adjoining post and wire corral were all part of Harold Cook’s homestead cabin complex. Within the next year, a windmill and telephone line (strung in 1913 by Harold and brother John Cook) had also been added to the ensemble. Along with all these landscape features stood a 12’ x 24’ gable-roof, wood-frame building, about 75 feet east of the homestead cabin, used as the cook shack for the American Museum’s field crew.

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Harold had constructed this building in 1911 with funding from the American Museum at the request of field crew supervisor Bill Thomson.⁵²

The young Cook couple occupied Harold's rudimentary homestead cabin for many months of each year between 1910 and 1914 in order to satisfy the



Figure 8.11 In April 1914, just as Harold had successfully gained ownership by fulfilling his five-year homesteading requirements, his homestead cabin appeared sturdy, along with the windmill and the elongated American Museum field crew shack (left background). Courtesy of Barbour Collection, Archives and Special Collections, University of Nebraska—Lincoln Libraries (BE 2786).

requirements of the homestead legislation. From the “bone cabin,” Harold managed both the Agate Springs Ranch three miles to the west as well as his own homestead ranch, which he called “East Agate.” Eleanor kept extremely busy running the household, including entertaining and occasionally feeding visiting summer paleontologists. She also edited the writings of her husband, Harold, and her aunt. Eleanor moved to Lincoln temporarily before the birth of her first child, Margaret, on October 17, 1911. Harold spent the winter of 1911 and 1912 with his father at the Agate Springs

Ranch house. Eleanor may have spent the coldest months of the next two winters in Lincoln with her parents and, by then, her two daughters, Margaret and Dorothy.⁵³

The busy lives of the Cooks included socializing with visiting family members and friends, who often made the three-mile trip from Agate Springs Ranch, as well as hosting paleontologists working at the fossil quarries. The entourage moving between East Agate and the main ranch house included Eleanor's parents and Erwin Barbour's sister, Jim, young John, Jim's brother Jack Cook, and Jim's mother-in-law Mary Graham. Although the privacy of both the young Cook family and the occupants of the nearby bone camps was respected, social exchanges with the summer field crews and especially with Albert (“Bill”) Thomson, his wife, and sister-in law, Agnes Gildea, became frequent, as revealed in photographs at and around the homestead cabin and in the diaries of Agnes Gildea and Bill Thomson.⁵⁴

⁵² *Ibid.*, 49-67, 70.

⁵³ *Ibid.*, 47-49, 69-70.

⁵⁴ *Ibid.*, 69-70.

In mid-1914, the nature of the social life at the bone cabin changed. Having fulfilled the five-year occupancy and monetary expenditure requirements of the homestead laws in order to file a patent on the 640-acre claim, Harold Cook received Homestead Patent Number 413352 on June 12, 1914. The Cooks had successfully met the homesteading requirements and Harold obtained legal ownership of the land encompassing Carnegie and University hills. Harold and Eleanor Cook, along with their two daughters, three-year-old Margaret and infant Dorothy, moved to the Agate Springs Ranch house, where they took up residence with Jim Cook and John Cook, Harold's fifteen-year-old brother. Harold made his homestead cabin available to Bill Thomson and the American Museum of Natural History summer field parties, who continued to investigate the fossil quarries into the mid-1920s.⁵⁵

Final Phase of Excavations, 1911—1923

The final phase of discovery and intense excavations at Agate's fossil hills occurred between 1911 and 1923. During this period, the American Museum of Natural History conducted extensive excavations under the field direction of Albert ("Bill") Thomson. Thomson and his crew uncovered several chalicotheres, including seventeen *Moropus* specimens in the mid-1910s. These proved to be the most complete samples of chalicothere known in the world.⁵⁶

While Harold and Eleanor Cook occupied Harold's homestead claim cabin during a good portion of the six years from 1909 and 1914, Harold contributed to some of the excavation work undertaken by the American Museum—when ranch demands permitted. He also made useful observations to his mentor at the American Museum, W. D. Matthew, about the work being done and discoveries made at Carnegie Hill. During this period, Harold became well acquainted with other leading paleontologists from Princeton, University of Chicago, Kansas University, University of Michigan, and the Denver Museum of Natural History (for whom he would work a decade later). Thomson and his field crew at first used their own shack. After Harold, Eleanor, and their family left the cabin in June 1914 and moved to the Agate Springs Ranch, Bill Thomson moved into the Cook homestead cabin and used it as a staging area during the years of important chalicotheres excavations. Beginning in 1921, Thomson began focusing on other areas near the Agate fossil quarries, and his crew continued to use the Cook homestead cabin as a base. Thomson conducted his final major excavation at the Agate fossil quarries in 1923.⁵⁷

A summary of the principal excavations during this period is presented below.⁵⁸

⁵⁵ *Ibid.*, 71-72.

⁵⁶ Hunt, *Agate Hills*, 108.

⁵⁷ Sanford, Harlow, and Trupia, *Historic Structures Report*, DRAFT, 73.

⁵⁸ This table is compiled from information presented in Hunt, *Agate Hills*, Appendix A, 158-61.

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Year	Leader	Affiliation	Excavation Site
1911	A. Thomson	American Museum	Carnegie Hill, southwest excavation
1912	A. Thomson	American Museum	Carnegie Hill, southwest excavation
1913	A. Thomson	American Museum	Carnegie Hill, southwest excavation
1914	A. Thomson W. J. Sinclair	American Museum Princeton	Carnegie Hill, southwest excavation Carnegie Hill, southwest excavation
1916	A. Thomson	American Museum	Carnegie Hill, north excavation, test pits
1917	C. Barner Figgins	American Museum Denver Museum	Carnegie Hill, north excavation stripping Carnegie Hill, southwest excavation
1918	A. Thomson	American Museum	Carnegie Hill, north excavation survey Amherst Hill, inspection only
1919	A. Thomson	American Museum	Carnegie Hill, southwest excavation Carnegie Hill, north excavation
1920	A. Thomson P. Miller	American Museum University of Chicago	Carnegie Hill, southwest excavation Carnegie Hill, southwest excavation
1922	A. Thomson H. Martin Buettner-Hussey	American Museum Kansas University Michigan	Carnegie Hill, south excavation Carnegie Hill, southwest excavation Carnegie Hill, southwest excavation
1923	A. Thomson	American Museum	Carnegie Hill, south excavation Amherst Hill, <i>Stenomylus</i> Quarry

Between 1911 and 1914, during Harold and Eleanor's four-year occupancy of the homestead cabin, Bill Thomson led his crew of two to four men⁵⁹ in exposing sizeable new areas of bones at the southwest quarry on Carnegie Hill, untouched since 1908. Thomson began assiduously mapping and photographing his work at Carnegie Hill as well as some scenes and people around the encampment at "East Agate." When no substantial intact quantities of the *Moropus chalicotheres* material, much desired by the American Museum, had been found by the end of the 1911 season, it was decided that Thomson should return the following year. By the end of the 1912 field season, after the first snow fell in early October, Thomson and his

⁵⁹ Among the men who worked for Thomson were: Charles Barner, Lewis Roberts, Arthur Albertson, and W. K. Gregory (in 1911), Charles Barner and Mr. Newhouse (in 1912), Charles Barner and A. E. Anderson, as well as Montgomery and Roberts (in 1913), Billy Stein and later Charles Barne, A. C. Whitford, Roberts, and Montgomery (in 1914), Charles Barner, A. C. Whitford, and George Stoll (in 1916), Lill Thomson (in 1918), George Olsen (in 1919), Lill Thomson and George Olsen (1920), Lill Thomson, Carl Sorenson and his wife, Glenn Jepsen, Ray Lemley, Paul Miller, and other occasional assistants (in 1923). Hunt, *Agate Hills*, 108, 111, 116, 119-20, 129, 133, 136, 138-9, 141, 144.

men had finally uncovered the prized, nearly complete chalicotheres remains, including five intact skulls. These mammals shed light on the origins of the Agate bone bed. American Museum Director W. D. Matthew revived an early idea, discussed with the Cooks in 1908, to open a museum branch laboratory at Agate, presumably to keep alive the Cooks' interest in the excavations.⁶⁰ Such a branch laboratory, Matthew suggested in a letter to Thomson, could be used

as a centre for our field work in the later Tertiary, if we can get the funds to carry it on. . . . The idea you remember was to build a shack and drive a well if they would dispose to us of a small bit of land for the purpose, and install you or some other member of our staff there permanently. We would not carry out the plan this year but it should be seriously considered for next year.⁶¹

After such a rewarding season, Thomson and the American Museum men eagerly returned to Carnegie Hill in 1913, intent on recovering more chalicothere *Moropus* for the museum. For the first time, an automobile was used during this field season to carry loads of fossils from Carnegie Hill. "The Auto is a great thing," Thomson remarked. "Bone digging is certainly modernized in this camp—all we need is an orchestra."⁶² Again that summer Thomson focused his crew on the chalicothere pocket at the north end of the southwest quarry. By the end of August, Thomson's crew was swamped with such huge quantities of *Moropus* material, Thomson doubted that all of it could be removed by the end of the field season. By the end of the 1913 season, this quarry on Carnegie Hill had been lengthened to about 125 feet. The American Museum uncovered mostly chalicothere, a few rhinoceros that season, and the skull of the bison-sized, pig-like *Dinohyus*. The last large block of *Moropus* material was plastered for removal from the quarry in early October. Thomson returned in 1914, eager to collect the remaining chalicothere skeletons from the southwest excavation on Carnegie Hill. He arrived at Agate in early July and began working at the southwest excavation on Carnegie Hill in intense summer heat. As temperatures rose to 110° F in mid-July, E. C. Case from the University of Michigan paid Thomson and his assistant and camp cook Billy Stein a visit. By the end of the field season the northern end of the excavation had been widened to 40 feet and the entire quarry extended in length a few more feet. Thomson uncovered still more *Moropus* material—the greater part of four individuals—by the end of the field season. In early September, the fossils—mostly *Moropus* but also a few *Menoceras*—were packed into fourteen wooden boxes and shipped from Andrews to New York City. The only item missing from the American Museum's list of coveted specimens from Agate was a complete skeleton of *Dinohyus*.⁶³

⁶⁰ Hunt, *Agate Hills*, 108-19.

⁶¹ *Ibid.*, 119.

⁶² Quoted in Hunt, *Agate Hills*, 120.

⁶³ Colbert, *William Diller Matthew*, 161; Hunt, *Agate Hills*, 119-29.

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One other institution came to Agate's fossil quarries in 1914—Princeton University. W. J. Sinclair arrived at Agate from Princeton in mid-June, after working at the Snake Creek beds in southern Sioux County earlier in the summer. He hired two assistants, Charles Barner and A. C. Whitford, to help him with his work there and at Agate. Intent on retrieving a few small rhinoceros slabs of rock for Princeton, Sinclair excavated a small section of the southwest quarry at Carnegie Hill, with Harold Cook's encouragement.⁶⁴

Between 1915 and 1919, the onset of the Great War in Europe in 1914 and the United States' involvement three years later overshadowed the paleontological work at the Agate fossil quarries. Concerns about the war, and the cost of the war itself, diverted funds that may have been donated to scientific institutions to excavate at Agate or purchase Agate fossils from other institutions. In 1915, the American Museum and all other institutions stayed away from Agate. Thomson and a field crew of three returned in 1916 in intense pursuit of an entire *Dinohyus* skeleton. Only more chalicothere and rhinoceros were found, however. Although Thomson had intended to return again to Agate in 1917, the United States' entry into the Great War quashed his plans. Instead, Charles Barner, his assistant in previous years, returned to Carnegie Hill, to explore the north side. He found only some additional *Moropus* material and no *Dinohyus*. That summer Henry Fairfield Osborn wrote to Jim Cook to report that the American Museum had assembled a total of seventeen *Moropus* skeletons, far more than they had ever hoped for. Also that summer, the Denver Museum of Natural History had come to the Agate fossil beds and taken the place of the American Museum at the southwest excavation quarry. J. D. Figgins supervised a small crew from Denver that succeeded in uncovering rhino material as well as *Moropus* foot bones. Bill Thomson from the American Museum, along with his wife, Lill Thomson, returned to Carnegie Hill in 1918 but only to assess the stripping work done the previous year by Charles Barner on the north side of Carnegie Hill and to survey the excavation done by Figgins. The Thomsons made Harold's homestead cabin their home while there. Thomson and his wife also prospected the *Stenomylus* Quarry. Both Thompsons spent a few weeks at the Snake Creek beds in south Sioux County as well.⁶⁵

Bill Thomson returned to Agate in 1919, shortly after World War I ended, accompanied by one assistant, George Olsen. Harold's homestead cabin at East Agate served as their base of operations once again. In addition to working on the north side of Carnegie Hill, which Barner had stripped two years earlier, Thomson and Olsen worked for many days to remove a huge exhibit block of rhinoceros *Menoceras* bones from the quarry floor of the southwest excavation. The block measured 8'6" long and 4'6" wide and weighed two tons. After separating the block from the rest of the dense bone mass, Thomson coated it with shellac dissolved in alcohol to harden it, then boxed it and loaded it onto a wagon, and transported the massive block by horse team to the railroad station at Andrews for shipment back to

⁶⁴ Hunt, *Agate Hills*, 124-26.

⁶⁵ Hunt, *Agate Hills*, 129-33

New York City. This would be recognized as one of Thomson's best paleontological efforts. For decades, this slab has been exhibited in the Hall of Mammals at the American Museum of Natural History.⁶⁶

Bill Thomson and the American Museum returned to Agate fossil quarries for one last serious field season in 1920, in hopes of finding the illusive entelodont *Dinohyus* skeleton. His party, consisting of Lill Thomson and George Olsen, arrived at the southwest excavation of Carnegie Hill the third week of June. Once again, the Thomsons made Harold's East Agate cabin their home. Using dynamite to loosen rock overburden and local labor to clear it away, Thomson extended Carnegie Hill's



Figure 8.12 Albert ("Bill") Thomson, perennial visitor at Agate fossil hills for fifteen years, is at the southwest excavation of Carnegie Hill preparing fossil slabs for shipment. Courtesy of National Park Service (AGFO 5973.7).

southwest excavation to the north, making a large new cut. Instead of finding the desired *Dinohyus*, the crew exposed more chalicotheres. By the second week in October, a very large chalicothere *Moropus* began to appear in the bone bed as Thomson and his crew cleared away rock. More rhinoceros were also found. Late in the field season, the University of Chicago's Paul Miller arrived at Carnegie Hill and, with the permission of the Cooks and the American Museum, removed a rhinoceros slab from the American Museum's southwest excavation. By the end of October, Thomson covered the bone layer in the new cut, thus completing a decade of excavation work at Carnegie Hill for the American Museum. He assembled and packed thirteen boxes of fossil material for shipment to the museum. No large intact specimen of *Dinohyus* was included in this shipment from Carnegie Hill. Bill and Lill

⁶⁶ Hunt, *Agate Hills*, 138-41.

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Thomson left Agate in early November 1920, the American Museum's extensive excavations at Agate nearly over. They and others essentially left behind a trove of great *Moropus* mammals buried under tons of rock at the center of Carnegie Hill for future paleontologists to discover.⁶⁷

From 1921 to 1923, the American Museum made no additional excavations at Agate. Thomson supervised work at the Snake Creek fossil beds in 1921. Then in 1922, he came to Agate to prospect, becoming interested in a bone bed exposed on the southern edge of Carnegie Hill. During the American Museum's absence that year, two other institutions made an appearance at Carnegie Hill. Handel Martin of Kansas University, aided by American Museum's Director W. D. Matthew, arrived at Agate hoping to find a small slab of fossils for the struggling paleontology division at his institution. It seems likely that he removed such a slab from the southwest excavation of Carnegie Hill. Also in 1922, the team of Buettner and Hussey from the University of Michigan took a small slab of *Menoceras* bones from the same location on Carnegie Hill. In 1923, Bill Thomson returned to Agate with his wife and several others for one last time to explore a new site about 120 yards north of the *Stenomylus* Quarry, where about sixteen *Stenomylus* skeletons were removed that summer. The Thomson crew then returned to the twin fossil hills; Thomson investigated the south side of Carnegie Hill, where he had noticed bones exposed the previous years. He completed only a minor excavation here, once again attempting to uncover evidence of a *Dinobyus* fossil. Paul Miller from the University of Chicago was with him during this excavation work. The small quantity of new material disappointed Thomson and probably contributed to the American Museum's decision to end their excavations at Agate fossil quarries that year.⁶⁸

Albert Thomson's departure from the Agate fossil quarries in 1923 marked the end of more than a decade of American Museum activity at Carnegie Hill and *Stenomylus* Quarry, beginning with a brief introduction in 1908 and continuing almost every year between 1911 and 1923. Thomson retrieved huge quantities of fossils for the American Museum. Unquestionably, the extensive work and tremendous finds made by Thomson at Agate fossil beds expanded the museum's collection enormously. Henry Fairfield Osborn's facilitating and William D. Matthew's supervision of the work at Agate had helped make the American Museum one of the preeminent research institutions for natural history in the world.⁶⁹

Despite Thomson's discouragement about not being able to find the elusive intact *Dinobyus* fossil, it seemed to some at that time that many more fossils could be found in the Agate bone bed. In 1923, American Museum Director W. D. Matthew estimated that Carnegie Hill alone still held the fossilized bones of 100 entelodonts *Dinobyus*, 500 chalicotheres *Moropus*, and an amazing 16,400 *Menoceras*. Matthew unquestionably overestimated the number of remaining fossil bones and whole

⁶⁷ Hunt, *Agate Hills*, 141-43.

⁶⁸ Hunt, *Agate Hills*, 143-46.

⁶⁹ Ronald Rainger, "Vertebrate Paleontology as Biology: Henry Fairfield Osborn and the American Museum of Natural History," in *The American Development of Biology*, edited by Ronald Rainger, Keith R. Benson, and Jame Maienschein (New Brunswick, NJ: Rutgers University Press, 1988), 219-56.

fossils. Paleontologist Robert Hunt provided a full and complete explanation of a more accurate estimate of bones existing at the fossil quarries in his 1984 history of excavations at Agate Fossil Beds. His calculations suggest that Carnegie Hill may have as many as 19 *Dinohyus*, 35 *Moropus*, and 6,400 *Menoceras*.⁷⁰ Many more bones lay inside the fossil beds to be uncovered and much more was to be learned about the nature and quantity of fossils at the Agate fossil beds. Many years passed, however, before serious scientific inquiries would be resumed at Agate.

Harold Cook's "Nebraska Man" and the Creation-Evolution Debate

During the final twelve years of paleontological excavations at the Agate fossil quarries, Harold Cook remained extremely busy. At his father's urging, he had taken on nearly total management of the Agate Springs Ranch in the 1910s. Harold and Eleanor's family expanded to four young girls by 1918. Long periodic trips to Lincoln with his wife and family to visit his in-laws also consumed some of Harold's time and energy. Despite abundant family and ranch responsibilities, Harold engaged whenever possible in fossil digging. It was his serious pursuit of paleontology and his penchant for collecting that led to an amazing discovery that put Harold Cook at the center of an intense debate in the 1920s. This debate concerned two distinctly different theories about the origin of human beings on earth: creation versus evolution.

The story of Harold's discovery began in 1917, just as the U.S. entered World War I and the American Museum considered vacating Carnegie Hill after making some breathtaking fossil finds. One day while visiting the Snake Creek Beds,⁷¹ southeast of Agate, Harold found a single water-worn, human-like tooth under layers of earth. (Nine years earlier, a similar specimen tooth had been found by American Museum Director W. D. Matthew.) Distracted by his numerous responsibilities and not knowing what if anything to make of his find, Harold saved the tooth, but did nothing with it for five years. In 1922, he sent it to his mentor Professor Henry F. Osborn at Columbia University.⁷²

⁷⁰ Hunt, *Agate Hills*, 144-53.

⁷¹ The 3 May 1922 issue of the *Omaha World-Herald* reported that Harold had found the tooth on the Cook ranch. "Ape Man Skeleton Near Agate Belief of Cook, Tooth Finder," *World-Herald*, 3 May 1922, Box 118, Cook Papers, AFBNM.

⁷² This story of the "Nebraska Man" tooth has been summarized from several sources, including: John Wolf and James S. Mellett, "The Role of 'Nebraska Man' in the Creation-Evolution Debate," *Creation/Evolution* 16 (1985), 31-43; Meade, *Story of Agate Springs Ranch*, 32; "Human-like Tooth May Solve Mystery of Origin of Many," *Washington Herald*, April 26, 1922; "Ape Man Skeleton Near Agate Belief of Cook, Tooth Finder," *Omaha World-Herald*, May 3, 1922; "Evolution Can Be Reconciled with the Bible," *Alliance Herald*, June 13, 1922; all three articles in Box 118, Cook Papers, AFBNM.

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Upon receiving and closely inspecting the tooth, Osborn immediately announced that it was a new genus and species, probably 500,000 years old, which had evolved into human beings. He named this new anthropoid *Hesperopithecus haroldcookii* (Latin, loosely translated into “the new anthropoid from the West discovered by Harold Cook), which came to be known as the “Nebraska Man.” According to Osborn, the “diminutive tooth . . . is convincing evidence that the animals of eastern Asia and western North America were once closely related. It probably belonged to an animal which wandered over here from Asia with the large South Asiatic element.”⁷³

Osborn conceded that his strongest wish was to uncover an entire jaw to



Figure 8.13 This photo shows Harold (left) and Jim Cook exposed a *Menoceras* skull, probably in the early 1920s. Courtesy of National Park Service (AGFO 6244.4).

which Harold’s tooth belonged. Even without this additional fossil material, Professor Osborn presented Harold’s discovery and his own assessment of the diminutive tooth to an assemblage of scholars attending the National Academy of Sciences in Washington, DC, on April 25, 1922. Within days, news of Harold’s discovery and Osborn’s analysis reached the press and appeared in newspapers across the country and Europe. According to the *Washington Herald*, Dr. Osborn declared that the tooth “is one of the greatest surprises of American paleontology [sic] [and] will open a new field of investigation into the beginnings of the human race and will aid in the solution of the vexing question of the origin of man.”⁷⁴

⁷³ “Human-like Tooth May Solve Mystery of Origin of Many,” *Washington Herald*, April 26, 1922, Box 118, Cook Papers, AFBNM.

⁷⁴ *Ibid.*

The authenticity of *Hesperopithecus haroldcookii* became the center of heated debate in the United States and Europe. The Nebraska Man tooth sparked some memorable exchanges about evolution versus creation between the established American defender of evolution, Henry F. Osborn, and Christian fundamentalist, politician, lawyer, and Nebraska native son William Jennings Bryan. In England, anatomist Grafton Elliot Smith, who believed that Harold's tooth had come from a genus of extinct hominids, contributed to a fanciful artistic reconstruction of *Hesperopithecus haroldcookii* hunting for their next meal, which appeared in the *Illustrated London News*. Some claimed the imaginary ape-man in this drawing resembled in proportions and stature the average Englishman. The intense argument in England over *Hesperopithecus* left Henry Osborn scrambling for some rational middle ground.

Meanwhile, Harold Cook received some unexpected but probably welcomed attention. Soon after Osborn's pronouncement about the fossil tooth, Harold Cook accepted an invitation to lecture on the theory of evolution to the annual convention of the Western Nebraska Medical Society, meeting in mid-June 1922 in Alliance, Nebraska. Harold acknowledged that this theory and his little tooth's contribution to it contradicted the beliefs of such creationists as William Jennings Bryan, Christian fundamentalist and long-time friend of Erwin and Margaret Barbour of Lincoln.⁷⁵ In 1921, Bryan had proclaimed that: "The greatest enemy of the Bible is the numerous enemy, and the numerous enemy today is the believer in the Darwinian hypothesis that man is a lineal descendant of the lower animals."⁷⁶ It may have been no coincidence that, just as Harold's little tooth glittered brightly under the bright lights of the national press, the nearby Alliance, Nebraska, Chamber of Commerce officially determined to extend the Agate Highway from Alliance, via Hemingford, to the Agate Springs Ranch, where Harold's little tooth waited to be viewed by curious visitors.⁷⁷

Henry Fairfield Osborn's doubts about his identification of Harold's tooth deepened by the time of the 1925-26 Scopes "monkey trial," when daily newspaper accounts reported the national debate over evolution and creation in the courtroom, argued by lead trial attorneys William Jennings Bryan and Clarence Darrow. Osborn was listed as one of the eleven scientists to testify in the defense of John T. Scopes, the evolutionary biology teacher on trial. Just as the trial got underway, the American Museum of Natural History arrived at the Snake Creek beds to conduct excavations at the site of Harold's 1917 discovery. Material uncovered at this site by mid-July 1925 sowed the seeds of doubt about the Nebraska Man origins of Harold's tooth. Osborn never testified as an expert witness at the Scopes Trial. In 1927, Osborn's colleague William King Gregory retracted his earlier defense of Osborn's theory about Nebraska Man. Gregory concluded that Harold's tooth probably came from an extinct peccary (pig-like mammal still found in southwestern North

⁷⁵ "Evolution Can Be Reconciled with the Bible," *Alliance Herald*, June 13, 1922, Box 118, Cook Papers, AFBNM.

⁷⁶ Quoted in Wolf and Mellett, "Role of 'Nebraska Man' in the Creation-Evolution Debate," 36.

⁷⁷ "Ape Man Skeleton near Agate Belief of Cook, Tooth Finder," *Omaha World-Herald*, May 3, 1922, Box 118, AFBNM.

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America). Henry F. Osborn rarely mentioned Harold's tooth and his "Nebraska Man" theory about it. *Hesperopithecus's* short life had ended. Even though Harold Cook's tooth from Agate fossil quarries proved to be misinterpreted and not derived from an early Nebraska human, it served for a time as a focal point for discussions about the origin of the human species in the national debate over creation and evolution that still engages leading scientists and religious thinkers.⁷⁸

Excavations at Fossil Quarries, mid-1920s—1941

Although serious excavating ended with the departure of the American Museum in 1923, Agate fossil beds didn't fall into total disuse. Bill Thomson returned in 1930 to collect a few additional fossils for the American Museum. Other institutions sent paleontologists to inspect and learn from the quarries in the late 1920s and 1930s. Harvard University sent visiting paleontologists to Agate and used Harold's homestead cabin for limited periods in the 1930s. In 1937, the Peccary Society of Claremont, California's Webb School sponsored a fossil collecting trip to Agate, led by Raymond M. Alf. The Peccary Society used Harold's homestead cabin as a base for their fossil collecting. The society returned in 1939 to collect fossil specimens for the new museum at the Webb School. In 1938, University of Pennsylvania paleontologist Edwin H. Colbert, son-in-law of William D. Matthew who had directed Bill Thomson's work at Agate for the American Museum in the 1910s and early 1920s, worked the fossil beds at Agate (and had some memorable visits with Harold, Jim, and Jack Cook at the ranch). With the Cooks' permission, Colbert occupied the "bone cabin" while excavating at Carnegie and University hills. The cabin continued to serve as a base of operations for visiting paleontologists in the 1920s and 1930s, and the Cooks also periodically rented it to various members of the Chuck Lee family between the late 1920s and early 1940s.⁷⁹

Landscapes of Scientific Discovery

Landscapes re-shaped by humans search for fossils in hillsides inside Agate Fossil Beds National Monument look almost natural despite the fact that they are cultural creations. The buildings of the Agate Springs Ranch, especially the ranch house and the lush yard surrounding it, along with Harold's homestead cabin and the field crew work space at "East Agate," are obvious human constructions that played an important role in the planning, excavating, and socializing associated with the fossil digs. Corridors of travel linking the ranch and "East Agate," particularly the path of wagons and people between East Agate and the fossil hills, between East Agate and the Agate Springs Ranch, and leading north from the ranch and continuing for fifteen miles to the railroad shipping depot in Andrews, faintly visible

⁷⁸ Wolf and Mellert, "Role of 'Nebraska Man' in the Creation-Evolution Debate," 31-35.

⁷⁹ Edwin H. Colbert, *Digging into the Past: An Autobiography by Edwin H. Colbert* (New York: December Books, 1989), 232-40; Sanford, Harlow, and Trupia, *Historic Structures Report*, DRAFT, 94-100.

or invisible in 2007, also provided tangible physical evidence of Agate's history of paleontological investigations.

Though natural creations, the three fossil hills—Carnegie, University, and Amherst—and the much smaller North Ridge and Beardog Hill have been dramatically shaped and resculpted by a society intent on uncovering their mysteries. Nearly all sides of Carnegie Hill have been impacted by pick and shovel, scrapers, dynamite, or other earth-moving tools and equipment. Channels and caverns were excavated in some places, while piles of debris were created elsewhere. These hills are a mined landscape, where dirt and rock have been moved for over 100 years.

The cultural landscape associated with scientific discovery is often historically significant. The Cook homestead cabin (bone cabin) was nominated to the National Register of Historic Places in 1977 as part of an historic ensemble that included many components: the then-extant windmill; fence fragments and lines; the American Museum of Natural History Shack; Storm Cellar site; small barn site; larger barn site; and privy site. In 1985, the nomination was amended to include non-historic, non-contributing features at the site (including a stock tank) and to upgrade the significance of the site; the nomination was approved in 1986.⁸⁰

⁸⁰ Richard Ortega, "Harold J. Cook Homestead Cabin National Register of Historic Places Nomination," 1 March 1976 (approved 24 August 1977); Charles Trupia, "Harold J. Cook Homestead/Bone Cabin Complex National Register Historic Places Nomination Amendment," 1985 (approved 19 December 1986).

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Chapter 9

SEASONS AND CYCLES OF LIFE AT AGATE, 1887—1923

Introduction

Ranches are far more than an aggregation of acreage, livestock, and buildings, just as life on a ranch is more than a business. More than most other kinds of homes or businesses, a ranch is a rich interplay of human and environmental impulses. Through years of refinement and expansion, Agate Springs Ranch took on the character of its owners, who in turn bent to the seasonal demands of ranch life on the prairie. And while James (known as “Jim”) and Kate Cook developed a lush, green physical oasis for their horses and cattle—as well as for their own comfort and aesthetic pleasure—they were also creating a social oasis that connected their isolated ranch with the rest of the world.

Agate Springs at times resembled a beehive in its busy pursuit of work and leisure activities. The rigors of seasonal ranch tasks and year-to-year survival were lightened by entertaining colorful visitors, hosting paleontological digs, letter-writing, and traveling. All the while, the Cook family kept growing and changing, a younger generation learned the business, and carried on for those getting older and weary.

The enterprising spirit and curiosity that spurred Jim Cook to develop and continually add to his ranch also prompted him to make friends worldwide—from his long friendship with Red Cloud to his later association with a pair of brothers who supported the ranch financially for nearly three decades. But Jim’s ambition took a toll on his business and his family as well as his relations with his neighbors. Jim and Kate Cook fell further and further into debt as the years went by, adding stress to the idyllic life they had created. This, and the isolation and other pressures of the ranch, contributed to Kate’s spiral into schizophrenia, resulting in institutionalization in 1909. She never returned to the ranch, but her son Harold and his young wife breathed new life and energy into Agate Springs Ranch in the 1910s. Many of the Cook family’s improvements—buildings, roads, water features, shade trees, and perennial vegetables and flowers—live on at Agate, along with the stories of the fruitful social and intellectual life they cultivated there.

Seasonal Rhythm at Agate Springs Ranch

By the turn of the nineteenth century, a seasonal rhythm of work settled over the ranch. Kate Cook captured the cyclical nature of daily chores and seasonal tasks in her “Daily Record,” written between 1905 and 1908. Spring was among the busiest times of the year. In the early spring, the last hay harvested the previous summer may have been sold to tide over the Agate Springs Ranch and neighboring ranchers, whose cattle did not yet have enough new grass to eat. The Cooks and their hired help spent long hours planting a sizeable acreage of potatoes, grains, and,

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sometimes tree cuttings. Hundreds of calves were born, roped, tied, and branded in the spring, in a boisterous flurry of activity in the corrals south of the ranch house.¹

May and early June were the time to replace missing or deteriorated fence posts and barbed wire for seventy-five miles of fencing. Irrigation ditches needed to be cleaned and water periodically channeled from the river into the ditches and their



Figure 9.1 Jim Cook (half kneeling) oversaw and sometimes participated in the spring ritual of branding in the Agate Springs Ranch corrals. Courtesy of National Park Service (AGFO 6218.4).

laterals. During the height of the summer, Cook's own ranch hands were joined by teams from neighboring ranches for the task of haying the ranch's staple crop of grasses, consisting of blackroot and upland sedge, combined with gramma, wheat grass, bluestem, and buffalo grass. Horse-pulled hay rakes gathered the hay in small piles, while wooden sweeps piled the hay into mountainous piles. Alfalfa was also harvested. By the 1910s, steam-powered threshing machines processed the grain in the ranch fields. Crews of men worked long hours every day at both the "upper ranch" (McGinley and Stover's former ranch) and in fields closer to the ranch house

¹ Kate Cook, "Daily Record for 1905 [through 1908]," Box 89, Cook Papers, Agate Fossil Beds National Monument (hereafter cited as Cook Papers, AFBNM); Harold J. Cook, *Tales of the 04 Ranch: Recollections of Harold J. Cook, 1887-1909* (Lincoln: University of Nebraska Press), 106.

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harvesting these valuable cash crops, used to feed Agate cattle and to sell to neighboring ranches for winter forage.²

As early as August, fattened cattle may have been driven overland by ranch hand John Butler and, sometimes Harold, to the small railroad town of Andrews, fifteen miles north of the ranch—if the cattle could fetch a high price. This event must have reminded Jim Cook of his days, a quarter century earlier, driving cattle over Texas trails to railheads in Kansas and Nebraska. Since 1886 the Chicago and Northwestern Railroad (formerly the Fremont, Elkhorn and Missouri Valley

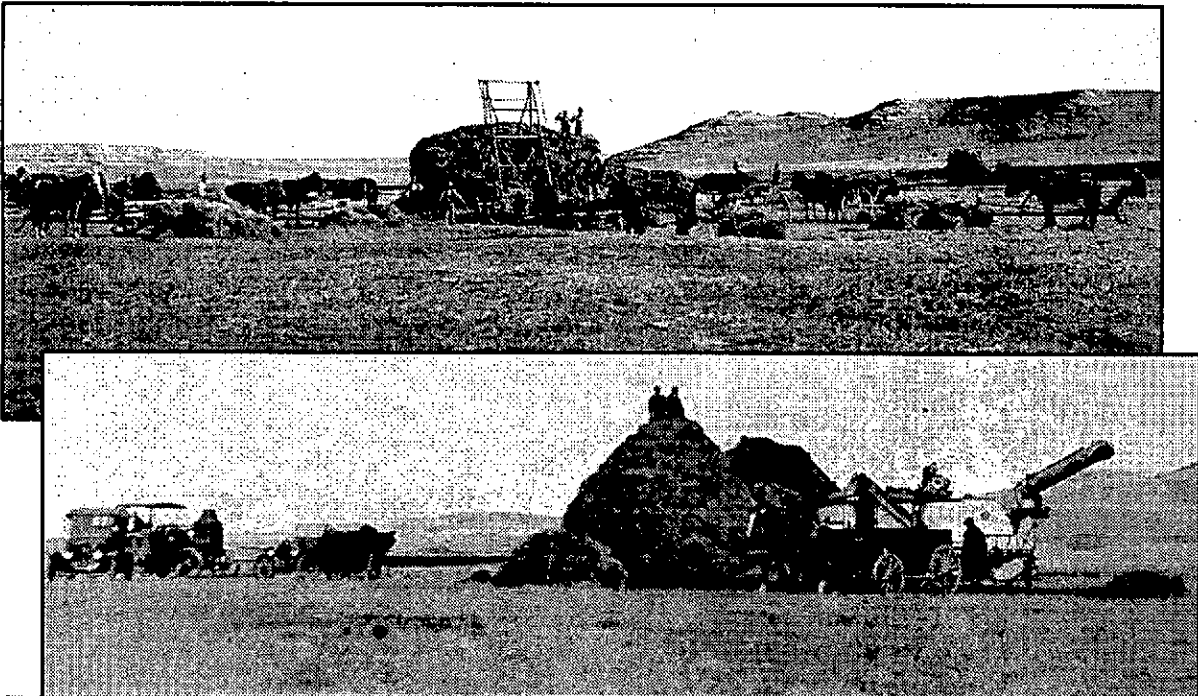


Figure 9.2 (a & b) Haying alfalfa and native prairie grass was a community activity that took place every summer. These two photos suggest the evolution in agricultural technology in the early 1900s, when gas-powered engines began to replace horse- or mule-powered vehicles and machinery. Stacking hay around 1915 took place manually while threshing around 1919 was done with a gas-powered machine. Courtesy of National Park Service (AGFO 5884.333 and AGFO 6210.106).

Railroad) had been completed to Andrews, Harrison, and beyond to the west.³ (Andrews, earlier named Hunter, was renamed for Jew Andrews, a locomotive engineer for the Chicago and Northwestern Railroad.) In 1903, Hunter received its first post office, three years before the name change. Hunter/Andrews was no more than a village with a small number of businesses aligned with the railroad tracks, a few houses, and stockyards, some owned by Jim Cook, for ranchers to hold their

² Kate Cook, "Daily Record for 1905 [through 1908]"; Cook *Tales of the 04 Ranch*, 116-17; photos of agricultural scenes and equipment, Box N, Cook Papers, AFBNM.

³ J. R. Buchanan, "The Great Railroad Migration into Northern Nebraska," *Proceedings and Collection of the Nebraska State Historical Society* 15 (1907), 25-34.

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cattle before shipping them by railroad cattle cars to markets in Chicago and later Omaha. Agate Springs Ranch cattle continued to be driven to Andrews through the fall and even winter, either for holding at Cook's stockyards there or for immediate rail shipment to Omaha. The timing of cattle shipments was critical to insure that the Cooks were able to get the best price per pound for their cattle.⁴

The fall and winter witnessed the Cooks gathering food and fuel around them for the long, cold winter ahead. In October, as many as 300 bushels of potatoes were dug and stored in the root cellar. With rising beef prices as cold weather set in, more cattle were driven to Andrews for shipment to Omaha. While in Andrews, John Butler often fetched coal and wood, carried it by wagon to the ranch, and emptied it in the sunken stone coal shed behind the ranch house. Also in the fall, ducks and geese were hunted around the pond near the house and elsewhere on the Agate Springs Ranch property. Occasionally a single steer might be killed for domestic consumption around the holidays. During exceptionally cold and windy winter storms, the Cooks, usually with little ranch help at that time of the year, needed to search for and round up stray cattle driven far from the ranch feedlots by high winds and blowing snow. More coal was collected in Andrews if the winter became especially cold and blustery. Butler or Harold usually cut ice from the pond in January or February and stored it in straw in the ice house to keep meat and perishables cool in warmer months. February and March were often good months to sell additional alfalfa hay to neighboring ranchers, in order to get the highest price and boost the family's winter income.⁵

Jim Cook's involvement in his family's ranching operation extended beyond the boundaries of the Agate Springs Ranch. In the early 1890s, he bought a half interest in the Ranch Supply House in Harrison, twenty-five miles north of the ranch, thereby forming a partnership with a man named MacLachlan, who owned property near Agate Springs Ranch. Cook and MacLachlan agreed to have George Gerlach run the store.⁶ In an effort to improve the livestock business in his region, Jim Cook served on the executive committee of the Stock Growers' Association of western Nebraska in 1910 and 1911.⁷

Agate's Hired Help

During the early Cook years, Agate Springs employed at least one hand and usually more, as well as domestic help for Kate. At busy times on the ranch, during the spring, summer, and fall, the Cooks had several men on the payroll, putting them

⁴ Kate Cook, "Daily Record for 1905 [through 1908]"; Andrews lost its post office in 1951. When the White River flooded in 1990 many of buildings comprising the core of Andrews were washed away. Teresa Johnston, "Andrews," *Sioux County: Memoirs of Its Pioneers*, 31; Bud Buckley, interview with author, March 20, 2007, Agate Fossil Beds National Monument; Ron Cockrell, "'Our Ranch is Different': The Agate Springs Ranch on Nebraska's Niobrara River," paper for Seminar in Western American History," November 27, 1996, 5.

⁵ Cook, "Daily Record for 1905 [through 1908]"; Cook, *Tales of the 04 Ranch*, 107-17."

⁶ Cook, *Tales of the 04 Ranch*, 39.

⁷ Erwin H. Barbour, "James Henry Cook," in *History of Nebraska, Volume III*, edited by Albert Watkins (Lincoln: Western Publishing and Engraving Company, 1913), 481.

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up in the bunkhouse. During haying season in the summer, more than a dozen men may have been mowing, stacking, and, eventually, baling in the hay meadows along the river and irrigation ditches. This number usually dropped substantially in the winter or if Jim Cook could not afford to employ much help.

One or two ranch hands stayed for extended periods at Agate. In 1900, for example, the census taker recorded five boarders at the ranch who worked for Jim Cook as stock herders or farm laborers. These boarders were: John Butler, Nathan Stover, John Imhoff, Arthur Cole, and Columbus E. Brice. All but one boarder ranged in age from sixteen to twenty-eight.⁸ Some of those employed at Agate Springs Ranch had moved to Sioux County recently and were getting their feet on the ground there. Others were passing through. Still others came from the Graham and Cook families' former hometowns in southern Michigan. Between 1905 and 1908, Kate Graham recorded partial and full names of a number of men hired to

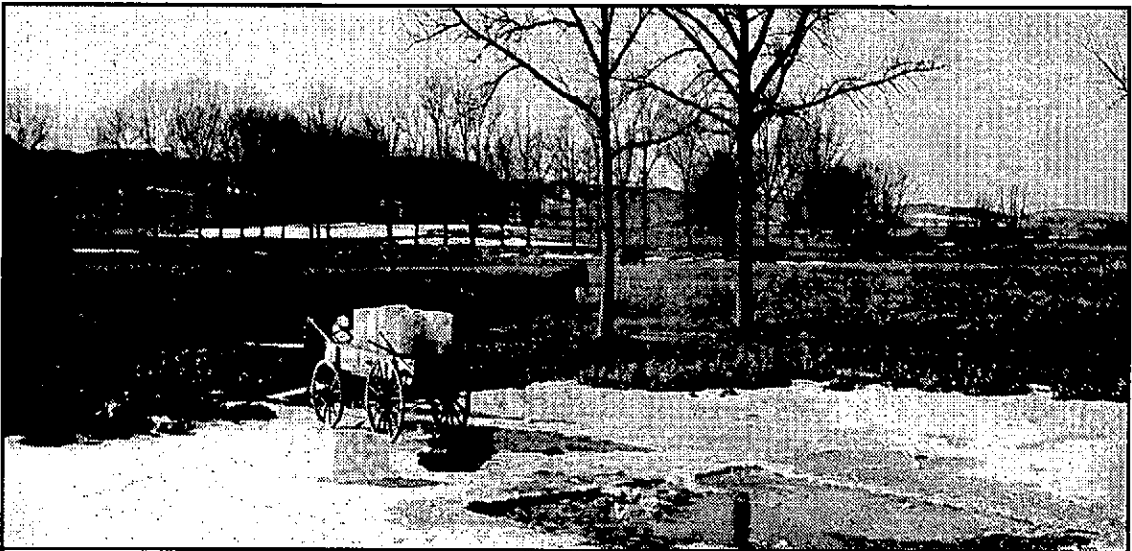


Figure 9.3 Every winter Jim and Harold Cook cut and stored ice in the tall ice house moved from Fort Robinson to the pond west of the ranch house. This wagon-load of block ice was harvested in February 1915. Courtesy of National Park Service (AGFO 6182.7).

work on the ranch for Jim; they included: Jake H. Kunkleman, Philip Cueto, Joe Storey, George Hill, Claghorn, Jones, Hesser, Finley, Gardner, Wallace, McManon, Lewis, Douglas, Matteson, Milligan, McNeill, Snow, Watson, Ward, and Carlson.⁹

As more people moved into the area to homestead, Cook also began to hire local residents who needed additional income. Some of the local families employed by the Cooks in the early 1900s included: Octave Harris, as Agate Springs Ranch

⁸ "Schedule No. 1—Population, Twelfth Census of the United States," Runningwater Precinct, Sioux County, Nebraska, June 1900.

