Ethnographic Overview and Assessment Theodore Roosevelt National Park, ND

INTEGRATED REPORT 2016

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ETHNOGRAPHIC OVERVIEW AND INVENTORY
THEODORE ROOSEVELT NATIONAL PARK, ND

INTEGRATED REPORT

PREPARED FOR

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The Little Missouri Badlands are something to be endured, something to be crossed on the way to… (Arikara Elder, 2015)

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EXECUTIVE SUMMARY

This Integrated Report is the result of two years of anthropological research devoted to creating an updated and exhaustive ethnographic resource inventory for Theodore Roosevelt National Park, North Dakota. While this report builds on a previous, broad-regional Cultural Affiliation and Ethnographic Resource Assessment for three North Dakota national park units (Zedeño et al. 2006), it nonetheless encompasses new archival research as well as original ethnographic data collected by the University of Arizona specifically for THRO and vicinity. Members of the Hidatsa, Mandan, Arikara, Crow, Nakota, Assiniboine, Blackfoot, and Chippewa ethnic groups contributed with information on traditional resource use and significance over 11 years of regional research (2004–2015), most of which is specific to THRO. In addition, archival and ethnographic research conducted with members of the local Euroamerican community expands previous studies with a unique take on the significance of the park's resources for its long-time neighbors.

The result of this study is a "living document" intented as a tool for resource managers in THRO that may help to identify culturally sensitive resources as well as to anticipate concerns and needs for resources in the near future. It is meant to be augmented with observations that only park staff who are connected with the daily operations of the park can actually provide. A second goal of this document is to provide information for use in park interpretation and development of materials for education of visitors that may increase appreciation for the unique landscape and character of THRO. The Integrated Report encompases Native American ancestral history as well as Euroamerican history to frame the depth of community attachment to the Little Missouri Badlands and the Missouri River Basin more generally. These histories are thematic, emphasizing those aspects that more directly relate to the park use history. The resource inventory, too, reflects this temporal depth as it includes resources of archaeological, historical, and contemporary significance that continue to attract regional and local residents as well as visitors from afar.

The Integrated Report includes information about 124 Native American ethnographic resources available in THRO, including archaeological site and resource types (13), animals (48), plants (36), landforms (8), and minerals (19). A total of 31 Euroamerican resources include historic sites (8), animals (17), plants (2), landforms (1) and minerals (3). The report also includes recommendations for preservation, interpretation, and collaboration with culturally affiliated and traditionally associated groups.

SCOPE, FUNDING, AND REPORT ORGANIZATION

This Integrated Report was written for the National Park Service. It is intended to provide an updated tool for resource managers who must be involved in the preservation of natural and cultural resources that are significant to culturally affiliated and traditionally associated Native American tribes and Euroamerican communities in Theodore Roosevelt National Park (THRO), North Dakota. The findings of this report are the combined result of historical, archaeological, and ethnographic literature review as well as original ethnographic resource assessments conducted in the Upper and Middle Missouri River, the Knife River, the Little Missouri River, and THRO specifically, from 2004 to 2015 (Zedeño and Basaldú 2003; Zedeño et al. 2006, 2010, Chandler 2014, and Chandler et al. 2016). The results of these investigations are organized into Resource Pages for each archaeological, historical, botanical, faunal, mineral, and geographic resource identified within the project area, which includes the north and south units of THRO and the Elkhorn Ranch property (Fig. 1).

PROJECT GOALS

The research presented here was commissioned by the National Park Service's Midwest Regional Office–Ethnography Program as part of a long-term, ongoing effort to (1) acknowledge cultural, historical, and contemporary relationships between national parks and subject communities, (2) implement legally mandated consultation programs, and (3) change NPS resource management culture with input from subject communities, in this case American Indian tribes (Crespi 2003). The NPS Ethnography Program responds to the Department of Interior's Native American Ethnographic Resource Policy of 1979, and is integrated with NPS through applicable legislation such as the National Environmental Protection Act (1970), the American Indian Religious Freedom Act (1978), the Native American Graves Protection and Repatriation Act, Sacred Sites Protection Act (1994), and sections 106 and 110 of the National Historic Preservation Act, as amended. According to Crespi (2003), the overarching goal of NPS ethnographic resource studies is to develop resource management strategies that are responsive to the viewpoint and lives of peoples traditionally associated with them. It is important to note that collectively, natural, cultural, and historical resources are also "ethnographic" resources insofar as they continue to be significant to living communities.

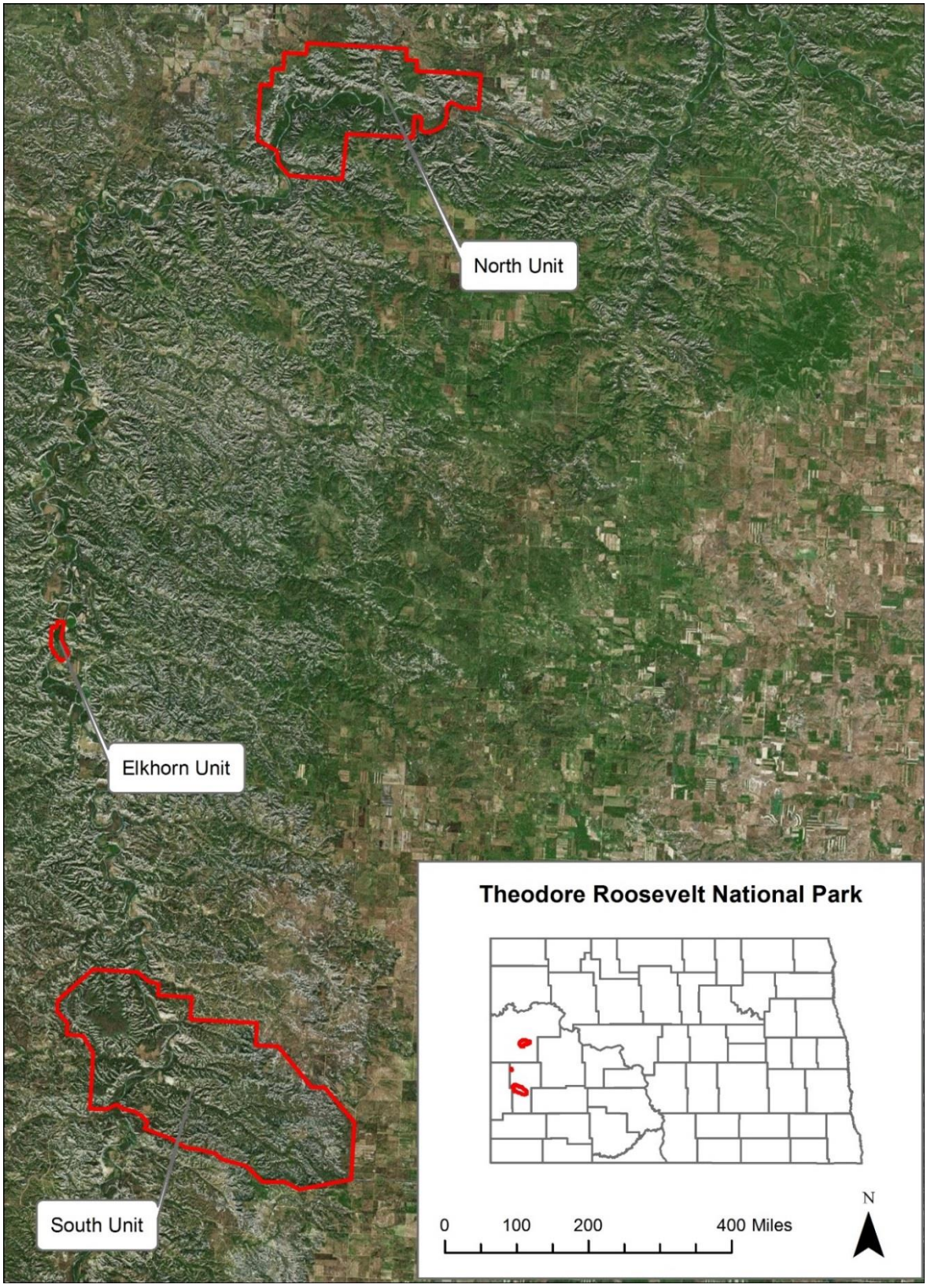


Figure 1 Theodore Roosevelt National Park (2015)

PREVIOUS RESEARCH AND TIERING

In 2003, a team from the Bureau of Applied Research in Anthropology at the University of Arizona (BARA-UA) was contracted by NPS to conduct a Native American cultural affiliation and ethnographic resource inventory for three North Dakota Parks, including THRO (Zedeño et al. 2006). That report provided an overview of the historical and contemporary significance of park lands and resources and identified tribal concerns for preservation. The goal of that study was to bring disparate information sources together in broadly regional narrative as well as to provide specific examples of tribal viewpoints regarding traditional resource use and significance in order to raise the parks' awareness about their own resource wealth from a cultural and ethnographic perspective.

The goal of the present study, commissioned in 2013, was to expand and update the ethnographic resource inventory of THRO so that it would include not only a detailed inventory of tribal resources but also Euroamerican resources. The Euroamerican community traditionally associated with THRO has maintained close ties with the land that is now managed by this park and thus has detailed knowledge about its resources as well as strong concerns for their preservation and management. Given that the Bakken oil and gas exploration in North Dakota and in the immediate vicinity of THRO has reached new heights in the past few years, the need to bring back to government and public attention the extraordinary cultural and historical significance of THRO for living communities is paramount. The results of this study may also help managers anticipate resource use concerns in the parks and place them in a better position to contend with such issues in the future.

The baseline cultural history and ethnography of THRO can be found in "*Cultural Affiliation Statement and Ethnographic Resource Assessment Study for the Knife River Indian Villages National Historic Site, ND; Fort Union Trading Post National Historic Site, ND; and Theodore Roosevelt National Park, ND*" (Zedeño et al. 2006). Here, we have tailored the broad scope of the initial work to focus specifically on THRO, and also added a wealth of culturally significant resource information for Native Americans and Euroamericans. We have also incorporated pertinent ethnographic data from more recently completed natural resource studies that are specific to the Upper Missouri River and its trench, including an ethnobotany (Zedeño et al. 2009) and an etno-ornithology (Chandler et al. 2016).