⁹ Spellings of people's names may not always be correct, since handwriting is sometimes unclear. Cook, "Daily Record for 1905 [through 1908]," Cook, *Tales of the 04 Ranch*, 60.

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foreman; John Harris, homesteading to the east of Agate; Ora Bibbey; and Kelley.¹⁰ Sometimes the Cooks became impatient over the lack of good help and advertised in Denver and Omaha unemployment offices, offering free travel expenses for a minimum of six months employment.

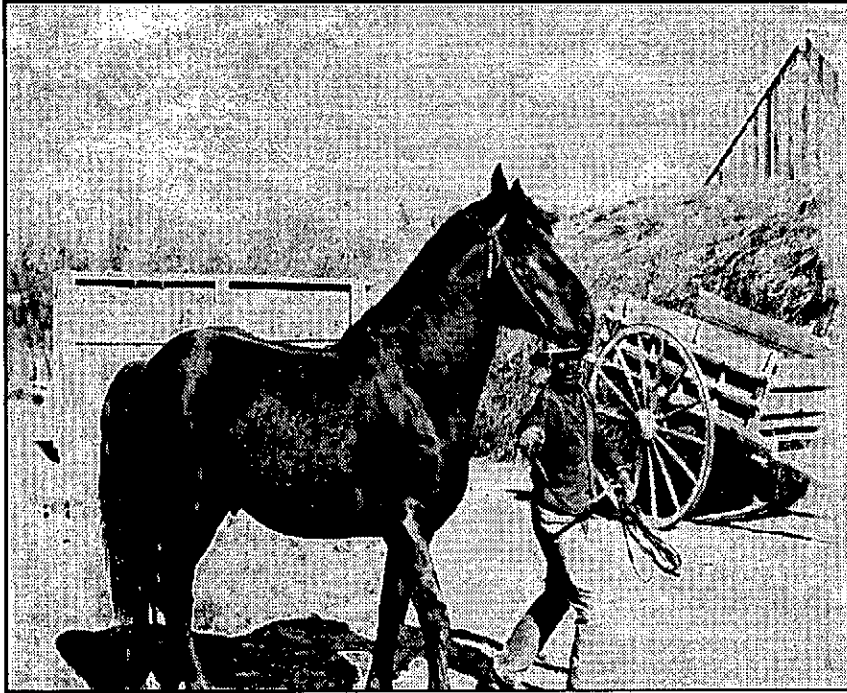


Figure 9.4 John Butler, born into slavery before the Civil War, worked for Jim Cook as a ranch stock herder for several years in the late 1890s and early 1900s. A retired sergeant, Butler was one of several African Americans Cook hired from Fort Robinson as ranch hands at Agate Springs. Courtesy of National Park Service (AGFO 6252.3).

The Cooks often employed a husband-and-wife team to work outside around the ranch and also in the ranch house for Kate. Not long after the new ranch house was completed, the Cooks hired the former wife of Jim's guide friend from the 1879s, Baptiste Garnier. Lalee worked for Kate for several months. She eventually remarried a man named Pete, whom Jim hired to work for him outside. A woman known as "Gertie" worked for Kate inside the house for a considerable length of time in the early 1900s, while her husband Charlie worked outside on the ranch.¹¹ In

¹⁰ Tyler Skavdahl, "The River: Days of the White Man," in *Along the River Road*, edited by Moni Hourt (Marsland, NE: Pink School House Press, 1995); Alice Kinnett, *Sioux County: Memoirs of Its Pioneers*, edited by Ruth Van Ackeren, 28; Robert M. Howard, "Hello There," *The Nebraska Cattleman*, July 1967, 18.

¹¹ Cook, *Tales of the 04 Ranch*, 46-47, 54; Kate Cook, letter to Harold Cook, May 30, 1907, Box 13 and Mary Graham reminiscences, around 1933 or 1934, transcribed by Eleanor C. Naffziger in 1970, Box 92, both in Cook Papers, AFBNM.

April 1910, no one resided at the Agate Springs Ranch except Cook and Graham family members.¹² (There may have been no employees at that moment or hired hands may have lived off the ranch.)

In the early 1900s, Cook periodically hired Indian friends as well as many African Americans who were on furlough from the Ninth Regiment of the U.S. Cavalry at Fort Robinson or who were retired. Established in 1874 to protect the Red Cloud Agency (located on the White River from 1873 to 1877), Fort Robinson became home to the all-black Ninth Regiment in the 1880s. Before that time, the Ninth Regiment, created after the Civil War in 1866, had been based at several locations throughout the south and southwest, where they received their famous nickname, "buffalo soldiers." Three troops of the Ninth arrived at Fort Robinson in August 1885. Additional Ninth troops soon moved to Fort Robinson and, in 1887, the fort became the regimental headquarters of the Ninth. By the Spanish-American War in 1898, the Ninth Cavalry were Fort Robinson's primary occupants. Many of the Ninth's noncommissioned officers and enlisted men boasted long years of service; by this time, the Ninth was considered a veteran cavalry unit.¹³ Some of its men, like John Butler, retired from the Ninth but stayed in the area. Jim Cook's upbringing by the Titus family, who participated in the Underground Railroad during the Civil War, plus the close working relationship he developed with the Eighth Regiment of the U.S. Cavalry during the Apache campaign in New Mexico in 1885, probably encouraged him to consider hiring African Americans associated with the cavalry.¹⁴

John Butler, a retired sergeant from Fort Robinson, worked at Agate Springs Ranch much longer than most ranch hands. Cook may have first hired him in the late 1890s. Born into slavery, Butler claimed that he did not know his real age. The census taker in 1900 apparently guessed that Butler was then about fifty-three when he boarded and worked as a stock herder for Cook (although Harold thought Butler might have been in his seventies in the early 1900s). Butler had many responsibilities around the ranch, including driving the cattle to the railroad depot in Andrews, fifteen miles north of Agate. Harold, once he became older, sometimes made these cattle drives with him. Butler was very good with horses, Harold later recalled. "He could go into the herd, after it was rounded up and in the corral, and catch an animal by walking up to it, whereas most cowpunchers would have to rope the horse to get near it. . . . We all liked him very much, and he was my devoted friend," Harold fondly remembered.¹⁵

Butler continued to work at Agate Springs Ranch at least through 1908, possibly until around 1910. As Butler aged and became less physically and mentally

¹² Kate Cook, letter to Harold Cook, May 17, 1907, Box 13, Cook Papers, AFBNM; "Thirteenth Census of the United States: 1910—Population," Running Water Precinct, Sioux County, Nebraska, April 21, 1910; Cockrell, "Our Ranch is Different," 9.

¹³ Thomas R. Buecker, *Fort Robinson and the American West, 1874-1899* (Norman: University of Oklahoma Press, 1999), 169-95.

¹⁴ Cook, *Tales of the O4 Ranch*, 101.

¹⁵ *Ibid.*, 93-94.

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competent, Jim Cook finally decided to let him go. He paid Butler a sizeable sum in cash and sent him to Crawford (forty-five miles away) to do odd jobs and live in comfort. Upon arriving in Crawford, Butler immediately paid a visit to the local saloon, where he probably boasted about his severance money from Jim Cook. Local hooligans followed him out of the saloon. Not long afterward, John Butler's body was found robbed and beaten, along the railroad tracks some distance from Crawford. Greatly angered, Cook tried to find out what had happened to his former long-time employee and friend, but no one in Crawford would talk.¹⁶

Social Life at Agate Springs Ranch

As the ranch became fully developed and its operation settled into seasonal cycles, the social and cultural life of the ranch also matured. Few records (letters, diaries, photographs, census, etc.) remain from the first fifteen years of the Cooks' residence at the ranch, making it difficult to reconstruct their social life before 1900. Undoubtedly, long hours were spent developing the ranch, probably leaving little time to socialize with more than family members and close friends. The nucleus of the Cook family at the ranch house was quite small through much of the 1890s, consisting of Jim, Kate, and Harold. Ranch hands occupied the bunkhouse during the busy spring and summer seasons.

The 1890s witnessed the gradual expansion of the nuclear family occupying the ranch house, after the completion of the new two-story house in 1892. Although Elisha and Mary Graham may have spent much of the winter of 1887—1888 on the Agate Springs Ranch, it is likely that they left within the next year and prepared to go in separate directions (leading to an eventual divorce). Mary Graham may have rejoined the Cook family between 1892 and 1894, after the Cooks' two-story house was substantially completed in 1892 and before Elisha Graham married Mittie Hayden in 1893. In 1894 Mary assumed her responsibilities as postmaster of Royville, then Agate post offices. Mary Graham probably lived in the ranch house during much of the 1890s. In 1898, the family expanded with the arrival of John Graham Cook.

The second John Cook in the family—John Franklin Cook, Jim's brother—periodically lived at and worked for Jim at the ranch during the 1890s, when not pursuing mining and other exploits elsewhere. The 1900 census, conducted in June, shows that he worked for Jim as a stock herder and boarded at the ranch with the five other ranch employees. His excursions away from the ranch ended when he succeeded Mary as Agate postmaster in 1902. John may have lived at the ranch bunkhouse when employed as a stock herder, at a small house north of the ranch

¹⁶ Cook, *Tales of the 04 Ranch*, 99-100; "Schedule No. 1—Population, Twelfth Census of the United States," Runningwater Precinct, Sioux County, Nebraska, June 1900; Kate Cook, letter to Clara Heath, February 11, 1908, Box 13, Cook Papers, AFBNM.

house and just south of the Niobrara (depicted in early photos of the ranch house taken from the south), or both depending on the season and his employment.¹⁷

Members of the Cooks' and Grahams' extended family probably began visiting Agate Springs Ranch soon after the Cook's large two-story wood-frame home was completed in 1892. (Before that time, accommodations at the three-room claim log cabin and parlor would have been difficult.) The Cooks as well as Mary Graham extended generous invitations to all family members to visit Agate Springs Ranch and even to stay for extended periods.

During the 1890s, Jim Cook invited his retired seafaring father, Henry Cook, to come from Michigan and visit the Agate Springs Ranch. He also let his father know that he was welcome to live permanently. Henry Cook spent several months in the late 1890s at the ranch, where he started a garden with rhubarb, asparagus, the first potatoes in the area, and other plants, a few of which went to seed and came up perennially for years. After the wind and sharp sand cut into some of Henry's young plants, Jim Cook built a low fence around his father's garden. The semiarid climate of western Nebraska, however, was not to Henry's liking after spending his childhood in England and so much of his adult life on open water of the Great Lakes. The Niobrara landscape seemed far too dry, windy, dusty, and bleak. Henry Cook decided to remain in Sturgis, Michigan, where he died in a rooming house.¹⁸ Harold Cook reminisced fifty years later: "For years after [he left], we cut asparagus that grew as a volunteer crop, and we still cut all we can eat in the spring."¹⁹

Jim Cook also invited his adoptive family in Kalamazoo, Michigan, the E. P. Titus family, to come to the Agate Springs Ranch and spend time visiting under the shade of the maturing cottonwood grove. (It is unclear if Jim Cook and the Titus family corresponded and saw each other after Cook left the Titus home as a young teenager and went to work as a cowboy. If so, Jim Cook may have contacted them after he settled into the new Agate Springs Ranch house.) Certainly by the turn of the nineteenth century the Titus and Cook households were writing to each other and also visiting. They came

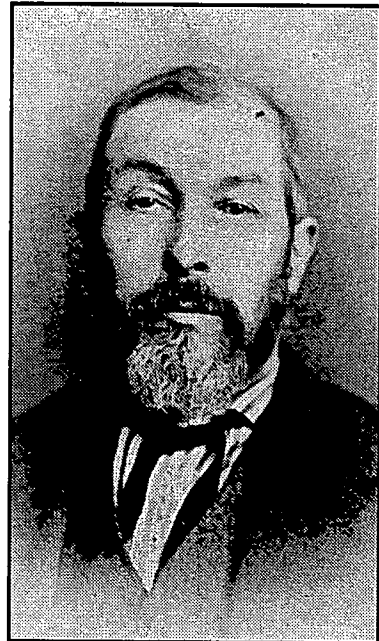


Figure 9.5 Henry ("Harry") Cook, Jim and John Cooks' English-born father and a sea captain on the Great Lakes for many years, visited Agate Springs Ranch for an extended period in the 1890s. Courtesy of National Park Service (AGFO 5822).

¹⁷ "Schedule No. 1—Population, Twelfth Census of the United States," Runningwater Precinct, Sioux County, Nebraska, June 1900.

¹⁸ Cook, *Tales of the 04 Ranch*, 17-18; Meade, "Cook Family," 364.

¹⁹ Cook, *Tales of the 04 Ranch*, 17.

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to Agate Springs Ranch at least once around 1910 and stayed for a week or two. The Cook family as well as Mary Graham also visited the Tituses in Kalamazoo. Letters between the two continued until 1919, when the Tituses were approaching age ninety.²⁰

Members of Mary Graham's family also came to the ranch. John Hutchison, Mary's brother and Kate's uncle, occasionally came from Michigan for extended visits.²¹ Mary's other daughter, Clara Heath, and her two sons, Bob and Russell, routinely came to Agate Springs Ranch each summer in the 1890s and early 1900s. Clara, six years older than Kate, had married Robert ("Rob") N. Heath in 1885 in Cheyenne. Her first son, John Robert ("Bob"), was born in Mary and Elisha Graham's home in Cheyenne within hours of Harold's birth, also at the Graham house, in late July 1887. Russell G. arrived in 1890. After the Heaths left Cheyenne, Rob Heath took a job as chief clerk at the U.S. army arsenal in Pittsburgh, Pennsylvania. From Pennsylvania, the Heaths traveled to northwestern Nebraska by train, arriving at Harrison where Jim would pick them up. Harold and the two Heath boys rode ponies, shot at animals with slingshots, and played together all around the ranch. The Heaths later spent time in Ontario Province, Canada. They eventually moved to southern California. Visits by the Heath family undoubtedly lessened the isolation of Agate for Kate before 1909, as well as for Harold and, eventually, John after his birth in 1898.²²

Sarah C. Day Bassett, a zealous home missionary, was a regular and colorful visitor at Agate Springs Ranch. Born on a farm in Sturgis, Michigan in 1839, she was the daughter of a minister (later shot by Indians while preaching to gold miners in California). Sarah Day and her sister, M. E. Day (Trowbridge) both graduated from the Baptist College in Kalamazoo, Michigan. Sarah Day, the sister-in-law of the Baptist minister in Three Rivers, Michigan, met Elisha and Mary Graham in the 1860s when the Grahams lived in Three Rivers. In 1867, Sarah Day married Henry Bassett, an early salesman of the first sewing machines in Nebraska. Later, Sarah Bassett's husband became a division superintendent for the western freighting firm of Majors, Russell, and Waddell, operating out of Nebraska City, then St. Louis. After Bassett contracted tuberculosis in the 1870s and doctors advised him to move to a drier climate, the Bassetts, possibly encouraged by the Grahams, moved to Cheyenne, Wyoming, for his health and to invest in cattle. After Henry Bassett's health continued to deteriorate and he died in Cheyenne in 1886, Mary Graham invited widow Sarah Bassett to make her home at Agate Springs Ranch. The ranch became the base for her work as a Baptist home missionary, charged with taking care of the needs of those in Sioux County. Her own existence was notably Spartan; she

²⁰ Mrs. E. P. Titus, letters to James Cook, December 17, 1900, July 22, 1912, March 23, 1915, December 16, 1919, and to Mary Graham, March 24, 1915, Box 53; also James Cook, random recollections, Box 92; all in Cook Papers, AFBNM.

²¹ Kate Cook, "Daily Record for 1905[-1908]," February 10, 1908, Box 89, Cook Papers, AFBNM.

²² Cook, *Story of Agate Springs Ranch*, 19; Karen P. Zimmerman, "The Cook Papers Collection: A Report Prepared for U.S. Department of the Interior, National Park Service," February 1985, 18, Cook Papers, AFBNM.

devoted all of her attention and money to caring for others. She regularly brought food and clothing into the homes of the destitute dry-land farmers who struggled to survive the cold winters with little food, nursed the sick, and scrubbed, cooked, and tended children throughout Sioux County. She personally financed, by loaning large amounts of her money, the education of several young men and women in Sioux County.²³

Bassett remained a life-long friend of Mary Graham and the Cooks. They interacted like family members, supporting and helping each other in many endeavors. When Harold attended Columbia University in the fall of 1908 and early 1909, Mrs. Trowbridge, Sarah's sister in New York City, provided rooming for him. After first riding a burro around the county to conduct her missionary work, Jim Cook loaned Sarah Bassett a horse and two-wheel cart. Eventually, she filed a homestead claim for land near the Agate Springs Ranch (which Jim Cook later purchased). Her homestead tract with a small primitive cabin overlooked the Niobrara Valley near Agate. Even with her various housing accommodations available, Sarah Bassett often stayed with the Cooks at the ranch through the 1910s. As she aged and became gradually more dependent, she became nearly an extended member of the Cook family. In the final years of her life, she lived from spring to fall in Jim Cook's small rudimentary house in Andrews (used primarily by his stock-herding men who drove cattle to the depot for shipment to Omaha). The railroad in Andrews provided a convenient means of transportation for her and her missionary food and clothing. One stormy night in late July 1921, a sudden cloudburst and instant flash flood caused the White River to instantly overflow its banks, picking up and demolishing the small Andrews house with Sarah Day Bassett in it.²⁴

Other Visitors at the Agate Springs Ranch

Numerous friends of both the Cook and Graham families began coming to Agate Springs Ranch beginning in the 1890s, and stayed for a night, a week, and sometimes much longer. Harold Cook later remarked that both his mother Kate and his grandmother Mary Graham loved to entertain. Dr. R. E. Field, one of the ministers who officiated at the Cooks' wedding in Cheyenne came to see the couple in 1889.²⁵ In the early 1890s, Erwin Barbour was the first of numerous paleontologists to come and stay at the ranch. Many members of the entire Barbour family became enmeshed with the Cooks' and were regular visitors at the ranch, when Harold Cook and Eleanor Barbour began courting and, later, married in 1910. The Walling brothers, social reformer William English and banker Willoughby,

²³ Cook, *Tales of the 04 Ranch*, 81-87.

²⁴ Dorothy C. Meade, "Bassett, Sarah C. Day," *Sioux County History* (Harrison, NE: Harrison Community Club, 1986), 312; Dorothy C. Meade, *The Story of Agate Springs Ranch* (Harrison, NE: Dorothy Meade, 1990), 7; Graham reminiscences, no date, also January 3, 1936, and June 6, 1933, both transcribed by Eleanor Cook Naffziger, Box 92, Cook Papers, AFBNM.

²⁵ R. Jay Roberts, "A Preliminary Sketch of the History of Agate Springs Ranch," August 1965, 25, Midwest Regional Office Library, National Park Service, Omaha, Nebraska.

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visited the Cooks at Agate Springs Ranch around the turn of the century. Willoughby, who lived most of his life in Chicago, later wrote to Jim of the



Figure 9.6 Harold and Eleanor's growing family along with visiting paleontologists made Agate Springs Ranch a lively social oasis in the late 1910s. Pictured here are, from left to right: Jim Cook, Albert ("Bill") Thomson (American Museum of Natural History), Agnes Gildea, Margaret Crozier (assisting the Cooks with childcare), Winifred Cook, Margaret Cook, Eleanor Cook, Dorothy Cook, Billy Martin (Jim Cook's former hunting partner and eventually homesteader near Agate), Lillian Thomson (Bill Thomson's wife), and an unidentified man. Courtesy of National Park Service (AGFO 3838.23).

memorable visits he had at the remotely peaceful ranch setting. Chicago resident James Ward Thorne, a nephew of Montgomery Ward who founded the department store catalogue company, also visited the Cook family at Agate in the early 1900s.²⁶

In the 1890s, the Cooks developed not only business dealings with some of the well-educated elite officers and their wives at Fort Robinson, fifty miles north of the ranch, but also maintained and cultivated friendships with some of the officers there. In addition to occasionally selling horses, mules, and hay to Fort Robinson men, the Cooks entertained several officers in the Ninth and Tenth cavalries at the fort, who knew some of the same cavalry men that Cook knew from his days serving as a guide during the Apache campaign in New Mexico. A few of the Cooks friends at Fort Robinson included: Colonel Hamilton, Lieutenant Williams, Major Gerard, Major C. S. Ilsley, Captain L. H. Rucker, Captain Taylor, and Lieutenant George E. Price; they were regular guests at Agate Springs Ranch. Price's cartography expertise

²⁶ Cook, "Daily Record," March 20, 1908, Box 89, Cook Papers, AFBNM; Cook, *Tales of the O4 Ranch*, 35, 90-91; Cook, "Daily Record," April 2, 1908, Box 89, Cook Papers, AFBNM.

was put to use drawing a map of the irrigation system at the Agate Springs Ranch in the 1890s. Periodically, the Ninth Cavalry would march a troop or two to Agate, by way of the Cooks' small house in Andrews, conduct practice drills and maneuvers on the hills above the ranch, then march back to Fort Robinson. Dr. and Mrs. LeGarde, who lived at the fort and who delivered John Cook at his 1898 birth at the fort, were also close Cook family friends who often visited the Cooks at Agate.²⁷

Some of Jim Cook's friends from his days cattle driving, ranching, and big game hunting came to Agate. One of Cook's big-game hunting partners in Wyoming in the late 1870s and early 1880s, Seldin D. ("Billy") Martin, had been out of touch with Jim Cook for over thirty years, when Jim was put in touch with him in southern California. In 1920, Jim Cook invited Martin, a small, wiry man then in his late sixties, to come visit the ranch. He decided to stay and, undoubtedly at Jim's encouragement, filed a homestead claim on roughly 200 acres near Agate Springs Ranch (in Sections 5 and 6, Township 28 North, Range 55 West that eventually became part of Agate Springs Ranch). In 1923, Jim Cook reported that Martin had "built a home, established residence, and has faithfully complied with the homestead laws." Unfortunately, Martin became ill and was forced to enter the hospital at Hot Springs, South Dakota. Fearing that he might die soon, Martin asked Jim to contact the General Land Office in Alliance, Nebraska, to learn how he could receive patented ownership of his claim.²⁸

Many paleontologists and a few politicians also frequented the Agate Springs Ranch in the early 1900s. Columbia University Professor Henry Fairfield Osborn and W. Judge M. P. Kinkaid, who later served as a U.S. congressman from Nebraska, visited the Cooks at their ranch on numerous occasions. Jim Cook and Kinkaid corresponded on a variety of matters, including existing land laws and the Kinkaid Act, which advocated a much larger acreage of 640 acres for prospective homesteaders/ranchers. The proliferation of prominent visitors to the Agate Springs Ranch contributed to neighbors' perception of the Cooks as aristocracy, according to historian Ron Cockrell.³⁰

²⁷ Cook; *Tales of the 04 Ranch*, 61, 67; Cockrell, "Our Ranch is Different," 8; Cook, "Story of Agate Springs Ranch," 16.

²⁸ James Cook, letter to U.S. Land Office, Alliance, Nebraska, July 25, 1923, Box 53, Cook Papers, AFBNM; Zimmerman, "Cook Papers Collection," 21; Cook, "Story of Agate Springs Ranch," 8.

²⁹ Cook, *Tales of the 04 Ranch*, 199-200, 209.

³⁰ Cockrell, "Our Ranch is Different," 10; Zimmerman, "Cook Papers Collection," Correspondence: Alphabetical Inventory, "Kinkaid, M. P."

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During the spring and summer of 1908, Agate Springs Ranch welcomed an especially large number of visitors. Several family members, such as John Hutchison, Clara, Rob, and Bob Heath, arrived and stayed for several days at a time. Sarah Bassett came and went numerous times between March and October. Red Cloud and his entourage of Lakota band members arrived in nineteen wagons in May and camped around the ranch grounds for several days. A large number of paleontologists (Utterbank, Peterson, Holland, Thomson, Stein, Matthew, Moody, Barbour, Loomis, Lull, Leonard, and Sternberg) came during the summer, and several stayed or had occasional meals with the Cooks. Additionally, the Cooks



Figure 9.7 The gracious living room in the Agate Springs Ranch house, which in the mid-1910s reveal the Cooks' interests in reading, music, and Indians, served as a social gathering place for the family and their many guests. Courtesy of Barbour Collection, Archives and Special Collections, University of Nebraska—Lincoln Libraries (BE 2791).

entertained James Ward Thorne of Chicago and First National Bank President John F. Williams from Douglas, Wyoming; investor Henry T. Clarke; and Margaret, Eleanor, and Erwin Barbour in July and August.³¹

The Cooks and their extended family, although cordial, did not seem especially close to their neighbors living along the Niobrara River. Mary Graham, who routinely held religious services on Sundays during her regular residence at Agate up until 1909, must have attracted a few nearby neighbors to the ranch, along with some of the hired men.³² Reminiscences and letters written by various members of the Cook family occasionally mention neighbors dropping by. Often, however, letters written between family members mention problems that arise with

³¹ Cook, "Daily Record," March to October 1908, Box 89, Cook Papers, AFBNM.

³² Cook, *Tales of the 04 Ranch*, 10.

the neighbors, such as the neighbors turning their cattle and horses loose to graze on adjoining Cook hay fields. “[T]he ones I have tried to treat the best have always treated me the worst,” Jim once confided to Harold. Mary Graham expressed an even stronger view about the neighbors to Harold. “If you only had neighbors with principle it would not be such a vexed question. They are to be feared—vipers in the grass. I do not understand how your father has held his temper all these years,” she fumed.³³ Apparently, the neighbors, in general, had little fondness for the Cooks, whose habits of grooming themselves and their horses before going to town and of dressing for dinner stood out in stark contrast alongside their neighbors’ practices. Routinely, the Cooks hired neighbors to work on the ranch, which probably added to the friction and prevalent attitude that the Cooks were socially above their neighbors. The Cooks seemed much more engaged in the lives and activities of people far beyond the geographic limits of Agate Springs Ranch.³⁴

Agate and the Outside World

Mail became one of many sources of exchange that Agate Springs Ranch developed with the world away from the upper Niobrara. Family members and friends spread far and wide across the country exchanged letters with members of the Agate Springs Ranch family. Since the Cook family traveled regularly away from Agate, and many of their friends were widely traveled, letters arriving at Agate might come from China, England, Russia, and Canada, as well as New York, Michigan, and California, where Cook and Graham family members lived. Letters to and from Cook family members were written and received nearly every day.

Before 1890, ranchers along the upper Niobrara River traveled to Fort Robinson to collect the mail. Soon afterward, it arrived at Harrison on the Fremont, Elkhorn, and Missouri Valley Railroad. Harold later recalled the family ritual of collecting the mail in Harrison, about thirty miles to the north. “Father would ride or drive up behind a good trotting horse at least three times a week; or send somebody for the mail. It was considered important to keep in contact with the world.”³⁵

The first post office near Agate opened in 1890 about eight miles southeast of Agate Springs Ranch on the homestead property of John Green and his wife. Mail was first brought to Marsland on the railroad, which extended its line from Alliance to Cambria, Wyoming, in 1889. Until 1894, Green’s wife ran the post office, named “Royville” in honor of the Greens’ son. In the early 1890s, another post office, named LaBelle, was established about five miles east of Agate Springs Ranch inside the new brick home of Octave and Caroline Harris.³⁶

³³ Cockrell, “*Our Ranch is Different*,” 6-7.

³⁴ *Ibid.*, 7-8.

³⁵ Cook, *Tales of the 04 Ranch*, 18.

³⁶ Roberts, “A Preliminary Sketch,” 22; Roberts, “History of Agate Springs,” 282-83; Tyler Skavdahl, “The River: Days of the White Man,” *Along the River Road*, edited by Moni Hourt (Marsland: Pink School House Press, 1995).

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When the Greens decided to move to Lake Chelan, Washington, Mary Graham, then living with Jim and Kate Cook on the ranch, began running the Royville post office in 1894, after being appointed assistant postmaster.³⁷ Twice a week, regardless of the weather, Kate Cook drove the team and cart with Mary Graham and Harold in it to the Royville post office so that Mary could fulfill her postal responsibilities. For a brief period when Mary Graham was postmaster at Royville the mail was taken to Ashbrook at the head of Whistle Creek. In a few weeks, the post office was moved to Agate and the new post office eventually became “Agate Springs,” and Mary Graham became post master. She also kept



Figure 9.8 Mary Eliza Graham, Kate Graham Cook’s mother, lived at Agate Springs Ranch through much of the 1890s and early 1900s until 1908. She also served as Agate postmaster for many years. Courtesy of National Park Service (AGFO 4123.2).

precipitation records for the U.S. Weather Bureau. The LaBelle Post Office subsequently moved to Agate Springs as well. At first a small room in the house was devoted to receiving, sorting, and distributing the mail. Mary Graham served as post master from 1894 to 1902.³⁸

From 1902 to 1906, Jack Cook served as postmaster. Around 1904, the post office was moved out of the ranch house to a diminutive wood-frame gabled-roof building that stood on the main ranch road about fifty feet east of the ranch house (known as “Bath Biffy” in 2007³⁹). This building may have been moved from low-lying land north of the ranch house and near the south shore of the Niobrara, where it might have served as the former house of the Grahams’ in the late 1880s and, later, of Jack Cook’s, when he visited or worked at the

³⁷ “Post Office Department,” appointing Mary E. Graham as postmaster at Royville, June 29, 1894, Box 61, Cook Papers, AFBNM; Harrison Community Club, *Sioux County History: First 100 Years, 1886—1986* (Harrison, NE: Harrison Community Club, 1986), 106.

³⁸ Mary E. Graham Reminiscences, December 9, 1933, Box 92, Cook Papers, AFBNM; Dorothy C. Meade, “History of the Agate Post Office” (Agate Springs Ranch, NE: Meade, 1988), 6; R. J. Roberts, “The History of Agate Springs Ranch,” *Nebraska History* 47: 3 (September 1966), 282-8; Cook, *Tales of the O4 Ranch*, 21.

³⁹ Bath Biffy acquired its name when the building was converted to a bath house in the 1990s. Lynn Bain, communication with author, August 23, 2007.

ranch.⁴⁰ During Jack's initial four years as postmaster, he was probably perfecting his homestead claim on land about three miles east of the ranch and sometimes staying

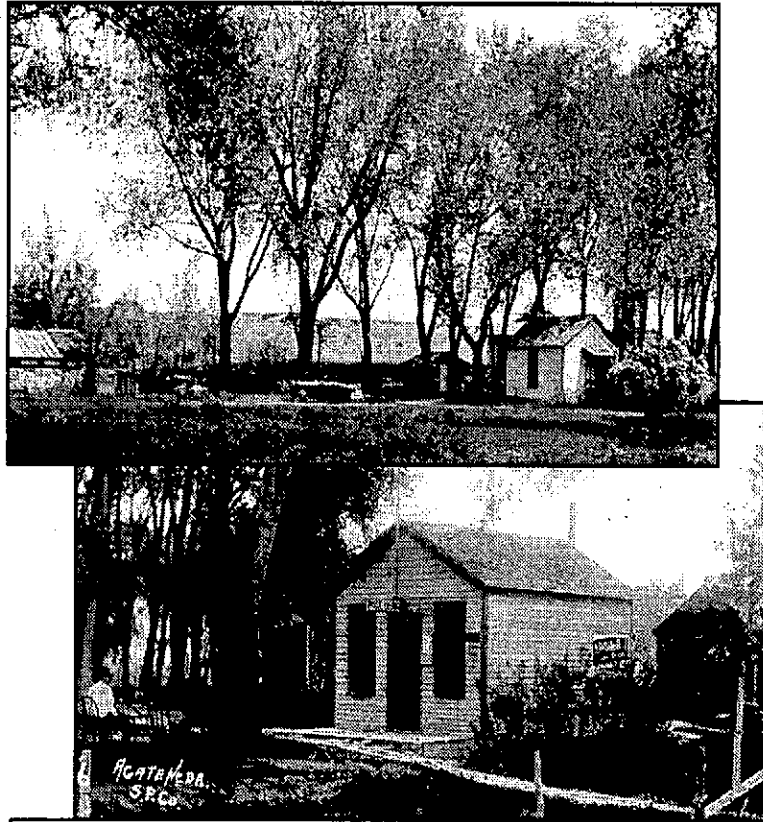


Figure 9.9 (a & b) The Agate Post Office moved three times between 1894, when it was established, and 1914. After occupying a room in the ranch house for the first ten years, it was moved to a small building east of the house (pictured above in the late 1910s), before finally being relocated to a slightly larger building, constructed in 1914 (and pictured below), sited much further east of the ranch house and near the present-day state highway between Mitchell and Harrison. Courtesy of National Park Service (AGFO 6092.17 and AGFO 6156.6).

at the ranch bunkhouse.

He left the position for two years and Mary Graham returned to the postmaster position at Agate in 1906. In 1906, mail delivery from the railroad depot at Andrews

⁴⁰ A few historic photos of the ranch house taken from Windmill Hill looking north, particularly one taken with the Spring House in the foreground, show a small house (resembling the second post office building) standing at the edge of trees on the south side of the Niobrara River. Historic photos, Agate Fossil Beds National Monument.

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changed from three days a week (Monday, Wednesday, and Friday) to daily.⁴¹ When she took occasional trips to visit family and friends, the Post Office Department would send a short-term replacement. She left in early 1909 after her daughter Kate was institutionalized and moved to California to be close to her eldest daughter and her family. Jack Cook became postmaster once again in early 1909 and served for the next thirty-one years until February 1940. During that period, the Agate Post Office served no more than thirty families at one time.⁴²

Not long after he returned to the position, a new slightly larger wood-framed gabled-roof post office building was constructed in 1914, through the grove of trees to the east of the ranch house and near the road between Mitchell and Harrison. From the post office, Jack not only dispensed mail, but also tobacco, gum, candy, crackers, and a few canned goods. "Making change for ten cents' worth of hard candy, he had the tense air of a metropolitan ticket vendor in the rush hour," his grand niece Dorothy Cook Meade, later reminisced.⁴³ A hand-crank telephone, connecting the post office with the ranch house and the bunkhouse, was eventually installed. By the late 1920s, he operated a gasoline pump near the post office building for the benefit of auto tourists traveling to the ranch and beyond.

For most of his years as postmaster, Jack Cook lived alone in a small, one-room house (no longer standing in 2007) near the post office building, sparsely furnished with a cot, chair, trunk, cupboard, and stove. After patenting his land claim three miles to the east of Agate Springs, he moved his metal-covered claim cabin to the north side of the post office building, where he used it for storage. A small woodshed stood nearby. A hand pump provided water. His small vegetable plot in front of the post office completed Jack's encampment there.⁴⁴

Postmaster Jack Cook carried out his duties as postmaster with colorful flair. Jack's grand niece Dorothy Cook Meade, who spent her early years on the ranch, later recalled his postal foibles with fond humor.

Jack found the business of his 4th class post office of compelling importance. There was no conceivable regulation with which he was not fully in compliance. He sorted mail with concentrated speed and ferocity that forbade interruption. Small talk at such a time especially nettled him; his response was to slam the service windows shut.⁴⁵

Jack's persona and character added great color to the Agate Springs Ranch scene. Small, wiry, sharp-tongued, and brusque, with his chin thrust outward, he was

⁴¹ Harold Cook, letter to Erwin Barbour, June 21, 1906, Barbour Papers, University of Nebraska Archives.

⁴² Meade, "History of the Agate Post Office," 5-6; Meade, *Story of Agate Springs Ranch*, 14; "Postmaster Jack Cook Is Quitting Office at Agate," *Scottsbluff Daily Star-Herald*, February 1, 1940, Box 118, Cook Papers, AFBNM; Kate Cook, "Daily Record for 1905" [-1908], June 13, 1906, Box 89, Cook Papers, AFBNM.

⁴³ Meade, "History of the Agate Post Office," 3.

⁴⁴ *Ibid.*, 3.

⁴⁵ *Ibid.*, 2.

ready to spar with anyone who irritated him. Taciturn and intensely private, Jack “regarded human speech as strictly utilitarian.” He rarely engaged in tale-telling and resented questions from reporters, friends, and even family. “Deadbeats” became his favorite expletive as he aged. Although prickly with family, he never failed to come to brother Jim’s aid and defense when in trouble, physical or financial. Jack grew stooped as he aged, due to numerous untreated appendicitis attacks, he claimed. Jack Cook retired from the position in 1940 at age eighty-four. John Franklin Cook died a year later on October 21, 1941, at age eighty-five.⁴⁶

Postal carriers delivered mail in saddlebags to Agate from Marsland (nonexistent in 2007), about thirty miles east of Agate, which arrived on the Burlington Railroad. From Marsland, mail carriers brought the mail by horseback or in a wagon over the rough unimproved Marsland Road, which followed the rocky south side of the Niobrara Valley. (This road path/cut is still visible in 2007 from the county road along the north side of the Niobrara River.) In winter the carrier used a sled to carry the mail to Agate. Some of the earliest mail carriers, who Jack Cook came to know well, were Blair Siebert and a Mr. Gowey. Later carriers brought the mail from Andrews (nonexistent in 2007), a rail depot fifteen miles north of Agate. Andrews for many years served as the freight shipping destination for the Agate Springs Ranch. Eventually, after the arrival of automobiles in the late 1910s and 1920s, carriers drove the mail to Agate from the Sioux County seat of Harrison, twenty-two miles to the north. Clarence Pfeiffer brought the mail from Harrison for many years, followed by Oakley Edgell.⁴⁷

Transportation routes and various modes of travel also linked Agate Springs Ranch with the larger world. Just two years before the Cooks’ arrival at the 04 Ranch, the Fremont, Elkhorn, and Missouri Valley Railroad had arrived at Fort Robinson (and the birthplace of nearby Crawford), fifty miles to the northeast. In 1886, as the Cooks prepared to move to the ranch, the FEM Railroad pushed farther west to what became the diminutive depot village of Andrews, fifteen miles north of Agate. Andrews became the shipping address for Agate Springs Ranch freight of all sizes, weight, and dimensions, from cattle to household goods. Jim Cook soon purchased land and built stock corrals along the railroad tracks there, as well as a small two-room house for boarding overnight when cattle were being driven to the railroad for shipment. Household goods and fabric for clothing (such as black fabric from the National Suit Company in New York) occasionally purchased by Kate Cook from eastern cities probably also were shipped to Andrews.⁴⁸ Paleontologists working at Agate in the early 1900s customarily shipped their boxed fossils from Andrews. Passengers boarded the train at Crawford, however, for Lincoln, Omaha, and points farther east. The Burlington Railroad announced its proposed construction of a rail line from Hastings (south-central Nebraska) to Billings, Montana, in 1908. This rail line, which would have come about two and one-half

⁴⁶ *Ibid.*, 4-5; Meade, *Story of Agate Springs Ranch*, 14; Harrison Community Club, *Sioux County History*, 106; “John Franklin Cook,” *Harrison Sun*, October 23, 1941, Box 118, Cook Papers, AFBNM.

⁴⁷ Meade, “History of the Agate Post Office,” 7-8.

⁴⁸ Kate Cook, letter to Clara Heath, November 17, 1907, Box 13, Cook Papers, AFBNM.

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miles south of Agate Springs Ranch and greatly facilitated the shipment of cattle and sheep from the area, never materialized. Shortly afterwards the Sioux City and Denver Railroad apparently adopted the plan to build a railroad following the same course. But it too was never built.⁴⁹

In addition to receiving mail and guests at Agate Springs Ranch, the Cook-Graham family members often traveled away from Agate and connected with the larger world. Jim Cook traveled to Andrews, Harrison, and Fort Robinson nearly once a week in the spring, summer, and fall, to deliver cattle for shipment to market, to retrieve freight or passengers from the train depot, or for business banking. He sometimes made train trips to Chicago and Michigan to visit friends and family. Although Jim traveled away from Agate far more than Kate, occasionally the two of them would make combined social and business trips to Fort Robinson, Lincoln, Omaha, and Douglas, Wyoming. In 1909, Jim spent several weeks touring the Southwest, including his old Texas cattle country, and Mexico. Cook began traveling to California after Christmas each year to spend the winter, beginning around 1911.⁵⁰

The Cook family also traveled considerable distances to insure that their two sons received a good education. After Kate taught her sons at home, Harold and John traveled away from the ranch to continue their high school education. Harold spent at least one school year in Pittsburgh attending school with his cousins Robert and Russell Heath, who worked as the chief clerk at the U.S. army arsenal there. John Graham Cook likewise received some of his education in Pittsburgh, as well as Lincoln and Inglewood, California.⁵¹

Agate Springs Ranch Darkened by Debt

Jim Cook had continued the development of Agate Springs Ranch through a very dry spell in 1893 and a national depression that had begun in 1893 and extended through much of that decade. This was accompanied by the arrival of a few moister years beginning in the late 1890s. By the early 1900s, High Plains ranching entered a decade-long boom period, encouraged by federal reclamation legislation (the Newlands Act) and the new Kinkaid homestead law in Nebraska that acknowledged the special acreage and water needs of those who took up ranching in semiarid conditions. At the same time, a dry-farming movement based on scientific methods of cultivation boosted efforts to ranch on short- and mixed-grass prairie conditions—at least for a while.

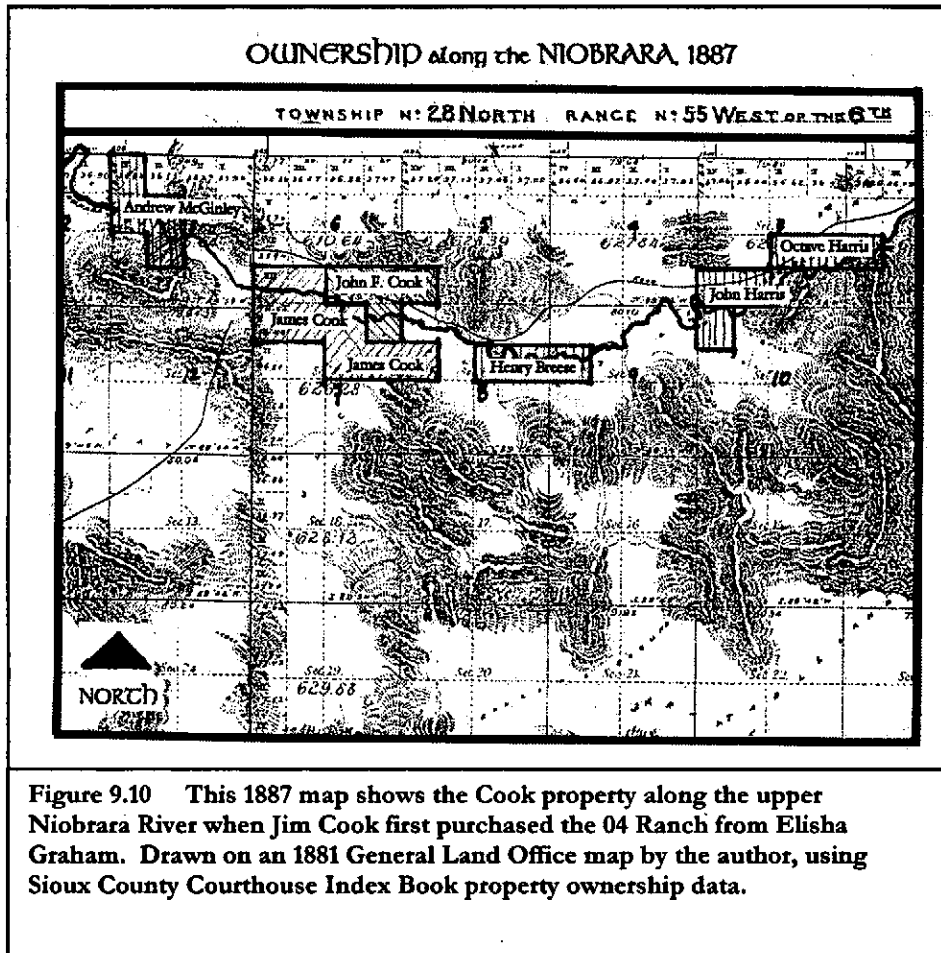
Beginning in the 1890s and continuing throughout this decade-long boom period, Jim Cook purchased additional land from several adjoining and nearby property owners to increase grazing and hay production on land within reach of the

⁴⁹ Kate Cook, letter to Clara Heath, February 11, 1908, Box 13, Cook Papers, AFBNM; B. F. Thomas, "Sioux County, Nebraska," March 27, 1899, Map Collection, Nebraska State Historical Society, Lincoln, Nebraska.

⁵⁰ Harold Cook, letter to Erwin Barbour, 3 January 1911; Harold Cook, letter to Erwin Barbour, January 15, 1912, Barbour Papers, University of Nebraska Archives.

⁵¹ Cook, *Tales of the 04 Ranch*, 76.

Niobrara River and the irrigation ditches. He bought parcels from Arthur M. Green, Henry Breese and his wife, Orson G. Loveland and his wife, Irving Wilson, Hugh W. MacLachlan, and Mary E. MacLachlan. Cook also purchased (or got permission to use) nearby land owned or in the process of being acquired by family members. John F. Cook, Jim's brother, and Mary E. Graham, Jim's mother-in-law, either purchased or filed homestead claims for sizeable parcels (as much as an entire

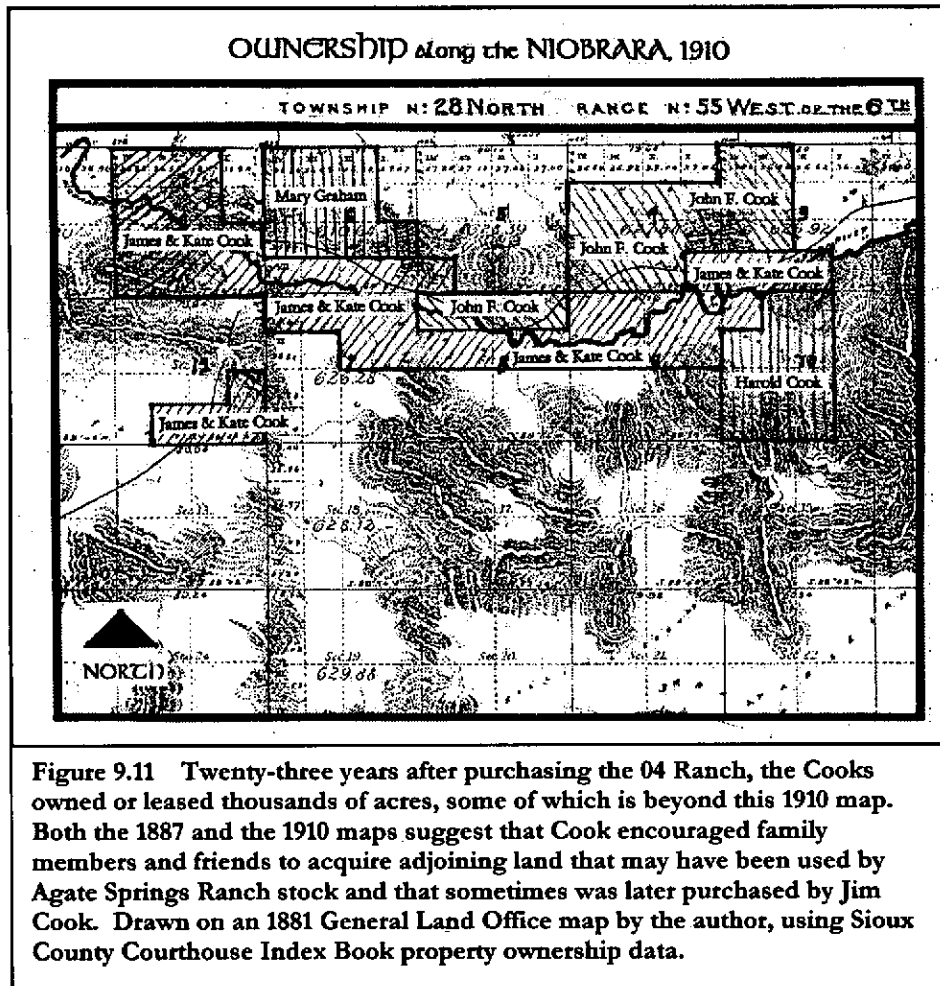


quarter section) near the Agate Springs Ranch; once they had met the ownership/patent requirements under the homestead law(s), they sometimes sold that land to Jim Cook.⁵² By 1910 Jim Cook and Kate, had acquired, or gained access to family and friends' land, amounting to thousands of acres.

⁵² Sections 5-8, Township 28 North, Range 55 West, and Sections 11-13, Township 28 North, Range 56 West, 6th Principal Meridian, "Numerical Index," Clerks Office, Sioux County Courthouse, Harrison, Nebraska.

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Agate Springs Ranch included land that “extends some ten miles along the Niobrara river,” exclaimed Erwin Barbour around this time. “Mr. Cook controls some 15,000 acres and has one thousand acres under [irrigation] ditch. . . . He now controls one of the largest and best equipped ranches in Nebraska.” According to Barbour, the Agate Springs Ranch was “spoken of as a model ranch.”⁵³ The Cooks, however, were at risk of losing a large portion of their entire ranch as long as their debt existed.



For the expansion of Agate Springs Ranch and the creation of a sublime oasis in the middle of the dry, dusty prairie, Jim Cook paid a high price—one that could not be easily repaid.

The uncertain vicissitudes of weather and market prices for beef stymied all of his efforts over many years. In order to add to the ranch holdings, Jim Cook had begun borrowing money in the late 1890s. The Cooks most important and costly purchase of land was the irrigated ranch of McGinley and Stover northwest of Agate.

⁵³ Barbour, “James Henry Cook,” 481.

In January 1898, Jim Cook borrowed \$2,500 (he mortgaged the parcels he owned) from a wealthy friend, Willoughby G. Walling of Chicago, apparently to pay for some of his recent land purchases. Less than a year later, Cook agreed to pay Andrew McGinley and William Stover and their wives, \$28,500 for 280 acres of mostly irrigated land traversed by the Niobrara River (all of the northwest quarter and part of the northeast and southwest quarters of Section 1, Township 28 North, Range 56 West). In order to accomplish this (and probably to pay off some additional debts), Cook turned in 1902 to William English Walling, Willoughby Walling's brother to borrow \$23,267 against his ranch land. Unable to pay this sum back while continuing to accumulate more debt, Jim Cook borrowed an additional sum from William English Walling in February 1906. This made his total debt to William English Walling \$30,000; he pledged nearly all of Agate Springs Ranch land as collateral.⁵⁴

It is unclear when and how Jim Cook met the two Walling brothers, who were considerably younger than Cook. Jim may have been the hunting guide in the early 1880s to their father, Willoughby Walling, a wealthy doctor in Louisville, Kentucky, and ambassador to Scotland in the 1880s. At this time, Jim Cook was co-investing in and managing the WR Ranch with other well-to-do English sportsmen. William English Walling, born in 1877, known as "English" to his family and friends, received his education at the University of Chicago, where he adopted socialist political beliefs. Later, he attended Harvard University Law School. He rejected his privileged family heritage and joined the Hull House settlement movement in the late 1890s before becoming a factory inspector in the early 1900s, and then moving to New York City where he lived in the tenement district. After becoming enmeshed in trade unions, he co-founded the National Women's Trade Union League (1903). He spent a few years in Russia and traveled widely through Europe in the years to follow. He met and married talented writer and Jewish immigrant Anna Strunsky. After they witnessed a race riot in 1908, he helped found the National Association for the Advancement of Colored People (NAACP) in 1908. He joined the Socialist Party in 1910, but later resigned when he disagreed with its anti-World War I stance. In the 1920s, he worked full-time for the American Federation of Labor and ran unsuccessfully for Congress in Connecticut; in 1935, he became executive of the Labor Chest. William English Walling died at age fifty-nine in 1936. Throughout his life, social causes and political philosophies remained of far greater interest to him than his economic matters.⁵⁵

These affairs he left to his brother, Willoughby Walling, a doctor in Chicago, who later went into banking and became the secretary of the Western Trust and Savings Bank in Chicago. As early as 1911, when Willoughby Walling complained to

⁵⁴ Section 1, Township 28 North, Range 56 West and Section 6, Township 28 North, Range 55 West, Sixth Principal Meridian, "Numerical Index," Clerk's Office, Sioux County Courthouse, Harrison, Nebraska; Harold Cook, letter to Willoughby G. Walling, February 25, 1925, Box, 54, Cook Papers, AFBNM.

⁵⁵ James R. Boylan, *Revolutionary Lives: Anna Strunsky and William English Walling* (Amherst: University of Massachusetts, 1999).

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Jim Cook that none of the Cooks' loans had been repaid except the \$2,500 note, Willoughby reported that his brother's "money affairs are not in as good condition as they would have been had he devoted himself more to business and less to public matters."⁵⁶ In 1920, after nine more years of no or delinquent payments by the Cooks and their request of another extension of their loan, Willoughby confessed to Henry T. Clarke, a business associate of the Cooks that: "English had made heavy inroads on his capital, having been generous both of his fortune as of his energy for causes in which he believes and which during the war period were proved to be of deepest value to our country."⁵⁷ By 1923, while acknowledging that the Agate Springs Ranch was an "unusual plant which will make money whenever money can be made in the cattle business," Willoughby denied Cook an additional loan, insisting that he was invested to the limit.⁵⁸ A year later, Willoughby insisted that the Cook debt be paid since English's total income came from an existing trust which had to be carefully managed so as to provide his family with a living.⁵⁹ In contrast to Willoughby's concerned communication with Cook, "English" wrote much less often to Jim Cook and, when he did, delighted in describing his travels, his social and political observations, and his adventures roughing it in the outdoors. Both Walling brothers often reminisced about the fine and memorable times they had spent with the Cook family at Agate Springs Ranch.

Despite the cordial relationship between Jim Cook and the Wallings, this enormous debt, with an accumulating interest of 6% that undoubtedly equaled millions in 2007 dollars, placed tremendous economic burden and psychological stress on the entire Cook family for a quarter century. Not until the mid-1920s were the Cooks able to pay off their entire debt to the Wallings by borrowing money from the Lincoln Joint Stock Land Bank. By this time, Harold Cook had assumed the responsibility of dealing with this financial burden. In 1925, Jim Cook was approaching seventy and undoubtedly becoming weary of the long years of stress.

Departures: End of an Era on the Ranch, 1909

Significant friends and family members left Agate Springs Ranch between 1908 and 1910, changing its social dynamics and character forever. Chief Red Cloud, Jim Cook's friend since the mid-1870s, came to Agate for the last time in 1908. Since 1888, two years before the Wounded Knee Massacre, the old chief had made this hundred-mile pilgrimage from Pine Ridge. As many as fifty wagons rolled into the ranch carrying Sioux and sometimes Cheyenne Indians. Red Cloud's family and friends usually arrived in the spring and stayed for a week or two. Jim Cook often killed a steer for them and gave them vegetables from the garden. While at the ranch, the Indians engaged in different activities: painting on cowhide, dancing,

⁵⁶ Willoughby G. Walling, letter to Jim Cook, February 14, 1911, Box 54, Cook Papers, AFBNM.

⁵⁷ Willoughby G. Walling, letter to Henry T. Clarke, Omaha, Nebraska, November 15, 1920, Box 54, Cook Papers, AFBNM.

⁵⁸ Willoughby Walling, letter to James Cook, November 6, 1923, Box 54, Cook Papers, AFBNM.

⁵⁹ Willoughby Walling, letter to James Cook, October 22, 1922, Box 54, Cook Papers, AFBNM.

telling stories, talking, and exchanging gifts with the Cooks. Cook had carefully preserved and displayed these gifts—tools, utensils, weapons, clothing, items with decorative beadwork, and various other mementoes—all around his office in the ranch house. Red Cloud and his family and friends camped at various locations around the ranch headquarters, as evident in several historic photographs of the Indians at Agate. One favorite campsite, around 1900, was the field to the east of the ranch house.⁶⁰

In May 1908, Red Cloud, then eighty-seven, made his last visit to his old friend Jim Cook. Guided by his son, Jack Red Cloud, Jack Red Cloud's wife Nancy, and their son, Red Cloud traveled to Agate in a group of two dozen wagons, partly over the old road between Fort Laramie and the former Red Cloud Agency near Fort Robinson. Kate Cook, in a letter to her sister Clara Heath, described his arrival in early May.

Well, old Red Cloud is here. Nineteen teepees came on Wednesday last. It was a sight to see the wagons and horsebackers come stringing down the hill road, singing their song about 'Wambli Cigala' [the Sioux name for Jim Cook] as of yore. Old Red Cloud was able to get out of his wagon with little help, which surprised me. But when he was seated on the ground, his sightless eyes facing the western sun and his trembling hands trying to tighten his blanket about him it could be seen how feeble he was. Jack Red Cloud stooped over him and shouted our names as we took his hand. His face expressed great emotion, and his voice, as he greeted us.⁶¹

Red Cloud's May 1908 visit was special. Bent, frail, and almost totally blind, on this visit he gave Jim Cook his last gift, the moccasins on his feet. In a demonstration of lasting friendship, Red Cloud had earlier insisted that Cook keep the painting of the proud chief that Cook had commissioned in 1903 by Chicago artist Bessie Sandes Butler. Red Cloud told Cook that he hoped future generations would "always go and look at the face of one of the last of the old chiefs that lived before the white men came to take our lands and turn us from the old trails we had followed for so many hundreds of years."⁶² Red Cloud remained at Agate for ten days, visiting and reminiscing about bygone times with his old friend Jim Cook before returning to Pine Ridge. The two never saw each other again. On the early morning of December 10, 1909, Red Cloud died. He was eighty-eight.⁶³

⁶⁰ Cook, *Fifty Years on the Old Frontier*, facing page, 198; Meade, "Cook Family," 365; Dorothy Meade, *Heart Bags & Hand Shakes: The Story of the Cook Collections* (Lake Ann, MI: National Woodlands Publishing Company, 1994), 9.

⁶¹ As quoted in Meade, *Heart Bags & Hand Shakes*, 8-9.

⁶² As quoted in Frank H. Goodyear III, *Red Cloud: Photographs of a Lakota Chief* (Lincoln: University of Nebraska Press, 2003), 179.

⁶³ Carnegie Museum paleontologist O. A. Peterson, who happened to be at this gift-giving exchange, reportedly wrote the day and "from" and "to" and witnesses names on the moccasins. Kate Cook, letter to Clara Heath, May 12, 1908, Box 13 and Jim Cook, letter to Harold Cook, April 26, 1908,

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Kate Graham Cook also left the ranch in 1909, never to return. For more than twenty years, Kate had raised her sons and managed the ranch household in this remote prairie-grass setting with only occasional trips away from the Niobrara River. Few family letters or accounts exist from the Cooks' first fifteen years on the ranch; our knowledge of the details of daily life is, therefore, scant. Judging from later letters written to and from Jim Cook, it appears that the men on the ranch regularly came and went from Agate on business trips (to drive cattle, visit stock-yards, and gather supplies from Andrews, Harrison, and elsewhere), while Kate stayed at home to tend to household chores. The subservient status of rural agrarian women, and the occurrences of depression, violence, and breakdown among rural women, and the loss of independence accompanied by feelings of powerlessness have all been well documented.⁶⁴ The isolation of Agate, particularly in the early years, and the loneliness, even though her mother was sometimes present, may have been acutely felt by Kate. When Harold was ten in 1898, Kate, age thirty-one, gave birth to her second son, John Graham Cook, at Fort Robinson. It may have been around this time that Kate began to struggle mentally with the difficult circumstances at Agate. She may have suffered from post-partum depression after John's birth; that same year, the Cooks first went into considerable debt. Jim Cook, in later letters, made occasional reference to Kate's violent temper during this period. Around the turn of the century, Kate suffered from a prolonged, unidentified illness, according to the family. In 1901, Willoughby Walling visited Agate from Chicago and afterwards noted in a letter to Jim Cook his disappointment in not being allowed to see Kate.

Indebtedness clearly contributed to the growing anxiety and sense of acute helplessness that Kate felt. As early as 1902, Kate, in a letter to a friend, described her "nervous headaches," when she saw just the handwriting of a man to whom the Cook's were indebted. "I am truly miserable that we cannot discharge our indebtedness to him," she wrote.

If I could only go out & do something that would earn money so that I could be a money earner instead of a money spender & still be at home part of the time. . . . When I have constantly to draw on Jim it makes me so blue & unhappy I hardly know what to do with myself. If it would not reflect on Jim, I would start out tomorrow for I cannot be contented anywhere tied up as we are. If I can ever make my sons follow my advice in any one thing it will be to keep out of debt for it cannot but be a source of worry, disappointment and injustice to themselves, their families & their creditors. I have lost every particle of interest in everything save the children's education & the family's health that there is in life and know I will never feel otherwise

Cook Papers, AFBNM; "Science, James Henry Cook," Vertical File: Cook, James H., Nebraska State Historical Society, Lincoln, Nebraska; Goodyear III, *Red Cloud*, 183.

⁶⁴ See especially Deborah Fink, *Agrarian Women: Wives and Mothers in Rural Nebraska, 1880-1940* (Chapel Hill: University of North Carolina Press, 1992); Roberts, "History of Agate Springs," 281-82.

until we emerge from this cloud of debt. . . . I have been having continuous headaches; I suppose that this is the reason.⁶⁵

Five years later, in 1908, the Cooks had been able to reduce their debt somewhat, but moribund market prices for cattle and the loss of some of the Cooks' range to shepherders diminished their anticipated income and compelled them to refinance all their mortgages. When Jim went to Omaha in December 1907 to look into refinancing their loans, he found and reported to Kate that money matters were in "much worse condition than he thought . . . and found out [that] no loans could be made on any security and that many cattle loans had already been called in."⁶⁶

The spring and summer of 1908 proved extraordinarily busy for the entire Cook family as they prepared for and entertained several paleontologists who came to dig in the fossil hills, fully engaged in all the ranching chores, and prepared to bid Harold farewell when he left for the University of Nebraska in August. Less than one month later, Kate Cook apparently suffered a nervous breakdown. In letters written almost every day to Harold in Lincoln, Jim and Mary described the ordeal they all experienced, beginning in late September and continuing into December. Kate's mental collapse was signaled by her refusal to eat anything for nearly two weeks; after four months of eating very little, Kate eventually lost about forty pounds.⁶⁷ She grew suspicious of everyone. "She turns against us all in turn," Mary Graham wrote in a letter to Harold in mid October.⁶⁸ Kate's violent outbursts were especially difficult for everyone. Their timing was unpredictable and the physical and verbal abuse that accompanied them pained everyone who heard or witnessed them. Two people, often Jim and Mary, stayed with Kate day and night to insure that she did not break out through the windows. At least once she jumped through a downstairs window and attempted to jump out of a second-floor window. Fearing that she might harm herself or others with her physical outbursts, Jim nailed heavy wire screens on two rooms in the house. Grandmother Mary Graham confessed to Harold that it was awful hard to bear her violence and told him that she was "glad you do not have to see and hear her."⁶⁹ Jim decided that the environment was too trying for ten-year-old John to witness, so Jim asked his brother Jack Cook to take care of him at the ranch bunkhouse. Clara Heath came to see and try to help her sister. Doctors came from Fort Robinson and also from Hastings, in south-central Nebraska, but their efforts to calm and restore Kate's mental health were of little long-term avail. Early on, Jim and Mary considered the possibility that Kate might need to be institutionalized in Hastings or in Lincoln, Nebraska. Professor Erwin

⁶⁵ Kate Cook, letter to Lislle (?; handwriting difficult to decipher), October 30, 1902, Box 13, Cook Papers, AFBNM.

⁶⁶ Kate Cook, letter to Clara Heath (her sister), November 17, 1907 and December 2, 1907, Box 13, Cook Papers, AFBNM.

⁶⁷ James Cook, letter to Harold Cook, November 10, 1908 and many other letters written by James to Harold between September and December 1908, Box 3, Cook Papers, AFBNM.

⁶⁸ Mary Graham, letter to Harold Cook, October 14, 1908, Box 1, Cook Papers, AFBNM.

⁶⁹ Jim Cook, letter to Harold Cook, October 4, 1908, Box 1, Cook Papers, AFBNM.

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Barbour, expressed great concern for everyone's well-being and offered suggestions about where Kate might be placed.

The Cook family suffered the tragic, all-consuming, emotional ordeal of Kate's breakdown at home for several weeks. Harold left his studies at Columbia University in February 1909 to come home and help deal with the situation. On April 9, 1909, Harold admitted his mother, then forty-one, to the state insane asylum, first at Norfolk, and, a year later, at Lincoln, Nebraska.⁷⁰ A report of an examination conducted with Kate on October 11, 1911, noted that very little was known about the gradual onset of her psychosis. The examining doctor reported



Figure 9.12 John Graham Cook is pictured here at around age ten, when his mother Kate suffered a breakdown and was institutionalized. She never returned to Agate Springs Ranch again. Courtesy of National Park Service (AGFO 3811.12).

that Kate was alternately melancholy and sometimes maniacal, and that she sometimes displayed "violent, homicidal, and probably suicidal behavior." Her language, the report continued, was very often "profane and vulgar, and her facial expressions were sometimes contorted." Kate Cook's diagnosis upon admittance was "manic-depressive insanity," which was subsequently changed to "dementia prae-cox."⁷¹ This disorder was eventually reframed and the term relabeled to schizophrenia.

For many years, Cook family members continued to hope for her "recovery" and return to Agate. The Cook and Graham family members, as well as paleontologist Erwin Barbour, were regular visitors at Kate's hospital. Gifts of candy and dresses were sent often, at first. Several letters written to Kate and between the immediate family members mention Kate's "improvement" and her decreasing flights of fancy, as well as odd behavioral mannerisms. As the years passed, her condition gradually deteriorated, despite the family's initial optimism. As the financial burden of her care and the ranch's debts continued, and the care of Harold's new family consumed great attention and time, family visits to Kate became much less frequent. Hopes for her recovery and return to Agate gradually faded. In the 1920s, her share of the Agate property was legally transferred to Harold. Despite the family's eventual resignation to her

long-term institutionalization, Jim Cook rarely failed to write endearing letters to Kate on their wedding anniversary in late September. "My own dear Kate," Jim wrote on September 28, 1909: "Today being our twenty-third wedding anniversary, I feel that I must write you a line to tell you again that my thoughts today will be of you every hour."⁷² Kate Cook apparently never returned to Agate Springs Ranch,

⁷⁰ Cockrell, "Our Ranch is Different," 12.

⁷¹ "Kate Graham Cook—Case #8041, Date of examination—Oct. 11, 1911," Box 61, Cook Papers, AFBNM.

⁷² Jim Cook, letter to Kate Cook, September 28, 1909, Box 13, Cook Papers, AFBNM.

even for a visit. After fifty years of institutionalization, she died in 1961, two years before her son, Harold. She was ninety-one.

Mary Eliza Graham also left Agate Springs Ranch around 1909. Following her daughter's commitment to an asylum, she undoubtedly felt deeply saddened and helpless remaining at the ranch. In early 1909, John F. Cook took over operation of the Agate post office from Mary. Mary traveled and spent time with her brother John and other family in Jackson, Michigan, as well as her daughter in Pittsburgh and in Port Maitland, Ontario (during the summer of 1913) over the next five years, returning to Agate to visit Jim and her grandchildren in the summer months. Jim stopped to see Mary during his occasional visits to the Tituses in nearby Kalamazoo, on his way to the East Coast, Florida, Texas, or Mexico. Mary Graham's letters to Harold often mentioned her daughter Kate with sadness and regret that she still remained institutionalized. On Jim and Kate's twenty-eighth wedding anniversary in September 1914, Mary penned to Harold: "she was such a beautiful girl and went forth to her new life with a joyous heart and was so happy. Your father was so full of happy anticipation in having what he had never known—a real home of his own."⁷³ In this same letter, Mary made a rare melancholy reference to her own marriage and its demise. "None but God knows how lonely I was without her [Kate] and at that time none knew the load upon my heart when I was aware that an evil woman [Mittie Hayden] was undermining my home."⁷⁴

In late 1915, seventy-five year-old Mary Graham moved to southern California and settled into an apartment in Los Angeles, while waiting for the completion of a small bungalow in Inglewood, not far from her daughter Clara and her husband Rob Heath (who had moved to California in 1914 for Rob's health). For several weeks during the winter of 1915—1916, Jim stayed with Mary Graham in her new home, enjoying a warm reprieve from the harsh winter at Agate. The next fall and winter of 1916 and 1917, eighteen-year-old John Cook went to live with



Figure 9.13 After Kate Cook's breakdown, Mary Graham moved to California to be close to her other daughter, Clara Heath. She lived in a new bungalow near Inglewood. Jim (pictured above in front of Mary's bungalow) and his son John Cook spent much time visiting and living with Mary Graham in the mid-1910s. Courtesy of National Park Service (AGFO 61619).

⁷³ Mary Graham, letter to Harold Cook, September 28, 1914, Box 1, Cook Papers, AFBNM.

⁷⁴ *Ibid.*

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Mary and attend Inglewood High School; Jim Cook joined them December 1916 and stayed for several months.⁷⁵

During this time, Mary often visited her daughter Clara and occasionally “the Dr.,” her estranged former husband Elisha, who lived with Clara and Rob and then owned a vineyard near Los Angeles. Jim Cook and Elisha saw each other often during that winter and reminisced about the early days in Cheyenne and on the 04/Agate Springs Ranch. During these winter visits with Mary in California, Jim Cook made the acquaintance of several new friends, like writer E. A. Brininstool, who found his experiences growing up on the “old frontier” fascinating and part of a dying past. As Mary Graham aged, she returned to Agate Springs Ranch less often. Her last visit took place sometime in the 1920s.

Re-creating the Cook Family at Agate, 1910-1923

Agate Springs Ranch stood quiet and solemn for more than a year in 1909 and 1910. The loss of Kate and her mother Mary in 1909 coincided with the death of Red Cloud in 1909, the absence of Harold away at school in 1908 and 1909, and the diminishment and absence of summer paleontologists in 1909 and 1910. Jim Cook, eleven-year-old John, and taciturn Jack were the only family members living at Agate. The marriage of Harold and Eleanor in October 1910, however, presaged substantial social changes at the ranch, although not all at once. In the early 1910s, Harold and Eleanor sometimes both spent weeks living in Lincoln with the Barbour, awaiting one of Eleanor’s four childbirths or avoiding the cold of Harold’s homestead cabin and even the Agate Springs Ranch house. In the fall and winter of 1911, Harold and Eleanor, plus John Cook, were all in Lincoln. Jim Cook didn’t hesitate to mention his loneliness, without his wife and family, to Harold. “I happen to be the one that is here alone in the house and my thoughts turn to my dear ones in Lincoln often.”⁷⁶

The marriage of Harold and Eleanor and the rapid growth of their family brought new life to Agate Springs Ranch in the 1910s. Although they spent considerable time at Harold’s homestead cabin at “East Agate” during the summers between 1911 and 1914 and Eleanor often went to Lincoln to visit her parents in winter and to give birth to her children, the young couple frequented Agate Springs Ranch regularly and brought fresh buoyancy to it. The birth of four daughters between 1911 and 1917—Margaret on 17 December 1911; Dorothy on 1 June 1913; Winifred on 15 July 1915; and Eleanor on 9 October 1917—made the ranch house full of busy activity. The frequent visits of Erwin and Margaret Barbour added to the vitality of the household. In addition, paleontologists, most notably Bill Thomson directing the work of the American Museum of Natural History, resumed and continued the visits to the fossil quarries during the summers, from 1911 to

⁷⁵ Mary Graham, letter to Harold Cook, 3 December 1913, March 22, 1914, April 16, 1916, May 7, 1916, June 27, 1917, Box 1, Cook Papers, AFBNM.

⁷⁶ James Cook, letter to Harold Cook, October 15, 1911, Barbour Papers, University of Nebraska Archives.

1923, with few interruptions. Jim Cook must have been pleased that, once again, Agate Springs Ranch had become a home full of vitality, warmth, and stimulating socializing.⁷⁷

Eleanor Cook embraced her role as the female head of household with spirit, humor, and creativity. An entertaining and musical hostess, she welcomed the wide assortment of ranch guests with wit and charm. She skillfully completed the myriad household chores—cooked in a wood stove, concocted pre-made bread and pancake mixes, heated and carried all the hot water needed for various tasks, washed and ironed the clothes for the entire household, kept kerosene lamps filled and wicks long, and cleaned.

Also, with minimal assistance from Harold, she educated all her children at the grade school level. All this she accomplished with minimal help. In the early years, Ida Posvar helped Eleanor with child care and household tasks, followed by various young women for a season or two. In 1920, Margaret Crozier, who the family had met in southern California while visiting Mary Graham, came to work for Eleanor in the Cook household at Agate.⁷⁸

Harold continued working with his father, and took primary responsibility for managing Agate Springs Ranch after Kate's departure in 1909. Buildings, fences,



Figure 9.14 Agate Springs Ranch became a lively family home with the arrival of four daughters born to Eleanor and Harold Cook between 1911 and 1917. Posing on the front porch of the ranch house around 1914 are, from left to right: standing—Margaret Barbour, John G. Cook, Harold Cook, John F. Cook, and Erwin Barbour; seated—James Cook, Eleanor Barbour Cook with Margaret in front, Mary Graham with Dorothy in front, and an unidentified person, possibly a caretaker of the Cook children. Courtesy of the Barbour Collection, Archives and Special Collections, University of Nebraska—Lincoln. Libraries.

⁷⁷ Zimmerman, "Cook Papers Collection," 17.

⁷⁸ Meade, *Story of Agate Springs Ranch*, 24-26; Meade, interview with the author, June 10, 2007.

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and irrigation ditches required constant maintenance. Cattle needed to be bred, grazed, and driven to market at the Andrews depot. The continuing ranch debt needed to be addressed. And hired help required supervision. The “Upper Ranch” house, formerly the McGinley homestead east of the ranch house, was furnished and rented out to caretakers and also required oversight. Haying alfalfa and native grasses and selling it to ranchers in the vicinity became an increasingly important cash crop for the Cooks. Often they tried to avoid selling quantities of it until the winter months when it could bring a higher price (sometimes as much as \$22 per ton⁷⁹).

The ranch holdings continued to increase incrementally during the 1910s; often this occurred when the Cooks purchased adjoining parcels homesteaded by family members and friends. In 1916, in eight adjoining sections along the Niobrara River, Jim Cook alone owned roughly 4,080 acres. He also leased five sections of unused school land in these same eight sections, amounting to an additional 3,200 acres. Harold Cook at that time owned 640 acres, Mary Graham held 520 acres, and John F. Cook owned 750 acres. All told, 9,000 acres were available to the Cooks for ranching purposes in 1916. Unlike two decades earlier, however, all parcels in between and around the Cook land were privately owned by small farmers and ranchers. The 1904 Kincaid homestead provision, combined with the promotion of dry-land farming, had encouraged dozens of new arrivals in the area and throughout semiarid western Nebraska to attempt ranching on parcels from 40—640 acres (the maximum allowed by the Kincaid Act). The proliferation of small-scale ranching is clearly evident on the 1916 *Standard Atlas of Sioux County, Nebraska*. The population of Sioux County peaked in 1910 with 4,599 people, compared to 2,055 in 1900 and 4,528 in 1920.⁸⁰

While attending to ranch management, Harold continued to engage in excavations, mostly supervised by his friend Bill Thomson, at the East Agate fossil quarries. He also pursued his own serious scientific endeavors in paleontology and geology, and published the results of his findings. Many of his articles written in the 1910s and early 1920s, often published in the *Nebraska Geological Survey*, were collaborative efforts with Professor Erwin Barbour and they focused on new fossil discoveries or interpretations of fossils in Sioux County, Nebraska. Harold’s professional associations continued to enrich the social and cultural environment of the Cook home at Agate Springs Ranch during this time of vigorous family growth. A four-year gap, from 1917 to 1921, appeared in Harold’s scientific publishing, suggesting his attention had turned elsewhere.⁸¹

In the 1910s, Harold’s younger brother John Graham Cook was an active and integral part of his young family as well as Jim Cook’s. Only ten years old at the time of his mother’s mental breakdown in the fall of 1908, John Cook grew to maturity under the care of his father Jim, his brother Harold, and extended family members—the Barbours in Lincoln, the Heaths in Pittsburgh, Pennsylvania, and his

⁷⁹ Harold Cook, letter to Erwin Barbour, March 24, 1912 and February 19, 1918, Barbour Papers.

⁸⁰ *Standard Atlas of Sioux County, Nebraska* (Chicago: George A. Ogle & Company, 1916).

⁸¹ Zimmerman, “Cook Papers Collection,” 8-13.

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(1911—1912)⁸² while living with the Barbours. In December 1911, Erwin Barbour reported to Jim Cook that thirteen-year-old John “was doing remarkable work. . . . He started with less training than his companions and yet shows plain signs of going ahead of many of them,” Barbour wrote. John continued to get good grades during the 1912—1913 school year without special effort, as he grew noticeably taller.⁸³ He received high marks in all his early classes; on two occasions he completed a whole year of school in just over a semester. John then went to school in Jackson, Michigan, and lived with Mary Graham (1912-1913). The next two years were spent attending school in Crawford (1914-1915) and Harrison (1915-1916). His junior year in high school (1916-1917) was spent with his grandmother Mary Graham and his father, who came to live with Mary at her home in Inglewood, California. At Inglewood High School John Cook excelled in many sports, and was selected as the best all-around athlete at the end of the year. He did especially well as a sprinter on the high school track team. In 1917—1918, John Cook completed his final high school term at Harrison, Nebraska, graduating in December that year.⁸⁴

He entered the University of Nebraska in the fall of 1918 and immediately joined the University Student Army Training Corps, which aimed to prepare young students for eventual service in World War I. Near the end of his first term at the university, John contracted influenza, as did hundreds of thousands of others in what became a more deadly scourge than the world war itself. Much to the shock of his entire family, robust John Graham Cook died on December 10, 1918 in the military hospital at the University of Nebraska of influenza complicated by pneumonia. He was twenty years old.⁸⁵ The next day, Jim Cook wrote to Erwin Barbour, thanking him for all that he had done during John’s illness. “I can hardly bear up under the terrible blow that has fast fallen,” Cook wrote.⁸⁶ (Ironically, Jack Red Cloud, the son of Red Cloud, also died in 1918 of the influenza.)

Outpourings of grief and sympathy were extended to the Cook family from the Barbours in Lincoln, while the Cooks struggled to keep other members of the family protected from the deadly influenza virus. At the time of John Cook’s death, Eleanor Barbour Cook and her two oldest daughters, Margaret and Dorothy, were hospitalized in Lincoln with the flu. At Agate Springs Ranch, Harold and his two youngest daughters, along with Jim and Jack Cook, took every precaution to avoid the dreaded disease. The children’s English nurse Mary Whelan had experienced devastating epidemics in India, and she took firm control of activities and human interaction at the ranch. She ordered everyone to avoid face-to-face contact with anyone from the outside, including those delivering the mail to Jack’s small post

⁸² James Cook paid the Barbours to board John while he attended school in Lincoln. Harold Cook, letter to Erwin Barbour, December 17, 1911, James Cook, letter to Erwin Barbour, August 30, 1912, Barbour Papers, University of Nebraska Archives.

⁸³ Erwin Barbour, letter to Harold Cook, December 23, 1911 and October 21, 1912, Barbour Papers.

⁸⁴ Enclosure with John’s life chronology, James Cook, letter to Erwin Barbour, December 11, 1918, Barbour Papers.

⁸⁵ Harold J. Cook, “John Cook of Agate Dies at Lincoln on Tuesday,” *Harrison Sun*, December 20, 1918.

⁸⁶ James Cook, letter to Erwin Barbour, December 11, 1918, Barbour Papers.

office building at the east side of the ranch headquarters. She directed Jack to cut a slot in the front door of the Agate Post Office, through which neighbors could drop their mail into a box on the inside of the door. Patrons retrieving their mail were directed by Jack to collect it on the front porch of the post office. Mail carriers delivering and collecting bundles of mail came only halfway from their automobile to the Agate Post Office to deliver or collect mail sacks put out by Jack. This regimen imposed by Mary Whelan succeeded in protecting all residents at Agate Springs Ranch from contracting the deadly influenza.⁸⁷ In early 1919 Eleanor along with Margaret and Dorothy returned to Agate Springs Ranch.

Agate: Landscapes of Social and Cultural Oasis, up to 1923

The development of Agate Springs Ranch as a vibrant social and cultural oasis became evident in changes to the cultural landscape around the ranch headquarters. Mary Graham's and Jack Cook's operation of the post office eventually spawned a diminutive collection of assorted small buildings, located about fifty yards east of the ranch house. After Mary left the ranch in 1909, vacating the existing small post office building just east of the house, Jack, over the next decade, assembled together a new post office building, built around 1914, a gas pump (gone in 2007), his own small living quarters (gone in 2007) and well pump, his metal-sheathed claim cabin used for storage, his small woodshed, and a storage building for Jim Cook's excess fossil and mineral treasures.

The ranch house also witnessed some additions that reflected the growth of the young Cook family. Around 1915, Harold built a tent house with canvas walls above reinforced lower walls and a wood floor on a knoll east of the house for the family to use when the main house overflowed with guests. Nearby, two full-sized tepees and a small one for the children, from Indian friends, were erected each summer near Jim Cook's flagpole. Joining this small grouping in 1919 or 1920 was a log cabin playhouse, the "Kiddies Cabin," constructed by Erwin Barbour for his four granddaughters, just north of the old post office (now "Bath Biffy"), and about 100 feet east of the ranch house. (Kiddies Cabin was moved much later to the north side of the ranch house.) In 1923, the nearby canvas tent house was replaced by a permanent hip-roof, wood-frame small building called the sleeping house. Around this same time, the remainder of the front porch on the ranch house was enclosed. Passing near these new structures was a slightly widened and smoothed road encircling the green elliptical-shaped "square." A small number of automobiles, probably the Barbours as well as one or two used by the American Museum of Natural History, periodically arrived at the ranch. Casting cool shade over all these modifications and new additions was the aging grove of cottonwood trees, then three decades old.⁸⁸

⁸⁷ Meade, "History of the Agate Post Office," 5; Gretchen Meade, interview with the author, June 10, 2007, Surrey, British Columbia, Canada, transcript at Agate Fossil Beds National Monument.

⁸⁸ Meade, *Story of Agate Springs Ranch*, 26-27, 31.

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Around the ranch headquarters the introduction of many new plants also altered the cultural landscape. Henry Cook's asparagus, planted during one of his extended visits, grew wild around the yard. Jim Cook's original cottonwood and willow trees grew larger and were joined by new trees purchased and planted by Harold Cook in the spring of 1910, about six months before his marriage to Eleanor Barbour.⁸⁹ Not long after their marriage, the Barbours sent many hardy fruits, vegetables, and flowers from their own yard in Lincoln to Agate Springs Ranch. In March 1918, Erwin Barbour sent a box full of Siberian iris, "Snow Queen" and "Yale Blue" varieties and advised Harold where to plant them. "I wish you would plant them close to the edge of the lake [just west of the house]. . . . They like very rich ground and I think they like rather moist conditions."⁹⁰ A box of peonies along with walnut and oak tree specimens arrived at the ranch from Barbour a year later.⁹¹ Barbour shared his love and samples of flowers with Jack Cook as well. In 1919, he sent the elder Cook, for planting in his small corner of the ranch headquarters, a box containing *Hemerocallis* lilies, an "old-fashioned Live-Forever" variety, the roots of *Helianthus* (a form of single sunflower), and a few vines for the fence at the post office.⁹²

⁸⁹ Harold Cook, letter to Erwin Barbour, March 3, 1910; Eleanor Barbour Cook, letter to Erwin Barbour, July 21, 1912; both in Barbour Papers, University of Nebraska Archives.

⁹⁰ Erwin Barbour, letter to Harold Cook, March 26, 1918, Barbour Papers, University of Nebraska Archives.

⁹¹ Erwin Barbour, letter to Harold and Eleanor Cook, April 7, 1919 and May 5, 1919, Barbour Papers.

⁹² Erwin Barbour, letter to Jack Cook, April 7, 1919, Barbour Papers.

Chapter 10

REFLECTING ON THE PAST IN TROUBLED TIMES, 1923–1962

Reconstructing the Cook Family Again

The Cook family experienced another reconstitution in the early 1920s. With four young girls, Eleanor Cook had often relied on the help of an assistant to care for the children and respond to the needs of her husband and of aging Jim Cook, both of whom relied on her for editing and typing their manuscripts. In 1916–1917, when young John Graham Cook attended Inglewood, California, High School, the Cooks met the family of George Crozier, superintendent of schools in Inglewood, and his wife Lulu. In their family of six children, Margaret F. Crozier was the oldest. Born in Mead, Nebraska, in June 1899, Margaret was a senior at Inglewood High School when John Cook attended high school there; she was eleven years younger than Harold. Musically talented and motivated, Margaret took three years of piano and five years of voice lessons between 1917 and 1927. She also completed some coursework in psychology and science and did practice teaching at the University of California at Los Angeles in the 1919–1920 school year and in the mid-1920s.¹

Following her senior year in high school and possibly again in the early 1920s, Harold and Eleanor Cook invited Margaret to come to Agate Springs Ranch and help care for the four Cook girls. It was during this time that Harold and Margaret Crozier developed an intimate relationship. In 1922, Harold decided to marry Margaret. The following year, Eleanor and the four girls left Agate and moved to Chadron, where Eleanor began teaching geology and English at the college there. For the next five years, Eleanor hoped that Harold would invite her and the girls to return to Agate. This never happened. Harold divorced Eleanor in 1927 and officially married Margaret Crozier. Harold and his four daughters corresponded regularly as they were growing up. The four daughters spent time each summer at Agate Springs Ranch with Jim



Figure 10.1 This portrait of Margaret Crozier, Harold Cook's second wife, was probably taken around the time of her marriage to Harold in 1927. Courtesy of National Park Service (AGFO 3835.1).

¹ "Supply Teaching, Denver Public Schools, Application Blank for Teaching Position," completed by Margaret Crozier Cook, September 19, 1927, Figgins Papers, Denver Museum of Nature and Science.

Cook, helping him operate the Cook Museum of Natural History. When the girls visited, Harold and Margaret were often gone, pursuing various engineering and paleontological professional activities. Eleanor stopped writing to Harold in 1926 and to Jim Cook in 1930.²

Margaret Crozier gave up her own musical aspirations when she married Harold Cook. She turned all of her attention to supporting Harold in his pursuit of various professional endeavors and to assisting Jim Cook with his manuscripts and other needs. She became totally involved in and devoted to all Cook family activities, even occasionally visiting Kate in Lincoln when Harold or Jim was unable. In addition to recording and/or editing some of Jim's stories, Margaret wrote down some of Mary Graham's reminiscences as well, thus facilitating the history-making process in the Cook family. She also wrote some of her own stories about the Cook family history. When John Cook stepped down as the Agate postmaster, Margaret C. Cook took over the job in 1942 and continued in that capacity until a few months before her death in 1968. Margaret and Harold were together for nearly forty years.

After her separation from Harold, Eleanor Barbour Cook taught at the college in Chadron for eighteen years. She played in the college orchestra and founded a natural history museum there with assistance from her father, Erwin Barbour. When her parents became elderly, she returned to Lincoln to help care for them. In her own elderly years, she made her home with Dr. Henry Foster in Pullman, Washington, where she died in 1976.³

Ranching Struggles in 1920s, 1930s, 1940s

The lush and vibrant physical and social oasis created by the Cooks may have stood out from most other ranches along the Niobrara River and in Sioux County. However, hard times that descended over farms and ranches across the nation in the 1920s and 1930s became a great leveler. No one, including the Cook family, escaped the devastation of the combined drought and international economic depression. Elevated prices and high demands for agricultural produce created by World War I ended by 1920, less than two years after the war. Long before the Great Depression began in the 1930s, the market for cattle and the price paid for them dropped catastrophically.