While the present Integrated Report recapitulates a few aspects of cultural history that have not changed substantively in the intervening years since our first study was completed, the new chapter "Ancestral Tribal Histories" attempts to integrate relevant oral traditions with the archaeology and history of tribal groups. The report also includes information from original tribal interviews regarding ethnographic resources, a detailed historical context for Euroamerican presence in THRO lands, data from interviews with Euroamerican consultants, an updated bibliography, and extensive resource tables. In this report, the baseline resource inventory completed in 2006 has been greatly

expanded and organized in a format that is accessible to park staff and visitors, researchers and managers, interpreters and educators.

CONTENT OF THE INTEGRATED REPORT

As specified in the project Scope of Work, this report includes:

- An brief overview of ancestral tribal histories associated with THRO and environs;
- A historical context for Euroamerican use of parklands;
- descriptions of historically and contemporary use and perceptions of cultural and natural resources, including general location, frequency of use, nature of use, and ascribed significance (e.g. religious, subsistence), if any;
- textually reproduced or summarized information from interviews with culturally affiliated and traditionally associated consultants for each identified resource;
- a current bibliography;
- a list of any ethnographic resources to be considered for nomination to the National Registers as Traditional Cultural Properties;
- a list of potential interpretive topics;
- a discussion of the challenges and realities of gathering contemporary resource use data in national parks;
- suggestions for further studies on THRO associated groups which may be designed and conducted to develop more complete information on which to base future decisions by the Superintendent with regard to ethnographic issues and concerns that have the potential to affect management of the park.

RESEARCH METHODS

The project design followed Zedeño and colleagues' standard cultural landscape framework developed for collaborative research that integrates current anthropological perspectives on land and resource use, tribal worldviews and principles, and public land regulations regarding the identification of landscapes and traditional cultural properties (Stoffle et al. 2001; Zedeño and Bowser 2009). Specific methods included:

Literature Review

Background research was conducted to establish a "resource of interest" baseline for THRO, and to determine whether there are land use areas in its immediate vicinity that may contain relevant project information. In 2003 we undertook an extensive document search at the NPS' Midwest Archaeological Center (MWAC), as well as at THRO. In 2014-15 we consulted the archives of the North Dakota State Historical Society and Heritage Center to obtain information on current archaeological surveys and new discoveries, and visited the local library and Cowboy Hall of Fame Museum in Medora to search for information pertinent to Euroamerican presence in THRO. Tribal websites were canvassed for information on history and culture. As well, we reexamined THRO library in search of new reports and documents relevant to the Euroamerican community. Extensive searches for photographs and documents were also conducted over the internet and targeted tribally produced documents. Also included in this report are extensive literature searches of plant and bird resources conducted in the surrounding region that are relevant to the park's ethnographic resource inventory.

Fieldwork

Park visits and interviews were carried out in four sessions: 2013, 2014, and 2015 (2). These visits included a detailed assessment of Euroamerican historical sites by a BARA-UA team and follow-up interviews with Native American and Euroamerican consultants. Interviews encompassed a wide range of topics on use history, significance, and interest in park resources as well as concerns for resource preservation and interpretation

Organization of the Report

The following chapters draw upon a wide range of traditional, scientific, and archival data in order to establish a framework for understanding the ways human beings have lived in the Theodore Roosevelt National Park. The report is organized as an ethnographic resource guide or catalog for THRO managers. The repot introduces the ancestral histories of culturally affiliated and traditionally associated Native American groups as well as the historical context for Euroamerican settlement in the park area. Next, archaeological, historical, faunal, floral, geographic, and mineral resources are inventoried. Each resource type has its own section and each resource has its own "page" that details tribal and Euroamerican use and significance as well as folklore associated with that resource. Finally, a summary section contains suggestions for future research and for TCP nominations. The report has been designed as a "living document" where managers and researchers may add new information as it becomes available in the future.

ANCESTRAL TRIBAL HISTORIES

INTRODUCTION

People have lived on the northern Great Plains for over 10,000 years, but the majority of evidence of human activity in the North Dakota Badlands region is sparse prior to approximately 5,000 years ago. The Badlands were frequented by Native American ancestors since the early Holocene; however, the arid terrain and fragile ecosystem of the park did not make it amenable to permanent human occupation. The Little Missouri Badlands or "place where the hills look at each other" are known to have been traditional Mandan, Hidatsa, and Crow hunting and eagle-trapping territories, with the closest territorial affiliation being the Hidatsa and River Crow (Allen 1982; Allen 1983; Bowers 1950; Bowers 1963; Curtis 1976 as cited in Kuehn 1990:130; Murray 2009, 2011; Wilson 1931).

In Hidatsa traditions, the Little Missouri River is home to a spirit snake that helps to maintain the flow of the stream and provides good hunting along its banks (Bowers 1992:372, 380). The Mandan-Hidatsa story of Packs Antelope also relates how he roamed the country while in his thunderbird guise and killed evil snakes and other things (Beckwith 1938:94). Hawk and Swallow camped in the east bank of the Little Missouri north of the Killdeer Mountains; this place is called "Land of the Beginning" because at this place was the beginning of plenty and the place of introduction of the horse (Beckwith 1938:239). Other groups known to have used or passed through the Badlands include the Blackfoot, Dakota-and Lakota-Sioux groups, Assiniboine, and Cheyenne, although the latter remained mostly in the South Dakota Badlands except for one recorded antelope hunt in 1865 and perhaps many other such hunts (Denig 1961; Hyde 1968:20, 196; Hoebel 1960 as cited in Kuehn 1990:130; Sundstrom 1997). For the Lakota, the Badlands contain the scattered bones of the female water monster (Walker 1991).

Unlike other areas in the Northern Plains, there is a paucity of colonial documentation on the North Dakota Badlands. During the exploration of western North and South Dakota in 1742 and 1743, the two La Vérendrye brothers traveled through the Badlands leaving behind descriptions of the landscape but little or no information about indigenous groups that might have been in the area (Kuehn 1990:129; Smith 1980). Prior to joining the expedition of Lewis and Clark in 1804 and 1805, the French-Canadian trapper Jean Baptiste Le Page descended the Little Missouri River, passing through what is now THRO (Petty 1968). Unfortunately, no detailed accounts of the area were left behind. Few Euroamericans ventured into the Little Missouri valley because of the increasing presence of newcoming tribes at war with U.S. soldiers (Denig 1961:xxvi–xxvii; Emmons 2001; Petty 1965); thus native inhabitants found safety and seclusion in this area. With this dearth of written documentation one must rely even more heavily on archaeological and ethnographic research to gain insights into the cultural history of the park.

Most of what is known about the archaeology in the vicinity of the Theodore Roosevelt National Park was summarized by David D. Kuehn in the report "*The Archaeology of Theodore Roosevelt*

National Park, North Dakota" (1990). This document was created based on the extensive survey Kuehn led across THRO in 1987–1989 and included a comprehensive archaeological context for the park with emphasis on the prehistoric period. In 2008, the State Historic Preservation Office updated the *North Dakota Comprehensive Plan for Historic Preservation* (http://history.nd.gov/hp/stateplan_arch.html). Information from the archaeological component of this document (Gregg et al. 2008) has been incorporated into this section of the report.

THRO encompasses 70,447 acres of discontinuous property along the Little Missouri River. Nine ecozones are recognized within the Little Missouri Badlands (Kuehn 1990:22). Distinct combinations of topographic, pedologic, floral, and faunal variables distinguish each zone. As a result, the region has an abundance of natural resources that attracted prehistoric groups to the area. The nine ecosystems include river bottoms, hardwood draws, upland grasslands, rolling grasslands, terraces, upland breaks, river breaks, toe slopes, and hilly scoria (Beckes and Keyser 1983:26–43). At present there are over 300 known archaeological sites within THRO boundaries (fig. 2), representing a wide range of cultural activities and time periods. Sixty-one sites are historical and associated with either Native Americans or Euroamerican homesteading and ranching activities in the late nineteenth and early twentieth centuries (Kuehn 1990). The remaining sites have been assigned to various categories. These sites range from the Archaic period (5,500–400 B.C.) to the Plains Village period (prehistoric and historic) (A.D. 1000–1865). Sites without temporally diagnostic materials are placed into rough chronologies or are given "unassigned" designations.

To better understand the abundance, distribution, and representation of heritage resources in the park it is necessary to take into account the Badlands' geomorphology and geoarchaeology. The area is characterized by a rugged and highly dissected terrain that was sculpted by a half million years of erosion. The advance of the Wisconsin glacial ice sheet, ca. 40,000 years ago, altered the course of the Little Missouri River and initiated alternating processes of erosion and landscape stability that continue to the present. The modern day topography of the park is the result of dynamic geomorphological processes that have had a dramatic effect on the park's archaeological record. With ongoing wind, water, and rain erosion the face of the landscape is in a constant state of flux that often results in the displacement and/or loss of archaeological provenience.