Consequently, bank loans and mortgages for expanded land and machinery remained and even grew. In the 1920s, per capita agricultural income was one-third of the national average. By 1929 the total farm debt was almost \$10 billion nationwide. Between 1929 and 1932, the darkest years of the Great Depression, net farm income drastically declined from \$6.1 billion to \$2 billion. Additionally, a prolonged dry spell lasting ten to fifteen years (with the worst year in 1934),

² Dorothy C. Meade, *Story of Agate Springs Ranch*, (Scottsbluff, NE: Business Farmer Printing), 37; Karen P. Zimmerman. "The Cook Papers Collection," prepared for the National Park Service, February 1985, 27; Gretchen Meade, interview with the author, June 10, 2007, transcript at Agate Fossil Beds National Monument.

³ Meade, *Story of Agate Springs Ranch*, 37; Meade, interview with the author, June 10, 2007.

combined with the economic plunge to bring thousands of foreclosures and drive people out of the Midwest Dust Bowl region.

Those who stayed in the short- and mixed-grass prairie along the Niobrara River, like the Cooks and some of their neighbors, were confronted not only with mounting debts. There was also a 25 to 50 percent depletion of the range due to heavy grazing during World War I to meet urgent food shortages. This may have accounted for the Cooks' under-stocking their ranch in the 1920s and grazing far fewer cattle than a ranch of Agate's size should have supported. As a consequence of the drought and continuing depletion, prairie-grass plants found typically in more arid regions—wheatgrass, blue gramma, and buffalograss—migrated all the way east into the tall-grass prairie of the more moist eastern Great Plains.⁴

The Cooks, like many ranchers, customarily suffered from chronic debt and high interest rates. "I have struggled for years," Jim Cook wrote to Harold in 1914, "under a pretty heavy load of them and at times I have been in the position of an abject slave to bankers and others."⁵ The depression and drought of the 1920s and 1930s, however, worsened ranch affairs that were stretched thin by their existing heavy debt and complicated by their personal family circumstances, including the cost of Kate's institutionalization and Harold's professional pursuit of work away from Agate. Harold, primarily in charge of the ranch operation since Kate's departure in 1909, bore much of the responsibility for rescuing the Agate Springs Ranch from total demise. Their financial problems spiraled downward through the 1920s and 1930s as conditions far beyond their control—low market prices for cattle and forage, increasingly more conservative and rigid loan policies, and drought—grew more severe.

Making payments on existing loans and obtaining new loans became an increasingly challenging problem for the Cooks. In 1922 and 1923, Harold and Jim Cook began searching, with minimal success, for additional loans to make up for their flagging income and high expenses. After failing to obtain a loan from the Nebraska Agricultural Finance Corporation, which the Cooks believed undervalued their irrigated land, they finally succeeded in obtaining a \$27,000 loan from the U.S. National Bank of Omaha in 1923. A year later, however, the Cooks' financial affairs came under the purview of the Central Trust Company of Illinois, along with the finances of William English Walling with whom the Cooks had been indebted for nearly \$30,000 since 1906. When the Cooks made a late payment to this Illinois company, its loan officers threatened foreclosure on the Agate Springs Ranch in the fall of 1924. To alleviate this crisis, Harold immediately attempted to secure another loan through the Lincoln Joint Stock Land Company. This proved problematic because Kate had a life estate in the ranch but was not able to sign legal papers due to her incompetency. In an effort to get around this obstacle, the Cooks obtained a

⁴ Francis Moul, "Prairie Grass Dividing: The Land, Life, and People of Sioux County, Nebraska" (Ph.D. dissertation, University of Nebraska, Lincoln, 1998), 120-22; Ron Cockrell, "*Our Ranch is Different*": The Agate Springs Ranch on Nebraska's Niobrara River," seminar in Western American History, November 1996, University of Nevada, Las Vegas, 16.

⁵ Quoted in Cockrell, "*Our Ranch is Different*," 16.

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court order to liquidate Kate's estate, formed a trust, and conveyed all interests in Agate Springs Ranch to Jack Cook who, in turn, deeded the property back to Jim Cook.

These intricate maneuverings enabled the Cooks to obtain a \$30,000 federal loan, which allowed them to pay off their \$30,000 to the Wallings in 1925. Little more than a year earlier, Willoughby Walling, William English Walling's brother and financial advisor, had assured the Cooks of his confidence in their ranch operation. "As a cattle proposition, you have an unusual plant which will make money whenever money can be made in the cattle business," Willoughby wrote in November 1923.⁶ Unfortunately, money could not be easily made from cattle ranching in the mid-1920s. Less than two years later, the Cooks flirted with threatened foreclosure once again when they failed to repay their U.S. National Bank of Omaha loan in a timely fashion. A wealthy Chicago friend, James Ward Thorne, bailed them out of impending financial disaster in the fall of 1926.⁷

Long-time friends, the English ranching family of Harold Wilson, part-owners of the WS Ranch in New Mexico and Harold Cook's namesake, helped the Cooks in the late 1920s build up the number of cattle on the Agate Springs Ranch. In late 1929, just around the time of the stock market crash on Wall Street, the Cooks happily agreed to graze 1,000 head of the Wilsons' steer calves. This arrangement promised to be lucrative for the Cooks. At the last moment, however, the plan collapsed. Harold Cook explained the plan to his friend Willoughby Walling in early January 1931.

We had made a deal, which had been in operation for a year, with a big New Mexico ranch (of some 125,000 acres) by which we were taking the steer calf crop from that ranch, to develop out here, year by year. We had already several hundred head of yearlings and two-year-olds here, and in order to make room for over a thousand head of this year's steer calves, the older stuff was sold off early this fall. . . . Owing to the world financial condition their extensive holdings in Australia, England, etc., were in the red this year for the first time in two generations, so that the New Mexico ranch had to carry them to the extent of something near a hundred thousand dollars for the year. This forced them to sell all the stock that was planned to come here; and as we did not know this definitely until too late this fall to make other arrangements and had put up a big hay crop to handle these cattle, this left us holding the sack.⁸

In an effort to restock the ranch at the last moment, Harold Cook obtained a loan of \$60,000, reliant on the sale of security bonds issued by a Chicago mortgage company, Louis Stern and Company. When a single bond failed to sell and, simultaneously,

⁶ Willoughby G. Walling, letter to James Cook, 6 November 1923, Box 54, Cook Papers, Agate Fossil Beds National Monument (hereafter cited as Cook Papers, AFBNM).

⁷ Cockrell, "Our Ranch is *Different*," 19.

⁸ Harold Cook, letter to Willoughby Walling, 9 January 1931, Box 54, Cook Papers, AFBNM.

regional banks began to close their doors, the Cooks suffered from understocking Agate Springs Ranch.⁹

New financial challenges confronted and confounded Harold and Jim Cook in the 1930s. “We are in a tighter position financially than we have been in two or three years,” Harold confessed to his grandmother Mary Graham in April 1930. “We are simply pushed for ready cash and no apparent way of getting it to meet the necessities of the next two months.”¹⁰ When no cattle had been sold from Agate Springs Ranch for four years in the early 1930s, the Cooks once again faced foreclosure proceedings. On January 7, 1935, the sheriff was to sell at a public auction 5,480 acres of the Agate Springs Ranch on the steps of the Sioux County Courthouse in Harrison. The local Harrison newspaper published the auction announcement in early December 1934 and early January. Legal maneuvering successfully stalled the sale while the Cooks engaged in negotiations to secure a \$25,000 loan from the Federal Land Bank of Omaha and a smaller loan from the Alliance Production Credit Association. More liberal banking policies fashioned during Franklin D. Roosevelt’s New Deal Farm Credit Administration, aimed at helping farmers survive the national depression, saved the Agate Springs Ranch and thousands of others like it from total financial disaster. New guaranteed federal loans to farmers and ranchers allowed the Cooks to rebuild the number of cattle on the ranch and survive the Great Depression.¹¹

The survival of Agate Springs Ranch in the drought-stricken agricultural depression of the 1920s and 1930s speaks volumes about the Cooks’ staunch support from a few wealthy friends, their clever investigative skills and dogged determination to find funds, and their resiliency in dire personal and financial straits. At times, Jim Cook expressed melancholy over the loss of Kate and disappointment about the imagined ill-will of neighboring ranchers.¹² Cook feared that they might divert water from the river and dry out the Agate Springs Ranch. Their resolve to hold on to their home prevailed, despite continued financial catastrophes and numerous personal and professional distractions.

Supplements to Ranching

Throughout the 1920s and 1930s, both Harold and Jim Cook were distracted from ranching and buoyed by other pursuits that stimulated and intrigued them. Harold Cook’s decision to stay on the ranch and wrestle with perpetual debt and the vicissitudes of weather and fluctuating stock prices did not keep him from pursuing his first love, paleontology and geology. His geologic explorations in the High Plains led him to involvement in oil resources. In an effort to supplement the sometimes

⁹ Cockrell, “*Our Ranch is Different*,” 19-20.

¹⁰ Harold Cook, letter to Mary Graham, 15 April 1930, Box 13, Cook Papers, AFBNM.

¹¹ “Numerical Index” book, Sections 3-10, Township 28 North, Range 55 West, Sioux County Courthouse; Cockrell, “*Our Ranch is Different*,” 20-21.

¹² In a 1914 letter to Harold he shared his certainty that the Coffee family, which owned a ranch upstream on the Niobrara, “have for years been trying to surround us.” Cockrell, “*Our Ranch is Different*,” 16.

faltering ranch income, he began consulting in the practical and applied profession of geology, specifically in oil, as early as 1917. Writing to Harold in July 1917, grandmother Mary Graham sent Harold abundant best wishes that his oil venture would make “East Street” his “line of travel. Agate builders are surely entitled to the fat of the land from now on,” she observed.¹³

Based upon some work done by Harold and Professor E. F. Schramm at the University of Nebraska, the first attempt to find oil in Sioux County was made near Agate in 1920 by the Associated Oil Company of Wyoming.¹⁴ On neighbors’ land just south of the fossil hills, the company drilled an oil well and built a small company town of shacks. They hired Harold to supervise the work at the site in

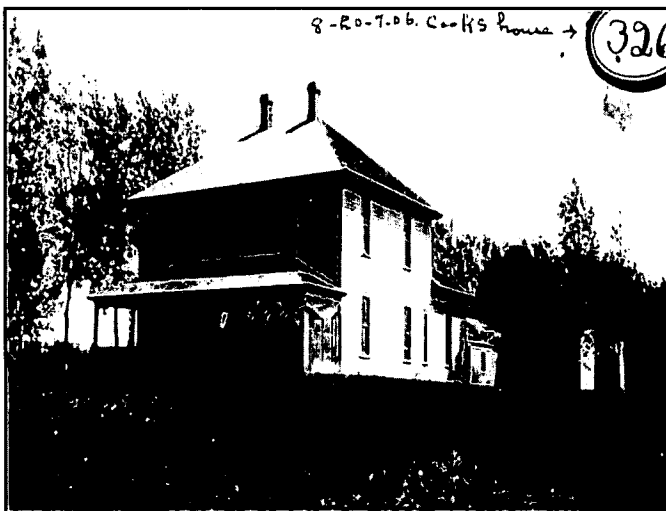


Figure 10.2 The once-open porch across the front of the Cook residence was enclosed (northwest corner), first to house bone specimens, then, later (glassed-in portion) to accommodate the growing family of Harold and Eleanor Cook. Courtesy of Barbour Collection, Archives and Special Collections, University of Nebraska—Lincoln Libraries (BE 2779).

1921. The Associated Oil Company installed a telephone at the Agate Springs Ranch for the benefit of its employees. The ranch house then served as a communications and social base for oil company employees, along with summer field crews from the American Museum of Natural History. Harold consulted for several different oil companies over the years.

In the early 1920s, Harold Cook became loosely associated with the Colorado Museum of Natural History (Denver Museum of Nature and Science). He was appointed curator of paleontology at the museum in 1925. Margaret Crozier later became an employee of the museum as well. It was

during this time that Harold oversaw the excavations made by the Denver Museum at Folsom, New Mexico, that uncovered the famous Folsom projectile points near the bones of a type of bison that had been extinct since the Ice Age. The close association of the projectile points and the extinct bison bones strongly suggested, for the first time, that humans had inhabited North America ten thousand years ago. During this time, Harold clashed numerous times with the director of the Denver

¹³ Mary Graham, letter to Harold Cook, 8 July 1917, Box 1, Cook Papers, AFBNM.

¹⁴ Harold Cook, letter to Erwin Barbour, 14 November 1920, Barbour Papers, University of Nebraska Archives.

Museum, J. D. Figgins. Figgins's apparent unwillingness to acknowledge Harold's key role in uncovering the Folsom points, along with strident personality conflicts between the two men, prompted Harold (and also Margaret) to submit their resignations in late 1929. The debate between Harold and the Denver Museum over who should receive credit for the Folsom discovery continued for two decades.¹⁵

Harold also continued conducting research, often as an independent scholar, on a variety of paleontological subjects and sites. The Folsom culture was just one of numerous topics that he researched and described in numerous published articles. He was especially productive in the late 1920s and 1930s. Over sixty-five of his manuscripts were published.¹⁶

Collecting Mementoes of the Past—Old Bones and Indian Relics

Jim and Harold Cook's curiosity about history and nature, their penchant for collecting things, and their firm belief that a familiarity with Indian culture would foster greater understanding of Indian peoples lay at the heart of their keen desire to create a museum collection comprising their personal treasures. Harold's daughter, Dorothy Cook Meade has written that: "They saw this sharing as essentially educational, something they enjoyed doing as a public service. Both men were greatly interested in expanding public knowledge about fossils, . . . particularly those from the Agate fossil quarries."¹⁷

The origins of what became known as the Cook Museum of Natural History are difficult to pinpoint. At a young age, Jim Cook seems to have developed a keen awareness of and fascination with the past. Cook's idea to collect and display objects for public enjoyment and intellectual enrichment may have begun in the 1870s when he first met paleontologist O. C. Marsh in the Badlands. At that time, vertebrate paleontology captured scientific interest and public attention and raised intriguing questions about the history of the earth and of life on it. Charles Darwin's new theory of evolution instigated the search for "missing links" in the evolutionary process of all species. Additionally, funding from the federal government through geological surveys and from private institutions supported paleontological fieldwork and research. "During the 1870s," author Ronald Rainger has written, "an interest in almost all western resources and an enthusiasm for government sponsorship of science provided support for research in vertebrate paleontology."¹⁸ Cook met

¹⁵ Numerous letters between Harold, Figgins, and other members of the Denver Museum staff chronicle the heated debate that unfolded in the late 1920s and heated up again in the 1930s and 1940s. See Cook letters, Figgins Papers, Denver Museum of Nature and Science. Meade, *Story of Agate Springs Ranch*, 20; Margaret C. Cook, "The Cook Family in Sioux County," *Sioux County: Memoirs of Its Pioneers*, edited by Ruth Van Ackeren (Harrison, NE: Harrison Ladies Community Club and the Harrison Sun-News, 1967), 16.

¹⁶ Zimmerman "Cook Papers Collection," 9-13.

¹⁷ Dorothy Cook grew up alongside the Cook's museum until the age of nine. Dorothy Cook Meade, *Heart Bags & Hand Shakes* (Lake Ann, MI: National Woodlands Publishing Company, 12-13.

¹⁸ Ronald Rainger, *An Agenda for Antiquity: Henry Fairfield Osborn & Vertebrate Paleontology at the American Museum of Natural History, 1890—1935* (Tuscaloosa: University of Alabama Press, 1991), 12.

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Marsh during the heyday of interest in and support of paleontological investigations. By the late nineteenth century, when Cook was engrossed in developing the Agate Springs Ranch, vertebrate paleontology had become overshadowed by experimental biology, and interest in and funding for it declined and shifted away from universities to private museums supported by wealthy patrons.

In the early 1900s, Cook became aware that a few museums like the American Museum of Natural History received financial support from wealthy New Yorkers, many of whom belonged to the Boone and Crockett Club, New York



Figure 10.3 This interior view of the enclosed front porch of the ranch house is looking west toward the entrance of the "Bone Room." Courtesy of National Park Service (AGFO 6076.3).

Zoological Society, American Bison Society, and/or the American Ornithologists' Union. These private organizations fully endorsed research, interpretation, and conservation ideals.¹⁹

Jim Cook's initial awareness of natural history conservation principles may have originated in the early 1880s when he guided wealthy big-game hunters from England and the eastern United States on outdoor adventures in Wyoming. This was a time of growing concern about the loss, even extinction, of some plants, animals, and birds and the diminishment of other natural resources and loss of unsettled frontier environments. Some of the men with whom Cook rubbed shoulders while on big game hunts and natural history excursions in Wyoming promoted conservation ideals in magazine articles, books, in newly formed outdoor

¹⁹ *Ibid.*, 7-23, 105-22.

organizations, which soon became embodied in government policies.²⁰ The early 1890s saw the creation of the first national forest conservation legislation in the United States; French-trained forester Gifford Pinchot was an early staunch supporter of conservation policies and practices in the United States.



Figure 10.4 This interior view showing the east wall of Jim Cook's "Indian Room" and his den, taken around 1915, shows the hundreds of items given to Cook as gifts by Red Cloud and various band members as well as other Indian leaders Cook befriended. Hanging on the wall are Jim Cook's buckskin hunting suit on the right, Harold's leather suit on the left, a Medicine bow near the door, and dozens of moccasins. Courtesy of National Park Service (AGFO 6076.4).

In the late 1890s, he was appointed chief forester and head of the United States Department of Agriculture's Division of Forestry, forerunner of the U.S. Forest Service, by outdoorsman President Theodore Roosevelt. Jim Cook and Gifford Pinchot met in 1901 and shared information about subjects of mutual interest—New Mexico and forestry.²¹ Cook invariably met other men who shared this mutual interest in hunting, natural history, and conservation.

²⁰ Mark Firth, well-to-do Sheffield, England industrialist; Thomas Brassey, English nobleman and noted sailor who circumnavigated the world in 1877; Paul du Chaillu, natural historian and historian who explored regions of West Africa and recorded anthropoid apes and who documented the naval expeditions of the Vikings; and Harold C. Wilson, a noted African explorer, were among the more notable Europeans that Cook guided. Cook also guided several well-known U.S. outdoorsmen, such as Dr. Charles P. Murray, and bridge engineer Washington Augustus Roebling, son of John Augustus Roebling who had begun the construction of the Brooklyn Bridge in New York City, a noted collector of mineral specimens. Cook, *Fifty Years on the Old Frontier*, 115-122, 139; Cook, *Tales of the 04 Ranch*, 3-4; Barbour, "James Henry Cook," 477-80.

²¹ Gifford Pinchot, letter to James Cook, 23 December 1901, Box 53, Cook Papers, AFBNM.

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After Henry Fairfield Osborn, head of the American Museum of Natural History in New York, first visited the Cooks at Agate Springs Ranch in the summer of 1908, the two men began exchanging ideas about establishing both a game reserve and bone-hunters headquarters at Agate. In early September, he “made mention of the park or game preserve scheme.”²² Jim also began promoting the idea to W. D. Matthews at the American Museum.²³ Writing to his son on Christmas Day 1908, Jim explained more fully his thoughts about the preserve.

I am most desirous, Harold, that you and John hold on to this old place so long as you can, unless we can turn it into a game reserve and the place be kept intact, and even that scheme does not appeal to me as strongly as it did. If I had a little money to operate with I would not think of it for we, if we saw fit, could have our own private little game reserve, in a short time, by starting in a small scale and breeding up as we would with any livestock.²⁴

Many years later, paleontologist Edwin H. Colbert, who did some field work at Carnegie Hill in 1938 and also knew about the American Museum’s long association with Agate, wrote that W. D. Matthews had a long-held dream of establishing a permanent facility at Agate where “study could be devoted to fossils collected not only at Agate but more widely at fossil localities throughout the region.”²⁵ Matthews envisioned a laboratory at Agate that was a joint effort undertaken by a consortium of museums.

The notion of founding a bone museum at Agate had, in fact, already been realized to some degree when Cook, Osborn, and Matthews discussed the idea. By 1908 Jim Cook had a museum of sorts at Agate Springs Ranch. Jim and Harold may have assembled the collection of fossils they had already gathered and displayed them on shelves just prior to the arrival of their distinguished visitors Osborn and Matthews in the summer of 1908. Kate Graham, writing to her sister in April 1908, mentioned that improvements were planned for their house in preparation for a busy summer of visitors. Among the work to be done was the enlargement of the porch room (on the northwest corner of the house) for Harold’s den and, perhaps, for at least a temporary display of fossils for the paleontology guests to view.²⁶ (This porch room became the Bone Room.) Writing from Chicago in late September 1908, Willoughby Walling mentioned that Jim had opened a “museum” in the ranch house. Cook apparently attempted to interest Walling in providing financial assistance for developing the museum concept at Agate, but to no avail.²⁷

²² James Cook, letter to Harold Cook, 6 September 1908, Box 3, Cook Papers, AFBNM.

²³ *Ibid.*, 10 November 1908, Box 3, Cook Papers, AFBNM.

²⁴ *Ibid.*, 25 December 1908, Box 3, Cook Papers, AFBNM.

²⁵ Edwin H. Colbert, *Digging into the Past: An Autobiography by Edwin H. Colbert* (New York: December Books, 1989), 240.

²⁶ Kate Cook, letter to Clara Heath, 11 April 1908, Box 13, Cook Papers, AFBNM.

²⁷ Willoughby G. Walling, letter to James Cook, 23 September 1908, Box 54, Cook Papers, AFBNM; Dena Sanford, William S. Harlow, and Charles Trupia, *Historic Structures Report: Cook Homestead Cabin*,

Beginning in the 1910s, Jim and Harold's collections of Indian artifacts, bones, and mineral specimens occupied three rooms in the northwest corner of the ranch house. Jim Cook's den became the "Indian Room," where a great array of Indian clothing, tools, guns, and rugs were displayed on the walls and floor. Here, the portrait of Red Cloud painted by Chicago artist Bessie Sandes Butler was prominently displayed for all to see and contemplate. The "Bone Room," organized primarily by Harold, occupied and enclosed a corner of the north porch; the walls were traversed by multiple shelves covered with fossil bones and mineral specimens of all kinds. The "Curio Room," occupying a small hall between the Bone and Indian rooms, displayed a curious assortment of unrelated odds and ends, ranging from a ship in a bottle to dried insects. The small number of visitors who stopped by the Cook Museum of Natural History before 1910 multiplied in the 1910s as news of the museum spread by word of mouth. By the 1920s the increasing availability of the automobile to middle-class Americans and improvement of roads in the area made travel to Agate Springs Ranch more possible and pleasant. It also brought more visitors to the Cook Museum. As summer visitors increased, family members were enlisted to help guide visitors through the Cook Museum, explaining each room's contents as they went.²⁸ "From the age of six or seven on [1919—1920]," Dorothy Cook Meade explained, "my sisters and I were each assigned, in turn, the responsibility for conducting groups of adult visitors through the museum. We explained the artifacts in the same terms as did our elders, told the stories that went with them, and answered questions." The entire operation was quite informal, Meade recalled.²⁹

On weekends, however, there might be as many as "a hundred or more cars out in the grove," Dorothy Meade recalled. "People picnicking. Just large numbers of people."³⁰ The shaded grove east of the house and between the post office on the north and the irrigation ditch on the south became a wayside parking and picnicking area for tourists arriving by car. That area of the ranch headquarters adopted the appearance of a cultural landscape reserved for tourism activities in the summer.

Jim Cook had other ideas about preserving and displaying his Indian artifacts, representing tangible vestiges of his image of the fading frontier West and the saga of the Lakota people who had been such an essential element of his West. It is unclear when Jim Cook first imagined the re-creation of Fort Laramie, icon of the old West, at Agate Springs Ranch. This scheme entailed building a replica of Fort Laramie that would store and display Cook's collection of fossils, Indian artifacts, and mementoes of the old West.³¹ In the early 1920s, Cook put together a plan of the Fort Laramie venture that he sent to numerous friends and acquaintances for their comment. In 1921, Cook had his Fort Laramie proposal set in small type on a single page, with a

HS-1, *Agate Fossil Beds National Monument, Agate, Nebraska*, DRAFT, (Omaha: Midwest Region, National Park Service, 2004), 40.

²⁸ Meade, *Heart Bags & Hand Shakes*, 12-15.

²⁹ *Ibid.*, 13.

³⁰ Dorothy Cook Meade, interview with Ron Cockrell, May 22, 1986, (transcript, p. 16) at Agate Fossil Beds National Monument.

³¹ Cockrell, "Our Ranch is Different," 15.

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small image of the fort in fur-trading days, and sent it to dozens of individuals over several months. "The day of the wild Indian, the great bands of buffalo, elk and pronghorn antelope have passed forever. So also have the days of the old fur-trappers and frontiersmen of the West," his letter began.

... For years I have thought that a replica of the old American Fur Company's post which was built at the junction of the Big Laramie and the North Platte rivers, back in the '30s, would be the most fitting representation of such a memorial. . . . My desire is to see a replica, exact in detail, of this old fur-trading post at Fort Laramie, on my ranch on the Niobrara river, fifty miles northeast of the site where the old fort stood, as it is within the radius of which so many of the activities about the fort took place. . . . Being included among the frontiersmen who lived the life when there was truly a frontier, I have many things in my home which pertain to the history of the West. Old Indian friends have made me many presents—relics of days when conditions were vastly different. . . . I also have one of the old light Concord stagecoaches which was used on the Overland Stage Route to California . . . presented to me by General L. H. Rucker of the United States Army. An Indian village, typical of the old days, containing the last of the old-time Plains Indians, would also be a prominent feature, with their tepees pitched adjacent to the fort. . . .³²

Cook went on to explain that a growing number of people already visited his ranch to see his collection of fossil material and prehistoric animal life even though he had never advertised his exhibits. "Texas has its Alamo; New Mexico has its old pueblos; California its El Camino Real, with which to create atmosphere for their sections of our great West. . . . The Middle West should be represented by having such a distinctive attraction that people from all over the world will . . . visit and enjoy," Jim Cook reasoned. Cook presented his Fort Laramie replica idea to scores of people in California.³³

Despite his entrepreneurial efforts, Jim Cook's Fort Laramie replica never won the full-fledged support of his friends. The Cooks' Indian, bone, and stone collections remained in rooms at the Agate Springs Ranch. In the 1920s, visitation in the summer had grown to a point where parking and a picnic area with tables, south of Jack Cook's post office, were warranted. Visitors stopped not only to view the Cook Museum but to also relax over a picnic lunch in the cool shade of a cottonwood grove east of the house. By the mid-1920s, following the publication of his first book in 1923, *Fifty Years on the Old Frontier*, Jim Cook of "wild West" repute became a venerable living artifact on display at the Cook Museum and another reason to stop at the Agate Springs Ranch on summer outings. Cook's personal tales of cattle driving, big-game hunting, and Indian scouting became well polished as he

³² James H. Cook, typeset letter with image of Fort Laramie at top, 1921, Box 97, Cook Papers, AFBNM.

³³ *Ibid.*

explained and entertained summer vacationers who came to tour the Cooks' collections of ancient and modern historical relics.³⁴

Harold Cook apparently carried on the idea of building a museum to house the Cook collection of Indian artifacts and fossil bones. Dorothy Cook Meade, in 1986, recalled that her father had plans of a museum building that he had hoped to build. "He tried various schemes through the years to try and get something done in the way of a museum." Lack of funding foiled his efforts, however. Both Jim and Harold "had very strongly the attitude that these things should be in the public domain somehow," Dorothy vividly recalled.³⁵

For many years, admission to the Cook Museum was free; only late in life did Jim Cook charge visitors a small entrance fee.³⁶ By the early 1930s, after Harold Cook had barely survived two or three near-financial catastrophes with the ranch and the Great Depression was dipping to its lowest point, Harold acknowledged that the fee charged visitors to view the Cook Museum mattered. In a letter to his grandmother Mary Graham, Harold wrote about some small improvements that he and Margaret had been making to the house, including the enlargement and rearrangement of the bone and Indian exhibits. "We feel that the collections are a very important source of revenue, and that it is important to have them as attractive and different from the way many people have seen them," Harold explained. Unfortunately, Harold complained, time taken to improve the exhibits caused him to neglect "writing that would bring in needed money."³⁷

In 1938, writer A. B. Wood described the Cook Museum of Natural History and its creator in glowing terms.

One of the most interesting private museums in the entire west has been built up there by Capt. Cook, assisted as the years have passed by his son, Dr. Harold J. Cook. . . . The Cook collection is most varied, not only including a wealth of fossil specimens, but also a huge assortment of Indian trophies, bead and leather handiwork, as well as unnumbered historical frontier items and dozens of relics, mementoes and other contributions Agate Springs ranch has become one of the most famous meccas for visitors in the west and its scientific and historic value is growing in public appreciation.³⁸

In the fall of 1940, on the eve of U.S. entrance into World War II, Harold Cook continued to promote the Cook Museum of Natural History in newspapers and elsewhere.³⁹

³⁴ Cockrell, "'Our Ranch is Different,'" 24; Meade, *Story of Agate Springs Ranch*, 32.

³⁵ Both quotes from Meade, interview with Cockrell, May 22, 1986.

³⁶ Meade, *Heart Bags & Hand Shakes*, 13.

³⁷ Harold Cook, letter to Mary Graham, 30 April 1931, Box 13, Cook Papers, AFBNM.

³⁸ A. B. Wood, editor, *Pioneer Tales of Nebraska Panhandle* (Scottsbluff, NE: n.p., 1938), 198.

³⁹ Harold J. Cook, "Hunting Nebraska's Prehistoric Animals at the Agate Quarries," *Business Farmer Special North Platte Valley Edition*, October 1940, Box 116, Cook Papers, AFBNM.

Recording the Real and Mythical “Old Frontier”

For Jim Cook, recalling the old West and reminiscing about the loss of a past and a place that he had known well, took another direction in addition to collecting and exhibiting artifacts in the Cook Museum. At the encouragement of family and friends, he began to record his own experiences cattle driving, scouting, and ranching in articles and in books. As he grew older, some of his friends recognized that Cook had experienced a part of U.S. history that had vanished and was fast becoming mythical—the old West of Indian fights and cattle drives. Harold, Erwin Barbour, and friends like the Walling brothers regularly encouraged Cook to put his recollections in writing. “Do stick to your memoirs,” Willoughby Walling urged. “They are worth all the time you can put on them.”⁴⁰ This process may have been prompted by the enormous popularity of state and regional history books written and published in the late 1800s and early 1900s by self-styled popular historians like Californian George Bancroft, South Dakotan Doane Robinson, and Nebraskans Julius Sterling Morton and Albert Watkins, who produced a three-volume history of Nebraska in the early 1900s. Jim Cook was one of dozens of Nebraska residents that Morton and Watkins selected and solicited to pay for the inclusion of their own biographical sketch in their history. (In 1911, Cook noted that this request was about the third one that he had received for a sketch of his life.) At Harold Cook’s request, Erwin Barbour wrote a lengthy colorful biography of Jim Cook, filled with the details of his western adventures, which was published in 1913 in Volume III of *History of Nebraska*.⁴¹ The process of recalling people and events for Barbour along with the positive response Cook may have received after the volume’s publication, undoubtedly encouraged Cook to write an entire book on his experiences coming of age in a West that had all but disappeared. By early 1912, Harold reported to Erwin Barbour that Jim had “twenty odd thousand words done on his ‘book,’ and has taken the manuscript of it with him to the [California] coast.”⁴² Five years later, Cook’s first published article, “Trailing Texas Long-horn Cattle through Nebraska,” was published in the *Nebraska Historical Society Publications* (1917). Cook’s writing was greatly aided by Eleanor Cook’s typing and editorial skills. Since he had never learned to “wrangle” a typewriter, every page was written in long-hand and then taken to Eleanor to type and to straighten out the English. After a decade of writing, Yale University Press, probably at the request of Yale-graduate Erwin Barbour, published Jim Cook’s *Fifty Years on the Old Frontier* in 1923.⁴³

⁴⁰ Willoughby Walling, letter to James Cook, 27 November (undated, around 1915), Box 54, Cook Papers, AFBNM.

⁴¹ Erwin H. Barbour, “James Henry Cook,” in *History of Nebraska, Volume III*, edited by Albert Watkins (Lincoln: Western Publishing and Engraving Company, 1913), 477-79.

⁴² Harold Cook, letter to Erwin Barbour, 15 January 1912, Barbour Papers, University of Nebraska Archives, Lincoln.

⁴³ James Cook, letter to Harold Cook, 15 October 1911; James Cook, letter to Harold Cook, 1 November 1911; Erwin Barbour, letter to Harold Cook, 18 November 1911; and Harold Cook, letter to Erwin Barbour, 20 November 1911; all in Box 3, Cook Papers, AFBNM; Meade, *Story of Agate Springs Ranch*, 32-35.

Laudatory response to Cook's first book undoubtedly encouraged Jim Cook to consider writing additional personal memoirs of different western history topics. Willoughby Walling thanked Jim for sending him a copy of the book in the fall of 1923 and told Jim that he had "made a real contribution to a big public and it makes me happy that the book is replete with the modesty and fine spirit which we who love you have always known in you."⁴⁴ Cook's writing endeavors were further encouraged by Earl Alonzo Brininstool, a California writer that Cook met there in 1919. E. A. Brininstool, a resident of Los Angeles since 1895, who wrote numerous articles and books on cowboys, range and frontier life, and Indian wars, found Cook's life and work fascinating. Over a twenty-year period, Brininstool provided Cook substantive suggestions and advice about his writing.

In the 1920s and 1930s, when the ranch on one or two occasions seemed destined for foreclosure, Cook focused his energies on the museum and writing his memoirs, at least in part to supplement the ranch income. Articles by Jim Cook, then in his seventies, proliferated in the 1930s, and included:

- "The Art of Fighting Indians," *American Mercury*, June 1931;
- "Early Days in Ogalalla," *Nebraska History*, 1933;
- "The Texas Trails," *Nebraska History*, 1935;
- "Six-Gun Days," *New Mexico Magazine*, March 1936;
- "Memories of Chadron," a letter, *Nebraska History*, 1938.

Jim continued to write or dictate into the early forties, completing his second book, *Longhorn Cowboy*, just before his death in 1942. (The manuscript was edited by Howard R. Driggs and published later that year.⁴⁵)

Jim Cook's writing, at Agate and when visiting Mary Graham in California, may have also encouraged her to record her reminiscences. Her grandson Harold also continually encouraged her to write down her personal recollections of growing up in rural upstate New York and living in Cheyenne and the 0 4 Ranch in the 1880s. "You have had a most interesting and unusual life," Harold wrote in February 1933. "I hope now that you will feel equal to writing at least A LITTLE EACH DAY, if only a sentence or two, or a page or two, on the reminiscences I asked you to write."⁴⁶ Three months later, Harold inquired again if Mary had found time to write any reminiscences. Mary Graham responded obediently to Harold's plea and produced many pages of handwritten descriptions of her young life growing up in New York, her years living in Michigan, and her time spent traveling to and living on the 0 4 Ranch after its founding. (Eleanor Cook Naffziger later transcribed her grandmother's reminiscences, which are archived at Agate Fossil Beds National Monument).

⁴⁴ Willoughby G. Walling, letter to James Cook, 23 October 1923, Box 54, Cook Papers, AFBNM.

⁴⁵ Howard R. Driggs, editor, *Longhorn Cowboy*, by James Cook (New York: G. P. Putnam's Sons, 1942).

⁴⁶ Harold Cook, letter to Mary Graham, 17 February 1933 and 12 May 1933, Box 13, Cook Papers, AFBNM.

Memorializing the Past

In addition to collecting artifacts and memories of the past, local and regional historians often asked Jim Cook to participate in commemorative ceremonies of various kinds, many that memorialized the life of Red Cloud and the Sioux and northern Cheyenne. The changed conditions of subsistent Native American cultures served as a poignant reminder that the “old West” was gone forever. Jim and Harold took part in more than one commemorative event at Fort Robinson. In late October 1917, Jim Cook and several Indians, including Red Cloud’s son, attended



Figure 10.5 Harold Cook is leading an auto tour to Carnegie Hill and University Hill, possibly in the mid-1920s around the time that the Agate Highway was proposed between Alliance and Harrison, Nebraska. John Graham Cook noted in his 1915 diary that it was not uncommon for the Cook family to offer Bone Room visitors guided tours to the fossil quarries. Courtesy of National Park Service (AGFO 3838.28).

the unveiling of a stone monument in Crawford, Nebraska, to commemorate Red Cloud’s signing of the Black Hills Treaty of 1876.⁴⁷

During the 1930s, Cook was invited to participate in other gatherings that memorialized people or events in western history. In 1932, he took part, along with several children and in-laws of Red Cloud, in the dedication of the Red Cloud Agency Monument near Fort Robinson. In September 1934, Jim Cook played a leading role in the ceremony at Fort Robinson to commemorate Crazy Horse, who

⁴⁷ “Historic Marker Commemorating Treaty of 1876,” *Crawford Courier*, 1 November 1917, Box 118, Cook Papers, AFBNM

was slain at the fort in September 1877 and also Lieutenant Robinson killed by Indians on February 9, 1874 after whom the fort was named.⁴⁸

The Auto and Good Roads Spur Tourism

Harold Cook, along with pursuing his life-long passion for paleontology, also became increasingly involved in promoting parks and tourism, both of which were natural outgrowths of the Cook family's interest in preservation and education of their own history and fossil quarries. In 1921, Harold was appointed to the newly established Nebraska State Park Board. The board and the Nebraska Federation of Women's Clubs attempted to interest Harold and his father in making the fossil quarries a state park at that time, but the two men resisted. They set a high price of \$80,000 for the sale of the quarries to the federation and state parks, which killed the proposal when it went before the Nebraska legislature.⁴⁹

Harold Cook became totally immersed in the Good Roads movement in the early twentieth century, which promoted the improvement and new construction of roads—especially to nature parks, cultural sites, and outdoor scenic attractions of all kinds. Middle-class Americans' ownership of the automobile, access to new and improved roads during the Good Roads movement in the 1910s and 1920s, and the founding of automobile associations (such as the American Automobile Association, See America First League, Lincoln Highway Association, and the Park-to-Park Highway Association) expanded auto touring across the country. The tremendous growth in automobile ownership, made possible by the reduction in cost due to assembly line production, the growth of the middle class, and an increase in leisure time, contributed enormously to tourism and outdoor recreation in the 1920s. Between 1900 and 1930, automobile ownership jumped from 8,000 to nearly 26,000,000, making travel away from congested and industrialized urban areas increasingly possible. The automobile, combined with improved roads, encouraged tourism to parks and places of scientific wonder and scenic beauty near Agate Springs Ranch, like Scotts Bluff National Monument, Fossil Cycad National Monument, Badlands National Monument, Wind Cave National Park, Custer State Park, Mount Rushmore National Memorial, and Devil's Tower.⁵⁰

Realizing the critically important boost that auto access would give tourism at the Cook Museum, Harold heartily supported good roads and their construction in

⁴⁸ Meade, *Heart Bags & Hand Shakes*, 19; "Captain Cook is White Leader in Symbolic Rites," *Northwest Nebraska News*, 6 September 1934, Box 118, Cook Papers, AFBNM.

⁴⁹ Cockrell, *Bones of Agate*, Chapter 1, p. 2 (digital version).

⁵⁰ The literature on the history of tourism and the influence of the automobile on it in the early 1900s is enormous. See: Earl Pomeroy, *In Search of the Golden West: The Tourist in Western America* (Lincoln: University of Nebraska Press, 1957/1990); Warren James Belasco, *Americans on the Road: From Autocamp to Motel, 1910-1945* (Baltimore: The Johns Hopkins Press, 1979); John F. Sears, *Sacred Places: American Tourist Attractions in the Nineteenth Century* (New York: Oxford University Press, 1989); John A. Jakle, *The Tourist: Travel in Twentieth-Century North America* (Lincoln: University of Nebraska Press, 1985); and Marquerite S. Shaffer, *See America First: Tourism and National Identity, 1880-1940* (Washington, DC: Smithsonian Institution Press, 2001).

the vicinity of Agate. Writing to his father in September 1921, Harold articulated his rationale for supporting good roads (and also parks) in and around Agate. "This good roads and parks movement is going to mean constantly more people . . . [and] there will be many times the present travel at Agate. . . . We have a situation which is unique, and one that can readily be made to make a very good income of itself, and supplement the other source of income very materially."⁵¹

Harold soon became a driving force behind the Alliance, Nebraska, Chamber of Commerce's promotion of the Agate Highway, joining Alliance to the southeast with the Agate Springs Ranch and the fossil quarries via Hemingford. In early May 1922, the Alliance Chamber officially established the Agate Highway and extolled its virtues and promise. "This city [Alliance] . . . will mark the new highway and see that it is maintained for tourist travel. The roads to the fossil beds and the museum on the Cook ranch are good and will undoubtedly be traveled by hundreds of tourists during the coming months," predicted the Chamber. Harold's discovery of an important fossil tooth near Agate around the same time further enhanced the Alliance Chamber's Agate Highway promotional efforts. Harold informed the chamber in 1922 that he hoped "to have the government make the fossil beds a permanent and protected exhibit with a suitable building erected over them."⁵² Despite all the boosterism, the Agate Highway never materialized west of the Box Butte-Sioux County line into anything more than a barely or, in places, even impassable rough ranch road that more or less followed the old mail route.⁵³

In the 1920s, Harold served as well as the president of the Western Nebraska Good Roads Association. He vigorously campaigned for the creation of a north-south road that accessed Agate, and in 1927 he tenaciously pushed through the original Nebraska State Highway 29 between Mitchell and Harrison, with its alignment past the Agate Springs Ranch. Many among the trickle of auto tourists that grew larger every year, as well as organized groups, stopped at the ranch to hear Harold lecture on fossils or some aspect of local history. Harold also went on regional speaking tours, and even hired an Omaha publicist to arouse interest in and build tourism at Agate. He also approached executives of railroads serving the Black Hills and Yellowstone with a proposal to add an overnight "Agate Detour," with taxi service from Crawford or Scottsbluff-Gering. One railroad, Chicago, Burlington & Quincy, tried this "detour" plan in 1931, but public interest in Agate's fossils and Indian artifacts proved too tenuous and Agate's location too remote to make this a successful money-making venture for the railroad.⁵⁴

The 1920s and 1930s proved to be a watershed in the development of state parks and national parks. Both park systems grew in response to their greatly enlarged role in preserving and managing historic sites and cultural parks as well as places featuring more natural elements. Jim and Harold Cooks' earlier thoughts

⁵¹ As quoted in Cockrell, "Our Ranch is Different," 24.

⁵² Both quotes from "Ape Man Skeleton Near Agate Belief of Cook, Tooth Finder," *Omaha World-Herald*, May 3, 1922.

⁵³ Thomas Arthur Repp, "Agate Highway: Nebraska's Buried Gem," *American Road* 5: 1 (Spring 2007), 14-21.

⁵⁴ Cockrell, "Our Ranch is Different," 26.

about creating an Agate reserve made them keenly aware of the potential importance of parks at or near Agate. Early on in the park movement, Harold became associated with, first, the Nebraska state parks, then, the National Park Service.

Both state and national parks benefited greatly from the arrival of Franklin D. Roosevelt in the White House in the spring of 1933. In an effort to lift the nation out of the Great Depression, he and Congress worked together to launch an expansive constellation of conservation policies, programs, and agencies created to build up state and national parks.

Well-versed in park principles, Harold became employed at Scotts Bluff National Monument, fifty miles south of Agate, in the mid-1930s. In 1934, Harold was experientially well qualified to head the national monument's Historical and Reconnaissance Survey, created to identify the park's historic and natural resources and to determine its future needs. In December 1934, he became the fourth custodian (later called "superintendent") of the park. He became instrumental in the work of the Civilian Conservation Corps, which arrived in April 1935 to complete the park road to the summit of one prominent bluff, build new picnic grounds, and make plans for constructing the Oregon Trail Museum in the park. In mid-February 1935, Harold excitedly wrote to his grandmother Mary Graham about recent developments at Scotts Bluff.