Nervertheless, the archaeological record documents the exploration, colonization, and settlement the Litter Missouri Badlands and THRO in particular. Hundreds of archaeological sites attest to attachments to land and place that evolved into the present. Archaeology not only provides a record of cultural pasts but a clear and present connection between contemporary people and their historical trajectory; as such, archaeological remains are a unique kind of ethnographic ("heritage") resource. Contrary to late nineteenth and early twentieth century perspectives of the Little Missouri River Badlands as devoid of life (Broach 1992), this region is rich in animal, plant, and mineral resources that were sought by indigenous prehistoric groups (Root 1985:91) and, thereafter, Euroamerican settlers. Land use strategies of different groups resulted in archaeological deposits

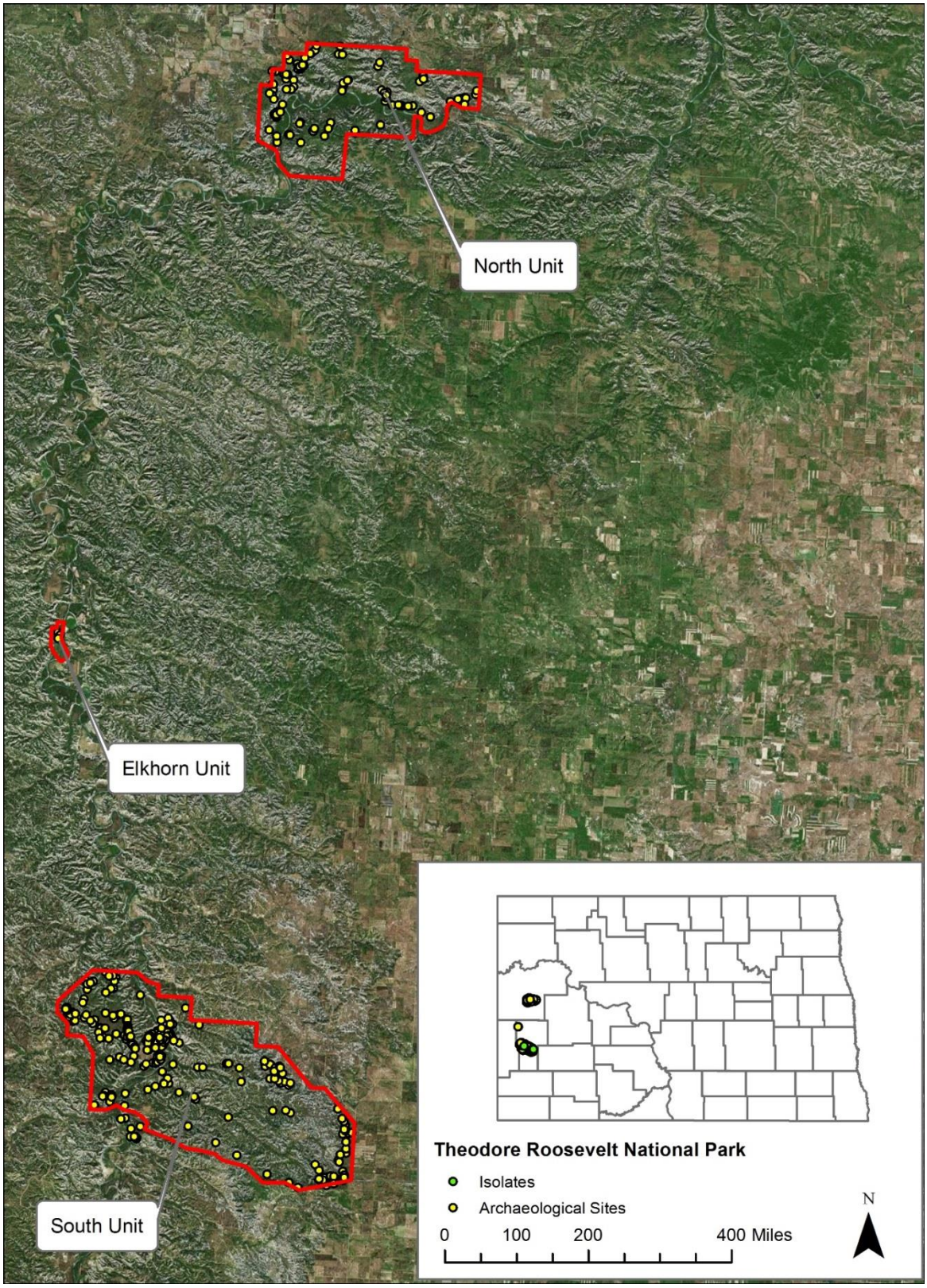


Figure 2 Known archaeological and historical sites in THRO (2015) [site locations at this scale are approximate only]

representing temporary encampments, locations of resource procurement, ritual spaces, hunting localities, ranches, homesteads, and other enterprises.

The archaeology of the park indicates that, for at least 5,000 years, indigenous groups used different constellations of resources found in the nine ecological zones of the park. The Badlands were a place where resources could be collected and transported to another location where they would ultimately be used. Trails on ridges and terraces found throughout the park facilitated travel across the plains. The area was peripheral to most native transhumance rounds, however, it was used as area of refuge during times of duress (Hollenback 2015:159). From oral history and ethnohistorical records it is known that the park area was variously visited for hunting and eagle trapping, resource collecting, war, and ritual purposes. Tables 1–7 in this report list archaeological and ethnographic resources found in the park, the groups that used them, and their uses.

BEGINNINGS

> According to the Mandan creation myth, as told by to Arthur Mandan by his mother Calf Woman, when First Creator and Lone Man decide to make the world from mud brought by a bird to the surface of the water, Lone Man chooses to create the east whereas First Creator chooses create the west, leaving a space between, in the water, which becomes the Missouri River…First Creator makes the west side: broad valleys, hills, coulees with timber, mountain streams, and springs with buffalo, elk, mule deer and white tails, mountain sheep and all other creatures useful to mankind for food and clothing… Lone man makes the east side: mostly level country, lakes and small streams with rivers far apart and his animals were beaver, otter, muskrat, moose and other animals with cattle of many colors with long horns and long tails.
>
> First Creator and lone Man meet and compare their creations: They first inspect what Lone Man has created…First Creator disapproves: "the land is too level and affords no protection to man. Look at the land I have created: it contains all kinds of game. It has buttes and mountains by which man can mark his direction. Your land is so level that a man will easily lose its way for there are no high hills as signs to direct him…The lakes you have made have most of them no outlet and hence become impure. Look at the cattle you have created with long horns and tail, of all colors, with hair so short and smooth that they cannot stand the cold! … Lone Man realizes his dilemma: "The things I have created I thought were the very things most useful to man. I cannot very well change them now that they are once created. So let us make man use first the things that you have made until the supply is exhausted and then the generations to come shall utilize those things which I have created." (Grinnell 2004 in Zedeño et al. 2009:130)

Calf Woman's story of the Mandan Creation (very similar versions of which have been told by the Hidatsa [Beckwith 1938]) provides a measure of space and time in the trajectory of the Missouri

River tribes; the river not only separates two geographies but two worlds. First Creator's world represents precolonial identity and traditional lifeways, whereas Lone Man's world speaks of their recent history and reservation life. The resources found in Theodore Roosevelt National Park precisely integrate these two worlds: First Creator's ridges, buttes, and coulees are not only repositories of fossils, animals, plants, and minerals that interacted with people since ancient times but are also homes of spirits and locales of mystical encounters between humans and supernatural beings.

At the same time, the history of the park itself—the larger-than-life presence of President Roosevelt, his conservation ideals, and specific historical resources including longhorn cattle and historical architecture built by settlers and American workers during the Great Depression—belong in the realm of Lone Man's creation. Together, these resources tell a story about the Native Americans who were once present in the park area and who continue to situate their identity in this created landscape as well as Euroamericans who came thereafter. In this chapter we attempt to integrate traditional history, archaeological trajectories, and documentary accounts of these ethnic groups in order to contextualize the use and significance of ethnographic resources found at THRO.

The Native American trajectory in the Missouri River Basin and Badlands began thousands of years ago. Origin stories about the Little Missouri Badlands date to time immemorial and are generally associated with its unique geological features. For example, Wilson (1910:88) recorded a Hidatsa creation story related by Butterfly; it explains how Ear-Afire taught One-man how to make fire; the fire and smoke [of the pipe] represent burning ground, such as occurs in the area and refers to the burning coal seams. The Sioux believed that the Little Missouri was formerly a fertile valley that was destroyed when to tribes fought over it so the Great Spirit turned it into a wasteland (Works Project Administration 1941:176).

The material record of this trajectory can be dated to the end of the Pleistocene (ca. 13,500 BP), as mobile groups of hunter-gatherers traversed the Northern Plains back and forth from the foot of the Rocky Mountains in the west to the edge of the tall grass prairie in the east, and from the Mississippi and Ohio valleys to the plains. While the Missouri River offered a clear path to follow in this vast movement, its tributaries, particularly those running north-south like the Little Missouri River, offered early hunters a means to reach unique local environments and resources either during migrations or short-term stays.

The natural resources available at THRO—bison, deer, and elk, in particular—are contemporary representatives of those that sustained paleo-Americans. The earliest documented Native American ancestors who inhabited the Northern Plains at the end of the last glaciation subsisted from hunting extinct Pleistocene megafauna, and overtime developed a tradition of hunting the modern species of bison and supplementing their diet with smaller mammals and wild plants (Frison 1991; Hudecek-Cuffe 1998; Loendorf and Borchert 1991; Kornfeld et al. 2010). According to Hudecek-Cuffe (1998), the Paleoindian period on the Northern Plains was characterized by regionally distinct

groups, exploiting different environments, using diversified strategies and practicing broad-based economies with the exploitation of a wide variety of plant and animal resources (also Surovell and Waguespack 2009).

While artifacts well known for their association with these early hunters (e.g., Clovis spear points) have not yet been found in THRO, their presence in the Missouri River region makes it possible to suggest that these hunters were cognizant of the Badlands and its potential for sustaining human groups whose descendants gave origin to the tribes that historically inhabited the region. The shores of what is now Lake Sakakawea, for example, preserves heritage resources such as the Moe Site (32MN101, Schneider 1975, 1982). This site contains evidence of human occupation (albeit impermanent) along the Missouri River in North Dakota for thousands of years. In fact it has yielded deposits containing Clovis, Folsom, and Mummy Cave complex points as well as the later Archaic, Woodland and Plains Village artifacts.

Among the most significant natural resources utilized by ancestors since the Paleoindian period period is the Knife River Flint (KRF), a high-quality siliceous stone used in the manufacture of projectile points. The main quarries for KRF are located in Dunn and Mercer counties, but the raw material itself was widely sought by hunters across the Northern Plains and beyond (Loendorf et al. 1984; Schneider 1982:35). Paleoindians dug numerous shallow pits into these deposits to obtain this flint, which are easily identifiable on aerial photographs. It is possible that Paleoindian craftspeople (and more recent prehistoric knappers) specialized on a part-time basis in the extraction of KRF for exchange, in the manufacture of tools with this raw material, or both, as indicated in occupations at the at the Bobtail Wolf site (32DU955A) and Big Black site (32DU955C) near the quarry. Travel to and from the KRF quarries may have brought prehistoric groups across the Badlands, which was a more common means of spreading KRF than trade of specialized tools.