"I have just secured a CCC-ECW camp of 200 men for the monument. . . . I will have the general direction of the work of this camp; and with it we can build fine buildings, do important road and trail development work, work [with] fossil and archaeological and historical excavation crews, do reforestation, conservation, and endless other jobs. . . . I am being paid next to nothing, practically donating both [*sic*] time, training, and expenses, at the present time! I HOPE this can be corrected before long, It all happened because I got all these projects approved. . . ."⁵⁵

Harold served as park custodian until mid-1935, when Cook refused to yield to the Sioux County Democratic Party chairman's demand to hire an unqualified engineer and loyal Democrat to head the CCC camp. Eventually, Secretary of the Interior Harold Ickes, outraged by Harold's defiance to this mandate, concurred that Harold Cook should be terminated as Scotts Bluff custodian.⁵⁶

In June that year, Harold wrote to National Park Service Acting Director Arthur Demaray to explain his political situation at Scotts Bluff. He also invited Demaray to visit Agate fossil quarries. According to Howard Baker who accompanied Demaray on a personal tour of the quarries later that summer given by

⁵⁵ Harold Cook, letter to Mary Graham, 16 February 1935, Box 13, Cook Papers, AFBNM.

⁵⁶ Chapter 1 in Ron Cockrell's *Bones of Agate: An Administrative History of Agate Fossil Beds National Monument, Nebraska* (Omaha, Midwest Region, National Park Service, 1986) presents a detailed history of Harold's tenure at Scotts Bluff and the National Park Service's early interest in Agate.

Harold, Agate impressed the acting director. There would be no further Park Service conversations about Agate, however, for another twenty-five years.⁵⁷

Celebrating the Past in a Life—Jim Cook

Jim Cook and his older brother John aged together in the shade of the mature cottonwood grove at Agate Springs Ranch. Jim developed perpetual problems with his sinuses and became increasingly deaf. Margaret C. Cook mentioned these infirmities in a letter to Mary Graham in the early 1930s. “First we must make some money . . . Then we will be able to have Father Cook’s sinuses treated properly and relieve his condition, if not help the deafness.”⁵⁸ Not long afterward, Mary Graham sent Jim a newspaper article describing a new instrument, an oscillator that helped deaf people “feel” sound. A demonstration of this bone conduction oscillator had been given by Dr. Hugh Lieber before a group gathered at the Engineering Society in New York. The bony structure of the head, rather than the inner ear, apparently amplified sound. Ear phones that fit snugly over the head and ears along with a receiver that hung from a front pocket made the oscillator somewhat cumbersome. None-the-less, Jim eventually acquired an oscillator.⁵⁹



Figure 10.6 (a & b) A festive party celebrating Jim Cook’s eighty-second birthday on August 26 and John Cook’s eighty-fourth birthday on July 26 was held at Agate Springs Ranch on August 26, 1939. Many friends and family attended, including paleontologist Walter Granger, American Museum of Natural History paleontologist and A. B. Wood, former president of the Nebraska State Historical Society. At his birthday celebration on August 26, 1939, Jim Cook wore an oscillator to help improve his hearing, which by then had become extremely poor. Courtesy of National Park Service (AGFO 5849.12 and AGFO 5761.18).

As the long national economic depression of the 1930s gradually subsided, Harold decided to stage a grand birthday party for his father to celebrate his eighty-two years of life. On August 26, 1939, dozens of friends and celebrities gathered on the east lawn under the cottonwood trees to pay their respects to Jim Cook—"the man having a history no other man in western Nebraska is known to possess."⁶⁰ John Franklin Cook, who had just turned eighty-three a month earlier, was also celebrated. Following the picnic dinner on the lawn, consumed over the tones of a cornet duet, A. B. Wood, former president of the Nebraska State Historical Society and publisher and editor of the *Gering Courier*, presented a history of Jim Cook and introduced others who made laudatory comments about his life and character. Walter Granger, paleontologist from the American Museum of Natural History in New York City and long-time friend of the Cook family, was among the featured speakers. Dr. Granger noted that Agate was the most famous and best known of any such place in the world. Photographs were taken of the festive event; Jim Cook, eager not to miss a word, wore his hearing oscillator.

Little more than two years later, John Franklin Cook died at the ranch on October 21, 1941. Carrying out his wishes, Harold oversaw his burial on a terrace on the lower western flank of the fossil hills, where a grand view of one of John's homestead claims could be seen across the Niobrara River. John was eighty-five.

Jim Cook followed his brother in death just three months later. He died at his long-time home at Agate Springs Ranch on January 27, 1942 at age eighty-four. As he had long wished, he was buried in Lincoln next to his young son, John Graham Cook, who had died more than twenty-three years earlier.

Carrying On

Harold Cook returned to Agate Springs Ranch after leaving Scotts Bluff National Monument and continued operating the ranch and conducting geological and paleontological studies. When Jim Cook died in 1942, Harold continued operating the ranch. (Eleanor Barbour Cook maintained a half-interest in the Harold J. Cook Homestead Cabin and fossil hills.) In addition to ranching, Harold and Margaret and Harold and Eleanor's four daughters welcomed the perpetual stream of summer visitors to the Cook Museum of Natural History and the fossil quarries.

Harold also continued pursuing geology as a consultant and paleontology as an independent researcher. At times, he and Margaret traveled away from the ranch for weeks at a time pursuing a professional endeavor or presenting a scholarly paper at a meeting. In 1956, he initiated explorations that led to the discovery of more than a dozen fossilized eggs near Crawford dating from forty million years ago. The number of specimens in his personal collection of fossil and rocks as well as his library of scientific and local history books continued to grow. Between 1936 and 1951, Harold wrote nearly one dozen articles and book chapters, ranging from reports of scholarly paleontology studies and paleontological overviews for the

⁶⁰ "Honor Accorded Pioneer Ranchman," Vertical File: Cook, James H., Nebraska State Historical Society, Lincoln.

general public, to local history vignettes. For his continued scholarly accomplishments, he received an honorary doctor of science degree from the South Dakota School of Mines in 1952. At Margaret's coaxing and with her considerable clerical assistance, he even wrote chapters for a book on the history of the 04 Ranch (published posthumously).⁶¹

In the late summer of 1962, Harold fell ill and was hospitalized with viral pneumonia. Unexpectedly, his condition deteriorated and he died on September 29, 1962 from a massive coronary thrombosis. Harold J. Cook was seventy-five.⁶²



Figure 10.7 Harold Cook, about 1952, around the time he received an honorary doctoral degree from the South Dakota School of Mines for his long career of scholarly research and publications in paleontology and geology. Courtesy of National Park Service (AGFO 5767.17).

Margaret Crozier Cook maintained a half-interest in that part of the ranch containing the Harold J. Cook Homestead Cabin and fossil quarries. After championing her husband's wishes to create a national monument at Agate, Margaret witnessed its authorization in 1965. Three years later, she died in 1968 at age sixty-nine. Upon her death, her half-interest ownership of Harold Cook's Homestead Cabin passed to Harold's four daughters.

Emerging Preservation Landscapes and Archives

During the forty-year period between the mid-1920s and mid-1960s—a time when Harold Cook became the principal ranch manager—financial challenges that had plagued Agate Springs Ranch almost from its inception grew more intense. More than once, unpaid debts brought the Cooks to the brink of foreclosure proceedings. Some ranch parcels were actually sold during this time. Amidst these challenges, both Jim and Harold Cook turned elsewhere to supplement the ranch income and to divert their angst about finances.

Both men pursued their passions—researching the past in fossils, in the fading West of cattle drives and pre-reservation Indian cultures, and in their own lives—with entrepreneurial ingenuity, creativity, and conviction. Their own efforts to memorialize, preserve, and interpret the past that they knew coincided with a national nostalgia about a seemingly simpler quieter past and the

⁶¹ Zimmerman, "Cook Papers Collection," 9-14; Cockrell, *Bones of Agate*, Chapter 1; Meade, *Story of Agate Springs Ranch*, 37-39.

⁶² "Nebraska's Dr. Harold Cook Agate, Dies Here Saturday," *Scottsbluff Daily Star-Herald*, September 30, 1962, General Files, 1952-1963, National Park Service, Record Group 79, Central Plains Region, National Archives and Record Administration, Kansas City.

emergence of a conservation ethic. This forty-year period witnessed the emergence of a conservation landscape at Agate Springs Ranch.

Collecting, preserving, and interpreting fossil and Indian artifacts at Agate Springs Ranch began early in the twentieth century, primarily inside the Cook residence. The Cook Museum of Natural History was accompanied by an expanding library and archives of material relating to paleontology, geology, and local western Nebraska history. Gifts from Red Cloud, his band members and others, such as Red Cloud's wife and Lakota leader American Horse, to Jim Cook and his family made up an extensive part of the collection. The Cook Museum of Natural History evolved into the Cook Collection, eventually consisting of over 450 artifacts. Most of the pieces appear to have been done on the Pine Ridge Indian Reservation. The collection included an array of objects, ranging from Red Cloud's leather war shirt and moccasins to pipe bags, small pouches, horn spoons, and arrowheads. One of the premier items in the collection was (and is) a painted and quilled leather shirt worn by Red Cloud and depicted in the portrait of the old chief by the Cook's artist friend Bessie Sandes Butler.⁶³

The Cook Museum/Cook Collection included a variety of other items as well, such as a leather case once owned by Crazy Horse and a well-used elk antler scraper given by Red Cloud's wife to Jim Cook. A small number of Apache pieces may date from Cook's days at the WS Ranch in southwestern New Mexico. A variety of different catlinite, or pipestone, pipe bowls, ceremonial shields, and Indian saddles were also part of the museum. Most of the items were gifts to Jim Cook; he did not try to accumulate a representative collection of Sioux artifacts until late in life. After the Cook Museum was established, Cook began to look for items that more fully illustrated the traditional Sioux life. In some cases, Cook asked his Indian friends to make items not otherwise available, hence some objects have never been used.⁶⁴

Modern curators have observed that the Cook Collection as a whole has few major pieces. "The Cook Collection is remarkable for the circumstances in which it was formed. Cook was a rancher; he was not a trader or a soldier. He was a friend of the Indians who visited his ranch," University of Nebraska State Museum Curator Thomas Myers has written.⁶⁵

Books, articles, letters, and mementoes created by or related to Jim and Harold Cook and the Cook family about various subjects pertaining to the past—the Cook library and archives—further expanded this interior cultural environment. Jim's memoirs contributed to the notoriety of the Cook Museum, since visitors began to view him as an artifact that complemented the other items in the collection. Harold, the incorrigible raconteur, also drew people from far and wide to the Agate Springs Ranch's interior cultural spaces.

⁶³ Thomas P. Myers, "Collection on the Nebraska Frontier," *American Indian Art Magazine* (Winter 1993), 61-67, 102; Dorothy Cook Meade, *Heart Bags & Hand Shakes: The Story of the Cook Collection* (Lake Ann, MI: National Woodlands Publishing Company, 1994).

⁶⁴ Meade, *Heart Bags & Hand Shakes*.

⁶⁵ Myers, "Collection on the Nebraska Frontier," 67.

Chapter 10
Historic Resource Study
Agate Fossil Beds National Monument

The Cook Museum of Natural History/Cook Collection was complemented by an emerging cultural landscape at the ranch headquarters and fossil quarries. Agate Springs Ranch's emergence as a tourist destination manifested itself in a number of physical changes and additions. Roads in the vicinity were completed (or partially so) to bring the new automobile tourist to the ranch and fossil quarries. Once there, the Cooks had established a place east of the house in the shade of a cluster of cottonwoods for tourist parking and picnicking. At the fossil quarries to the east, the arrival of some tourists in cars was evident by the continued use of paleontological field crew wagon traces up the lower slopes of Carnegie and University hills to the quarries. Harold Cook's homestead cabin as well as field crew structures began to show signs of weathering and disuse (since their occasional use by field teams in the 1930s).

Only a few hundred yards northwest of the Harold Cook homestead cabin, a new cultural feature appeared on the landscape in the 1950s. George H. Hoffman, husband of Margaret Cook (oldest daughter of Harold and Eleanor Cook), purchased river bottom land that was once part of Cook's homestead claim. Here he and Margaret built a ranch-style home and adjoining garage and planted two rows of trees to the south and rear to create an L-shaped windbreak on the south side of the house and rear yard. Hoffman also obtained a surface lease to an adjoining school section (the northwest quarter of Section 16). On this land the Hoffmans pursued ranching, thus continuing the ranching tradition begun by Jim and Kate Cook seventy years earlier.

The long-standing interest of the Cooks in exploring and preserving the past blossomed during this period. Their deep interest encouraged them to contemplate various preservation and conservation plans that had applicability to the ranch and fossil hills. Ultimately, their interest in and predisposition to explore and reflect on the past laid the groundwork for establishing and fostering communication with the National Park Service about the future disposition of the fossil quarries and the Cook Museum of Natural History/Cook Collection and Papers. The culmination of these conversations led to the authorization of Agate Fossil Beds National Monument in 1965.

Since the mid-1960s, the National Park Service has set a series of overarching priorities for developing and managing Agate Fossil Beds National Monument. The acquisition of land was of initial great concern to NPS. In 1967, the Department of the Interior acquired title to a large land area within the proposed monument boundaries. This included the land occupied by Harold Cook's Homestead Cabin and the nearby Hoffman house (constructed in 1951). Opening and staffing a temporary visitor center (at the location of the present Visitor Center) also became the focus of early NPS attention at the monument.

Inventorying and assessing the cultural resources in the monument received significant attention in the 1970s. The NPS Midwest Regional Office first evaluated the Cook Homestead Cabin in late 1971. The following year a National Register of Historic Places nomination was completed for the cabin (and eventually accepted by the Keeper of the National Register in 1977). A National Park Service List of Classified Structures undertaken in the mid-1970s included the Cook Homestead

Cabin as well as the monument's other structures. Around the same time, a NPS historical architect recorded the Cook Cabin and other buildings in the park and at the Agate Springs Ranch. (An attempt to locate Historic American Buildings Survey records reportedly made of some buildings in the park has thus far been unsuccessful.) Some stabilization and repair work was completed on the Cook Cabin and ancillary structures beginning in the late 1960s (and continuing into the mid-1990s, when extensive stabilization and restoration work began).

The 1980s and 1990s witnessed the exploration of the history and interpretation of the fossil hills—Carnegie and University as well as the *Stenomylus* and *Daemonelex* sites. University of Nebraska paleontologist Robert Hunt wrote a detailed history of the fossil excavations at Carnegie and University quarries for the National Park Service in the mid-1980s. An administrative history of the monument, *Bones of Agate: An Administrative History of Agate Fossil Beds National Monument*, was also completed around the same time (1986) by NPS historian Ron Cockrell. In the early 1990s, a new Visitor Center, with interpretative exhibits of the paleontological history, Cook family history, and Native American history, opened to the public just north of the two fossil hills. A new maintenance area and park housing was developed around the same time. Archeological studies at various locations around the park and projects focusing on Native American traditional cultural properties have most recently been undertaken by several different professionals.

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APPENDIX A

Recommendations for Future Cultural Resources Projects

Appendix A

RECOMMENDATIONS for FUTURE CULTURAL RESOURCE PROJECTS

This study fills a long-standing void in the body of basic cultural resource literature that is required for the adequate management and interpretation of Agate Fossil Beds National Monument. This Historic Resource Study, however, cannot fill all the park's cultural resource needs. Others exist. And this study has raised an awareness of continuing deficiencies and needs in the inventory, study, evaluation, and treatment of cultural resources that need to be addressed in the future.

The Agate Fossil Beds National Monument superintendent and park staff thoughtfully assessed the park's cultural resource needs in the fall of 2007. The following is a list of tentative needs they identified, in no particular order of priority.¹

- Additional American Indian perspectives (oral histories, ethnic and traditional use studies, etc.) on the monument lands and its past history during Cook's lifetime and before, and its importance to Lakota and other High Plains tribes historically, spiritually, and currently.
- Archeological excavations or remote sensing studies to better document past use of the upper Niobrara River Valley by indigenous peoples, including such known sites as tipi rings and campsites around Agate Springs Ranch.
- A reassessment of the Hoffman House and its worth as an element of the cultural landscape versus practical value as a park property.
- Continued efforts to better organize and re-house the Cook Family Papers and Archives for their preservation and to make them available to researchers.
- Creation of electronic databases and educational remote learning programs utilizing the Cook Papers and collections for public access.
- Special history studies utilizing the Cook Papers and other sources to document detailed themes not sufficiently covered in this Agate Fossil Beds Historic Resource Study, such as the details of ranch economics, ranching from women's perspective, Harold Cook as a paleontologist, the "phantom" homesteaders who came and went without leaving much of a trace, and the dynamics of life and times on the early Pine Ridge Reservation.

¹ Mark Hertig, Agate Fossil Beds curator and long-time employee, solicited ideas from park staff and Midwest Senior Historian Ron Cockrell compiled this list, sent in an e-mail message to the author, 2 October 2007. This list is taken almost verbatim from Hertig's e-mail.



APPENDIX B

Draft National Register Nomination

United States Department of the Interior
National Park Service

National Register of Historic Places Registration Form

This form is for use in nominating or requesting determinations for individual properties and districts. See instruction in How to Complete the National Register of Historic Places Registration Form (National Register Bulletin 16A). Complete each item by marking "x" in the appropriate box or by entering the information requested. If an item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classifications, materials and areas of significance, enter only categories and subcategories from the instructions. Place additional entries and narrative items on continuation sheets (NPS Form 10-900a). Use a typewriter, word processor, or computer, to complete all items.

1. Name of Property

historic name AGATE SPRINGS FOSSIL HILLS HISTORIC DISTRICT

other names/site number SX00-289; SX00-002; SX00-028 25SX2; 25SX153—25SX159;
25SX161;25SX254; 25SX282; 25SX283; 25SX285; 25SX288; 25SX290; 25SX459; 5SX471; 25SX475

2. Location

street & number 301 River Road not for publication

city or town Harrison X vicinity

state Nebraska code NE county Sioux code 165 zip code 69346-2734

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended, I hereby certify that this ___ nomination ___ request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property ___ meets ___ does not meet the National Register criteria. I recommend that this property be considered significant ___ nationally ___ statewide ___ locally.

Signature of certifying official/Title - Deputy SHPO

Date

Nebraska State Historic Preservation Office

State or Federal agency and bureau

4. National Park Service Certification

I hereby certify that the property is:

Signature of the Keeper

Date of Action

___ entered in the National Register
___ See continuation sheet.

___ determined eligible for the National Register
___ See continuation sheet.

___ determined not eligible for the National Register

___ removed from the National Register

___ other (explain):

Name of Property

County and State

5. Classification

Ownership of Property (check as many as apply)

- X private
public - local
public - state
X public - Federal

Category of Property (check only one box)

- building(s)
X district
site
structure
object

Number of Resources within Property (Do not include previously listed resources in the count)

Table with columns for Contributing and Noncontributing resources, listing buildings, sites, structures, objects, and Total.

Name of related multiple property listing (enter "N/A" if property is not part of a multiple property listing)

NA

Number of contributing resources previously listed in the National Register

3 (Cook Homestead Cabin)

6. Function or Use

Historic Functions (enter categories from instructions)

DOMESTIC: Single dwelling; secondary structure; camp
AGRICULTURE: storage; agricultural field; animal facility; horticultural facility; agricultural outbuilding; irrigation facility
LANDSCAPE: forest; garden; natural feature; unoccupied land
TRANSPORTATION: road-related
RELIGION: ceremonial site
FUNERARY: graves/burials

Current Functions (Enter categories from instructions)

DOMESTIC: Single dwelling; secondary structure
AGRICULTURE: storage; agricultural field; animal facility; agricultural outbuilding; irrigation facility
LANDSCAPE: forest; garden; natural feature; unoccupied land
TRANSPORTATION: road-related

7. Description

Architectural Classification (Enter categories from instructions)

LATE 19TH and 20TH CENTURY AMERICAN MOVEMENTS (Vernacular)

Materials (Enter categories from instructions)

foundation: earth; wood; stone; concrete
walls: earth; wood (log, weatherboard); stone; metal
roof: wood; asbestos
Other: metal

Narrative Description

(Describe the historic and current condition of the property on one or more continuation sheets)

See continuation sheets, No. 7.

8. Statement of Significance

Applicable National Register Criteria

(Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing).

- X A Property is associated with events that have made a significant contribution to the broad patterns of our history.
X B Property is associated with the lives of persons significant in our past.
C Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
X D Property has yielded, or is likely to yield, information important in prehistory or history.

Areas of Significance

(Enter categories from instructions)

ARCHAEOLOGY: prehistoric; historic aboriginal
ETHNIC HERITAGE: Native American
AGRICULTURE
SCIENCE

Period of Significance

12,000 BP- 1942;

Significant Dates

1879: 04 Ranch founded by Elisha Graham
1887: Cooks acquired ranch; renamed it Agate Springs
1892-93:

Criteria Considerations

(Mark "x" in all the boxes that apply)

Property is:

- A owned by a religious institution or used for religious purposes
B removed from its original location
C a birthplace or grave
D a cemetery
E a reconstructed building, object, or structure
F a commemorative property
G less than 50 years of age or achieved significance within the past 50 years

Significant Person

(Complete if Criterion B is marked above)

Red Cloud
James Henry Cook

Cultural Affiliation

Native American (Unknown Prehistoric; Late Proto-historic; Historic--Lakota, Cheyenne)
Euro-American

Architect/Builder

Narrative Statement of Significance

(Explain the significance of the property on one or more continuation sheets)

Please see Continuation Sheets, No. 8

9. Major Bibliographical References

Bibliography (Cite books, articles, and other sources used in preparing the form on one or more continuation sheets) See continuation sheets

Previous documentation on file (NPS):

- preliminary determination of individual listing (36CFR67) has been requested
X previously listed in the National Register
X previously determined eligible by the National Register
designated a National Historic Landmark
recorded by Historic American Buildings Survey
recorded by Historic American Engineering Record

Primary location of additional data:

- X State Historic Preservation Office
Other State agency
X Federal agency
Local government
University
Other

Name of repository:

10. Geographical Data

Acreage of Property 3.055

UTM References

Please see Continuation Sheets, No. 10

1 _____
Zone Easting Northing
2 _____

3 _____
Zone Easting Northing
4 _____

Verbal Boundary Description
(Describe the boundaries of the property on a continuation sheet)

Boundary Justification
(Explain boundary selection)
Please see Continuation Sheets, No 10

11. Form Prepared By

name/title Gail Evans-Hatch, under contract with the Midwest Region, National Park Service
(with assistance from Brenda Williams, Quinn Evans | Architects)

organization Evans-Hatch & Associates date July 2007

street & number 610 NW Bailey Avenue telephone 503.791.8010

city or town Pendleton state OR zip code 97801

Additional Documentation

Submit the following items with the completed form:

Continuation sheets **YES**

Maps: A USGS map (7.5 or 15 minute series) indicating the property's location.
A sketch map for historic districts and properties having large acreage or numerous resources.

Photographs: Representative black and white photographs of the property.
Please see Continuation Sheets

Additional items (check with the SHPO or FPO for any additional items)

Property Owner(s)

name: Please see Continuation Sheets (Agate Springs Ranch; Charles/Donna Skavdahl; Neb. Dept. of Roads—hwy right of way

street & number _____ telephone _____

city or town _____ state _____ zip code _____

Paperwork Reduction Act Statement: This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C.460 et seq.).

Estimated Burden Statement: Public reporting burden for this form is estimated to average 18.1 hours per response including time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Chief, Administrative Services Division, National Park Service, PO Box 37127, Washington, DC 20013-7127; and the Office of Management and Budget, Paperwork Reductions Project (1024-0018), Washington, DC 20503.

National Register of Historic Places Continuation Sheet

Section Number 5: Classification

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<u>Significance</u>	<u>Feature</u>	<u>Type</u>	<u>Period of Sig.</u>	<u>Cont. or NC</u>
Ethnic Herit. (Native Am.)	Prehistoric to Historic debris, bone, tools	Sites (13)	12,000 BP-1700s	C (13)
	Traditional Cultural Properties	Sites (12)	1700s-1942	C (24)
	Red Cloud Campsites (at ranch headquarters)	Sites	1889-1942	C
	Burial of Ed Woman's Dress baby	Site	1889-1942	C
Agriculture (ranching)	Ranch house	Building	1878-1942	C
	Ice house	Building	1878-1942	C
	Coal cellar	Building	1878-1942	C
	Root cellar	Building	1878-1942	C
	Harold Cook's metal garage	Building	1878-1942	C
	Kiddies Cabin	Building	1878-1942	C
	Greenhouse	Building	1878-1942	C
	Early Post Office	Building	1878-1942	C
	Later Post Office	Building	1878-1942	C
	Tent Sleeping House	Building	1878-1942	C
	Storage Shed (Cook Museum storage)	Building	1878-1942	C
	Storage Shed Addition	Building	1878-1942	C
	Small Shed	Building	1878-1942	C
	John Cook's Claim Cabin	Building	1878-1942	C
	Cattle shed	Building	1878-1942	C
	Barn/shed	Building	1878-1942	C
	Bunkhouse (altered in 1990s)	Building	1878-1942	NC
	Garage with bunkhouse	Building	1878-1942	NC
	Shed (at corral)	Building	1878-1942	NC
	Shed (at corral)	Building	1878-1942	NC
	Shed (along Niobrara)	Building	1878-1942	NC
	Shed (near irrigation ditch)	Building	1878-1942	NC
	Shed (near irrigation ditch)	Building	1878-1942	NC
	Alum. Vehicle Storage in corral area	Building	1878-1942	NC
	Grove of historic trees/vegetation lines	Site	1878-1942	C
	Picnic area for visitors (near post office)	Site	1878-1942	C
	Lawn and gardens	Site	1878-1942	C
	Chicken House Ruin	Site	1878-1942	C
	Spring House Ruin	Site	1878-1942	C
	Shed Ruin at base of windmill	Site	1878-1942	C
	Grave site of Dorothy & Grayson Meade (recent)	Site	1878-1942	NC
	River Road	Structure	1878-1942	NC
	Road alignment (east-west) south of Niobrara R.	Structure	1878-1942	C
Roads at ranch headquarters	Structure	1878-1942	C	
Bridge (over Niobrara) to the ranch	Structure	1878-1942	C	
Road corridor from Agate to Andrews	Structure	1878-1942	C	
Nebraska State Highway 29 (1922)	Structure	1878-1942	C	
Irrigation Ditches	Structure	1878-1942	C	
Pond & earthworks (west of house)	Structure	1878-1942	C	

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Section Number 5: Classification

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	Hand Pump (near later post office)	Object	1878-1942	C	
	Fuel Tank (near ranch house)	Object	1878-1942	C	
	Raised Fuel Tanks (corral area)	Object	1878-1942	C	
	Bell (near ranch house)	Object	1878-1942	C	
	Fuel tank (corral area)	Object	1878-1942	C	
	Spatial relationships between cultural features		1878-1942	C	
	Viewsheds: prominent rock formations & ridgelines		1878-1942	C	
	Kelley Homestead Ruins	Site	1878-1942	C	
	Cottonwood Grove along Niobrara River	Site	1878-1942	C	
	Windmill (post-1942) and stock tank	Structure		C	
	Hoffman Ranch House & attached garage	Building		C	
	Well House at Hoffman	Structure		C	
	Stone Embankment at Hoffman	Structure		C	
	Fuel tank at Hoffman	Structure		C	
	Roadway to Hoffman Ranch House	Structure		C	
	Windbreak of Trees at Hoffman	Site		C	
	John Cook's Grave	Site	1878-1942	C	
	Harris-Neece Canal	Structure	1878-1942	C	
Science	Harold Cook Homestead Claim Cabin	Building	1886-1925	C	
	Windmill	Structure	1886-1925	C	
	Stock Tank	Structure			NC
	Road to Carnegie and University hills	Structure	1886-1925	C	
	Fenceline	Site	1886-1925	C	
	American Museum Shack site	Site	1886-1925	C	
	Storm Cellar site	Site	1886-1925	C	
	Small Barn site	Site	1886-1925	C	
	Larger Barn site	Site			NC
	Privy site	Site	1886-1925	C	
	Paleontology Excavation quarry, Carnegie Hill	Site	1886-1925	C	
	Paleontology Excavation quarry, University Hill	Site	1886-1925	C	
	Recent (2006) trail to excavation quarries	Structure			NC
	Amherst Hill (Stenomylus Unit)	Site	1886-1925	C	
	Daemonelex Fossil Quarry 1	Site 1	1886-1925	C	
	Daemonelex Fossil Quarry 2	Site 2	1886-1925	C	
	Trail to Daemonelex Fossil Quarries	Structure			NC
Entertainment/Recreation	Visitor Center (1992-1993)	Building			NC
	Landscaping (1992-1993)	Structure			NC
	Parking Lot (1992-1993)	Structure			NC
	Road to VC	Structure			NC
	Seasonal Residences (1993-1994)	Buildings (4)			NC (4)
	Maintenance Building	Building			NC
	Maintenance Parking (1993-1994)	Structure			NC
	Road to Maintenance and Seasonal Residences (1993-1994)	Structure			NC

AGATE SPRINGS FOSSIL HILLS HISTORIC DISTRICT

Name of Property

Sioux, Nebraska

County and State

NPS Form 10-900-a

OMB Approval No. 1024-0018

United States Department of the Interior
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Page 1**Section 7: Narrative Description****Summary**

The Agate Springs Fossil Hills Historic District is located in the northwestern Nebraska panhandle about forty miles north of Scottsbluff and twenty-two miles south of Harrison, Nebraska. The district encompasses the entire land area contained in the Agate Fossil Beds National Monument. The district and park total 3,055 acres, composed of one principal unit that focuses on the Niobrara River and a second, much smaller, discontinuous unit (known as the *Stenomylus* Quarry), located about one mile east of the main district. The main unit is four miles long (from east to west) and from one to two miles wide (north to south). The Niobrara River, at an elevation averaging 4,400 feet above sea level, forms the low backbone that meanders from west to east through the center of the district. Short- and mixed-grass prairie grasses are the dominant historic vegetation throughout the district. In the last 125 years, clusters of trees have been planted at four locations along or not far from the Niobrara to provide cool shade and wind breaks around human habitations. Rising roughly 300 feet above the valley are a series of prominent knolls, ridgetops, and buttes that parallel the river and create a visual U-shaped trough. Adjoining the park on the west end is a privately owned parcel, totaling roughly 432 acres. Another privately owned parcel at the northeast corner of the district totals 467 acres; its use and appearance are governed by scenic easements. The district occupies part of sections 3-10 and 12 in Township 28 North, Range 55 West of the 6th Principal Meridian.

This district is geographically unified by the Niobrara River, which meanders through its entire mid-section, and by a series of prominent knolls, ridges, and buttes that project high above the river and enclose the district along the north and south boundaries. These high ridges and buttes, extending east and west at the periphery of the proposed cultural landscape district, create and contain a U-shaped trough. This unique combination of natural features has drawn humans (and prehistoric animals before them) here and their activities and associations with this place in nature, in turn, have created this distinctive cultural landscape. The boundaries of the district encompass the paleontological sites of national importance at the twin fossil hills, as well as the *Daemoneelix* site and the *Stenomylus* Quarry, the Harold Cook homestead claim cabin/encampment for paleontological field crews (known by the Cook family as East Agate), and Agate Springs Ranch headquarters, which served as a gathering place for paleontologists who came from around the world to conduct field work at the fossil quarries. The ranch headquarters also served as a gathering place for Lakota and Cheyenne Indians, who visited James Cook annually between the late 1880s and 1942. The Niobrara River links the Agate Springs Ranch with East Agate and the fossil quarries there; the high ridges paralleling the river visually contain this significant cultural landscape. Open unobstructed views between the Agate Springs Ranch headquarters and East Agate and the nearby fossil quarries further connect these important features.

Roads in the district are both historic and contemporary and, like the Niobrara River, extend beyond the boundaries of the district. A road extending east and west on the south side of the Niobrara River, dating from the late 1800s or early 1900s, extended from the Agate Springs Ranch to the base of the two fossil quarries in the vicinity of Harold Cook's homestead cabin ("East Agate"). The path of the old road and its general alignment across the lower slopes of the hills are still visible in many places. This road is a contributing feature. Nebraska State Highway 29 extends north and south in the far western section of the district. A portion of this highway that now traverses the district was once part of the historic 1920s Agate Highway, extending from Alliance to Harrison. This highway and the portion passing through the park was constructed during the period of the Good Roads movement in the early 1900s. Now part of Nebraska State Highway 29 connecting Mitchell and Harrison, the road has been repaved and realigned over the years, but still follows its general course through the district; it is a contributing feature. More than 125 years ago, a road more or less paralleled the Niobrara River on its north side. The present-day River Road follows that historic road in places where the level topography invite this. Views from the road are very similar to those of the old historic road; this road is a contributing feature. Another historic road, dating from the early 1900s is the section of road winding up the fossil hills. Those sections of this road dating from the active period of excavations (1904—1925) are historic and contributing.

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The district includes several modern non-contributing roads and parking areas, most of which have been created since the establishment of Agate Fossil Beds National Monument in 1965. A small paved parking lot completed in the 1990s is at the base of the *Daemoneelix* site and trailhead near the major western entrance to Agate Fossil Beds National Monument is a non-contributing feature. At the park's visitor center, three miles to the east of the park's main entrance, a curvilinear paved access road leads to a sizeable modern parking lot just to the east of the visitor center (both building and lot completed in 1992—1993). A third curvilinear paved road one-eighth of a mile further to the east of the visitor center provides vehicle access to a park maintenance facility (created in 1992—1993) with a sizeable parking area enclosed by a brick, wood, and artificial wood wall and to four seasonal residences, each with its own driveway and garage (1993—1994). All of these roads leading off of River Road date from the 1990s and are not historic.

Finally, there are several unpaved ranch roads, some leave River Road and extend to the north or south and others turn off feeder roads south of the Niobrara River. These roads include the access driveway to the Hoffman house (dating from the 1950s and contributing). Three additional unpaved two-track roads go south and five others go north from River Road and continue beyond the district boundary, ending at a windmill or continuing for a few miles to ranch houses.

The Agate Springs Fossil Hills Historic District includes in its boundaries a wide variety of resource types scattered throughout the district. All cultural features are intimately associated with the natural features in the district. Distributed along or near the Niobrara Valley floor and on several knolls and ridgetops that parallel the river are several National Register eligible archeological sites related to the ethnic heritage of prehistoric as well as historic Native American occupants of the area. This includes the various annual campsites of Red Cloud (1821—1909) and his band who came to visit James Cook (1857—1942) at the Agate Springs Ranch up until Cook's death in 1942. The descendents of both Red Cloud and James Cook continued to have relations after Cook's death in 1942. These campsites are located near the Niobrara River in and around the Agate Springs Ranch, at the west end of the district. Although the location of the campsites often changed depending on weather and soil conditions and ranching activities, historic photos suggest that campsites were typically not far from the Niobrara and at the periphery of the shaded core of the ranch headquarters. Traditional cultural properties, relating particularly to Sioux and Cheyenne spiritual and folk beliefs, have been identified at various locations in the district. Sites, structures, and buildings related to significant paleontological discoveries on the sides of three prominent hills—University Hill, Carnegie Hill, and Amherst Hill¹ (Stenomylus Quarry Unit)—are in or near the southeastern section of the district. Finally, numerous buildings, sites, and structures associated with the history of ranching along the Niobrara in western Nebraska are clustered together at the Agate Springs Ranch at the western end of the district. (A complete list of all cultural resources identified in this cultural landscape district is included in this nomination.)

Archeology (prehistoric, historic—non-aboriginal)

Archeological resources in the district reveal much about the history of early inhabitants' use of natural features—the waters of the Niobrara River, the game that it attracted, places of shelter created by rock overhangs, and the relatively level corridor of travel that the river created. Also, certain natural features in the district have acquired special cultural meaning to early travelers and inhabitants. Since the mid-1960s, many archeological reconnaissance and survey projects have yielded substantial information about the entire area in this district. Ninety-two properties, ranging in origin from prehistoric to historic and producing a variety of artifacts, have been identified over this forty-year period. Archeological sites are

¹ Stenomylus Quarry was historically known as "Amherst Hill," which is not the same as "Amherst Point," just north of University Hill. Miller, Susanne J. "The Agate Fossil Beds National Monument Stenomylus Quarry: Historical and Scientific Overview, Resource Management Plan and Collections Data Base." Draft. April 2005, 6-8; Barnum Brown, "A Miocene Camel Bed-Ground," *Natural History* 29 (1929), 658-62.

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distributed fairly evenly throughout the Agate Springs Fossil Hills Historic District. A summary history of archeological projects conducted in the district is presented by archeologist John R. Bozell in *An Archeological Overview and Assessment of Agate Fossil Beds National Monument, Sioux County, Nebraska* (2004).²

Several of these archeological sites have been deemed eligible.³ In general, those sites determined eligible for the National Register by the Nebraska SHPO range considerably in type and location. Many sites are rock cairns located near or at the top of prominent knolls or ridges, both north and south the Niobrara River flood plain. Several other National Register-eligible sites, consisting of lithic debris, stone tools, bone, and projectile points, have been found on or near the valley floor on the north side of the Niobrara River.

Specific sites deemed eligible for the National Register by the Nebraska SHPO (as of October 2006) include the following.

25SX153: a cluster of stone circles ("tipi rings") and a debris field of chipped stone flakes and one ceramic sherd and several bone fragments, occupying about 60,000 square yards. The stone circles are not visible to the human eye at ground level. The site is located near the base of a hillside north of River Road and the Niobrara River at between 4,400 and 4,440 feet elevation, in the north-central portion of the district. The site is of Proto-historic origin.

25SX154: a single rock cairn, located north of River Road and the Niobrara River on a prominent knoll (Curley Bear Mound), at around 4,500 feet elevation, in the northeast corner of the district. This might be a burial site. The date and origin of the site is unknown.

25SX155: a site consists of two stone cairns on a prominent knoll north of River Road and the Niobrara, between 4,500 and 4,520 feet elevation near the north-central boundary of the district. The site is of unknown historic origin.

25SX156: a shallow elliptical 18-inch-high mound, measuring about 15 x 12 feet, filled with rock and dirt, located north of River Road and the Niobrara on rolling uplands at 4,560 feet elevation in the northwestern section of the district. The date and origin of the site is believed to be Prehistoric.

25SX157: a site covering about 120,000 square yards that includes stone tools (Paleo-Indian projectile and five late prehistoric arrow points), chipped stone debris, and animal bone. It lies on the broad Niobrara valley floor and a north-trending ravine, located between 4,400 and 4,480 feet elevation, in the western section of the district near the entrance to the park. The site is of unknown Prehistoric origin.

25SX158: two rock cairns 820 feet apart on a long rocky ridge, at 4,600 to 4,620 feet elevation, in a southeastern corner of the district. One cairn is 19.2 inches high and consists of 29 stones. The other cairn is 10 inches high and also comprised of 29 stones. The origin of the cairns is believed to be late Proto-historic.

25SX159: three rock cairns, ranging from 3.6 to 16.4 inches high situated on a high narrow ridge, at 4,540 to 4,580 feet elevation, south of the Niobrara River near the south-central boundary of the district. The origin of the cairns is thought to be late Proto-historic.

25SX161: two rock cairns, one measuring 11 inches high and comprised of five rocks and a second 14 inches high and comprised of 44 rocks, located on a long narrow ridge at 4,540 feet elevation, south of the Niobrara River near the south-central boundary of the district. The origin of this site is thought to be Historic.

25SX471: a site with chipped stone debris and tools, encompassing 1,200 square yards, located on the Niobrara River valley floor at between 4,420 and 4,440 feet elevation just north of the River Road in the western section of the district.

25SX475: a sparse cultural deposit of lithics and bone covering about 12,000 square yards on the lower slope of a prominent bluff at 4,400 to 4,480 feet elevation, located just north of River Road and the Niobrara in the central portion of the district. Origin of the site is believed to be Prehistoric.

² John R. Bozell, *An Archeological Overview and Assessment of Agate Fossil Beds National Monument, Sioux County, Nebraska* (Lincoln: Midwest Archeological Center, National Park Service, 2004).

³ Terry L. Steniacher, letter to the author, with enclosures, 2 October 2006.

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25SX476: a site with calcined bone, chipped stone debris, tools, lithic debris, a late prehistoric projectile point, and a small rock shelter, covering about 24,000 square yards on a south-facing slope north of the Niobrara River and River Road, at between 4,400 to 4,480 feet elevation. The origin of the site appears to be late Prehistoric and Historic.

25SX486: a site consists of a scatter of lithic debris and an entire hearth with charcoal, animal bone, and flaking debris and covers about 7,200 square yards at 4,400 feet elevation. It is located on the valley floor just north of River Road and the Niobrara River, near the west end of the district.

25SX487: this site has fire-cracked rock, flaking debris, stone tools, bone, and a single projectile point, encompassing about 3,600 square yards at 4,400 feet elevation, near the confluence of the Niobrara River and an ephemeral stream in the eastern section of the district. It is thought to be Prehistoric in origin.

Traditional Cultural Properties

Some archeological sites as well as certain natural features in the park are considered traditional cultural properties. These properties are associated "with cultural practices or beliefs of a living community that 1) are rooted in that community's history, and 2) are important in maintaining the continuing cultural identity of the community," according to National Register Bulletin 38.⁴ The concept of traditional cultural property is used by Euro-American land managers as a tool for identifying and protecting places and objects that have a special cultural significance to Native Americans as well as other ethnic groups in the United States. In Sioux culture traditional cultural properties may include: depressions; solitary high hilltops, ridges, and buttes; ridgelines with distinctive rock formations; rock cairns; natural rock formations; hillsides; level terraces; fossil exposures; and springs.

A total of seventeen individual Traditional Cultural Properties (TCP) in the park have been identified by ethnographer Sebastian ("Bronco") LeBeau. These properties are categorized by LeBeau as 1) sacred sites, 2) offering sites, and 3) gathering sites. Some of the TCP sites have also been identified by archeologists and given site numbers. Sacred sites are particular types of natural formations that the Lakota Sioux use during ceremonies, performed by a group or an individual. Offering sites are natural features that help an individual Lakota express their spirituality and their personal relationship to the natural environment. A gathering site is a place where the Lakota assemble to gather natural resources (such as medicinal herbs and edible foods) for a variety of purposes.

Traditional Cultural Properties in the district include several types of cultural features, such as fossil quarries of spiritual or medicinal significance to Native Americans, rock cairns, depressions, and rock formations. On top of Carnegie Hill, are two rock formations identified as manmade alters (one of which was reportedly constructed by Harold Cook in the early 1900s.) A circular depression atop Carnegie Hill has also been identified as a possible sacred site to the Lakota. Carnegie Hill itself, because of the fossil remains of prehistoric animals that exist there, is imbued with great cultural meaning and spiritual significance for the Lakota.⁵ The Traditional Cultural Properties identified to date are:

Carnegie Hill fossils throughout, but exposed on flanks, are responsible for the creation of the features found on top of Carnegie Hill and the other traditional cultural property sites in this cultural landscape district.

Carnegie Hill depression on top, measuring around 54.5 feet in circumference.

25SX2 (Serenity Site): five rock cairns on the summit of Carnegie Hill, at around 4,600 feet elevation. One of the cairns was presumably erected by Harold Cook around 1912, but is still considered a human-made alter of significance to the Lakota.

⁴ National Register Bulletin 38: *Guidelines for Evaluation and Documenting Traditional Cultural Properties* (Washington, DC: National Park Service, 1990, revised 1998), 1.

⁵ Sebastian C. LeBeau II, "Wico'Cajeyate: Traditional Cultural Property Evaluation Agate Fossil Bed National Monument," prepared for Agate Fossil Beds National Monument, c. 2002, 1-4, 6-8, 11.

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25SX154: a rock cairn or mound, about 62.3 feet in circumference and 3.3 feet high, on Curley Bear Mound, located north of the Niobrara River, may be a burial site.

25SX158: two rock cairns 820 feet apart on a long rocky ridge, at 4,600 to 4,620 feet elevation, in a southeastern corner of the district. One cairn is 19 inches high and consists of 29 stones. The other cairn is 10 inches high and also comprised of 29 stones. The origin of the cairns is believed to be late Proto-historic.