Cultural components dating to the post-Clovis Paleoindian period (early Holocene) are extremely rare in THRO. Two mutually exclusive hypotheses have been offered to explain this paucity of early prehistoric materials. The first proposes that the Badlands received little or no utilization by Paleoindian groups and that the current distribution of sites dating to this time period are the result of prehistoric settlement and hunting patterns (Loendorf, et al. 1982 as cited in Kuehn 1990:115–118; Schneider 1982). The second hypothesis explains the lack of Paleoindian deposits) in the Badlands as a result of post-depositional formation processes, such as wind and water erosion, and not as a function of prehistoric behavior (Kuehn 1990:115–118). The latter explanation is given credence by evidence of human occupation in the immediate vicinity dating as early as 11,500 B.P. the presence of Leonard-age paleosoils in the park are indicative of ancient surfaces that could have supported human occupation. From what little information is available, Kuehn (1990:26) suggests that the early prehistory of the Little Missouri Badlands is similar to other areas of the Northern Plains.

MOVEMENT AND INITIAL COLONIZATION

The Badlands functioned as a pathway with overland trails along upland ridge systems that linked the Missouri and Yellowstone rivers (Simon 1982). Notions of movement, travel, and migration are not only significant from an archaeological perspective, but also from a Native American perspective because there are oral histories of emergence and migration toward the Missouri River Basin among most contemporary tribes that claim affiliation or association with the region and THRO in particular. These traditions become more clearly associated with prehistoric archaeology as time passes (e.g., Ahler 1993).

From an archaeological perspective, patterns of movement evolved from the far-reaching Paleoindian explorations to a more strategic and localized familiarization with Middle Holocene (6,500-3,500 B.C.) landscapes, suggesting a trend toward the development of knowledge of, and interactions with, specific resources and landforms within the region. During the Middle Holocene, climate change and topographic instability following the ice melt conspired to influence the ways in which ancestral hunter-gatherers interacted with their landscape. The Altithermal Climatic Episode, which resulted in dramatic ecological transformations across the Plains, marks the transition to the Plains Archaic period (Loendorf and Borchert 1991:9; William 2000:12). Archaic peoples relied on hunting intermediate and then modern bison species and large ungulates, and on a broader pattern of gathering, but nonetheless followed a lifeway similar to their Paleoindian predecessors (Gregg and Davidson 1985; Johnson and Wood 1980; Loendorf and Borchert 1991:9; Reeves 1983). Cultural change was brought about by innovations and adaptation to changing environmental conditions.

As a result of drought, unstable topography, and uncertain flora and fauna resource distributions, people living during the Early Archaic period (5,500–3,000 B.C.) remained organized in few small groups that exploited local resources within smaller territories than their Paleoindian ancestors and who did not maintain broad social networks with other groups, as suggested by the proliferation of localized and highly varied lithic technologies (Beckes and Keyser 1983:96; Gregg 1985:101-108). Intriguingly, small group organization seems to have a deep origin in Mandan-Hidatsa oral history, as the origin myth recalls: "*First Creator decreed that people in seeking a living would scatter into small groups all over the land* ..." (Bowers 1992: 298).

The broad-sweeping patterns of movement characteristic of Paleoindian hunters seems to have changed in terms of resource use and distribution: one indication of this is that KRF is no longer found over the vast territory that it was during the Paleoindian period (Root 1992; Root 1997). Additionally, there seem to be fewer Early Archaic sites in the Northern Plains, which could be related to landscape instability, smaller group size, land use strategies, and formation processes. While sites assigned to the Early Archaic are rare, many locations within and surrounding the Little

Missouri Grasslands have yielded materials of this age, for example the Tysver-Olson Site in the Killdeer Mountains (Gregg 1985:103–104) and the Moe Site (Beckes and Keyser 1983:98).

Early Archaic cultural components are rare within THRO park boundaries (Kuehn 1990:115). An exception occurs at site 32BI703 in the Petrified Forest area of the South Unit. A KRF Simonsen point (5,500–3,300 B.C.) was discovered during profile excavations and may represent an extant Early Archaic deposit in the park (Kuehn 1990:118–120). This artifact is similar to a specimen recovered from the Tysver-Olson site in eastern Dunn County that dated to 5,345 +/-110 B.P. (Kuehn, et al. 1987:72, 75 as cited in Kuehn 1990:120). Based on the presence of the side-notched projectile point, Kuehn speculates that the component may be associated with the Logan Creek/Mummy Cave complex rather than the Oxbow complex (Kuehn 1990:120).

Ancestral populations increased during the Middle Archaic (3,000–600 B.C.) through demographic growth, return of scattered groups to the Missouri River Valley, or both. Frison has noted an increase in the number of sites during the Middle Archaic and in the reliance on wild plant foods, as well as movement of groups into the open plains and intermontane basins (Frison 1991:88–89). In North Dakota, projectile points diagnostic of these period (McKean, Duncan, and Hanna especially) are found at multicomponent sites such as Mondrian Tree (32MZ58) and Moe (Frison 1998:91; Gregg 1985:109–112), both of which may be considered "persistent places" in the traditional sense of the term, in that they continued to attract hunter-gatherer groups over time and into the historic period.

A general pattern within the Little Missouri Grasslands is an abundance of McKean-age deposits on many of the linear ridge formations that occur throughout the Badlands (Beckes and Keyser 1983:177; Simon 1982) including Cinnamon Creek Ridge (Beckes and Keyser 1983:179–180; East, et al. 1981 as cited in Gregg 1985), Anderson Divide (Beckes and Keyser 1983:183–184), and Ice Box Canyon (Beckes and Keyser 1983:189-190; Simon and Borchert 1981 as cited in Gregg 1985). Ridge systems, such as Flat Top Butte, Burning Mine Butte, and Lone Butte, in addition to the aforementioned, are dotted with small archaic campsites with stone-lined hearths and scatters of KRF (Beckes and Keyser 1983:177).

It has been argued that these ridge systems offered pathways of least resistance to prehistoric groups traversing the Badlands (Simon 1982). In addition, the ridges would have provided floral and faunal resources, water, and refuge to archaic travelers (Hollenback 2015:159). One cannot overemphasize the significance of occupations of buttes and ridges in the traditional history of the Mandan, Hidatsa, and Crow people, as these landforms consistently appear in oral history, especially that which is associated with culture heroes and spirit beings as well as with territorial boundaries (Bowers 1992; 2004). Perhaps this is the time when ancestor groups who were local to the Missouri River Basin and who eventually coalesced with immigrating groups began to develop cultural attachments and to experience encounters with the spiritual beings that inhabit the buttes and ridges of the grasslands and badlands. According to Mandan warrior Crows Breast, the

Awaxawi Hidatsa were called *maxaxa* in Mandan, which meant "people of the high buttes" (Crows Breast n.d., chapter 13:1).

Sites with Middle Archaic components within THRO are better known and include sites 32BI522, 32BI548, 32BI520, 32BI614, 32MZ912, and 32MZ935 (Kuehn 1990:116, 120–121). Seven diagnostic projectile points were recovered from these six locations. These include McKean lanceolate, Mallory, Yonkee, and Hanna. Kuehn (1990:121) suggests that an improvement in climatic conditions and resource availability during this time period might have led a number of different McKean groups to utilize and/or occupy THRO area for almost two millennia.

Throughout the Northern Plains, the Late Archaic period (1,500 B.C.-A.D. 250) may be identified by the broad distribution of components of the Pelican Lake Complex, originally identified at the Mortlach site in southern Saskatchewan (Gregg 1985:112). Little change is noted in subsistence economies of Middle and Late Archaic groups. The distribution of the stylistically distinctive Pelican Lake projectile points suggests regional and local demographic growth as well social networks acting over large areas within and beyond the Northern Plains; at the same time, each regional group seems to have adapted their subsistence strategies and land use practices to local landscapes and resources (Zedeño et al. 2015). It is possible that in North Dakota the local groups relied more heavily on bison procurement than their predecessors (Beckes and Keyser 1983:185).

Other than the Mortlach site, Pelican Lake components have been found at the Marsh Hawk site (32BI317), site 32BI249, and 32BI272 on Anderson Divide in the Little Missouri Grasslands. Additionally similar components occur at Ice Box Canyon (32MZ38) and Cinnamon Creek Ridge in the area around THRO (Gregg 1985). During this time, unnamed Late Plains Archaic projectile point types are abundant in western North Dakota and found in many of these same contexts (Beckes and Keyser 1983). Five Pelican Lake sites and two unclassified Late Plains Archaic sites were recorded during Kuehn's three-year survey project (Kuehn 1990:116). These include 32BI562, 32BI567, 32BI573, 32BI614, 32BI615, 32BI629, and 32BI649. Six corner-notched projectile points of varying sizes and morphology characterize the Pelican Lake specimens. Because Pelican Lake likely developed out of McKean, the presence of these components represents a cultural continuum in the region.

COMMUNITIES AND SOCIAL NETWORKS

Community formation and the development of new (and continuation of old) pan-regional social networks in the Northern Plains date to the Woodland Period (A.D. 1-1200) or more specifically to the Plains Woodland Tradition. This tradition is characterized by the appearance of pottery, burial mounds, mortuary ritualism, the adoption of the bow and arrow, and other changes in technology (Gregg 1985:79; Johnson 2001; Johnson and Johnson 1998; Wood and Chomko 1973; Wood and Johnson 1973). Despite the dearth of information on the Archaic/Woodland transition in the

Dakotas, many scholars have posited that Woodland communities developed out of indigenous, regional archaic groups. Gregg (1985:117) suggests that there is not a qualitative difference between Archaic and Woodland subsistence economies in North Dakota indicating a cultural continuum in the Northern Plains region.