25SX254: prominent knoll, at 4,460 feet elevation, south of and overlooking the Niobrara River near the south center of the district. Atop the knoll is a small scatter of lithic debris.

25SX282: three rock cairns on a high ridge, between 4,600 and 4,620 feet elevation, at southeast corner of district. The cairns range in height from 6 to 13.5 inches and are from 37 to 65 inches in diameter.

Natural rock formation, located about 572 feet south of Carnegie Hill, consisting of six large rocks that form the outline of the Lakota Beavers Lodge. Offerings of tobacco and food were once placed here. This formation represents the above ground form of the underground *Daemonelix* fossils.

Natural rock bowl formation, located on a small hill about 670 feet south of the Carnegie Hill, where the Lakota placed offerings to the spirits.

Ridgeline that served the Lakota people as a directional marker, located about 1,558 feet southeast of the natural rock formation above (572 feet south of Carnegie Hill).

Large circular depression, 9 to 10 feet across, located 1,366 feet south of Carnegie Hill. Known as a "buffalo wallow," Lakota women collected buffalo hair and dust from these depressions.

Small rock cairn, located about 3,447 feet southwest of Carnegie Hill, on top of a large flat level hill. Next to the cairn is a small bowl, one inch across, known as a "Spirit Bowl."

Small circular depression, about 6 feet in circumference and located just in front of the rock cairn (3,447 feet southwest of Carnegie Hill).

Large rock formation called "Buffalo Woman" in Lakota and related directly to the fossil beds in Carnegie Hill. The site is 6,481 feet west of Carnegie Hill.

Very large rock formation on top of a small knoll about 6,593 feet west of Carnegie Hill. Lakota men would come here to receive a sacred stone.

Daemonelix fossil, near the west entrance of Agate Fossil Beds National Monument and the district. The Lakota call this fossil the Beavers Lodge.

Small knoll, near *Daemonelix* interpretive complex, is a site where women came to receive a sacred stone.

Red Cloud Campsites

Historic photographs have shown that there were three separate camp locations to the north, south, and east of the Agate Springs Ranch house in three different years. The 1891 campsite of Red Cloud was situated north of the Niobrara River and the ranch headquarters. The 1898 campsite was located in open or semi-shaded grassy fields to the southeast of the ranch house and in the vicinity of the corral and associated outbuildings for cattle and horses. The 1914 campsite of Red Cloud and his band stood east of the ranch headquarters and, and is now partially under the 2007 alignment of State Highway 29, non-existent before 1922.⁶ (It has been identified as site No. 25SX459 by the Nebraska SHPO.)

In reality, many historic photos (principally in the Cook Papers at Agate Fossil Beds National Monument) and also textual references indicate that Red Cloud and his band, as well as those Indian leaders who continued to come to the ranch after Red Cloud's death, camped at several different locations in and around the Agate Spring Ranch headquarters. The

⁶ Gretchen Meade, interview with the author, 10 June 2007, transcript, Agate Fossil Beds National Monument.

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campsites appear to have been within reach of the Niobrara River and often at or just outside the shaded periphery of the ranch headquarters, to allow and encourage social interaction between the two cultural groups. Additionally, those Indians who continued to come and camp every year at the ranch erected teepees for Harold and Eleanor Cook's children on the ranch house lawn. Red Cloud and his band and those who followed after Red Cloud's death occupied and used not just their campsite, but much of the ranch headquarters area. The entire ranch headquarters landscape is associated with Red Cloud's and subsequent Indian leaders' visits and encampments.

The various Red Cloud campsites, therefore, generally occupied the edge of fields near or under the partial shade of maturing cottonwood trees, at the periphery of the ranch complex of buildings and development at an elevation of around 4,400 feet. There is little extant cultural evidence of these ephemeral transitory campsites. The cultural landscape of Indian campsites combines both human-created features and natural features. Relative close proximity to the Niobrara undoubtedly guided the selection of a campsite. Protection from sun and wind provided by the cottonwood grove (although a cultural feature) may also have contributed to the selection of a campsite.

Today, there are several cultural features that date from the time of Lakota and Cheyenne visits and have a clear association with these Native American visits and campsites. These features include: the constructed ranch headquarters, including the buildings, the mature cottonwood and willow trees, the pond west of the ranch house, and the natural rock formations and fossil remains visible from the ranch headquarters. Contributing historic features associated with Indian campsites include: the ranch buildings; the aged trees and vegetation lines they form; the pond; the historic roadways around the ranch headquarters creating patterns of circulation; spatial relationships between historic buildings, sites, and structures around the ranch headquarters; and prominent rock formations and ridgelines that are part of the historic viewshed. In 2003, the Nebraska SHPO office concurred with a National Park Service determination that the 1914 Red Cloud campsite, encompassing roughly ten acres just to the east of the actual campsite (and partially covered by realigned Highway 29), was eligible for the National Register of Historic Places.⁷

Agricultural (ranching)

The Agate Springs Ranch headquarters is located on private property at the west end of the district, adjoined by Nebraska State Highway 29 on the east. The headquarters is on level ground around 4,400 feet in elevation, just south of the meandering Niobrara River. Buildings dating from the period of significance (late 1870s to 1942) include the: ranch house, bunkhouse, sleeping tent house, kiddies cabin, two small buildings serving as post offices at different periods, John Cook's claim cabin, Harold Cook's metal garage, a privy, icehouse, greenhouse, coal cellar, several storage sheds and cattle sheds, and the ruins of a historic spring house and chicken house. The arrangement of the outbuildings near the ranch house is loosely linear, extending southward from the rear of the house. Nearly all the buildings, structures, and sites at the headquarters are shaded by a large grove of predominantly cottonwood trees planted by James Cook over 100 years ago. (Prior to this massive planting and watering effort, this site had no trees.)

In addition to buildings, the ranch headquarters also includes important sites and structures. East and south of the ranch house is the elongated, oblong-shaped lawn, known by Cook descendants as the "square," encircled by cottonwood trees and a single-lane roadway. A crescent-shaped pond is west and irrigation ditches are south of the ranch house. The very old pre-1900 Fort Laramie-to-Fort Robinson Road, probably used, in part, for driving ranch cattle fifteen miles north to the train depot in Andrews exists as an invisible transportation corridor extending north and south from the corral area of the ranch headquarters. The picnic area for Cook Museum visitors, beginning in the 1910s, existed in a grove of cottonwoods just east of the later post office. The pattern of roads, including an old bridge across the Niobrara leading to the ranch house and dating from at least the 1910s, connect many cultural features at the headquarters.

⁷ *Red Cloud Campsite, Cultural Landscapes Inventory, Revised 2003* (Omaha, NE: Midwest Region, National Park Service, 2003).

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The headquarters buildings stand in two clusters: one at the northern section and occupied and used predominantly by the ranch inhabitants, and another cluster at the southern end of the headquarters that are composed of cattle sheds, corrals, and other ranching-related buildings and structures. A tight concentration of shade trees separates and forms a visual screen between the open un-shaded ranching cluster of buildings and features and the northern human-inhabited section of headquarters. The landscape elements in the southern portion of the ranch headquarters are organized in a functional arrangement associated with the animals and equipment that dominate this portion of the ranch. The buildings that house livestock are clustered together at the northwestern corner of the corrals. Sheds used for storing tractors and other heavy equipment are located closer to the ranch road, where there is easy access to the storage area. Storage facilities for hay, feed, firewood, building materials, and equipment are located in level areas closer to the ranch road. Several of the buildings, fences, and arrangement of space in this area of this working ranch were built after 1942, thus post-dating the period of significance. Although they represent the historic theme of ranching, in style, scale, design, and materials they are largely non-contributing features. All together, the buildings, structures, and sites at the Agate Springs Ranch headquarters present a totally constructed cultural landscape designed for human habitation, ranching activities of all kinds, transportation, social interaction, and recreation and aesthetic enjoyment.

Most of the buildings at the Agate Springs Ranch headquarters are wood-frame, one-story (except the two-story ranch house), with gable or shed roofs sheathed with composition shingles, and resting on full stone or stone and wood post and pier foundations. Windows are predominantly wood, multi-pane, fixed casement or double-hung sash. Stone, obtained locally, was used to construct four outbuildings—the greenhouse, coal cellar, spring house (ruins), and chicken house (ruins)—possibly all constructed by the same craftsman in the 1890s. The kiddies cabin, constructed by Erwin Barbour around 1918 for his four grand-daughters, is the only log building at the ranch headquarters. Metal sheathing, not wood, has been used on the walls of a half-dozen buildings, most notably Harold Cook's metal garage south of the ranch house and John Cook's claim cabin near the later Agate post office (presently alongside Nebraska State Highway 29). Several buildings, or partial buildings, were moved to their present location before 1942. These include: the ice house moved in the 1910s from Fort Robinson to the rear of the ranch house; John Cook's claim cabin, moved from one of Cook's claim sites, probably about three miles east of Agate; kiddies cabin, moved about 200 feet from the north side of the early Agate post office building (now called "Bath Biffy") to the north side of the ranch house; and possibly the early post office, moved from a site north of the ranch house near the Niobrara River bank (and believed to have been periodically occupied in the late 1880s and 1890s by John Cook) to the east side of the ranch house along the oblong-shaped ranch road. It is very possible that other buildings, particularly smaller ones clustered near the later post office just to the west of Highway 29, also may have been moved before 1942 as well. Homesteaders and ranchers often salvaged and recycled building materials, parts, and entire buildings, since many materials (like milled lumber and windows) were costly. Building materials could be shipped by train to Andrews beginning in the mid-1880s (fifteen miles north of Agate Springs Ranch), but the cost, time, and patience required to obtain them encouraged recycling.

Sites and structures scattered across the ranch landscape are numerous. Water features include a pond and irrigation ditches, engineered by James Cook in the late 1800s, as well as the meandering Niobrara defining the northern edge of the ranch headquarters. A former entrance road to the ranch with a narrow historic stone and earth bridge extending across the Niobrara, with a semi-circular culvert, once delivered ranch visitors to the east side of the house, where an elongated oval-shaped roadway links the ranch house to the livestock corrals and sheds several hundred yards south of the house.

A large 100-year-old grove of cottonwood and willow trees shade nearly the entire ranch headquarters. The mature cottonwood and willow trees at the Agate Springs Ranch headquarters provide shade and spatially define the northern portion or the headquarters area. Their arrangement in double rows along the oblong headquarters loop road defines the circulation route as well as the edge of the lawn encircled by the loop, known by Cook descendants as the "square." Another row of cottonwood extends along the east side of the ranch house. Willows and cottonwoods line the irrigation ditches and the pond located to the west and south of the ranch house. The trees also encircle an abandoned garden southeast of the ranch house. Remnants of treelines are present in the area between the irrigation ditch and the outbuildings near the Nebraska State

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Highway 29. These appear to have lined a former road or driveway, and another expanse of lawn. Many of the cottonwood trees have lived well past their 100-year life expectancy. A few trees have been planted in recent years around the ranch headquarters, where historic trees have been lost. These provide continuity to the landscape. Maintaining the large grove of hundreds of cottonwoods is critically important to retaining the historical integrity of the ranch headquarters. This will be a challenge, however. As James Cook realized so well when hand watering his grove in the late 1880s and early 1890s, young cottonwoods demand adequate water until they become well established. At a couple of other locations in the district, juniper and cedar have been used as the shade and wind break of choice, since it requires less initial care.

East of Agate Springs Ranch, there are several other buildings, sites, and structures relating to the agricultural ranching history of the district. The Kelley Homestead ruin (25X283), probably dating from the first quarter of the twentieth century, consists of a small scatter of Euro-American debris (such as brick, glass, and metal) and an exposed cement and rubble stone foundation on a gentle slope above and to the south of the Niobrara River at an elevation of around 4,400 feet. The site covers about 192 square yards in the south central portion of the district.

A planted grove of cottonwood trees along the Niobrara River, about one-half mile east of Nebraska State Highway 29, exists as probable testimony of homesteading in the early 1900s, around the time of the 1904 passage of the Kinkaid Act, that encouraged the arrival of additional homesteaders in semi-arid western Nebraska. No trees existed along this stretch of Niobrara River before the arrival of the first homesteaders, as is apparent in the very earliest photos of the Graham/Cook ranch headquarters to the west of this site. Cottonwood trees were a favored tree species among ranchers, since they grew relatively quickly (with adequate water when young), provided abundant shade and a wind break, and required little care once established. Since they need adequate water to survive, cottonwoods thrive along rivers and irrigation ditches. Their presence often suggests the one-time existence of a homestead or ranch headquarters, long after these buildings or structures have vanished from the landscape. This grove of trees along the Niobrara may have been associated with the Kelley homestead now an archeological site.

Two windmills, which presumably draw water from wells, constructed of wood and metal near or just beyond the northern boundary of the district, represent the ranching history along the upper Niobrara since the late 1870s and the importance of water to it. The age of these windmills is not precisely known. These are conspicuous structures, however, that contribute to the feeling and sense of Agate's ranching past.

The Hoffman Ranch House, built in 1951-1952, is a rectangular, one-story, wood-frame dwelling, sheathed with horizontal board siding that is built into a small hill. It rests on a concrete block foundation wall that encloses a basement above ground on the north side. A two-bay concrete garage, believed to date from the early 1950s, is attached to the northeast corner of the house. The house has double-hung sash windows. Both the house and garage are capped by a hip roof clad in wood shakes. A stone retaining wall projects from the foundation wall at the east rear corner of the house and creates level ground at the rear of the house for a lawn. A well house of unknown vintage is embedded in an embankment about 100 feet away from the house. The Hoffman Ranch House is sheltered from the winds by a row of evergreen trees planted in a 180 degree arc on the west and north sides of the ranch property. Three cottonwoods stand on the southeast side of the house.

A few hundred yards east of the Hoffman Ranch House is another site associated with the ranching history of the district—the grave site of John Franklin Cook (25SX285), older brother of James Cook. John (known to the family as "Jack") periodically worked for James Cook as a ranch hand in the early years of Agate Springs Ranch before reigning as Agate post master for over three decades. John Cook began filing claims on parcels along the Niobrara River in 1886, then later sold several of them to his brother in order to help expand the holdings of the Agate Springs Ranch. One of John Cook's homestead claims lay about one-half mile north of this grave site situated on the north side of the Niobrara River. His grave sited on a small level terrace above the river at above 4,400 feet elevation, affords an unobstructed view of one of John Cook's homestead claims along the Niobrara River.

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Finally, the importance of water in the ranching history of this region is evident by the presence of another constructed landscape feature. In the northeastern section of the district which is privately owned, the hundred-year-old Harris-Neece Canal diverts water from the Niobrara River and carries it several miles to the east and outside the district. Harris and Neece are the last names of the early homesteaders who initially dug this canal.

Science (paleontology)

The twin peaks Carnegie Hill and University Hill are just a few hundred yards apart and rise to an elevation of about 4600 feet. The twin peaks, located in the southeastern section of the district, are among the series of prominent knolls, high ridges, and buttes that form a rim enclosing the valley floor on both the north and south sides. The formations of these hills are easily identified in the broader monument landscape, and their appearance in the distance signifies a connection between the physical landscape and the human activities that occurred historically. The alteration of these hills during paleontological investigations created land forms that are closely identified with the activities that occurred. The large quantities of materials that were removed from the sites, primarily during the period of significance for the science theme of this nomination (mid-1880s-1925) were not replaced in-kind. Therefore, the alterations to the landscape have left a visual reminder of the discoveries and research that occurred here. The hills can be seen from most of the western portion of the district. A new wider handicapped-accessible trail that winds from the visitor center to Carnegie Hill (before continuing to University Hill), with a lower grade than the narrower more direct one it replaced, was largely completed in 2006. Interpretive signs and benches are positioned along the trail near the fossil excavation sites.

Two historic archeological sites that are most likely associated with the paleontological history of these hills have been identified and recorded by the Nebraska State Historical Society. In the saddle between Carnegie and University hills fossil quarries, at 4,540 feet elevation, lies a scatter of Euro-American debris (25SX288) containing pieces of wood, tin cans, glass, and concrete. The site covers roughly 420 square yards. Downslope and to the north of University Hill at 4,460 feet, a site covering roughly 144 square yards, contains tin cans and a wooden plank.

Amherst Hill (known as the Stenomylus Quarry Unit of Agate Fossil Beds National Monument) is a discontinuous 400-acre rectangular unit of the district, located about one and one-half miles east of the other fossil quarries at Carnegie Hill and University Hill. A trail/rough two-track that follows the floor of an ephemeral stream crosses private land and links the main district and Amherst Hill. Amherst Hill is one of a series of project shoulders on a ridgeline rising to above 4,600 feet elevation, trending northwest-southeast. The west side of the hill was the site of paleontological excavations in the early 1900s; the cuts into the hillside are still evident in 2007. Access across private land to this site from River Road, about two miles to the north, is limited to a unimproved hiking trail or a rough ranch road across the prairie. Interpretation is very limited since there are few visitors.

The Daemonelix site, a third locale in the district of fossil remains, is notable for its distinct landforms and exposed fossilized burrows of the "devil's corkscrews," or *Daemonelix*. Millions of years ago, the small, five-inch tall *Palaeocastor* created spiraling beaver burrows resembling corkscrews, which are now exposed on the sides of small hillsides in the northwestern section of the district. A single *Daemonelix* burrow and a split, double *Daemonelix* burrow are encased (in one instance) and interpreted along a winding path. Remnants of other fossilized material in the hillsides is also exposed and visible from this trail. This *Daemonelix* site also includes an ancient sand dune formation, originating millions of years ago during the Miocene epoch. This dune formation of sandstone consisting of fine volcanic particles transported by wind from the west, is said to be one of the oldest land forms exposed by eroding forces of the Niobrara River in this area.

The Harold Cook Homestead Cabin/Bone Cabin (25SX290), located west of Carnegie and University hills and directly associated with twenty-five years of fossil excavations there, is a one-story, wood-frame building with a shallow gable roof over the central portion and shallow gables capping two smaller additions. A shed roof porch, partially enclosed, extends across the main façade on the east. All portions are sheathed with composition rolled roofing. Exterior walls are wood, both

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vertical board and batten and horizontal flush boards. The windows vary in size and are predominantly multi-pane, louvered or fixed sash. The entire structure now rests on a concrete and stone low foundation. Several historic landscape features are within close proximity of the cabin. The fencelines and fence materials date from several different periods, but represent the wood post and barbed wire enclosure that has been historically associated with the cabin since its arrival at the site. The windmill, built in 1942, stands in the same location as the original homestead windmill. The sites of several outbuildings associated with fossil excavations include: American Museum of Natural History shack, east of the cabin; storm cellar, southeast of the cabin; larger barn, southeast of the cabin; privy, southeast of the cabin; and smaller barn, southwest of the cabin. Finally, the corridor of the road connecting the Cook Homestead Cabin and the fossil quarries, which are clearly visible to the southeast and an important element of the viewshed, is still evident (although altered somewhat by more recent use and improvement).⁸ The Cook Homestead Cabin complex of a building, structures, and sites encompasses about five acres.

Entertainment/Recreation

The Agate Fossil Beds National Monument Visitor Center, built in 1992-1993 and located south of River Road near the eastern end of district, is a two-story rectangular shaped building with a small two-story projection on the north side. The roof is a medium-pitch gable with four projecting gable-roof dormers all clad with composition shingles. Exterior walls are sheathed with horizontal unpainted wood siding. The windows are relatively small (in relation to the entire surface of each wall) and primarily fixed pane. The building stands on a concrete foundation. Landscaping around the Visitor Center includes several sites and structures: a paved parking lot and entrance road, a screened utilities area, a picnic area, a flag pole, a tepee site, and scattered evergreen trees and shrubs. In 1979, fourteen years before completion of this Visitor Center, fifty-one cottonwood, ponderosa pine, and Rocky Mountain juniper trees were planted around the former visitor center (a trailer) and the Hoffman House, some of which still remain in 2007.

The Agate Fossil Beds National Monument Seasonal Residence Housing and the Maintenance Area are accessed by a short paved road south of River Road near the eastern boundary of the district. The Maintenance Area on the east side of this road is dominated by a long, single-story, rectangular vehicle storage building with several bays. This maintenance building, once located in the area of the Visitor Center, was moved to its present location in 1992-1993. Two wells were dug nearby at that time. A wall encircles a paved maintenance yard. A row of dumpsters lines the south wall of the enclosed maintenance yard. The Seasonal Residence Housing (341, 343, 345, and 347 River Road) is south of the maintenance area on the west side of the access road. Four dwellings, built in 1993-1994, are spaced about 100 feet apart. The buildings share a similar design and materials. Each one is one-story, wood-frame, irregular in shape with a medium-pitch gable roof clad with asbestos shingles. A two-car garage is attached. The building stands on a concrete slab. Landscaping around and between each residence building consists predominantly of native prairie grass, with a small area alongside the foundation set aside for exotic perennial plants. Both the Maintenance Area and the four Seasonal Residences are clearly visible for miles across the open unobstructed prairie.

⁸ Dena Sanford, William S. Harlow, and Charles Trupia, *Historic Structures Report: Cook Homestead Cabin, HS-1, Agate Fossil Beds National Monument, Agate, Nebraska*, DRAFT, (Omaha: Midwest Region, National Park Service, 2004).

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Section 8: Statement of Significance

Summary

The Agate Springs Fossil Hills Historic District is a significant cultural landscape that was studied by National Park Service landscape architects between 1995 and 2004 and deemed National Register-eligible by the Nebraska SHPO in July 2004.⁹ This district is geographically unified by the Niobrara River, which meanders through its entire mid-section from west to east, and by a series of prominent knolls, ridges, and buttes that project high above the river. These high ridges and buttes, extending east and west at the periphery of the proposed cultural landscape district, create and contain a U-shaped trough. The unique combination of natural features has drawn humans (and prehistoric animals before them) to this place for thousands of years, and their activities and associations with this place in nature have, in turn, created a distinctive cultural landscape. The boundaries of the district encompass the paleontological sites of national importance at the twin fossil hills, as well as the *Daemonelex* site and the *Stenomylus* Quarry, the Harold Cook homestead claim cabin/encampment for paleontological field crews (known by the Cook family as East Agate), and Agate Springs Ranch headquarters, which served as a gathering place for paleontologists who came from around the world to conduct field work at the fossil quarries. The ranch headquarters also served as a gathering place for Lakota and Cheyenne Indians, who visited James Cook annually between the late 1880s and 1942. The Niobrara River links the Agate Springs Ranch with East Agate and the fossil quarries there; the high ridges paralleling the river visually contain this significant cultural landscape. Open unobstructed views between the Agate Springs Ranch headquarters and East Agate and the nearby fossil quarries further connect these important features.

The scientific importance of the Agate fossil beds provided the primary rationale for the National Park Service's decision to create a park and to draw the current boundaries of the Agate Fossil Beds National Monument (which also serve as the boundaries of this district). According to the "Preliminary Study of the Agate Springs Fossil Quarries Area, Nebraska," (April 14, 1961), the Agate Springs Fossil Quarries are a classic paleontological site well known for their wealth of fossil mammal bones. . . . A tremendous quantity of bones of extinct mammals of Miocene Age accumulated in a relatively small area here. . . . A remarkable feature of these deposits is the abundance of almost complete skeletons concentrated in a small area. . . . The classical paleontologist, Henry Fairfield Osborn, has been quoted as calling these the most remarkable deposits of mammalian remains of Tertiary Age that have ever been found in any part of the world."¹⁰ The importance of preserving James Cook's collection of Indian artifacts, displayed at the Cook Museum of Natural History at the ranch headquarters, was also recognized by the National Park Service at that time. Since the early 1960s, other aspects of significance have also been recognized, most notably an abundance of prehistoric, protohistoric, and historic archeological sites, the cultural significance of several natural features to Native Americans, and the unique Agate Springs Ranch headquarters created by the Cook family that is still intact and retains historic integrity. The boundaries of the Agate Springs Fossil Hills Historic District encompass—physically and visually—all these significant cultural and natural features.

The Agate Springs Fossil Hills Historic District meets National Register Criterion A, B, and D. Several places and cultural resources in the district are associated with events and activities (Criteria A) that have contributed to the broad historical patterns related to ethnic heritage (Red Cloud and Sioux/Cheyenne), to agriculture (ranching) in the High Plains, and to science (paleontology). Two individuals (Criteria B), Red Cloud, chief of the Oglala Sioux people for many years, and James Henry Cook, early and long-time rancher on the semi-arid upper Niobrara River, made significant contributions to Sioux history (Red Cloud) and to developments in ranching on the High Plains and paleontological and cultural endeavors in the region (James Cook). Finally, cultural resources within the district, both archeological and paleontological, are likely to yield

⁹ "Consensus Determination of Eligibility, Agate Fossil Beds National Monument," 28 July 2004 and Ruthanne Knudson, letter to Lawrence J. Sommer, 20 July 2004, both at Nebraska State Historic Preservation Office, Lincoln, Nebraska.

¹⁰ "Preliminary Study of the Agate Springs Fossil Quarries Area, Nebraska," April 14, 1961, (p. 2), General Files, 1952, 1963, Record Group 79, Central Plains Region, National Archives and Record Administration, Kansas City. Also see Ron Cockrell, *Bones of Agate: An Administrative History of Agate Fossil Beds National Monument, Nebraska* (Omaha: Midwest Region, National Park Service, 1986).

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information that will expand human understanding of progressive changes on earth before the arrival of humans, of prehistoric human life, and of humans during historic times (Criteria D). The cultural landscape features and resources in this district are significant in the regional history of the High Plains (ethnic heritage and ranching) and also in national history (Red Cloud, James Cook, and paleontology), during the period of 10,000 years ago to 1942.

Additionally, this four-mile-long section of the upper Niobrara River Valley is closely associated with the individual and intertwined lives of James Cook and Red Cloud, who had a unique friendship for over forty years. The Agate Springs Fossil Hills Historic District contains an area with numerous intact features that, through their association with Red Cloud and James Cook and their families, convey the history of Native American spirituality and subsistence way of life and of important Euro-American agricultural practices and scientific discoveries.

Criteria A: Association with Events Making a Significant Contribution to Broad Patterns of History

Ethnic Heritage: Archeology and Traditional Cultural Properties¹¹

Background

Humans have occupied western Nebraska's High Plains region for at least 10,000 to 13,000 years. The earliest arrivals, called "Paleo-Indian," inhabited and engaged in a subsistence economy from 18,000 to 8,000 years ago. Paleo-Indians occupied villages and camps across western North America (and as far south as Venezuela and Chile). These Indians were mobile hunter-gathers who subsisted primarily on large mammals and a few smaller animals. Although their wooden and bone tools long ago disintegrated, stone spear points provide some clues about Paleo-Indians' existence and activities. Evidence of Paleo-Indian presence in western Nebraska has been unearthed at Scotts Bluff Bison Quarry.

Aboriginal inhabitants known as "Archaic" people occupied the Great Plains from 8,000 to 1,500 years ago. Like the Paleo-Indians before them, they hunted and gathered their food, but developed more diverse techniques and sources to feed themselves and were somewhat more sedentary. They crafted smaller, less perfectly crafted spear points than their predecessors as they evolved into masterful foragers. Archaic people began to practice burial ceremonialism; burial mounds first appeared during their occupancy.

During the Late Prehistoric (or Late Pre-Contact) period, between 2,800 to 1,500 years ago, the Woodlands tradition emerged east of the Mississippi River and gradually influenced Great Plains inhabitants west of the Missouri River. These semi-horticultural people who raised corn, beans, squash, and other vegetables, gathered berries and nuts, and fashioned globular pottery and decorative ornaments, extended their communities far up the Dismal, Loup, Republican, and Platte rivers onto the Plains and into present-day western Nebraska. The influence of Woodland people reached the High Plains of western Nebraska around 2,000 years ago. A significant Woodland burial site, containing skeletal remains, a large broken ceramic vessel, charred stone, ashes, and stone flakes, was unearthed in the Hat Creek drainage in the northwestern corner of western Nebraska in 1973. A second Late Prehistoric group, known as the "Central Plains Tradition," emerged between 1,100 and 550 years ago and, relying on abilities to adjust to environmental variations, became the first truly sedentary culture in the High Plains. Evidence of people belonging to the Central Plains Tradition in the Late Prehistoric time has been excavated in Nebraska's north-central Sand Hills at Enders Lake and also at the McIntosh site. People belonging to the less sedentary branch of the Central Plains Tradition made bison-hunting forays into present-day western Nebraska where they occupied temporary campsites in rock shelters, on butte tops, and on stream terraces. The Donovan Site in northeastern Colorado

¹¹ Contents in the following paragraphs in this section are summarized from three primary sources: Gail Evans-Hatch, Chapter 2, and Chapter 5, *Centuries along the Upper Niobrara: Historic Resource Study, Agate Fossil Beds National Monument* (Omaha, NE: Midwest Region, National Park Service, 2008); Bozell, *Archeological Overview and Assessment of Agate Fossil Beds* (2004); Paul H. Carlson, *The High Plains Indians* (College Station: Texas A & M Press, 1998).

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suggests that the inhabitants of the less sedentary Central Plains Tradition people may have extended into western Nebraska's Panhandle.

Finally, during the Proto-historic era, between 600 and 200 years ago, Native American groups arrived on the High Plains on the eve of written records. This period proved to be one of seismic environmental, demographic, and social change. Three prolonged droughts continuing for forty years (between 1470 and 1510) followed by a general cooling and shortened growing season, altered the migration patterns of bison and caused the disappearance of some Indian villages and the consolidation of others. Apaches migrating south from Canada into the western High Plains along the Front Range of the Rockies and in western Nebraska displaced the existing groups there; these bison-hunting horticultural Apaches (possibly the Kiowa-Apache) dominated the central High Plains environment and culture for two centuries (from the mid-1500s to the mid-1700s). Finally, during the Protohistoric period, the arrival of European visitors and eventually settlers, beginning in the early 1500s, along with the pathogens, tools, and cultural trappings that accompanied them, devastated Indian groups across the North American continent and ushered in monumental irreversible changes in the social dynamics, cultural traditions, lifeways, and very existence of the indigenous groups everywhere. All these momentous changes that occurred during the Proto-historic period ushered into present-day western Nebraska the modern historic Plains Indian people and traditions depicted in the literature and art of European visitors and Euro-American settlers.

By the mid-1700s, the Sioux Nation, whose roots extended back to the Woodland cultural tradition and ancestral homeland occupied the mixed fir-deciduous forests west of the Great Lakes in present Minnesota, had been pushed to the west and south by other Native American groups moving into the Sioux territory from the Lake Superior region. By the mid-to late 1700s, one division of the Sioux Nation, the Lakota Sioux (comprised of seven sub-bands including the Brule and Oglala) had moved into territory loosely bounded by the Yellowstone River (Wyoming) on the west and the Republican River (Nebraska) in the south. Soon, the Lakota Sioux emerged as the most powerful tribe on the western High Plains. As a bison-hunting culture they ultimately ranged over a vast territory extending from the Platte River (southern Nebraska) north to the Heat River and from the Missouri River in the east to the Bighorn Mountains (Wyoming) in the west. Some bands of the Oglala Lakota moved again, in 1834, when Rocky Mountain Fur Company leaders invited them to make their base near the juncture of the Laramie and North Platte rivers (in eastern Wyoming) near newly established Fort William (later Fort Laramie). The availability of more bison and abundant opportunities to engage in fur trading at Fort William induced the Brule Lakota to also move further west from the White River country, south of the Black Hills, to the upper Niobrara River, only 100 miles northeast of Fort William.

The Lakota and northern Cheyenne were drawn to the landscape of the upper Niobrara not only for the bison that roamed here, but for other natural features on the land. The Niobrara provided refreshment for both humans and horses alike. Fish could be caught in the Niobrara waters. At the margins of the river grew abundant grasses as well as edible roots. Level places for camping existed throughout the valley floor. Striking butte and ridgetops became important ceremonial places. The upper Niobrara valley served as a kind of oasis to pursue the historic Lakota and Cheyenne subsistence life and to perform sacred ceremonies.

Significance

Agate Springs Fossil Hills Historic District contains several archeological sites revealing the rich, multi-layered past of indigenous peoples who occupied the High Plains from prehistoric to historic times. A total of ninety-two archeological properties have been identified inside the district, spanning more than 10,000 years from the Paleo-Indian period to the historic Euro-American period. All time periods are represented by the entire suite of archeological sites. The archeological site density for this 3,055-acre district is about one site per 33 acres. Together, these sites occupy nearly all types of geographic settings, ranging from riparian wetlands, low terraces, and hillsides to knolls, buttes, and ridge tops. The majority of sites are associated with lithic procurement and temporary camping and hunting pursuits, reflecting the presumed ephemeral indigenous use of the upper Niobrara River Valley.

Several of the archeological sites in this district warrant listing in the National Register. Twenty archeological sites at fifteen different locations have already been deemed eligible for the National Register by the Nebraska SHPO.

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These sites include: a prehistoric mound; several prehistoric sites of an unknown period with lithic material, bone, and debris; a number of late Protohistoric and historic rock cairns atop high points above the valley; and a Protohistoric arrangement of tipi rings (no longer visible at ground level). These sites shed light on how past peoples used the upper Niobrara River High Plains setting. They represent use of the upper Niobrara Valley from the Paleo-Indian period more than 10,000 years ago to the historic time after the arrival of Euro-Americans.

In addition to archeological sites, certain inorganic landscape features in this district have acquired significance to the Lakota Sioux Indians and are, therefore, considered important traditional cultural properties in Lakota Sioux culture that warrant listing on the National Register. These natural features or formations include: depressions; natural formations of stone that exist on ridges, cliffs, hillsides, and level terraces; prominent ridgelines; solitary high hilltops or buttes; or an isolated tree or grove of trees. Some of these features were deemed sacred sites or offering sites and chosen as places for vision quests, for sun dances, for alter sites, places to set out spiritual offerings, or places to gather.¹²

Several specific features in Agate Springs Fossil Hills Historic District have been identified as having cultural and spiritual significance to the Lakota. On top of Carnegie Hill, are two rock formations identified as alters. A circular depression atop Carnegie Hill has also been identified as a possible sacred site to the Lakota. Several other landscape features with possible Lakota cultural significance—rock formations, depressions, cairns, and a couple of sites relating to the *Daemonelex*—most of which (except the *Daemonelex* sites) are located in an arc south to southwest of Carnegie Hill. (Please see Section 7 for a complete list of identified traditional cultural properties.)¹³

Carnegie Hill itself, because of the fossil remains of prehistoric animals that exist there, is imbued with great cultural meaning and spiritual significance for the Lakota. For centuries, Native Americans found mysterious petrified remains of long-deceased creatures and sought to comprehend their transformation to stone. In creation stories they visualized fossil remains of extinct mammoths, dinosaurs, and marine creatures as Monster Bears, Thunder Birds, Water Monsters, and Giant Lizards. Many of their insights, some so perceptive that they presaged modern scientific theories, were passed down in oral histories for generations. These fossil tales and legends became part of the cultural traditions of many Great Plains Indians, including the Lakota Sioux, and represent one step in the process of how humans made sense of fossils before the theory of evolution developed.¹⁴

According to cultural ethnographer Sebastian (Bronco) LeBeau the importance of Carnegie Hill (whose old Lakota name is "Animal Bones Brutally Scattered About") relates directly to the fossil beds that exist within it. "It is the fossil remains of the prehistoric animals represented in the paleontological record that are responsible for the creation of the features found on top of Carnegie Hill and the other [traditional cultural property] TCP sites found at Agate."¹⁵ LeBeau then delves more deeply into the nature of Carnegie Hill's significance to the Lakota people.

Carnegie Hill is significant as a traditional cultural property because of what "occurred there far back in the cultural past during the period the Lakota call Wico'icage Pe'ta (the Fire Age). The story of Gnaskinyan identifies Carnegie Hill as the location for the origin of the H'mun'ga Wico'han and it is this event that identifies Carnegie Hill as a significant spiritual site to the Lakota Indians."¹⁶ Carnegie Hill is the origin of the "Stinging Ceremony" in Lakota story-telling folklore. The bones found inside the hill belong to monsters and creatures that once roamed the earth before the coming of man.

¹² Linea Sundstrom, "Sacred Islands: An Exploration of Religion and Landscape in the Northern Great Plains," in *Islands on the Plains: Ecological, Social, and Ritual Use of Landscapes*, edited by Marcel Kornfeld and Alan J. Osborn (Salt Lake City: University of Utah Press, 2003).

¹³ Sebastian C. LeBeau II, "Wico'Cajeyate: Traditional Cultural Property Evaluation Agate Fossil Bed National Monument," prepared for Agate Fossil Beds National Monument, c. 2002, 1-4, 11.

¹⁴ Adrienne Mayor, *Fossil Legends of the First Americans* (Princeton, NJ: Princeton University Press, 2005).

¹⁵ LeBeau, "Wico'Cajeyate," 8.

¹⁶ *Ibid.*, 11.

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Finally, Red Cloud campsites and those campsites occupied by Sioux and Cheyenne tribal members who came after Red Cloud's death in 1909 until James Cook's death in 1942 are a significant cultural resource that warrant listing on the National Register. In 1889, nearly fifteen years after Red Cloud and James Cook first met, then sixty-eight year-old Red Cloud began making annual pilgrimages from his home on the Pine Ridge Reservation in South Dakota to Agate Springs Ranch to visit his friend Jim Cook. These visits and the campsites occupied by Red Cloud and his band, represent the enduring friendship and respect shared by Red Cloud, his band of Lakota and Cheyenne, and James Cook. Out of this decades-long friendship and the cross-cultural exchanges that occurred at the Agate Springs Ranch grew a continuing mutual appreciation for the differences and commonalities between the Native American and Euro-American cultures that Cook and Red Cloud were able to share with their descendents and friends. Additionally, during these visits to the ranch Red Cloud gave James Cook dozens of Native American gifts that became part of a growing collection of Indian artifacts, clothing, and crafts that, beginning in the 1910s, the Cook family amassed in an educational museum collection that they shared with visitors.¹⁷ This collection eventually became the property of the National Park Service after the Agate Fossil Beds National Monument was created in 1965.

Several other Native Americans, some prominent, also visited Cook at Agate Springs Ranch, both before and after Red Cloud's death in 1909. These Indians include: Jack Red Cloud (Red Cloud's son), Red Cloud's daughter (Mrs. John Kills Above), Young Man Afraid of His Horse, American Horse, Woman's Dress, Little Wolf, Good Lance, Two Lance, Short Bull, He Dog, Frank Goings, Clear Sky, Red Bear, John Kills Above, Jack Kills Chief, Phillip Romero, Red Hawk, Little Hawk, Little Sound, Little Chief, Little Crow, Wolf's Ears, Red Head, Left Hand Bear, Blue Shield, Chicken Hawk (or Beaver's Heart), Calico, Standing Bear, Mini Lee (also Minihuha), Jumping Eagle, Bone Necklace, Good Cloud, Runs Above, Walking Bull, Baptiste Pourier ("Big Bat"), and Baptiste Garnier ("Little Bat").¹⁸ These Indians are also important to the heritage of Native American people, to the Cook descendents, and the history of this district. The grave of Ed Woman's Dress's baby, in a grove west of the ranch pond, is a landscape feature signifying the trusting close relationship between James Cook and his family and Indians who came every year to visit the family.

Agriculture (ranching)

Background

Although Euro-American emigrants traveled through western Nebraska along the North Platte River as early as the 1840s and 1850s, present-day northwestern Nebraska, 50 to 100 miles north of the Platte received permanent settlers very late in western history. The semi-arid climate subject to frequent drought periods and the baked, windswept earth that supported the short- and mixed-grass prairie but no or few trees did not attract most Euro-American travelers from the humid east in search of country that would support non-irrigated farming. The first Euro-American settlers did not attempt to establish farms and homes in Sioux County, Nebraska until the mid- and late 1870s. While the open-range ranching still boomed throughout the Midwest and Far West, a handful of individuals discovered the potential for livestock grazing north of the Niobrara River. Once the word spread that northwestern Nebraska's High Plains was suitable for open-range grazing, Texas ranchers began driving their cattle north to Kansas and, eventually, Nebraska to fatten their herds. James Cook, who drove cattle from Texas north between 1874 and 1877, undoubtedly encountered the prairie grazing potential of the upper Niobrara River in northern Sioux County. The extension of railroads into western Nebraska, the continued high demand and market price for beef in eastern markets, and the continued existence of the open, unfenced range led many to believe that riches

¹⁷ Dorothy Cook Meade, *Heart Bags & Hand Shakes: The Story of the Cook Collections*. Lake Ann, MI: National Woodlands Publishing Company, 1994.

¹⁸ *Ibid.*, 18-19.

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could be made in the cattle industry. Such euphoric propaganda encouraged the movement of cattle and cattle ranchers into northwestern Nebraska in the late 1870s.¹⁹

Elisha B. Graham, who began his 04 Ranch operation on the upper Niobrara River in 1879, was among the very first to settle in northern Sioux County. Edgar Beecher Bronson, credited as the first rancher in the county, had arrived and established the Dead Man's Ranch just one year earlier. Charles Coffee, another Sioux County pioneer, arrived around the same time. Federal surveyors did not arrive to chart the topography and cultural features until 1881. Five years later in 1886, John Franklin Cook, James Cook's brother, filed for his first land claim along the Niobrara River. James Cook, one year later, purchased the 04 Ranch from his father-in-law, just after a record cold and blustery winter across the northern Plains had killed free-ranging cattle by the thousands.

For the next fifty years, James Cook and his family operated the Agate Springs Ranch. Their experiences in many ways reflect the larger ranching history of Sioux County and the semi-arid High Plains. Cycles of drought and deadly cold winters, of national and international depressions, and of debt were common for the Cooks and all ranchers struggling to survive on the rural High Plains. In other respects, the James Cook's Agate Springs Ranch was quite unique in its operation and in the contributions it made to the ranching history of the region.

James Cook and also Harold his son went to great lengths to construct a ranch headquarters that was both functional and visually attractive. The principal objectives were to create an operational ranch and a warm and welcoming home. Soon after the Cooks arrived at Agate Springs Ranch in September 1887, James Cook and his ranch hands spent much time re-creating the landscape for practical purposes and aesthetic appeal. Cook realized the critical importance of water to the entire ranch operation. Drawing upon his experience building irrigation ditches on a New Mexico ranch that he had managed, Cook began to develop an irrigation system that took water from the Niobrara River, at two places downstream from the existing McGinley and Stover ditches northwest of the Agate Springs Ranch. The irrigation water flowed across some of the Agate Springs Ranch fields, ending slightly to the east of the ranch headquarters. In 1892, Mary Graham, Cook's mother-in-law who lived at the ranch at that time, filed a claim for an entire quarter section of land traversed by the Niobrara River, just west of the ranch headquarters. Cook probably began to divert water from the river and channel it through his first ditch across Graham's land to the northern part of the ranch headquarters by the early 1890s. In 1895, James Cook purchased nearly all of the quarter section directly west of Mary Graham's, allowing him to construct a second irrigation ditch from the Niobrara that delivered water to the southern part of the ranch.²⁰ Both of his irrigation ditches were probably completed between 1892 and 1896. In December 1898, James Cook purchased much of the land and irrigation system on the McGinley and Stover ranch to the west of Agate Springs Ranch headquarters.²¹ (Within a very few years, another irrigation ditch, the Neece-Harris Canal, began to withdraw water from the Niobrara River about three miles downstream from the Agate Springs Ranch headquarters, in Section 3 of Township 28 North, Range 55 West, now partially inside the historic district.²²)

Cook surveyed and constructed the two ditches by using a homemade level to determine the precise route of the ditches so that they descended at the proper rate and overflowed across the desired areas. After each ditch was staked, it was

¹⁹ Principal sources for this summary history of ranching in western Nebraska include: Louis Berger Group, Inc., *Nebraska Historic Buildings Survey, Sioux County*, prepared for the Nebraska State Historical Society (Marion, IA: Berger Group, 2005); Gail Evans-Hatch, *Centuries along the Upper Niobrara: Historic Resources Study, Agate Fossil Beds National Monument* (Omaha: Midwest Region, National Park Service, 2007); Francis Moul, "Prairie Grass Dividing: The Land, Life, and People of Sioux County, Nebraska" (Ph.D. dissertation, University of Nebraska, Lincoln, 1998); Harrison Community Club, *Sioux County History: First 100 Years, 1886-1986* (Dallas, TX: Curtis Media Corporation, 1986).