While it is difficult to connect precisely origin and migration stories to specific sites (but see Ahler 1993:102), it is important to note that the notion of community is present in the earliest of Native American traditions. At least one ethnic subgroup, the Awatixa (Hidatsa), has an origin story that places them in the Middle Missouri region much earlier than other groups. According to the Hidatsa, the Awatixa came to the earth from a village in the sky and have always lived on the Missouri River. The archaeological record of the Awatixa is known as the Charred Body Complex (Bowers 1992:303). Were Woodland groups that peppered the Missouri River region ancestral to the Awatixa? The answer is a tentative yes.

Sites with important Woodland components, including Cross Ranch near Stanton, ND as well as Menoken in Apple Creek near the town of Mandan, are also speculated to be ancestral Awatixa. Ahler (1993:101) "could trace the Awatixa branch through the complete culture-historic sequence in the Knife region, placing its origin in part in what may be indigenous populations assignable to the Charred Body complex, and also in early populations who migrated into the region during the [later] period encompassed by the Painted Woods complex." We will retake this point later in the chapter.

The Plains Woodland Tradition (A.D. 1–1,200) in western North Dakota is characterized by the persistence of a hunting and gathering subsistence economy, based primarily on bison, and smaller nomadic groups moving through known territories in seasonal rounds (for a summary of the Plains Woodland Tradition see Beckes and Keyser 1983:103–108; Gregg et al. 2008; Johnson 2001; Johnson and Johnson 1998; Kuehn 1990:30; Neuman 1975; Reeves 1983; Wood and Johnson 1973). Technological and ceremonial changes mark the transition to the Woodland period across the Plains.

The Besant/Sonota complex in the Little Missouri region is marked primarily by the appearance of diagnostic projectile points and pottery. The introduction of the bow and arrow also occurs during this time period as evidenced by Samantha projectile points. Knife River Flint is the most frequent lithic raw material type in components assigned to this complex, but other locally available stone (e.g., porcellanite from the Badlands) was also utilized for making lithic artifacts. Linear burial mounds, such as those found along the Missouri River (Wood and Chomko 1973; Wood and Johnson 1973), are absent in the Badlands. There is suggestion that ceremonialism associated with bison procurement strategies expanded during this period, as it happened across the northwestern Plains (Frison 1991), but did not materialize in the park area.

Community life is well represented in Besan/Sonota sites. Evidence of group activities may be found in stone circle sites, large base camps, and hunting camps (Hill 1988) as well as in food

processing and cooking features (Gregg et al. 2008:1:32). A group of three Besant/Sonota sites (32MZ954, 32MZ946, 32MZ957) containing ceramic remains were located in the Mandal Spring locality. These appear to be single component sites, suggesting some degree of contemporaneity (cf. Kuehn 1988a). Plains Woodland settlement practices in the Little Missouri Badlands were undoubtedly linked with dependable water supplies (Gregg et al. 2008:1.31).

The existence of social networks that stretched across the Plains into the Rocky Mountain Front to the west and far to the east into the Ohio River Valley is for the most part evident in the pan-regional distribution of Knife River Flint, obsidian, and porcellanite. Besant artifacts made of KRF are found in Woodland-age campsites as far as St. Mary Lake in Montana (Zedeño et al. 2015) and in mortuary deposits in the upper Mississippi Valley (Braun, et al. 1982 as cited in Gregg 1985; Scribe 1997:157). Zedeño's ongoing research indicates that porcellanite was used to manufacture arrow points far west and northwest from the Badlands (Zedeño's ongoing research).

Other regional Woodland complexes in the Northern Plains include the Laurel Complex (100 B.C.–A.D. 900) (Gregg 1985:124–127), the Avonlea Complex (A.D. 450–-1,000) (Gregg 1985:127–130), Old Women's Complex (A.D. 750–1,800) (Gregg 1985:131–133), the Black Duck Complex (A.D. 800–1,500) (Gregg 1985:133-135), and the Mortlach Aggregate (A.D. 1500–1780) (Gregg 1985:135; Walde 1994). Of these, only Avonlea has but a slight presence in the Little Missouri River valley.

Woodland components have been found at the Sunday Sage, Abraxas, and Cinnamon Creek Ridge sites (Kuehn 1990:31). The largest numbers of sites with known cultural affiliations in THRO are those assigned to the Besant complex of the Plains Woodland tradition (Kuehn 1990:122–123), once again conforming the affinity with northwestern Plains populations. Kuehn recorded eleven sites between 1987 and 1989. These are 32BI548, 32BI575, 32BI706, 32BI614, 32MZ954, 32MZ946, 32MZ957, 32MZ984, 32MZ988, 32MZ1000, and 32MZ996 (Kuehn 1990:116). The identification of these sites as Besant was based on the recovery of eleven projectile points and nineteen cord-roughened sherds. These findings contrast with previous observations about the dearth of Plains Woodland components in the Badlands (Beckes and Keyser 1983:190).

REGIONAL AND LOCAL COALESCENCE

Village life both emerged from, and arrived to, the Missouri River about 1,000 years ago and lasted until 1865, when life in autonomous villages became untenable. The trajectory of Plains Village societies in the Middle Missouri Subarea (which includes the Little Missouri Badlands) is not only abundantly evident in the archaeological record (Thiessen, ed. 1993), but also explained in mesmerizing oral traditions. Archaeologically, Plains Village Tradition unfolded during the the Late Prehistoric period (A.D. 500–1750) and continued until the establishment of Indian reservations. Plains Village life consisted of a semi-sedentary horticultural and a semi-nomadic

hunting-gathering subsistence economy (Ahler 1993; Lehmer 1971; Lovick and Ahler 1982). Mitchell (2013) notes that village life was not static throughout the centuries; on the contrary, around A.D. it was reorganized to accommodate aggregation of local and migrant populations as well as increased agricultural production, bison hunting, and craft specialization. This economy was greatly augmented by trade with neighbors and distant groups, moving hundreds of items across the Plains, notably corn produced in the villages (Wood and Thiessen 1985). Warfare loomed large, as indicated by the construction of planned communities, many of them exhibiting formidable fortifications (Ahler 1993; Kvamme 2007)).

Both archaeology and oral history indicate that movement and migration were at the center of village formation and organization; while Euroamerican writers would later collapse communities in large, monolithic ethnic groups, originally Native societies on the Missouri river were aggregates of self-named and self-identified subgroups that lived in their own villages and had their own origin stories and dialects (Bowers 1992; 2004). These stories help archaeologists to understand the complexity and diversity of practices contained in archaeological sites belonging to the Plains Village Tradition (Ahler 1993). Coalescence may be explained by macro-geographical movement among the aboriginal groups of the northern Plains, including ancestors of the Hidatsa, Mandan, Arikara, Crow, and Assiniboine (Lowie 1909, 1922a; Murray and Swenson 2016; Zedeño et al. 2009:115). Narratives of long-distance unidirectional movement toward the Missouri River also hint at macro-geographical knowledge of unknown antiquity.

Several versions of Mandan and Hidatsa migration stories were recorded by explorers and fur traders (e.g., Thompson, Tyrrell, ed. 1916), travelers (Catlin 1965; Maximilian de Wied in Thwaites, ed. 1906), government agents (Mathews 1877), and ethnographers (e.g., Beckwith 1938; Bowers 1950, 1963). In many of these accounts key tribal informants acknowledged that different versions of the story reflected separate origins of Mandan and Hidatsa ancestors andseparate origins for the historic sub-groups—an admission that has proven difficult (but not impossible) to reconcile archaeologically (Ahler 1993).

Bowers' informants recalled that during their residence at the Heart River there were five bands of Mandan, representing in turn three major dialectic groups. Certainly, the Mandan have two creation stories: one that asserts their right-of being on the Heart River and another (transcribed below) that places their origin somewhere along the Mississippi River (Bowers 2004). It is possible, therefore, that there may have been even more origin and migration stories for each subgroup that eventually became conflated into the two that survived to this day. Groups of Hidatsa Proper and River Crow ancestors likely arrived to the Knife River from the northeast after AD 1450 to join the Awatixa who were already in the area since very early times, with the Crow splitting and moving west before European contact. The question of whether Mandan and Hidatsa joined or replaced existing nomadic groups who inhabited that segment of the Missouri River drainage, or developed locally, continues to be explored (Ahler 2003).

Regional archaeologists generally agree that the historic Mandan derive from a stable and long-lived sedentary, agricultural, "Plains Village" adaptation that probably developed (here and elsewhere in the eastern and central Plains) as early as A.D. 800 (Ahler 1993; Benn 1983; Bruner 1961; Glassner 1974; Henning 1983; Lehmer 1971; Mitchell 2013; Tiffany 1983; Wedel 1961; Winham and Calabrese 1998; Winham and Lueck 1994; Wood 1967, 2001). Whereas there is strong evidence for continuity between late prehistoric traditions and the historic Mandan, there is much less certainty regarding the trajectory that would connect the earliest Plains Village manifestation known as Initial Middle Missouri Variant to the protohistoric Mandan. The answer to this conundrum may lay well beyond our study area. As expansive as the archaeological record is along the Missouri River and its tributaries, all that is known with some certainty is that the Mandan were well ensconced and settled the Heart River sometime before AD 1250, althought they may have encountered nomadic or semi-nomadic groups already using the area on a seasonal basis (Awatixa perhaps?) (Ahler 1993; Mitchell 2013).

Broadest in its geographical reach is the Mandan migration tradition told by Wolf Chief to Alfred Bowers (1950:156-163):

> A long time ago the Missouri River flowed into the Mississippi River and thence into the ocean. On the right bank there was a high point on the ocean shore that the Mandan came from. They were said to have come from under the ground at that place and brought corn up. Their chief was named Good Furred Robe…
>
> In this early time when they came out to the ground, Good Furred Robe was Corn Medicine, and he had the right to teach people how to raise corn. The people of Awigaxa asked him to teach them his songs so as to keep the corn and be successful in growing their corn. Good Furred Robe also had a robe which, if sprinkled with water, would cause rain to come.
>
> When they came out of the ground, there were many people but they had no clothing on. They said, "We have found Ma'tahara." That was what they called the river as it was like a stranger. It is also the word for "stranger."