²⁰ "Numerical Index," Section 1, Township 28 North, Range 56 West, Clerk's Office, Sioux County Courthouse, Harrison, Nebraska.

²¹ Harold Cook, *Tales of the 04 Ranch* (Lincoln: University of Nebraska Press, c. 1956), 11-12; Dorothy Meade, *Story of Agate Springs Ranch*, (Scottsbluff, NE: Business Farmer Printing, 1990), 16; James Skavdahl, conversation with the author, 19 March 2007, at Agate Springs Ranch and 20 May 2007 (telephone communication).

²² Harold Cook, letter to Howard Baker, 5 March 1962, Box 1, File L58, General Files (1952-1963), Record Group 79, Central Plains Region, National Archives and Record Administration, Kansas City.

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dug about three to four feet deep, gates at the entrance to each ditch were constructed, and flumes were built to carry water across or under any obstacles that interfered with the gradual descent in elevation of the ditch. Laterals (smaller ditches tributary to the two main ones) were also surveyed, stacked, and dug. Once the water filled these ditches to the top, they overflowed and flooded the adjoining land below the ditches. Cook's irrigation system extended for about one mile northwest of the ranch house and continued through the ranch headquarters to a point about a quarter mile to the southeast of the corrals.²³ By 1910, Cook used and maintained ten miles of irrigation ditches. Nearly 1,000 acres of Cook's land were under flood irrigation.²⁴

James Cook's flood irrigation system expanded his hay production many times. In 1886, no more than ten tons of hay could be grown.²⁵ The development of the flood irrigation system enabled Cook to harvest more hay and also to grow more different kinds of crops that required water and that otherwise would not have survived the dry, hot, and windy summers and periodic drought years. His system had its first test during the drought in the early 1890s, which drove a number of settlers away from the upper Niobrara. "By persistent experimentation [Cook] has demonstrated that a wide range of field products can be successfully grown under irrigation in his region," according to Cook's friend and paleontologist Erwin Barbour in the early 1900s.²⁶ Cook was among the first ranchers in the area to grow alfalfa under irrigation. Alfalfa hay became a staple crop, both for use on the ranch and for sale to other ranchers, especially during the cold winter months when the cattle required rich, nutritious forage. He also grew small grain crops and potatoes under irrigation, often on the former McGinley and Stover irrigated ranchland. Around the ranch house, Cook planted bluegrass and clover on a terrace surrounded by shallow laterals fed by the southern ditch, making it possible for a wide lawn to grow.²⁷ In the early 1900s, after paleontologist and family friend Erwin Barbour sent the Cooks some plants and seeds from Lincoln, Cook wrote thanking Barbour for his gift. "We are having a very dry spring in this section of [the] country, but with our irrigation ditches we hope to make the valley of the Niobrara blossom."²⁸

Jim Cook clearly gave much thought to the overall plan and grand design of the Agate Springs irrigation system and its purpose of creating a tranquil oasis and profitable ranch operation. He was interested in watering not only crops for cattle, but also food for human consumption, and trees for winter wind protection, human comfort, and aesthetic appeal. Both Jim and Kate had grown up in southern Michigan and knew the delights and relief from summer's humid heat given by shade trees. James Cook's plan for the ranch headquarters landscaping may have also been influenced by the nineteenth-century English landscape tradition that celebrated nature while striving to control it and created pastoral scenes of tree-line passages and long views, tranquil ponds, and park-like picturesque vistas. Cook's father had emigrated from England many years earlier and may have told his son about gardens there. Cook may have also heard about English landscape design from many of the wealthy Englishmen he guided on hunting expeditions in Wyoming in the late 1870s and early 1880s. Whatever landscape design knowledge may have influenced Cook, it seems likely that practicality must have had equal influence on Cook's landscape constructions.

²³ The McGinley Stover irrigated land became known by the Cooks as the "Upper Ranch." The Upper Ranch became a prime section of the ranch for growing potatoes and alfalfa under irrigation. "Our whole ranch operations and economy are based on the irrigated valley sections of this ranch, with its hub and operational center at Agate," Harold Cook later wrote. Cook, letter to Baker, 5 March 1962, Box 1, File L58, General Files (1952-1963), RG 79, CPR, NARA.

²⁴ Cook, *Tales of the 04 Ranch*, 117; Barbour, "James Henry Cook," 481.

²⁵ Harold Cook, letter to Erwin Barbour, 13 December 1906, Barbour Papers, University of Nebraska Archives.

²⁶ Erwin H. Barbour, "James Henry Cook," in *History of Nebraska, Volume III*, edited by Albert Watkins (Lincoln: Western Publishing and Engraving Company, 1913), 481.

²⁷ Cook, *Tales of the 04 Ranch*, 42; Kate Cook, "Daily Record for 1905 [through 1908]," Box 89, Cook Papers, Agate Fossil Beds National Monument; Ron Cockrell, "Our Ranch is Different: The Agate Springs Ranch on Nebraska's Niobrara River," Paper for Seminar in Western American History, November 27, 1996, 4.

²⁸ James H. Cook, letter to Professor Barbour, c. 1908, Barbour Papers, University of Nebraska Archives.

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When the Cooks and Grahams arrived at the ranch in September 1887, only one lone willow tree, which gave "no more shade than a knitting needle," grew on the west side of the slough near the claim house.²⁹ Soon Cook purchased willow trees from a Canadian firm and planted them near the Niobrara and the crescent-shaped dredged oxbow pond near the house. He also planted fruit trees around the ranch (some of which later died for lack of water). By 1889 James Cook and some of his ranch hands had planted dozens of cottonwood trees, uprooted as small saplings from the North Platte River and transported under wet sacks by horse and wagon nearly forty miles to the ranch. All around the ranch complex he planted orderly rows of trees and groves. An 1888 newspaper article describing the Cook ranch noted that several thousand fruit and forest trees had been planted. Many years later, Harold recalled how, as a small child, he watched his father "after he had come in from riding or working in the corrals, dog-tired and weary, carrying buckets of water to each tree, individually, hundreds of them, to keep the seedlings alive and growing until their roots could push down to water."³⁰ For this reason, Jim Cook often referred to his cottonwoods as his "bucket trees."³¹

James Cook's irrigation system ended near the lower south side of the ranch headquarters by design and not accident. Cook must have been enormously relieved when the southernmost irrigation ditch was completed to the ranch headquarters, where young trees were then planted in a tight row on both sides of the ditch (just north of the corrals). This same southern irrigation ditch also probably flooded a vegetable and flower garden, located in a slightly depressed hollow southeast of the new house on the knoll. Potatoes, in particular, were grown in huge quantities at Agate, sometimes requiring the entire ranch workforce to plant each year in May. The irrigated land around the ranch house became fertile ground for asparagus, which went wild after initially planted by Henry Cook, James's father, during his extended stay at the ranch in the mid-1890s.³² As the trees grew, they not only created a cool, shady oasis with lawns and gardens surrounding the house, but the thousands of trees provided "a splendid and valuable winter shelter for corrals and feedlots" located at the southern end of the ranch complex. The trees also provided wood for fence posts and other purposes. According to Harold Cook many years later, the grove of trees combined with the complex of cattle sheds, feed lots, corrals, and buildings at Agate Springs Ranch headquarters was "recognized as the best and most practical situation for ranch development in this region."³³

Another water feature that became an integral part of the Agate Springs Ranch headquarters was a crescent-shaped oxbow lake, long ago cut off from the main channel of the Niobrara River but fed by a nearby spring, located just to the west of the ranch house and south of the winding Niobrara. When the Cooks arrived at the ranch in 1887, this pool was a shallow, murky, mud-filled oxbow, condemned as a source of pesky, disease-carrying mosquitoes. James Cook, however saw its practical and pleasurable possibilities. He first hired a homesteader to dredge the slough to solid rock or gravel with his ox team. The muck dredged was used to build a dike that totally separated the river from the pond, even during spring floods. The nearby spring trickled water into the pond. Jim had a milk house built near the waters of the pond, where cream and milk were kept cool and sweet in the summer heat, and where butter was made for the entire ranch. The pond soon became a nesting habit for wild ducks, which the Cooks and visitors hunted in the fall. Near the pond, he also installed a machine that released tin birds, which he and others used for target practice. In winter the pond became a source of ice, cut into blocks and stored in the nearby icehouse for refrigeration of perishable goods. James Cook also stocked the pond with sunfish, bullheads, and chub. The fish ate the mosquito larvae and provided pan fish for the family. The entire Cook family, as well as their guests, enjoyed fishing in the pond and duck hunting around it. James and Kate Cooks' two sons even enjoyed trapping

²⁹ The "knitting needle" analogy was James Cook's, recalled by Harold Cook in *Tales of the O4 Ranch*, 12.

³⁰ Cook, *Tales of the O4 Ranch*, 12.

³¹ Jay Roberts, "Preliminary Sketch of the History of Agate Springs Ranch," Midwest Regional Library, National Park Service, 24-25.

³² *Ibid.*, 12; Roberts, *History of Agate Springs*, 284-85; Meade, *Story of Agate Springs Ranch*, 16; Kate Cook, letter to Harold Cook, 17 May 1907, Box 13, Cook Papers, AGFO.

³³ Cook, letter to Baker, 5 March 1962, Box 1, File L58, General Files (1952-1963), RG 79, CPR, NARA.

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water-loving muskrats around the pond, whose pelts they sold. A mosquito-infested slough had been refashioned into a bucolic scene with numerous recreational pursuits possible.³⁴

One member of the third generation of Cooks continued on with ranching on the Niobrara River. Margaret Cook, oldest daughter of Harold and Eleanor Cook born in 1911, married George Hoffman in 1934 and pursued ranching. Eventually, they built a house in the early 1950s near Harold's homestead cabin and to the west of the Carnegie and University hills fossil quarries. Following in the tradition of the Agate Springs Ranch, they also planted trees for wind and shade (to a lesser extent) protection. Although the Hoffman ranch house is not individually eligible to the National Register it is considered a contributing resource in the district since it: 1) represents the continuing Cook ranching tradition and financial challenges associated with it; 2) provides a visual link between the Agate Springs Ranch house and the fossil quarries; and 3) a different type of ranching within the Agate Springs Fossil Hills Historic District. The Hoffman ranch house is a contributing feature. Dorothy Cook Meade and her husband Grayson Meade, Winifred Cook McGrew, and Gary Hoffman (son of Margaret Cook Hoffman and George Hoffman) are all buried on Windmill Hill, south of and overlooking the Agate Springs Ranch headquarters and inside the historic district; their graves are cultural landscape features signifying the continuance of ranching by the third generation of the Cook family.

Significance

Agate Springs Ranch, comprised of the ranch headquarters, grazing land acquired by the Cooks over four decades and extending east along the Niobrara River, and remnants of the James Cook's early irrigation system still evident around the ranch headquarters, is eligible for listing in the National Register for state-wide significance. Its period of significance extends from the late 1870s, when the ranch was first founded by Elisha Graham, to 1942, when long-time owner and architect James H. Cook died. The ranch buildings, sites, structures, and associated cultural landscape features are significant for several reasons. First, the 04 Ranch/Agate Springs Ranch was among the very first ranches established in Sioux County. The 1880 census lists it as one of only six ranches in the entire county at that time. Second, although James Cook struggled financially to make his operation viable and, to survive prolonged years of low market prices and depressed economic conditions in the 1930s, he approached ranching with great innovation, adaptability, and resourcefulness. Unlike most ranchers in the area who focused exclusively on cattle raising and haying, he pursued race horse breeding and raising in the early years of his ranch. After this failed, he not only relied on beef cattle for an income but increasingly raised alfalfa hay for sale locally. His 1890s vintage irrigation system, one of the oldest in the county and about the third constructed on the upper Niobrara (after Edgar Beecher Bronson's 33 Ranch and McGinley-Stover's two separate systems), enabled Cook to raise water-thirsty alfalfa, which dry-land farmers could not. Cook was among the first ranchers in the area to grow alfalfa under irrigation. Cook's innovative resourceful approach to life on the upper Niobrara encouraged him to consider other ways of supplementing his ranching income. Both he and his son Harold pursued the operation of a U.S. post office on the ranch premises for over fifty years, wrote articles and books in part for the income, and engaged in an early educational tourist activity—the opening of a museum featuring Indian artifacts—for which they charged a small entrance fee. (Harold, unlike many ranchers pursued a professional career as a geologist and paleontologist.)

Third, realizing the great importance of water to his entire ranching operation, Cook developed a very early irrigation system (by building his own ditches and acquiring those of McGinley-Stover to the west), that not only supported his cattle and hay production, but also created a lush green oasis comprised of huge groves of trees, gardens, and lawn at the Agate Springs Ranch headquarters. Rarely in ranching history is so much attention and effort devoted to creating an aesthetically appealing home environment around a ranch headquarters. Cook, however, did not neglect creating a stock environment that functioned well, protected cattle, and facilitated human care of the stock. He is said to have created a somewhat early unique arrangement of three-sided cattle sheds facing onto the main corral. In 1923, Willoughby Walling, a friend and Cook's

³⁴ Cook, *Tales of 04 Ranch*, 13-14, 42-43; Mead, *Story of Agate Springs Ranch*, 16; "History of Agate Springs Ranch," attached to Dorothy Cook Meade oral history interview, May 22, 1986.

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mortgage holder, in a letter to Cook, observed that "as a cattle proposition, you have an unusual plant which will make money whenever money can be made in the cattle business."³⁵

Finally, few if any historic ranch headquarters in Sioux County or western Nebraska have such a complete ensemble of extant ranch buildings, structures, and sites that so poignantly reflect the early ranching history of western Nebraska. Outbuildings, often the first to disintegrate or be replaced by modern buildings, survive in great abundance at the Agate Springs Ranch and range from a small ice house, privy, and coal cellar to the larger, more substantial ranch house and tentsleeping house. The large grove of cottonwood trees shading the entire complex, although aged and, in some instances, dying, is an important integral feature of the ranch headquarters ensemble. Although many of these trees were initially planted over a decade in the 1890s, new trees were added over many more years, such as those purchased and planted by Harold Cook in the spring of 1910, about six months before his marriage to Eleanor Barbour.³⁶ Not long after their marriage, the Barbours sent many hardy fruits, vegetables, and flowers from their own yard in Lincoln to Agate Springs Ranch. In March 1918, Erwin Barbour sent a box full of Siberian iris, "Snow Queen" and "Yale Blue" varieties and advised Harold where to plant them. "I wish you would plant them close to the edge of the lake [just west of the house]. . . . They like very rich ground and I think they like rather moist conditions."³⁷ Jack Cook, James Cook's brother, is also said to have planted iris along the edge of the pond. These iris have naturalized downstream along the Niobrara. In 1919, a box of peonies along with walnut and oak tree specimens arrived at the ranch from Barbour.³⁸ Barbour shared his love and samples of flowers with Jack Cook as well. In 1919, he sent the elder Cook, for planting in his small corner of the ranch headquarters, a box containing *Hemerocallis* lilies, an "old-fashioned Live-Forever" variety, the roots of *Helianthus* (a form of single sunflower), and a few vines for the fence at the post office.³⁹ Other plants may have become a permanent feature under the shade of the cottonwoods at the ranch headquarters.

Visually, the Agate Springs Ranch is connected to the historic paleontological fossil quarries about three miles to the east. Looking east down the Niobrara valley from the ranch headquarters it is possible to see the twin butte tops, Carnegie and University hills, in which fossil quarries were excavated between 1904 and 1925. Agate Springs Ranch headquarters, with its large grove of cottonwoods, is plainly visible from the fossil quarries and Harold Cook's homestead cabin at the base of the twin buttes. The visual connection between these two important constructed features unifies this cultural landscape district.

Science (paleontology)

Background

Most of the paleontological excavations in the Agate fossil hills took place between 1904 and 1923. James Cook and Kate Graham are credited with discovering the fossil beds while riding horseback in the area, sometime between 1878 and 1885. The Cook family ultimately played a significant role in the paleontological studies undertaken at the fossil hills; they became owners of the two fossil hills—Carnegie Hill and University Hill—and permitted their land to be used for summer field camps and a staging area for organizing and packing fossils for shipment. The Cooks developed close long-term friendships with many of the nationally known scientists who conducted excavations at the fossil hills.⁴⁰

³⁵ Willoughby Walling, letter to James H. Cook, 6 November 1923, Box 54, Cook Papers, Agate Fossil Beds National Monument.

³⁶ Harold Cook, letter to Erwin Barbour, 3 March 1910; Eleanor Barbour Cook, letter to Erwin Barbour, 21 July 1912; both in Barbour Papers, University of Nebraska Archives.

³⁷ Erwin Barbour, letter to Harold Cook, 26 March 1918, Barbour Papers, University of Nebraska Archives.

³⁸ Erwin Barbour, letter to Harold and Eleanor Cook, 7 April 1919 and 5 May 1919, Barbour Papers.

³⁹ Erwin Barbour, letter to Jack Cook, 7 April 1919, Barbour Papers.

⁴⁰ This summary paleontological history is based primarily on the following sources: Robert M. Hunt, Jr., "The Agate Hills: History of Paleontological Excavations, 1904-1925" (Lincoln: University of Nebraska Museum, 1984); George MacDonell, Draft "Carnegie Hill National Register of Historic Places Nomination Form," June 1998.

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In 1892, James Cook invited University of Nebraska paleontologist Professor Erwin H. Barbour to visit Agate Ranch and inspect the fossil deposits. Barbour, pressed for time and unsure of the importance of the fossil beds, sent one of his students to inspect the fossil hills. Barbour decided not to return to Agate and excavate. Twelve more years passed before active excavation began at the fossil hills. James Cook and his young son, Harold, who developed a growing interest in paleontology as he matured, believed in the importance of the fossil hills near their ranch and tried to interest others in this site. James and Harold invited several scholarly paleontologists from universities and science museums around the United States to Agate. Eventually, many institutions sent teams of paleontologists to conduct excavations. The Cooks encouraged all to come, and by so doing, inadvertently stimulated rivalries between them. Between 1904 and 1908, field crews from Carnegie Museum, the University of Nebraska, Amherst College, the American Museum of Natural History, and Yale University and others converged on the fossil beds at Carnegie, University, and Amherst hills. Olaf A. Peterson of the Carnegie Museum, who first visited Carnegie Hill in 1904, is credited with identifying the great scientific value of the fossil discoveries near Agate. Field crews working at Carnegie and University hills during the summer typically set up tents for sleeping, eating, and for conducting office work near Agate Springs Ranch. By 1906, modest frame shacks were also used by field crews. Despite growing conflicts between competing paleontologists working at the fossil quarries, the early period of scientific excavations climaxed in the summer of 1908. Some paleontologists determined that they had adequate samples from the quarries and needed no more. Yale, Amherst, and Carnegie conducted no further work at Agate after 1908 and 1909. Paleontology work dwindled in 1909 and none took place in 1910. Probably in early 1909, after Harold returned to Agate from his studies at the Columbia University and simultaneously at the laboratories of the American Museum of Natural History in New York City, the bone shack was moved from its location north of the Niobrara to a site about one mile to the southwest, near the base of Carnegie Hill's western slope. It thereafter served as the homestead claim cabin of Harold Cook, who filed a claim for ownership of this parcel in August 1908, as well as a later base of operations for future fossil excavations at the quarries.

The third and final phase of discovery and intense excavations at Agate's fossil hills occurred between 1911 and 1923. During this period, the American Museum of Natural History conducted extensive excavations under the field leadership of Albert ("Bill") Thomson. Thomson and his crew uncovered several chalicotheres, including seventeen *Moropus* specimens in the mid-1910s. These proved to be the most complete samples of chalicothere known in the world. Thomson and his field crew at first used their own shack. Between 1914 and 1927, Bill Thomson, however, moved into Harold Cook's Homestead Cabin and used it as a staging area during the years of important chalicotheres excavations. Beginning in 1921, Thomson began focusing in other areas near the Agate fossil quarries, and his crew continued to use the Cook Homestead cabin as a base. Thomson conducted his final major excavation at the Agate fossil quarries in 1923.

Significance

The fossil deposits and the excavation activities are of national and international scientific importance, since they provide important knowledge about animal life during the Miocene Epoch. A great concentration of Miocene fossil mammal bones are buried in a two- to three-foot thick layer of sediment that extends through Carnegie and University hills. Commonly found mammal bones include those of *Menoceras*, *Moropus*, *Dinobylus*, *Daphoenodon*, and *Tennocyon*. Additional fossil deposits also exist in nearby hills, such as Amherst Hill, the location of a concentration of *Stenomylus* fossils. James H. Cook and Kate Graham, before marrying, first discovered fossil bones at these hills in the mid-1880s, although serious, extended scholarly excavations did not begin until 1904 and extended to the mid-1920s. Scientists came to Agate Fossil Beds from numerous educational institutions from around the country, including: University of Nebraska, Carnegie Museum, American Museum of Natural History, Yale University, and Amherst College. The period of significance for the fossil quarries, thus, extends from 1886-1925.

The Harold Cook Homestead Cabin ("Bone Cabin") and its associated historic landscape features (windmill; fence fragments and fence line; American Museum of Natural History Shack site; Storm Cellar site; small barn site; and privy site) are significant for their direct and important association with the scientific investigation of paleontological fossils at Carnegie

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Hill, University Hill, and Amherst Hill (to a lesser extent) in northwestern Nebraska. The Cook Homestead Cabin is the most tangible building linked to the path-breaking discoveries made at the fossil quarries near Agate, particularly of the complete samples of chalicothere. Discoveries of ancient fossils spotlighted and influenced theories of evolution hotly debated across North America in the early twentieth century. Between 1909 and 1923, Harold used the cabin as part of a homestead claim. It was most extensively used, however, by the American Museum of Natural History paleontological excavation crews through the mid-1920s. The Cook Homestead Claim Cabin was nominated to the National Register of Historic Places in 1977 as part of an historic ensemble (also including the then extant windmill, fences, and four related sites). In 1985, the nomination was amended to include non-historic, non-contributing features at the site (a stock tank) and to upgrade the significance to national; the nomination was approved in 1986.⁴¹

Criterion B: Associated with the Lives of Significant People

James Henry Cook

Background

James Henry Cook was born on August 26, 1857 in Kalamazoo, Michigan, to an English sailing father, Henry Cook, and a native Scottish mother, Elizabeth Shaw. Following the disappearance of his mother when Cook was an infant, Henry Cook placed young James (known commonly as "Jim") and his older brother, John Franklin Cook, in the care of separate adopted Kalamazoo families. Jim Cook grew up with the E. P. Titus family, which taught him much about hunting, marksmanship, and other outdoor skills, and imbued in him a strong sense of acceptance of different cultures and human justice. Reflecting many years later on the Titus's early influence on his life, Jim Cook recalled that "its members had been raised after the severest models of order, industry, frugality, integrity, and every Christian virtue."⁴² He vividly remembered that, as officers in the Underground Railway during the Civil War, the Titus's were distinctly anti-slavery. Cook's formal education ended at around age twelve, when he followed in his father's footsteps and took up sailing on Lake Michigan for a few months. Unhappy in this pursuit, he decided to head west for new adventures among cattlemen. Near Wichita, Jim Cook worked as a cattle herder for several months before meeting cowboys driving cattle between southwestern Texas and Kansas and joining them on their return trip to Texas. Cook began herding cattle on Texas ranches at a time when the open, unfenced range, robust markets, and plentiful investment capital made cattle ranching a lucrative business. During the early and mid-1870s, Cook became well acquainted with some of the larger cattle drivers. Between 1874 and 1877, Cook participated in major cattle drives over the Chisholm and other cattle trails between Texas and Kansas, then Nebraska.

It was during Cook's time as a cattle driver that he first met Red Cloud in 1874 at the Red Cloud Agency on the White River in northwestern Nebraska. Well-known and greatly respected army scout, big-game hunter, and Indian interpreter, Baptiste Garnier, born at Fort Laramie to a French father and Sioux mother, introduced the two men. Chief Red Cloud, then fifty-four years old, invited the seventeen-year-old Cook into his lodge, where Cook was asked to talk with many of Red Cloud's sub-chiefs and warriors about the country, wildlife, and Indian tribes inhabiting the vast territory between the North Platte River and the Gulf of Mexico. Cook talked that day with Red Cloud and the other Sioux about his love of traveling over the plains and mountains, of the wildlife, and all the wonderful works of the Great Spirit. Red Cloud, himself a student of nature with a vast knowledge of the plants and animals inhabiting the land his people occupied, must have delighted in Cook's descriptions. Cook's knowledge of nature, his understanding of the radical changes unfolding in the Sioux's home territory, and his empathy for the meaning of these momentous changes for the Sioux must have impressed Red Cloud and his

⁴¹ Richard Ortega, "Harold J. Cook Homestead Cabin National Register of Historic Places Nomination," 1 March 1976 (approved 24 August 1977); Charles Trupia, "Harold J. Cook Homestead/Bone Cabin Complex National Register Historic Places Nomination Amendment," 1985 (approved 19 December 1986).

⁴² *Ibid.*, 3.

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sub-chiefs. Reflecting on this meeting nearly fifty years later, Cook wrote: "The fact that I met him on the common ground of a hunter and dweller in the Plains country, and in a different manner from most white men, had much to do, I think, with the establishing of a friendship that grew with the passing years."⁴³ The friendship that began between Red Cloud and James Cook in 1874 would continue for the next thirty-five years.⁴⁴

Jim Cook continued to drive cattle north from Texas, sometimes to Indian agencies like the Red Cloud Agency, until 1878. After completing the spring cattle drive that year, Cook turned to his great love of hunting and trapping and took up hunting and guiding full time. Using Cheyenne as a base of operations, he hunted big game for the Union Pacific Railroad and other clients and guided parties of wealthy English and American sportsmen. He also occasionally gave assistance to renowned paleontologists O. C. Marsh and E. D. Cope, who sometimes relied on Cook's knowledge of the country to help them locate fossil sites. Cook's acquaintance with certain English big game hunters led to his decision to invest in and manage a large cattle ranch in southwestern New Mexico for a handful of English big game hunters he had guided. Between 1882 and 1886, Jim Cook managed the WS Ranch and helped manage other nearby ranches owned by English hunting friends. While at the WS Ranch, he developed an irrigation system and became thoroughly familiar with ranching in a semi-arid environment.

James Cook's marriage to Katherine ("Kate") Graham in 1886 and his purchase of the 04 Ranch from his father-in-law, Elisha B. Graham, in 1887 launched Cook into a new life as the manager of his own ranch—Agate Springs Ranch—on the upper Niobrara River. Over the remainder of his life, Cook focused all his energy and resources on developing the ranch into a viable operation and a comfortable living environment. He also encouraged and supported the scientific work of paleontologists who worked intensely at the fossil quarries on the Cook property three miles east of the Agate Springs Ranch. Cook not only welcomed Indians on his property, but also hired some to work on the range. In his later years at the encouragement of his son and friends, he wrote and published articles and a book about his participation in a period of western history that was fading forever. Although Cook gradually turned over the major responsibilities of operating the ranch to his son, Harold, in the 1910s and 1920s, Agate Springs Ranch remained Jim Cook's primary residence until his death on January 27, 1942. Cook was eighty-four years old.⁴⁵

Significance

James Henry Cook is significant for his contribution to ranching developments on the semi-arid, short- and mixed-grass High Plains prairies, for his role in advancing important paleontological investigations on his property, and for encouraging a greater understanding and appreciation of Sioux Indians and their history and culture. Throughout his ownership of the Agate Springs Ranch, Cook struggled to make it a viable operation. He failed to establish a ranch for breeding and raising race horses as he had planned and struggled with the consequences of cyclical drought and periodic low depressed market prices and occasional depressions. Despite these challenges, however, he persisted in developing the ranch. He added acreage over several decades, constructed or moved many buildings to it, and built one of the earliest irrigation systems on the upper Niobrara. Despite a mounting debt, James Cook succeeded in transforming a once open treeless ranch headquarters into a lush green island oasis on the dry windy High Plains prairie grass. Cook was primarily responsible for creating a unique, totally constructed utilitarian and aesthetically pleasing ranch operation.

James Cook was also fundamentally responsible for making the Agate Springs Ranch a cultural and scientific oasis as well. Cook's personal curiosity about natural science and his encouragement of paleontological investigations at the fossil quarries made his home a gathering place for renowned scientists from all over the country. James Cook's trusted long-term relationship with Red Cloud also encouraged the annual visits of his friend and spawned the birth of a sizeable collection of Indian artifacts that Cook shared with the public in a museum housed in his ranch house. James Cook, therefore, contributed to developments in nationally significant investigations in paleontology and to expanding cultural awareness in the region.

⁴³ *Ibid.*, 186-87.

⁴⁴ *Ibid.*, 166-67, 186-87, 195-96, 85,

⁴⁵ Major sources of information for Cook's life are found in: Gail Evans-Hatch, *Centuries along the Upper Niobrara: Historic Resource Study, Agate Fossil Beds National Monument* (Omaha: Midwest Region, National Park Service, 2008).

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Red Cloud

Background

Red Cloud was born in May 1821 to a Brule Lakota Sioux father and an Oglala Lakota mother on Blue Water Creek, near the forks of the Platte and North Platte rivers in present-day western Nebraska. After losing his father to alcoholism at a young age, Red Cloud went to live with his maternal uncle. Soon, Red Cloud went on war parties against the Pawnee and Crow, and he gradually gained a reputation for his cunning and cruelty in battle. His prestige as a war leader continued to grow after he killed his uncle's rival in a feud in 1841. When several bands of the Oglala Sioux moved to territory east of Fort William (later Fort Laramie) to trade with Euro-Americans and to hunt more plentiful bison there, Red Cloud went with them. By 1865 Red Cloud was recognized by the Oglala people as one of their fiercest fighters; many warriors looked to him for leadership. Red Cloud assumed this role in 1865 when he led the Oglala against military and emigrant travelers over the Bozeman Trail that crossed vital Sioux hunting territory. Red Cloud played an influential role in negotiating the 1868 Fort Laramie Treaty that resulted in the U.S. Army's abandonment of forts along the Bozeman Trail in the Powder River region of Wyoming and the creation of the enormous Great Sioux Reservation, encompassing most of western South Dakota. Beginning in 1870, around the time that Red Cloud moved onto a reservation, he made his first of numerous trips to Washington, DC and other eastern cities, where he took part in discussions and negotiations with politicians, scientists, and the general public. On these trips and on other occasions he became a much photographed and a widely recognized subject. Red Cloud and James Cook met in the mid-1870s on the Red Cloud Agency in northwestern Nebraska, at a time when Red Cloud and the Sioux became embroiled in a series of major crises—the relinquishment of the Black Hills to the Americans (1876), the war following the Custer massacre (1876-77), the massive reduction of the Great Sioux Reservation in South Dakota, and the crisis and killing resulting from the Ghost Dance crisis of 1890. Just one year earlier, Red Cloud began making his annual trips from the Pine Ridge Reservation in southwestern South Dakota to Agate Springs Ranch to visit James Cook. A band of loyal followers that included members of both the Lakota and Northern Cheyenne accompanied Red Cloud on these visits. (The Northern Cheyenne had shared the same hunting territory with the Lakota in the early 1800s and they had joined with the Lakota in the "Sioux Alliance" in making raids on more vulnerable horticultural tribes to the north. In 1876, the Lakota, Northern Cheyenne, and the Arapaho gave up northwestern Nebraska in a treaty. Many Northern Cheyenne went to live with the Lakota at the Red Cloud Agency at Fort Robinson in the 1870s.) These visits, usually made each spring, continued for nearly two decades until 1908. Red Cloud died at age eighty-eight in December 1909.

Significance

Red Cloud may have been associated with this portion of the upper Niobrara River earlier in his life while buffalo hunting in the region. His association with the Agate Springs Ranch began in 1889 and continued until 1908, one year before his death. For nearly twenty years, Red Cloud, then between age sixty-eight and eight-seven, made annual visits to the ranch to spend time with James Cook and to camp in a familiar and comfortable setting. According to Red Cloud historian Robert W. Larson, Red Cloud "and his family probably felt more contentment camping along the wooded banks of the Niobrara River as Cook's guests than they did anywhere else."⁴⁶ Although Red Cloud had passed his prime as a warrior and as a dedicated influential tribal diplomat, Red Cloud continued to do "everything in his power to hold his bands together and to oppose the coming of the whites." According to James Cook, who did not meet Red Cloud until 1874 when Red Cloud was aging, "his right to rule and to oppose the oncoming of the invading paleface, he never doubted. He died as he lived—an Indian who never pretended to be reconstructed."⁴⁷ Around the time that Red Cloud and Cook met, Red Cloud not only witnessed but participated in events that transformed the way of life of the Lakota Sioux and the Plains Indians forever. Although often forced to maintain an unpopular position of compromise in all major crises confronting the Sioux after 1868 (the year of his Bozeman Trail victory), Red Cloud steadfastly worked to obstruct the erosion of Sioux culture whenever he

⁴⁶ Robert W. Larson, *Red Cloud: Warrior-Statesman of the Lakota Sioux* (Norman: University Oklahoma Press, 1997), 295.

⁴⁷ James H. Cook, *Fifty Years on the Old Frontier* (Norman: University of Oklahoma Press, 1980, new edition), 187, 209.

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could. A complicated and controversial figure, even during his declining years when he visited Agate Springs Ranch, Red Cloud and his name and image retained a formidable aura. Both Native people and non-Natives recognized the power of his reputation to attract attention and respect. The Agate Springs Ranch is significant for its association with the aging Red Cloud and the construction of the mythic warrior-diplomat that continued long after his death.

Red Cloud family and loyal Lakota and Northern Cheyenne band members, continued Red Cloud's tradition of visiting Agate Springs Ranch every year until the death of James Cook in 1942. Descendents of Red Cloud's band and James Cook maintained a relationship into the early twenty-first century.

Criterion D: Likely to Yield Important Information

Cultural resources within the Agate Springs Fossil Hills Historic District, both archeological and paleontological, are likely to yield information that will expand human understanding of progressive changes on earth before the arrival of humans, of prehistoric human life, and of humans during historic times (Criteria D). The cultural landscape features and resources in this district are significant in the regional history of the High Plains (ethnic heritage and ranching) and also in national history (Red Cloud, James Cook, and paleontology), during the two periods of significance that extend from 10,000 years ago to 1942.

Archeological sites can yield information about indigenous people's subsistence life and technology in the High Plains region, both in prehistoric and historic times. They can also shed light on the cultural history of the region. Further investigations here can provide a clearer understanding of Native American adaptation to the upper Niobrara River environment, the cultural history of the area, the process of site formation, and the technology of lithic procurement. The various Red Cloud campsites that occupied several different sites around the Agate Springs Ranch can potentially yield additional information about Lakota Sioux and Cheyenne during a period of profound adjustment and accommodation to Euro-American culture.

Paleontological sites, concentrated at Carnegie, University, and Amherst hills, can yield additional information about animal and plant life, particularly during the Miocene Epoch. Although preservation of these sites is essentially important, low impact excavations in the future might add to existing knowledge about previous life in the area and on the continent.

Integrity

The integrity of the Agate Springs Fossil Hills Historic District has remained largely intact since the end of the period of significance (1942). The natural features of this cultural landscape district—the Niobrara River, U-shaped trough-like valley, and the terraces and buttes and ridge-tops that contain the valley—have retained physical integrity. There has been no massive ground-disturbing activity, air pollution, damming or disappearance of the Niobrara River, or blasting or removal of major buttes or ridgetops. Historical integrity also has been retained among the cultural features—the archeological artifacts; paleontological excavations at the fossil and *Daemonelex* quarries; Harold Cook's homestead cabin and site; historic road alignments; and ensemble of buildings, circulation patterns, and planted vegetation at the Agate Springs Ranch. Additionally, historically significant views within the district are protected from alteration; the district viewshed is protected by 467 acres of scenic easements.

Some alterations have occurred since 1942, impacting the physical integrity of the district somewhat. Throughout the district the abandonment of grazing has changed the vegetative makeup of the land since the cattle and bison (before that) grazing and haying (alfalfa and native grasses) along the Niobrara. Transportation-related features, such as roads and trails, have also been altered in places since the establishment of Agate Fossil Beds National Monument in 1965, whose dual mission combines both preserving features and providing for public visitation. Highway 29 has been repaved and, in 2007, was

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realigned across the Niobrara River near the park entrance. Likewise, River Road has been repaved and improved between Highway 29 and the park visitor center. Short roads and parking lots at the *Daemonelix* Quarry and at the park visitor center and fossil quarries, at the east end of the district, are new additions since the early 1990s and non-contributing features. In 2006, the paved trail leading to the Carnegie and University hills fossil quarries from the visitor center was widened and realigned so as to create a lower grade for greater wheelchair access. The young age and somewhat conspicuous nature of this trail deems it non-contributing. Finally, the presence of the National Park Service has a visible impact on the landscape, primarily at the east end of the district. Here, the construction of a new visitor center, maintenance facility, and park seasonal housing in the early and mid-1990s have created two clusters of non-contributing building ensembles visible on the open prairie grass from the west.

Conclusion

The Agate Springs Fossil Hills Historic District is a significant cultural landscape that was deemed National Register eligible by the Nebraska State Historic Preservation Officer in July 2004.⁴⁸ The district is geographically unified by the Niobrara River, which meanders through its entire mid-section from west to east, and by a series of prominent knolls, ridges, and buttes that project high above the river. These high ridges and buttes, extending east and west at the periphery of the proposed cultural landscape district, create and contain a U-shaped trough. The unique combination of natural features has drawn humans (and prehistoric animals before them) to this place for thousands of years, and their activities and associations with this place in nature have, in turn, created a distinctive cultural landscape. The boundaries of the district encompass the paleontological sites of national importance at the twin fossil hills, as well as the *Daemonelix* site and the *Stenomylus* Quarry, the Harold Cook homestead claim cabin/encampment for paleontological field crews (known by the Cook family as East Agate), and Agate Springs Ranch headquarters, which served as a gathering place for paleontologists who came from around the world to conduct field work at the fossil quarries. The ranch headquarters also served as a gathering place for Lakota and Northern Cheyenne Indians, who visited James Cook annually between the late 1880s and 1942. The Niobrara River links the Agate Springs Ranch with East Agate and the fossil quarries there; the high ridges paralleling the river visually contain this significant cultural landscape. Open unobstructed views between the Agate Springs Ranch headquarters and East Agate and the nearby fossil quarries further connect these important features.

The Agate Springs Fossil Hills Historic District meets National Register Criterion A, B, and D. Several places and cultural resources in the district are associated with events and activities (Criteria A) that have contributed to the broad historical patterns related to ethnic heritage (Red Cloud and Sioux/Cheyenne), to agriculture (ranching) in the High Plains, and to science (paleontology). Two individuals (Criteria B), Red Cloud, chief of the Oglala Sioux people for many years, and James Henry Cook, early and long-time rancher on the semi-arid upper Niobrara River, made significant contributions to Sioux history (Red Cloud) and to developments in ranching on the High Plains and paleontological and cultural endeavors in the region (James Cook). Finally, cultural resources within the district, both archeological and paleontological, are likely to yield information that will expand human understanding of progressive changes on earth before the arrival of humans, of prehistoric human life, and of humans during historic times (Criteria D). The cultural landscape features and resources in this district are significant in the regional history of the High Plains (ethnic heritage and ranching) and also in national history (Red Cloud, James Cook, and paleontology), during the period of 10,000 years ago to 1942.

⁴⁸ "Consensus Determination of Eligibility, Agate Fossil Beds National Monument," 28 July 2004 and Ruthanne Knudson, letter to Lawrence J. Sommer, 20 July 2004, both at Nebraska State Historic Preservation Office, Lincoln, Nebraska.

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OMB Approval No. 1024-0018United States Department of the Interior
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UTM References

	<u>Datum</u>	<u>Zone</u>	<u>Easting</u>	<u>Northing</u>
NAD	13	1	605185	4698685
		2	605240	4697400
		3	605695	4697400
		4	606420	4696705
		5	607120	4696250
		6	607720	4696250
		7	607740	4695800
		8	607120	4695800
		9	607120	4696100
		10	606360	4696600
		11	605862	4697340
		12	605240	4697340
		13	605295	4695850
		14	603860	4695850
		15	603820	4696260
		16	600620	4696180
		17	600240	4696580
		18	599060	4696560
		19	599020	4698760
		20	600020	4698800
		21	600020	4698205
		22	600620	4697600
		23	602480	4697645
		24	604560	4698660

Verbal Boundary Description

The boundary line of this historic district is located on two adjoining 1:24,000 scale USGS maps ("Agate, Nebraska" and "Whistle Creek NW, Nebraska") that accompany this nomination. The boundary can also be described generally as: beginning in the northwest corner of the district at the NW corner of Section 6, Township 28 North, Range 55 West, then extending east along the northern edge of Section 6, then south and then southeast to a point along the boundary between sections 6 and 5, then east across Section 5 and part of Section 4, then northeast across Sections 4 and some of 3, then directly east, then south to the section line between 3 and 10, then east along the section line between 3 and 10 and sections 2 and 11, then southeast to the Stenomylus Quarry unit of the Agate Fossil Beds National Monument, which occupies a small rectangular area in the western side of sections 12 and 13. From the Stenomylus Quarry, the district boundary heads northwest, then west, paralleling the above noted boundary and forming a narrow corridor linking the Stenomylus Quarry and the main portion of the district, then heads directly south through Section 10 to its southern boundary, then west along this section line to the Section line between 9 and 10, then directly north for a short distance, then directly west through the mid-portion of sections 9 and 8 to the section line between sections 8 and 7, then northwest and west across Section 7 to the section line between Section 7 and Section 12 of Township 28 North, Range 56 West, then north along this section line to the point of beginning.

AGATE SPRINGS FOSSIL HILLS HISTORIC DISTRICTName of Property
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Section number 10: Geographical Data

Page 1**Boundary Justification**

The Niobrara River, with its bordering wetlands and narrow valley floor, along with the rolling uplands terraces and ridge tops above that parallel the river, form a topographically and historically discrete and naturally contained district. The meandering course of the Niobrara River, which flows through the Agate Fossil Beds National Monument from west to east, forms the historical focal point of human and animal subsistence and is the geographic backbone of this district. Several prominent knolls and ridge tops that parallel the river course and trend generally east and west, form the upper edge of an elongated U-shaped trough and provide a natural topographic boundary for the district. The highest ridge and butte tops rise nearly 300 feet above the 4,400-foot valley floor. This natural boundary coincides with and, indeed, provided part of the justification for selecting boundaries for, Agate Fossil Beds National Monument and its two adjoining viewshed areas at each end of the park. The Agate Springs Fossil Hills Historic District, including its discontinuous unit (Stenomylus Quarry Unit), encompasses 3,055 acres. It is about four miles long (from east to west) and between one and two miles wide (north to south). Roughly 900 acres of this total is privately owned land encompassed by the park boundary.

The boundaries of the district encompass the paleontological sites of national importance at the twin fossil hills, as well as the *Daemonelix* site and the *Stenomylus* Quarry, the Harold Cook homestead claim cabin/encampment for paleontological field crews (known by the Cook family as East Agate), and Agate Springs Ranch headquarters, which served as a gathering place for paleontologists who came from around the world to conduct field work at the fossil quarries. The ranch headquarters also served as a gathering place for Lakota and Cheyenne Indians, who visited James Cook annually between the late 1880s and 1942. The Niobrara River links the Agate Springs Ranch with East Agate and the fossil quarries there; the high ridges paralleling the river visually contain this significant cultural landscape.