Wolf Chief's story describes in detail the subsequent movement of the ancestral Mandan – including groups named *Nu'itadi* ("from us")*, Awi'gaxa,* and *Nu'ptadi*--along the Mississippi River, their contact with people who made and used shell bowls and spoons, their trading of red-painted rabbit hides and meadowlark breasts, and the acquisition useful knowledge and items, such as the bull boat, the bow and arrow, snares, buffalo corrals, and ceremonies and ritual objects from First Creator, Lone Man, or the animal people. Explicit references to travel and navigation abound, for example,

> Good Furred Robe also owned a boat that was holy. It could carry twelve men. Each time they wanted to trade in the other village, they would take the red rabbit hides and the yellow meadowlark breasts and float over. There was a rough place in the middle, and they would drop some of these objects into the water, and then the water would calm.

The narrative contains rich description of landscape features as well as of floral and topographic variation, with details on the appearance of the Missouri River. From the Mandan migration story, as recalled by Wolf Chief, one learns that movement toward their final homeland near the confluence of the Heart and the Missouri Rivers followed the course of the Mississippi River upstream to the mouth of the Missouri River, and then continued along the Mississippi River cutting across the prairie toward the White River of South Dakota. Each or all of the Mandan bands named in the story built villages and grew corn at different times and locations along the route, occupying them for a few years at a time (Zedeño et al. 2009:117). Separation from the main body of the tribe and regrouping are acknowledged, and references to the passage of time and its effects on language variation are noteworthy (Bowers 1950:157). The knowledge that band-specific villages existed and that the identities of these bands persisted into historic times is evident from independent historical sources, including the journals kept by Richard Thompson (Tyrrell, ed. 1916), Prince Maximilian de Wied (Thwaites, ed. 1906) and by George Catlin (1965), among others.

The Hidatsa origin and migration traditions, first recorded by Thompson in the 1780s (Tyrrell 1916:225) and later by Lewis and Clark in 1804, are thought to derive in part from those of the Mandan (Bowers 1963); however, they have an altogether different geographical context. The story begins in time immemorial somewhere in the underworld of the lacustrine woodland-prairie ecotone of the Red River to the northeast, with special emphasis on the connection to Devils Lake--the Hidatsa primordial homeland. Like the Mandan, the Hidatsa origin and migration stories have numerous places and events explicitly associated with one or more linguistically similar (but dialectically different) subgroups, namely, the *Mirokac* or Hidatsa-River Crow and the Awaxawi. Their migration took them as far north as the Turtle Mountains during the flood and west to the Yellowstone and Powder Rivers.

In contrast, the story of the Awatixa, as mentioned above, lacks specific references to macro-geographical movement and thus may represent a more localized population with attachments to the Missouri River that predate the arrival of the Mandan and the other Hidatsa subgroups (Bowers 1963:300) but who still spoke a Hidatsa dialect. The Mountain Crow may have resided with the Awatixa at one time but likely moved west in prehistoric times. At the same time, Crow elder George Reed (Reed n.d.) has noted repeatedly during ethnographic studies that the trajectory of some Crow clans or subgroups has a local origin and development in what is now the Crow Indian Reservation in Montana and Wyoming. The role of migration traditions as affirmations of group identity, social distance, and rights-of-being to land and resources is evident in the Hidatsa story that acknowledges the prior presence of the Mandan on the Heart River as well as the Awatixa on

the Knife River, but affirms that corn, buffalo, and tobacco were given to Awaxawi and the Hidatsa-Crow while they were still living at Devils Lake (Bowers 1992). Therefore they owned these resources independently from the Mandan. Overall, the migration story and other origin traditions of the Hidatsa-Crow and Awaxawi portray an ancient lifeway that came to characterize the natives of the Northern Plains, with far reaching travels that took them from the eastern prairies to the foot of the Rocky Mountains and frequent contact with other groups including the Chippewa, Cree, Assiniboine and Blackfoot.

A complex of stories associated with the Awatixa, also known as the myths of the Sacred Arrow, while not including references to physical travel, reveal the powers of mystical travel and the significance of ritual in identity formation. The traditions speak of a village in the sky and name "sacred arrow" refers to the mode of travel used by the sky village people and their leader, Charred Body, and his ability to change into an arrow (Beckwith 1938). The themes center on Charred Body's selection of 13 sky village couples to settle the earth, their movement from the sky to the earth and its consequences; war and competition for the right to live on the Missouri River; crime and punishment; and the acquisition of a liturgical order as the marker of the end of strife and the beginning of a new society. These are "stories of change and becoming and thus are full of symbolism that provided a rationale for their ritual calendar and many other actions" (Zedeño et al. 2009:119).

An eloquent explanation of the historical trajectory embedded in these myths was given to Bowers by Hidatsa informant Bears Arm. Drawing a sketch in the shape of the letter Y, Bears Arm indicated that each of the upper forks represent (1) the making of the earth and the exodus from the underworld and (2) the settlement of the lands by people from the sky; respectively. The stem symbolizes the acquisition of social and ceremonial obligations once the villages were established, the Crow had left, and people had learned how to cooperate. At different points throughout this journey, Bears Arm explained, the ancestors acquired ceremonies that follow one another like "knots on a string" (Bowers 1963:304). These ceremonial obligations, in turn, connected people to landmarks and resources within the homeland as well as with their ancestral origin places. The Badlands (within and outside THRO) figure prominently in some of these ceremonies, notably eagle-trapping.

The trajectory of coalescing groups on the Middle Missouri Subarea would be incomplete without relating the history of movement of Sahnnish or Arikara people across the Missouri River Basin:

> The oral history of the Sahnish people is taken from sacred bundles and is verified by archeological findings. Ancient objects and ceremonies are part of the oral history of the people. The Sahnish history has its roots in eastern Nebraska where numerous village sites were found. Oral history tells of a person called "Chief Above" who brought these villages together in a union for protection against waiting tribes. Archeologists confirm there was a drawing together into large villages on the Elk Horn

River in what is now called Omaha, Nebraska, at the end of the prehistoric and beginning of the proto-historic period.

In 1714, explorer Etienne Veniard de Bourgmont, who spent several years with the Sahnish, described three Sahnish villages on the west bank of the Missouri above the Niobrara River and 40 villages still farther up river on both banks. By 1723, the Sahnish had gone up the Missouri into South Dakota near the Arickara River (called Grand River today).

In 1738, Pierre de Vamess Gaultier de La Verendrye, a French fur trader from Montreal, seeking a route to the Pacific Ocean, reported villages of the Panaux and Panai (Sahnish) living a day's journey from the Mandan villages near the mouth of the Cannonball River. In 1743 La Verendrye's son arrived at the Sahnish villages at the mouth of the Bad River and was met by the Little Cherry Band of Sahnish. La Verendrye commemorated the event by planting a tablet that today is kept in a museum at Pierre, South Dakota. Jean Baptist Trudeau, a French fur trader, found the Sahnish living at the mouth of the Grand River around 1794-95. Trudeau was the first trader to live with the Sahnish for a long period of time.

Their westward movement has sometimes prompted historians to promote the myth that the "Arikara seemed to have wandered aimlessly up the Missouri River." According to Sahnish oral historians, the extensive movements of the tribe were not at random or without purpose, but was the westward migration in fulfillment of the directive given to them by Neesaau ti naacitakUx, Chief Above, through an ancient tradition and from a sacred being called "Mother Corn." (Dorsey, 1904). Lewis and Clark encountered the Sahnish people at the mouth of the Grand River in 1804, and found them living in three villages that numbered about 3,000. … http://www.mhanation.com/main2/history/PDFs/The%20Sahnish%20(Arikara).pdf

According to Murray and Swenson (2016), numerous semi-autonomous Arikara earthlodge village communities located along the Missouri River and its tributaries in South Dakota characterized pre-epidemic settlement patterns. Following the demographic collapse caused by disease, these independent Arikara communities consolidated into larger “coalescent,” survivor communities. This consolidation provided a coping mechanism for multiple historical contingencies that were beyond their control. The resulting Arikara communities resembled their former villages in placement and layout, but their inhabitants were amalgamations of people who spoke different dialects, carried different religious responsibilities, and who each came to the settlement with their own ceremonial and political leaders. The authors explain that, given their variable organization and alliances with neighbors, certain Arikara communities opted for joining temporarily Mandan and Hidatsa villages. Thus over time the Arikara came to share knowledge about land and resources as they became familiar with their hosts’ territories.

Finally, coalescence at the regional level may also be seen in the movement of protohistoric Assiniboine groups:

> Tribal oral history states that the Assiniboine originated in the Lake of the Woods and the Lake Winnipeg area of Canada, and became allied with the Cree. IN 1744, a division was noted, and "the people" divided again. Some bands moved west into the valleys of the Assiniboine and Saskatchewan Rivers in Canada, while others moved south into the Missouri Valley. The bands inhabited an area from the White Earth, Minnesota, region west to the Sweet Grass Hills of Montana. They also lived and roamed north of the U.S.-Canadian border to a line running east and west from Hudson Bay to the Rocky Mountains. (http://www.ftbelknap.org/assiniboinehistory.html)

The Assinniboine bands who came to live near the earthlodge villages eventually developed strong trading partnerships with the Hidatsa and Mandan, as indicated by the earliest European observers. They also raided the villages and made war. We will return to this point.

With respect to archaeological remains of coalescence and village formation at THRO, only 12 Plains Village sites have been professionally documented in the Badlands as of 1990 (Kuehn 1990:123). Excavations at the Connell Ranch site (32BI439) were reported by Metcalf (1988). This site is situated in overbank deposits on the eastern bank of the Little Missouri River and has been covered by up to one meter of slopewash clays. Recovered artifacts included butchered bison bone and fetal bone, Plains Village ceramics, chipped stone flaking debris, stone tools made mostly of KRF, a stone bead. Most of the stone artifacts are KRF indicating group use of other portions of western North Dakota. Bone grease is thought to have been rendered in pots heated directly over fires, indicating perhaps that grease was needed for the production of pemmican, as this was a winter encampment (Gregg et al. 2008:1.34).