United States Department of the Interior
National Park Service**National Register of Historic Places
Continuation Sheet**Section number Additional DocumentationPage 1**Maps**

USGS maps enclosed

Area maps enclosed: 1) UTM Reference map
2) Contributing and Noncontributing Features, Agate Springs Ranch
3) Archeological and Traditional Cultural Properties [Restricted]**Photographs****Property Name:** Agate Springs Fossil Hills Historic District**County and State:** Sioux County, Nebraska**Photographer's Name:** Gail Evans-Hatch, Evans-Hatch & Associates**Date:** March 19, 2007**Location of Negative/Digital:** Midwest Region, National Park Service**Description of View:** Fossil hills and vicinity in the middle of the district, looking south across the Niobrara River valley.**Photograph Number:** 1**Property Name:** Agate Springs Fossil Hills Historic District**County and State:** Sioux County, Nebraska**Photographer's Name:** Gail Evans-Hatch, Evans-Hatch & Associates**Date:** March 19, 2007**Location of Negative/Digital:** Midwest Region, National Park Service**Description of View:** Hills south of Harold Cook's claim cabin and Hoffman ranch house at east end of district, looking south.**Photograph Number:** 2**Property Name:** Agate Springs Fossil Hills Historic District**County and State:** Sioux County, Nebraska**Photographer's Name:** Gail Evans-Hatch, Evans-Hatch & Associates**Date:** September 23, 2006**Location of Negative/Digital:** Midwest Region, National Park Service**Description of View:** University Hill from Carnegie Hill, looking north.**Photograph Number:** 3**Property Name:** Agate Springs Fossil Hills Historic District**County and State:** Sioux County, Nebraska**Photographer's Name:** Gail Evans-Hatch, Evans-Hatch & Associates**Date:** March 19, 2007**Location of Negative/Digital:** Midwest Region, National Park Service**Description of View:** Cottonwood grove at Agate Springs Ranch, in distance, from trail to *Daemonelix* quarry, looking southwest.**Photograph Number:** 4

United States Department of the Interior
National Park Service**National Register of Historic Places
Continuation Sheet**Section number 11: Additional Documentation Page 2

Property Name: Agate Springs Fossil Hills Historic District
County and State: Sioux County, Nebraska
Photographer's Name: Gail Evans-Hatch, Evans-Hatch & Associates
Date: March 19, 2007
Location of Negative/Digital: Midwest Region, National Park Service
Description of View: Agate Springs Ranch house with several outbuildings at rear of house, in cottonwood grove, looking north-northwest.
Photograph Number: 5

Property Name: Agate Springs Fossil Hills Historic District
County and State: Sioux County, Nebraska
Photographer's Name: Gail Evans-Hatch, Evans-Hatch & Associates
Date: March 19, 2007
Location of Negative/Digital: Midwest Region, National Park Service
Description of View: Agate Springs Ranch pond created from oxbow in the Niobrara, west of house and outbuildings, looking south.
Photograph Number: 6

Property Name: Agate Springs Fossil Hills Historic District
County and State: Sioux County, Nebraska
Photographer's Name: Gail Evans-Hatch, Evans-Hatch & Associates
Date: March 19, 2007
Location of Negative/Digital: Midwest Region, National Park Service
Description of View: Agate Springs Ranch, looking southeast from main house, from right to left, tent house, storage shed, later post office, and Jack's shed.
Photograph Number: 7

Property Name: Agate Springs Fossil Hills Historic District
County and State: Sioux County, Nebraska
Photographer's Name: Gail Evans-Hatch, Evans-Hatch & Associates
Date: March 19, 2007
Location of Negative/Digital: Midwest Region, National Park Service
Description of View: Agate Springs Ranch—John Cook's claim cabin (left, moved to site in 1910s), Agate post office building (center), and shed, standing along Highway 29 about 500 feet east of ranch house, looking southeast.
Photograph Number: 8

Property Name: Agate Springs Fossil Hills Historic District
County and State: Sioux County, Nebraska
Photographer's Name: Gail Evans-Hatch, Evans-Hatch & Associates
Date: March 19, 2007
Location of Negative/Digital: Midwest Region, National Park Service
Description of View: Agate Springs Ranch road and corridor of cottonwoods, along east side of oblong-shaped lawn ("the square"), looking south toward corrals.
Photograph Number: 9

**National Register of Historic Places
Continuation Sheet**

Section number 11: Additional Documentation

Page 3**Property Name:** Agate Springs Fossil Hills Historic District**County and State:** Sioux County, Nebraska**Photographer's Name:** Gail Evans-Hatch, Evans-Hatch & Associates**Date:** March 19, 2007**Location of Negative/Digital:** Midwest Region, National Park Service**Description of View:** Harold Cook's claim cabin and windmill ("East Agate") with Hoffman ranch house in distance, looking northwest.**Photograph Number:** 10**Property Name:** Agate Springs Fossil Hills Historic District**County and State:** Sioux County, Nebraska**Photographer's Name:** Gail Evans-Hatch, Evans-Hatch & Associates**Date:** March 19, 2007**Location of Negative/Digital:** Midwest Region, National Park Service**Description of View:** Harold Cook's claim cabin and windmill ("East Agate"), with Agate fossil hills in left distance, looking southeast.**Photograph Number:** 11**Property Name:** Agate Springs Fossil Hills Historic District**County and State:** Sioux County, Nebraska**Photographer's Name:** Gail Evans-Hatch, Evans-Hatch & Associates**Date:** March 19, 2007**Location of Negative/Digital:** Midwest Region, National Park Service**Description of View:** Hoffman ranch house, west of Harold Cook's claim cabin, looking northeast.**Photograph Number:** 12**Property Name:** Agate Springs Fossil Hills Historic District**County and State:** Sioux County, Nebraska**Photographer's Name:** Gail Evans-Hatch, Evans-Hatch & Associates**Date:** March 19, 2007**Location of Negative/Digital:** Midwest Region, National Park Service**Description of View:** Agate Fossil Beds National Monument park housing for seasonal employees, looking south.**Photograph Number:** 13

AGATE SPRINGS FOSSIL HILLS HISTORIC DISTRICT

Name of Property

Sioux, Nebraska

County and State

NPS Form 10-900-a

OMB Approval No. 1024-0018

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Section number; Property Owners

Page 1

Property Owner(s)

Agate Fossil Beds National Monument
National Park Service
301 River Road
Harrison, NE 69346

Agate Springs Ranch Corporation
c/o John Skavdahl, Attorney
P.O. Box 156
Harrison, NE 69346

Charles and Donna Skavdahl
453 River Road
Harrison, NE 69346

AGATE SPRINGS FOSSIL HILLS HISTORIC DISTRICT

Name of Property

NPS Form 10-800-a

United States Department of the Interior
National Park Service

Sioux, Nebraska

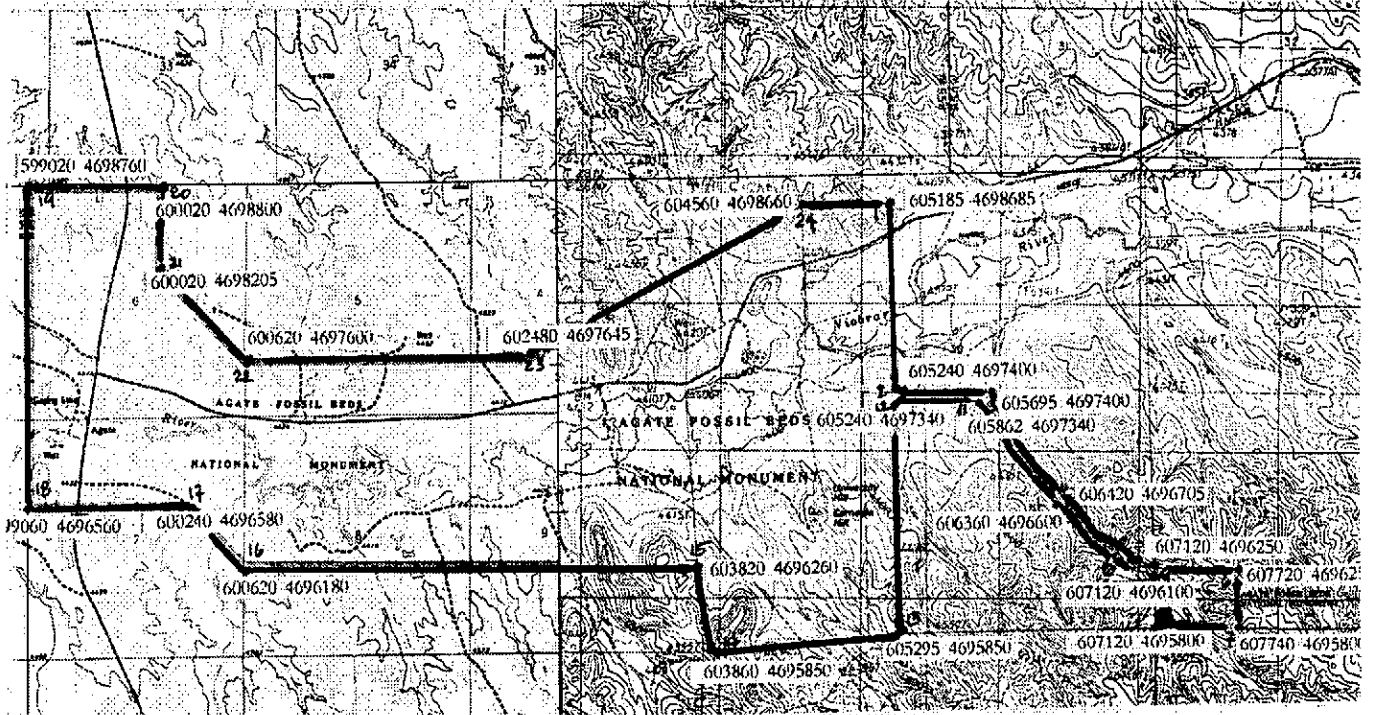
County and State

OMB Approval No. 1024-0018

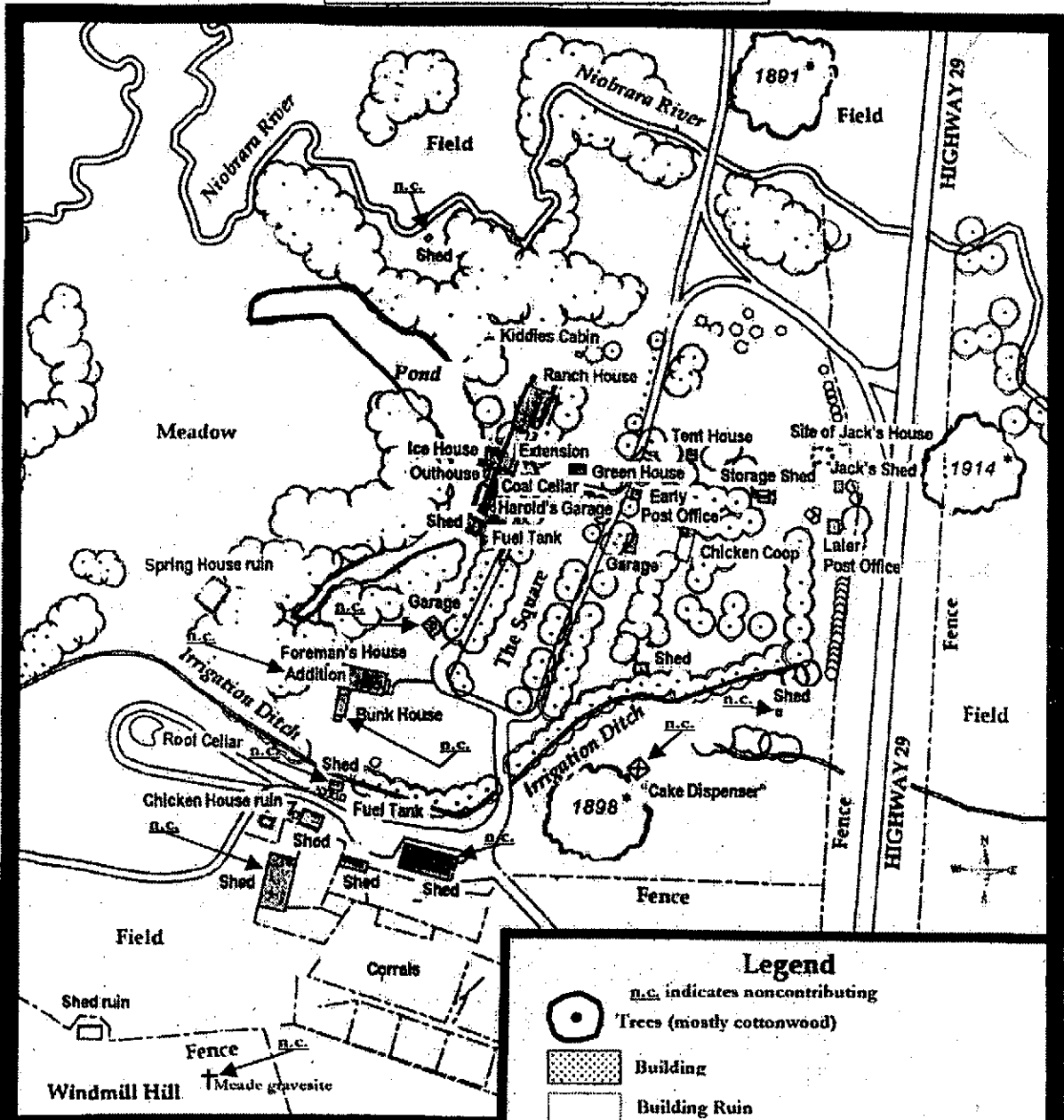
**National Register of Historic Places
Continuation Sheet**

Section Number 11: Additional Documentation—UTM Map

Page 1

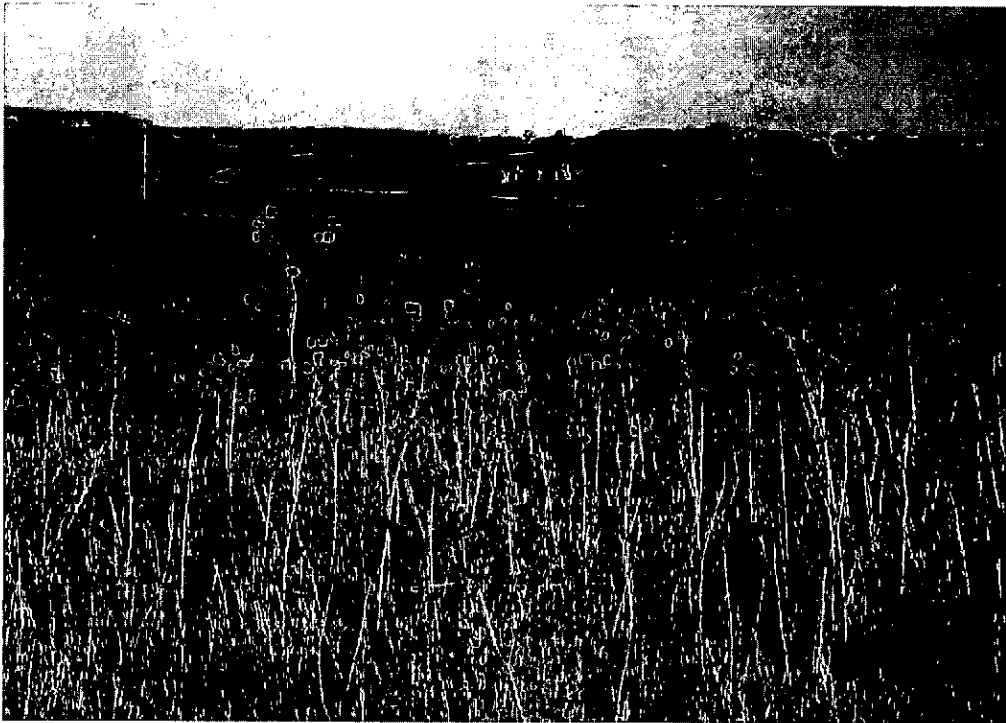


**Contributing & noncontributing features
Agate Springs Ranch**



- Features/structures deemed noncontributing:**
1. shed north of kiddles cabin
 2. garage west of square
 3. foreman's house addition
 4. shed near highway 29
 5. "cake dispenser"
 6. shed adjacent to irrigation ditch
 7. larger shed immediately north of corrals
 8. larger shed immediately northwest of corrals
 9. Meade gravesite.

NOTE: Structures not identified as noncontributing are deemed contributing



Property Name: Agate Springs Fossil Hills Historic District

County and State: Sioux County, Nebraska

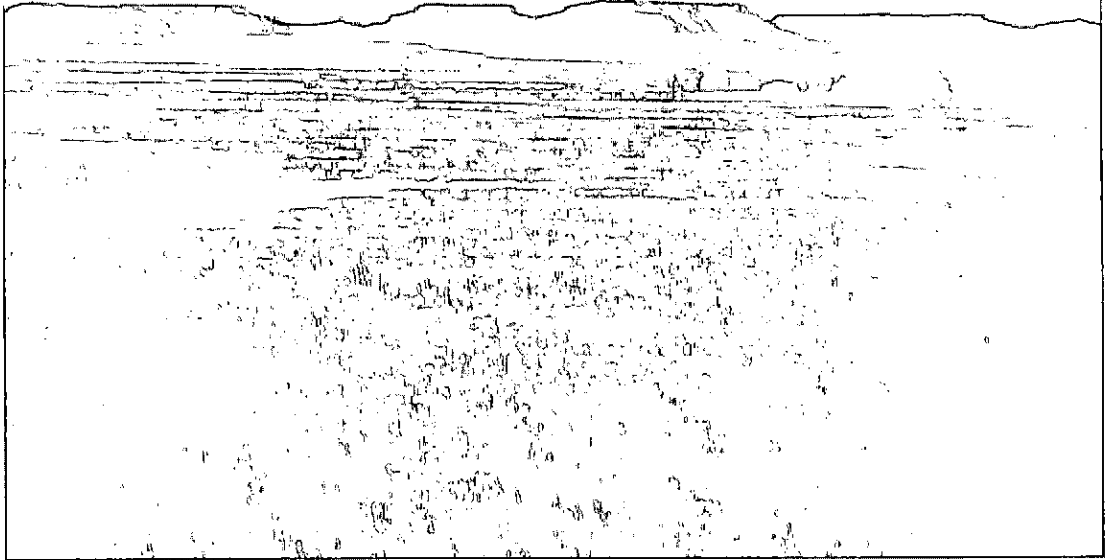
Photographer's Name: Gail Evans-Hatch, Evans-Hatch & Associates

Date: March 19, 2007

Location of Negative/Digital: Midwest Region, National Park Service

Description of View: Fossil hills and vicinity in the middle of the district, looking south
across the Niobrara River valley

Photograph Number: 1



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County and State: Sioux County, Nebraska

Photographer's Name: Gail Evans-Hatch, Evans-Hatch & Associates

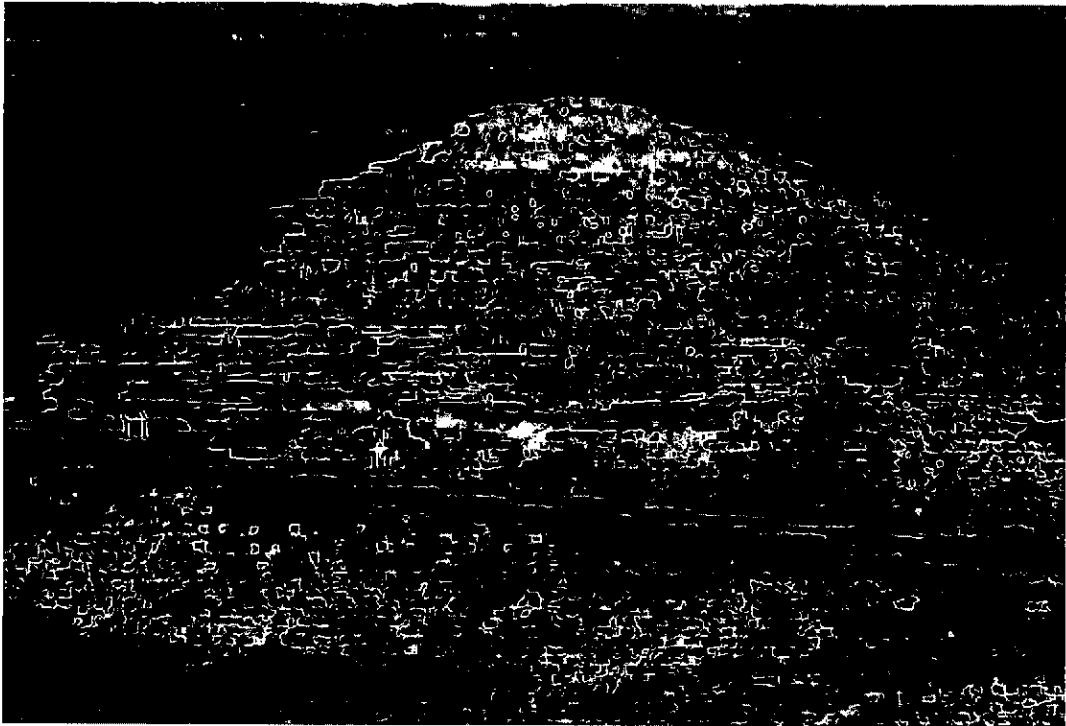
Date: March 19, 2007

Location of Negative/Digital: Midwest Region, National Park Service

Description of View: Hills south of Harold Cook's claim cabin and Hoffman ranch house
at

east end of district, looking south

Photograph Number: 2



Property Name: Agate Springs Fossil Hills Historic District

County and State: Sioux County, Nebraska

Photographer's Name: Gail Evans-Hatch, Evans-Hatch & Associates

Date: March 19, 2007

Location of Negative/Digital: Midwest Region, National Park Service

Description of View: University Hill from Carnegie Hill, looking north

Photograph Number: 3



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County and State: Sioux County, Nebraska

Photographer's Name: Gail Evans-Hatch, Evans-Hatch & Associates

Date: March 19, 2007

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Photograph Number: 4



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Description of View: Agate Springs Ranch house with several outbuildings at rear of house,

in cottonwood grove, looking north-northwest.

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Description of View: Agate Springs Ranch pond created from oxbow in the Niobrara, west

of house and outbuildings, looking south.

Photograph Number: 6



Property Name: Agate Springs Fossil Hills Historic District

County and State: Sioux County, Nebraska

Photographer's Name: Gail Evans-Hatch, Evans-Hatch & Associates

Date: March 19, 2007

Location of Negative/Digital: Midwest Region, National Park Service

Description of View: Agate Springs Ranch, looking southeast from main house, from right to left, tent house, storage shed, later post office, and Jack's shed.

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Property Name: Agate Springs Fossil Hills Historic District

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Photographer's Name: Gail Evans-Hatch, Evans-Hatch & Associates

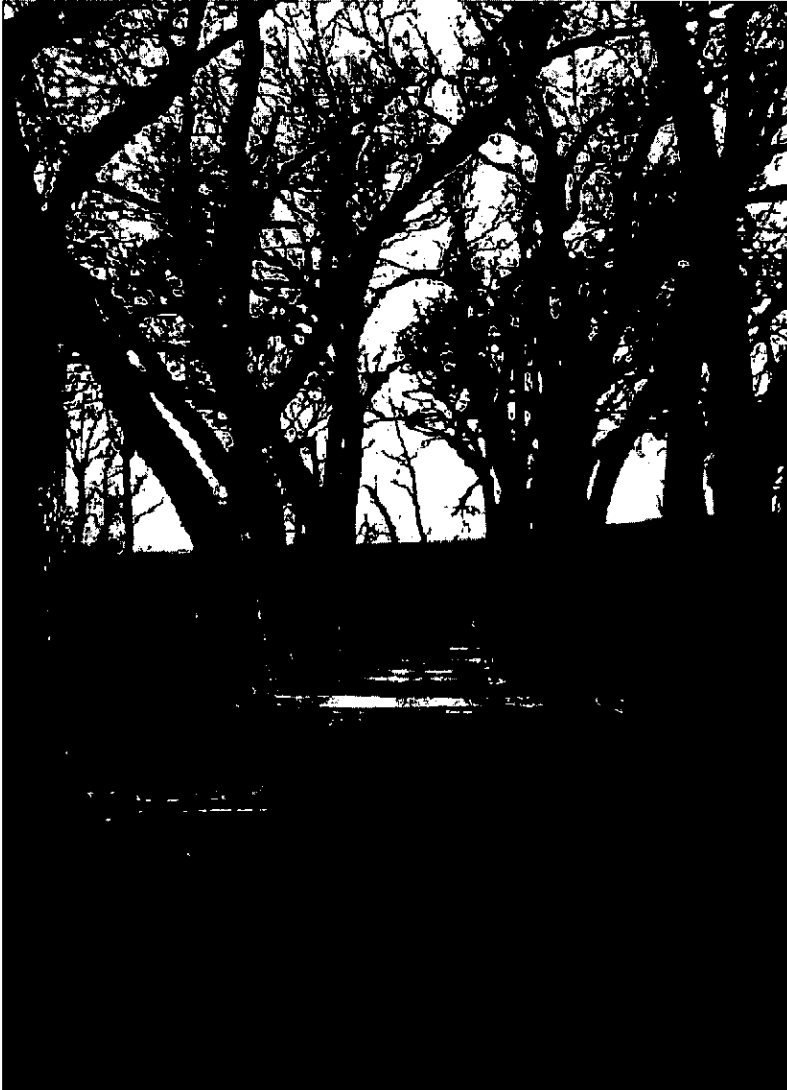
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Location of Negative/Digital: Midwest Region, National Park Service

Description of View: Agate Springs Ranch – John Cook's claim cabin (left, moved to site in

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Location of Negative/Digital: Midwest Region, National Park Service

Description of View: Agate Springs Ranch road and corridor of cottonwoods,
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corrals.

Photograph Number: 9



Property Name: Agate Springs Fossil Hills Historic District

County and State: Sioux County, Nebraska

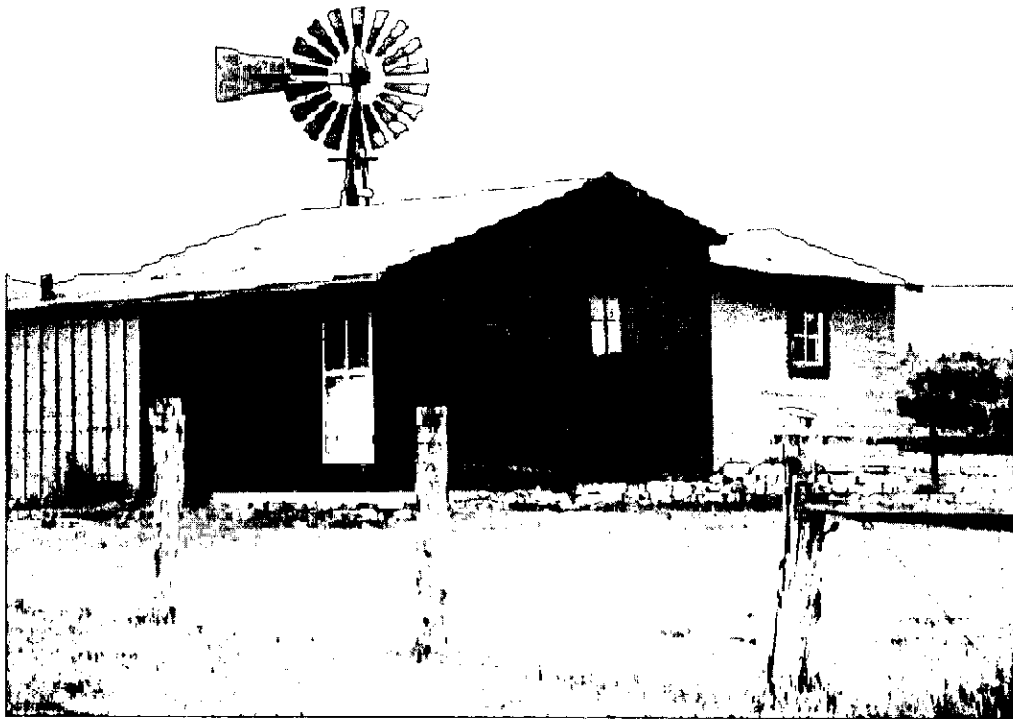
Photographer's Name: Gail Evans-Hatch, Evans-Hatch & Associates

Date: March 19, 2007

Location of Negative/Digital: Midwest Region, National Park Service

Description of View: Harold Cook's claim cabin and windmill ("East Agate") with Hoffman ranch house in distance, looking northwest.

Photograph Number: 10



Property Name: Agate Springs Fossil Hills Historic District

County and State: Sioux County, Nebraska

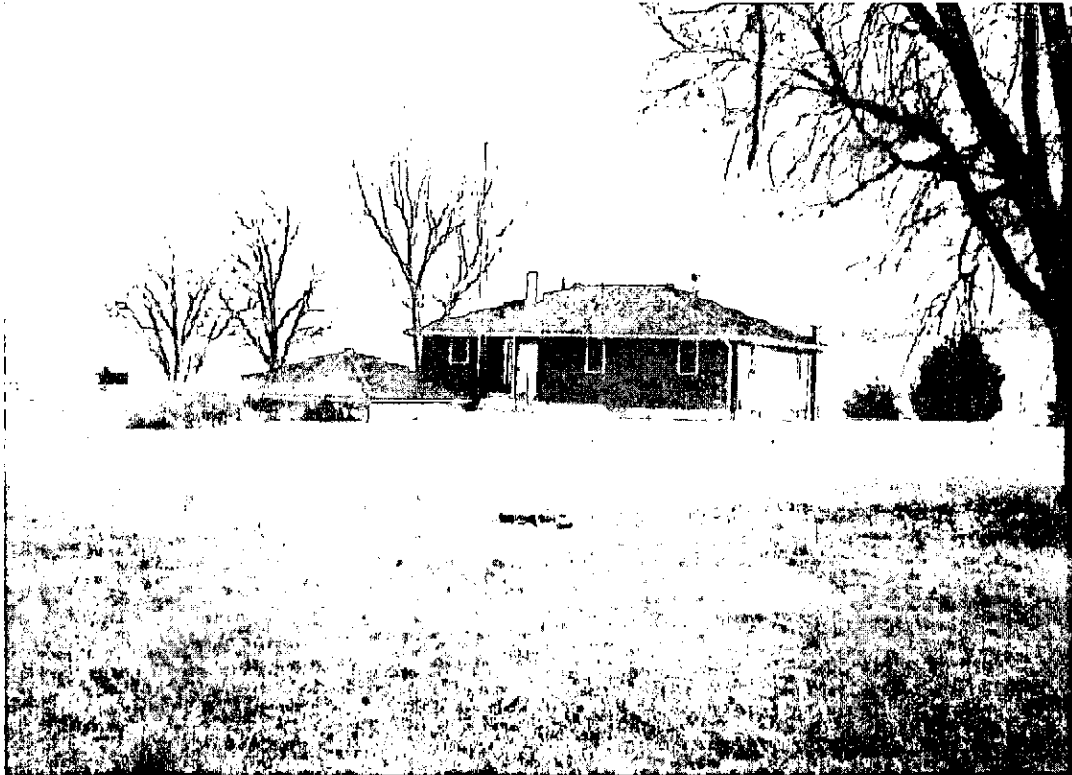
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Date: March 19, 2007

Location of Negative/Digital: Midwest Region, National Park Service

Description of View: Harold Cook's claim cabin and windmill ("East Agate"), with Agate fossil hills in left distance, looking southeast.

Photograph Number: 11



Property Name: Agate Springs Fossil Hills Historic District

County and State: Sioux County, Nebraska

Photographer's Name: Gail Evans-Hatch, Evans-Hatch & Associates

Date: March 19, 2007

Location of Negative/Digital: Midwest Region, National Park Service

Description of View: Hoffman ranch house, west of Harold Cook's claim cabin, looking northeast.

Photograph Number: 12



Property Name: Agate Springs Fossil Hills Historic District

County and State: Sioux County, Nebraska

Photographer's Name: Gail Evans-Hatch, Evans-Hatch & Associates

Date: March 19, 2007

Location of Negative/Digital: Midwest Region, National Park Service

Description of View: Agate Fossil Beds National Monument park housing for seasonal employees, looking south.

Photograph Number: 13



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Repositories

American Museum of Natural History, New York, New York.

Bureau of Land Management, Cheyenne District Office, Cheyenne, Wyoming.

Denver Museum of Nature and Science, Denver, Colorado.

National Archives and Record Administration, Central Plains Region, Kansas City, Missouri.

National Park Service. Agate Fossil Beds National Monument. Harrison, Nebraska.

Nebraska State Historical Society, Archives and Library, Lincoln, Nebraska.

New York State Library, Manuscripts and Special Collections, Albany, New York.

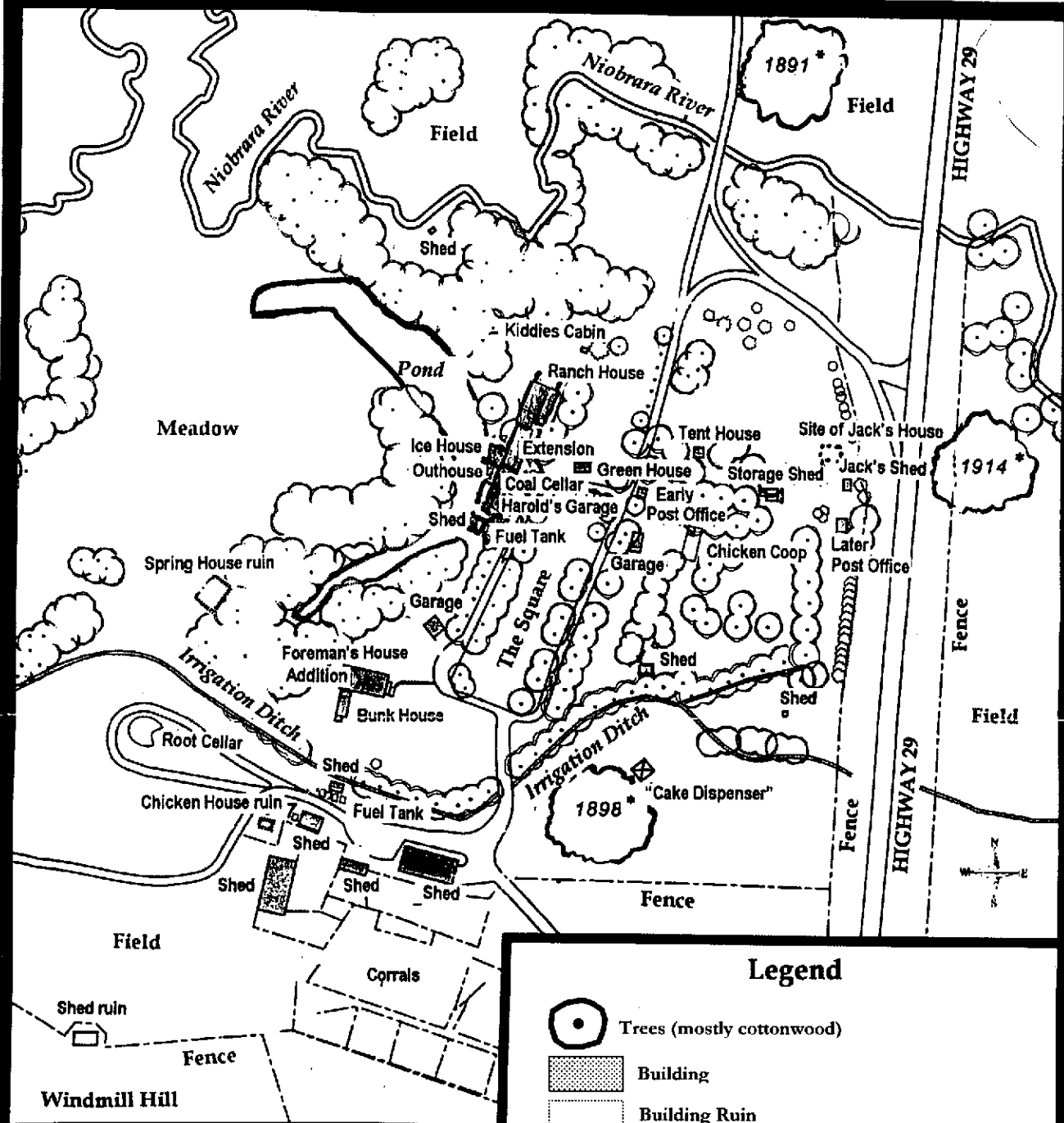
Sioux County Courthouse, Harrison, Nebraska.

University of Nebraska, University Archives and Special Collections, Lincoln, Nebraska






Western History Research Center, University of Wyoming, Laramie, Wyoming.



Agate Springs Ranch

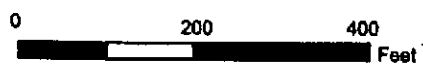


Legend

-  Trees (mostly cottonwood)
-  Building
-  Building Ruin
-  Fence
-  Evergreen trees

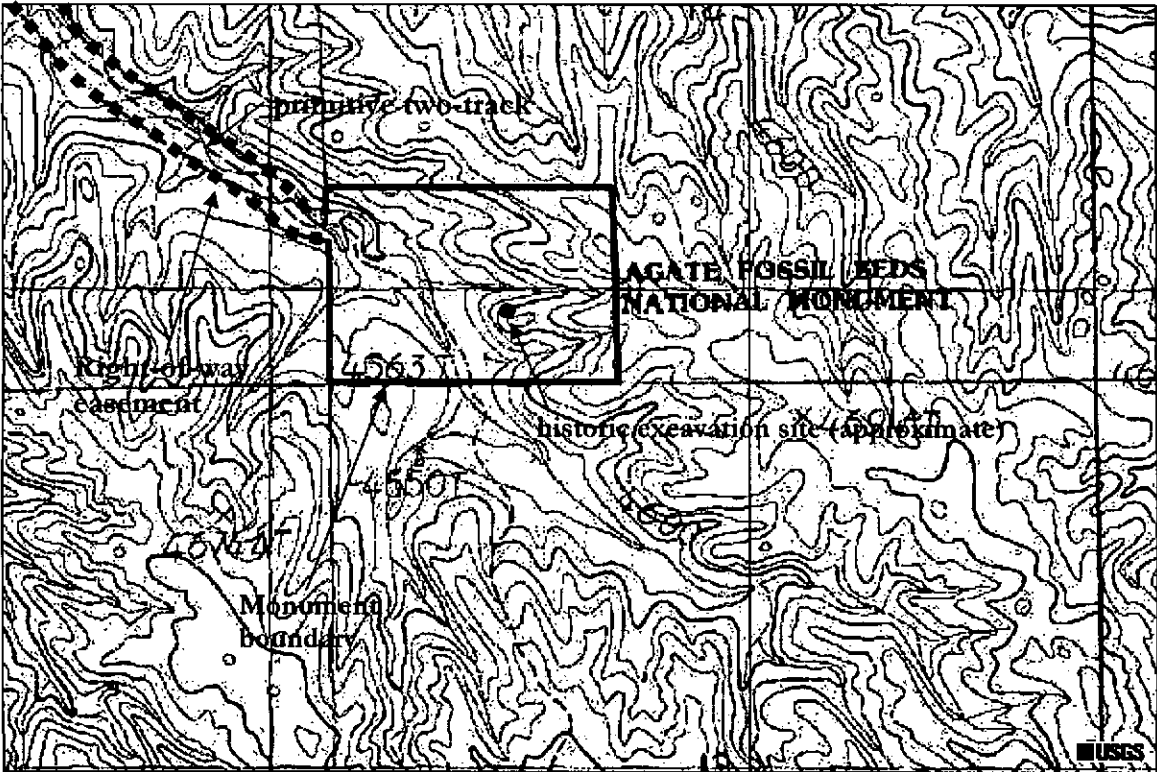
Sources
 Existing conditions and building locations, Brenda Williams, QEA, field investigations in April 2007, and Gail Evans-Hatch, Evans-Hatch & Assoc., field investigations March 2007.
 Red Cloud campsite locations based on the National Park Service Cultural Landscapes Inventory (revised 2003).

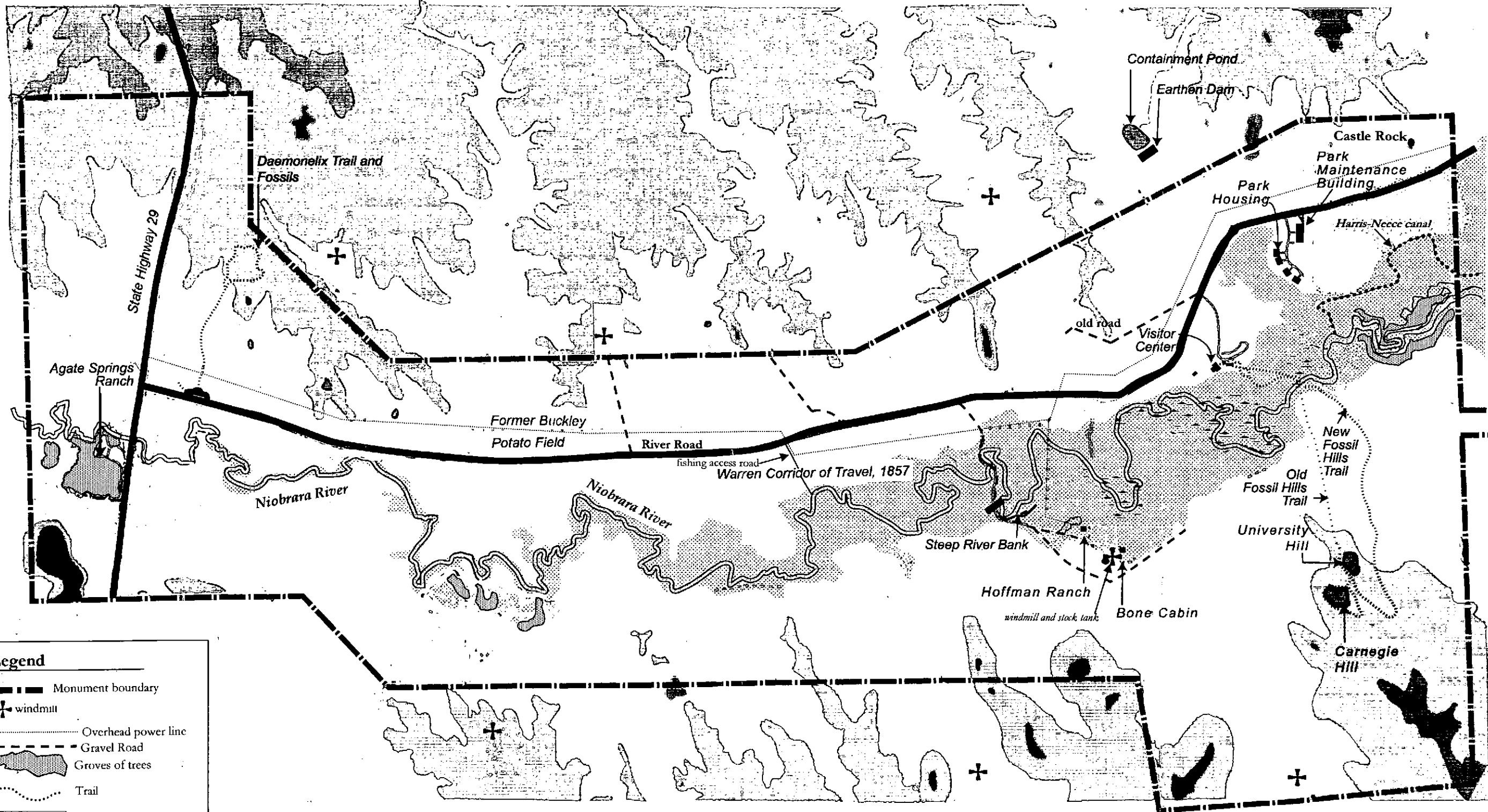
* This location is verified in historic photographs. Additional documentation indicates that Indians camped at several different sites over several decades.



Agate Fossil Beds National Monument

Base Map
Stenomylus Unit – Agate Fossil Beds National Monument
January 2008





Legend

- +—+— Monument boundary
- + windmill
- Overhead power line
- - - Gravel Road
- ▨ Groves of trees
- Trail
- 4500 elevation
- 4600 elevation

Base Map – Historic Resource Study: Agate Fossil Beds National Monument, Nebraska