The six Plains Village sites identified within THRO are 32BI549, 32BI568, 32BI626, 32BI731, 32MZ915, and 32MZ948. The identification of the Plains Village sites was based of the recovery of 138 sherds and two projectile points (Kuehn 1990:124). Site 32BI549, a bison processing area, yielded a single simple-stamped body sherd. At site 32BI568, determined to be less than 1,000 years old, two simple-stamped sherds, two smoothed sherds, and one Late Prehistoric projectile point were found. Site 32BI626, estimated to be less than 300 years old, had 10 simple-stamped sherds and two undecorated straight-rim sherds with rounded lips. 32MZ915 contained 25 simple-stamped sherds, one sherd with a possible punctate, and a small Plains side-notched point. Two cord-impressed sherds and one check-stamped sherd were recorded at site 32MZ948. Ninety-three sherds represent two or three vessels from site 32BI731. Seventy-one are smoothed sherds and 20 are check-stamped. The remaining two artifacts are cord-marked.

The presence of cord-impressed ceramics indicates a Plains Village cultural affiliation. The technique was occasionally used during the Initial and Extended Coalescent variants; however, it was more common during the Post-Contact Coalescent variant (Lehmer 1971). Check stamping was common in the Knife-Heart region during the Scattered Village and Nailati phases and may be indicative of ancestral Hidatsa (Ahler 1993:78). Simple-stamping was a common form of surface

finish from the Extended Middle Missouri variant through the Post-Contact Coalescent (A.D. 1100–1865) (Lehmer 1971).

Sites 32BI549, 32BI626, 32MZ125, 32MZ915, 32MZ948 are all Plains Village sites within the park (NPS 1993:17). Site 32BI549 is a bison processing area with one sherd and some historical debris; site 32BI626 is a possible PVT site with lithics, ceramics, and a possible heart/bone eroding from the bank. 32MZ125 has a side-notched Plains Village projectile point. Site 32MZ915 is a possible Plains Village "field camp." Site 32MZ948 has ceramics (NPS 1993:34). The unclassified Late Prehistoric sites are 32BI579, 32BI548, 32BI703, 32BI648, 32BI695, and 32MZ868.

NATURALIZATION OF TERRITORIAL IDENTITIES

Territorial boundaries between the Hidtsa and Mandan appear to have been settled by the time of European arrival. The Hidatsa and River Crow built villages at and above the Knife River while the Mandan settled to the south and east of the Knife River with their villages clustered around the Heart River area (Mitchell 2013). The area between the Knife and the Yellowstone rivers, and the badlands in between, were the traditional hunting ground of the Hidatsa and River Crow; from Alexander Henry's journals it is known that they claimed the Little Missouri River to themselves (Coues 1897:334). Importantly, this hunting ground corresponds to the area where culture hero Pack Antelope's roamed as a thunderbird, killing all evil creatures in it (Beckwith 1938).

Territorial rights were strictly reinforced as this was an area rich in a variety of resources and offered respite from inclement weather (Hollenback 2015). This was particularly evident after the smallpox epidemic of 1781, when the Hidatsa refused to let the Mandan or the Awaxawi move their villages above theirs (Wood 1980:30). The Little Missouri Badlands afforded protection as well as a wealth of opportunities for subsistence and worship. Winter camps that were built there by Hidatsa families were reoccupied, rebuilt, and claimed as property; these were passed on to descendants (Beckwith 1938:256 cited in Hollenback 2015:160). The Mandan also utilized the Badlands, particularly for eagle trapping, but not without Hidatsa blessings.

As Bear Arms told Alfred Bowers (1963:303), ceremonial obligations, like knots on a string, came into place once people had settled in villages and acquired a seasonal rhythm and a social calendar. Ceremonies and the stories and songs that sustain them, particularly in terms of places and resources attached to them, are known for fostering the naturalization of territorial identities (Zedeño et al. 2009). Among the most relevant of these ceremonies, which certainly predates the arrival of Europeans into North America, is eagle trapping. Eagle trapping is a highly ritualistic activity that occurred along the Little Missouri River. While there is archaeological and historical evidence of eagle trapping along the main branch of the Missouri and other tributaries, the Little Missouri Badlands figure prominently in this activity.

Eagle trapping is the quintessential mystical practice whose value extends beyond the realm of the sacred and into the trading economy. According to Hidatsa tradition, it was gifted to the people by the brown and black bears who were accomplished eagle trappers. Reciprocally the bears gave this knowledge and rights to the people in exchange for plant medicine (Wilson 1928). Localities of primordial bear eagle-trapping pits were once scattered along the main branch of the Missouri River and particularly around the mouth of the Little Missouri. These sites were identified by Wilson's informants and may now be under water. Once the people got eagle medicine and the right to trap eagles this became a ceremonial complex to which few individuals held exclusive rights. These individuals would transfer eagle rights to another individual over a lengthy period of time; it took commitment and continual gift exchange (Murray 2009, 2011). A more detailed account of this complex is found in the eagle resource page as well as in Appendix A.

Both Hidatsa and Mandan ancestors held rights to eagle trapping territories in the Badlands. Eagle trapping left distinctive marks on the THRO landscape. Two types of features are found: the ceremonial conical lodges where members of an eagle trapping expedition would prepare themselves for the activity (sites 32MSZ101, 32MZ955, and 32MZ116) and the eagle trapping pits (sites 32MZ630 and 32MZ633) which are subtle and difficult to identify without a knowledgeable tribal member as guide. During Kuehn's three-year project, Hidatsa elder Gerard Baker was working as park ranger at THRO and helped with the identification of these sites.

Historically, the Arikara also acquired rights to eagle trapping south and west of the Missouri River. Parks (1996:282) states that to the Arikara, eagle trapping was second only in importance to war as a means to acquire honor. They would travel from Like-A-Fishhook Village to favorite locations presumably in the Badlands, where they would build a sleeping lodge and pit. An important distinction between known Mandan-Arikara wooden conical lodges and Arikara lodges, according to oral history, is that the latter had a roof reinforced with pumice stones (Parks 1996:287).

There is no record of any other tribe utilizing the Little Missouri Badlands for eagle trapping or any other ceremony.

VECTORS OF CHANGE

By the late seventeenth century, shortly before the establishment of the Hudson Bay Company in 1675, the Middle Missouri Subarea was not only home to bustling earthlodge villages but also a main node in vast interregional trade at which the trajectories of many ethnic groups intersected (Thiessen 1993). Such was the world first encountered by European travelers to the Northern Plains. In this section we discuss three of the most important vectors of change introduced directly or indirectly to Native American life on the Missouri River—trade, disease, and warfare—and their relevance for understanding the land and resource use history of THRO.

Trade

> [The Mandan] knew well how to profit thereby in trading their grain, tobacco, peltries, and painted feathers, which they know the Assiliboille [Assiniboine] highly value [and who] had purchased everything which their means permitted, such as painted buffalo-robes; skins of deer and antelope well dressed and ornamented with fur; bunches of painted feathers; peltries; wrought garters, headdresses, and girdles. (La Vérendrye as cited in Thwaites 1904:221)

French explorer Pierre Varénnes Sieur de la Vérendrye arrived to the Missouri River in 1738 and encountered a metropolitan market in the Mandan towns, where goods of all kinds circulated and were redistributed from the Rocky Mountains to the city of St. Louis and beyond (Wood and Thiessen 1985). Long distance trade networks known at the time of contact were in place probably since the tenth century, but flourished and expanded shortly before the arrival of Europeans into the region (Ewers 1954). Foodstuffs, buffalo robes, hides and peltries, feathers of numerous birds, medicinal plants, pigments, shell and stone, as well as ceremonial objects, ceremonial knowledge, and crafts repeatedly changed hands. The protohistoric and historic Mandan and presumably the Hidatsa were renowned across the continent for their role as traders and middlemen before the smallpox almost annihilated them in the nineteenth century (Fenn 2014). The historic Mandan spoke several languages that facilitated their middlemen role (Bowers (1950:157). To their villages flocked the Arikara, Blackfoot, Crow, Cree, Assiniboine, Cheyenne, Shoshone, Arapahoe, Comanche, Kiowa, and Kiowa-Apache in search for their products. Many items were likely obtained down-the-line from the many permanent and temporary trade centers on the Great Plains, Rocky Mountains, Gulf Coast, and Northwest (Mitchell 2013).

Among the most important pre-equestrian trade goods that were obtained in the Little Misouri Badlands were eagle feathers, particularly golden eagle tail feathers. Because of its near invisibility in the archaeological record, the feather trade has been grossly underestimated in studies of pre-contact economies in the northern Plains, yet, eagle feathers constituted for many tribes, notably the Mandan and the Blackfoot, a "standard of value" against which the worth of other goods was measured (Grinnell 1962:236). The widespread ceremonial value and popularity of eagle feathers in Plains warfare and other honor systems, coupled with unequal distribution of eagle rights within and across the Missouri River tribes, created a huge market for them. The value of eagle feathers in Plains Indian society and culture would not change through time, however, it would come to be held against a new standard: the Spanish horse, introduced to the village tribes in the mid-1800s.

Shortly after the Hudson Bay Company was established in 1675, European goods began to trickle down to the Missouri River through native trade partners. This indirect trade network marks the first of three stages of native participation in the historic "fur trade" system (Thiessen 1993:31). The Assiniboine, Chippewa, Cree, and Sioux served variously as middlemen between the English and other tribes during early Hudson Bay Company's York Factory inland trade (Ray 1974:68-69). The Assiniboine, in particular, acquired European trade goods and passed them on to other Plains

tribes at a significant mark-up, exchanging their "used and deteriorated kettles, axes, knives, guns, and other trade goods" for corn, leather, feathers, and other material less abundant in their territory (Ray 1974:88; Rodnick 1938).

Considering that evidence of Assiniboine eagle trapping is rare, trade with the Mandan, Hidatsa, and Blackfoot became an important way to obtain valued eagle feathers for use in dress, regalia, and ceremonial items (Denig 2000:195; Will and Hyde 1964:179-180). In time of need, such precious goods could also be "cashed in" so to speak, for staples and medicine. The same type of eagle tail feathers formally transferred to an eagle trapping apprentice within strictly controlled parameters could also be traded to an Assiniboine partner for the price of a horse, a gun, or a number of bison robes (Chandler et al. 2016). Accounts of the Columbia Dalles trade center compiled by Griswold (1954), further indicate that golden eagle feathers were traded to the Northwestern tribes.

By 1740 the horse and the gun had made their way into the Middle Missouri villages. Thereafter, European traders made intermittent visits to the villages bringing an assortment of wares. Initially, the Missouri River tribes did not acquire many guns as they preferred to hunt with the bow and arrow; but as disease and intertribal conflict sent communities into distress people began to see guns as the answer to defending their villages. For the sedentary Mandan, for example, guns became indispensable in the defense of their villages against the mounted enemy that threatened to burn their lodges (Fenn 2014). Availability of these goods stimulated the participation of the Mandan and Hidatsa as middlemen traders, thus opening the door for the second stage of their historic trade system (Thiessen 1993:34).

By the end of that century, however, the Mandan and Hidatsa had established direct trade relations with the French North West Company. Tenant traders increased the frequency and length of their visits, a few of them eventually establishing their residence at the villages and marrying native women. Little is known of the local Mandan history between 1740 and 1790, except from rumors reported by Northwest Company trader Peter Pond, that a Mr. Pinneshon had reached the Mandan villages prior to 1763, where he found French traders already there (Thiessen 1993:35). There are also rumors that Mr. Menard, a Canadian trader, had a house in their villages sometime around 1770 and remained there for about 16 years (Nasatir 1952:82).

The Hidatsa, Mandan and Arikara were major trade partners of the Crow. The Crow residing along river sometimes served as middlemen between the Missouri River tribes and the upland Crow. Voget also noted that the upland Crow traded extensively with the Nez Perce (Voget 2001:697). Importantly, their access to the headwaters of the Yellowstone (Yellowstone Lake), which was visited by numerous tribes since prehistoric times (Loendorf and Nabokov 2004), and to trails that paralleled or crossed the Rocky Mountains, placed them in an ideal position to also trade with western tribes and obtain resources from the Far West and Southwest that eventually made their way to the upper Missouri.

Although the village tribes were not as horse-wealthy as the Crow, the Cheyenne, or the Blackfoot (Bamforth 1988), they nonetheless valued their horses for their hunting abilities and traction,

allowing people to travel farther and faster than ever before and to accumulate personal wealth (Hämäläinen 2003). The most prized possession of a Plains hunter was a good buffalo runner that could partner with the hunter in the successful bison kill. Trade in these horses provides a clear picture of their value in the commodity market relative to indigenous valuables such as eagle feathers. Grinnell (1920:240) noted that in the north, where golden eagles abounded, the Blackfoot could purchase a good horse with five golden eagles, compared to further south where only two eagles could purchase the same. A Blackfoot (North Peigan) consultant explained that his male ancestors were eagle trappers by occupation, and that the golden eagle feathers were prized so highly that only one eagle feather might be traded for a horse in certain contexts. Likewise, Washington Matthews (1877:28) reported that the Mandan could trade a single tail feather from a golden eagle to another tribe for a "buffalo-horse, i.e., a horse swift enough to outrun a young adult buffalo in the fall." Horses were also used in payment for even greater valuables such as the instance in which the Blackfoot were willing to pay 150 horses to the Mandan in the purchase of a sacred white buffalo robe (Chandler 2014).

There are records that the village tribes trapped beaver for trade during the height of the fur trade (Thiessen 1993), however, the ethnographic record does not indicate that they were engaged in this activity in any intensive way as were the Cree or the Chippewa, for example.

Trade would shift once again toward the exploitation of bison hides that took off in the early nineteenth century (ca. 1820s-1850s) with the arrival of the American Fur Company to the upper Missouri River (Barbour 2001). The hide trade was particularly attractive to native hunters because they had the upper hand in the direct procurement of hides, therefore, they were also in the position to dictate the placement of trading posts along the river. Fort Clark was one of the earliest posts near the Mandan; the Blackfoot had Fort Benton, and the Assiniboine, Cree, and Crow had Fort Union.

Fort Union was located near the mouth of the Yellowstone River and was closest to the Little Missouri Badlands. It was the largest and more important houses of the American Fur Company's Upper Missouri Outfit. It attracted numerous tribal groups, not only those with ancestral territories in the region but also other tribes from more distant areas, notably different bands of Sioux (Chandler 2012). The Assiniboine, in particular, developed strong attachments toward their neighboring Fort Union soon after it was established in 1829, visiting it frequently and acting as guardians against marauders (Barbour 2001:131). The character of the relationships between the fort's traders and the Assiniboine could be described as quasi-kinship, in the sense that the Assiniboine developed personal friendships as well as close social ties with the fort's employees (see Larpenteur's notes in Coues 1898). The fort also greatly benefited the Crow, whose hunting grounds extended along the Yellowstone River and who had not succeeded at retaining trading posts built earlier by Manuel Lisa in their territory (Wood and Thiessen 1985).

The bison hide trade had a large impact on the dynamics of pan-regional trade networks, particularly in terms of competition for access to the large bison herds of the north. It would eventually lead to an increase in warfare among competing tribes. Throughout the first half of the

nineteenth century the Hidatsa steadily asserted their political control on the Middle Missouri region by consolidating their hunting territory, which around 1830 extended from the Powder River to Square Buttes and from the mouth of the Yellowstone to the Cannonball River. The decade of 1830 was particularly momentous for the Hidatsa. At the height of the buffalo hide trade they occupied a prominent role in providing hides to the American Fur Company posts between the Heart and the Yellowstone Rivers (Bowers 1965). Their dominance would eventually be weakened by the smallpox epidemic in 1837. For their part, up to the epidemic the Mandan hunting and eagle trapping grounds extended west to the Little Missouri River; despite the threat of the advancing Sioux, they continued to hunt south around their ancestral villages in the Heart River area (Abel 1997).

Disease

Virgin soil epidemics arrived to the New World with the first Spanish explorers at the turn of the sixteenth century (Ramenofsky 1988). They spread to aboriginal populations decades before they met the first Europeans. It is difficult to comprehend the devastation these epidemics caused across the continent. Trimble (1989:50), examined the dynamics of disease systems as well as individual and community responses to contagion and survival. His chronology of infection for Plains tribes and vicinity indicates that the Arikara and Sioux were the earliest to suffer smallpox in 1734, with 16 subsequent epidemics affecting the Missouri River tribes of pre-reservation days.

The smallpox pandemic of 1781 hit the Northern Plains tribes with incredible ferocity. It affected mobile and sedentary communities differently, with the latter being the most ravaged by the disease. Yet, mobile hunters also suffered great losses; the Assiniboine, for example, appeared to have lost at least 3,000 lodges (almost one-half of the population) between the mouth of the Yellowstone River and the Edmonton House (Bray and Bray 1993:262). A similar case can be made for the Blackfoot (Jackson 2000). The smallpox epidemic of 1781 was particularly devastating for the sedentary Mandan, reducing the Heart River villages from seven to three and forcing them to move upriver near the Hidatsa (Fenn 2014). Immediately following the epidemic, the Mandan consolidated in two settlements about 20 miles south of the Knife River villages. By the time trader David Thompson reached them (Coues 1897), the Hidatsa and Mandan were consolidated in five villages: Big Hidatsa and a winter village with only Hidatsa lodges; Black Cat, across the river, with only Mandan lodges; and Sakakawea Village and Deapolis Village with a combined population of Hidatsa and Mandan (Ahler 2003c:3).

Death of knowledgeable adults and able laborers of either sex caused tremendous demographic upheaval as devastated communities either joined other ethnic groups or consolidated their surviving members into new settlements (Hollenback 2012). Raids for captive women and children were also a common result of the epidemic, as mobile hunters needed to replenish their numbers in order to have a viable, exogamous community. Yet, by the turn of the nineteenth century the population had recovered to the point that Mandan and Hidatsa were able to regroup separately and

were living in two and three villages, respectively (Hollenback 2012; Fenn 2014). That is where Lewis and Clark would meet them them in 1805.

The Hidatsa proper were gifted and aggressive buffalo hunters. They moved frequently, covering enormous distances during their seasonal hunts, regularly engaging in warfare campaigns as far from their home as the three forks of the Missouri River, as indicated in maps of warpaths that date to the Lewis and Clark expedition (Bowers 1965; Warhus 1997). This characteristic protected them from the full force of disease. Between 1781 and 1837 there were a number of intervening epidemics of various kinds that affected groups at different times (Trimble 1989), but none were as devastating as the smallpox epidemic of 1837, which ended Hidatsa dominance in the hide trade.

The smallpox epidemic of 1837 ravaged the villages below the Knife River, forcing the Mandan, Awatixa, and advancing Arikara to reorganize their settlements (Ahler 2003c; Hollenback 2012, 2015). Fort Clark's trader Francis Chardon (Abel 1997) described the effects of the epidemic in gory detail. The tribes were accidentally exposed by traders to a smallpox strain that was so virulent that many Mandan were dying within a few hours of presenting the first symptoms, some passing in agony even before the pustules began to erupt. Catlin wrote that maybe only 30 to 40 Mandan people survived (Catlin 1965 vol. II: 257–258). It has been established, however, that between 19 and 24 families actually survived the epidemic. It spread quickly up river, being carried on by people trading at Fort Union and reaching the Rocky Mountains by 1838. The Assiniboine were reduced by as much as 60 percent and the Arikara were likewise nearly destroyed.

Within the next few years, all but a small group of Nuptadi Mandan would join the Hidatsa at Big Hidatsa Village. The increasingly heterogeneous population of that village moved their lodges to the opposite side of the river in 1845, at an easily defensive bend that became known as "Like-a-Fishhook." That same year traders open a post that became known as Fort Berthold, which moved once after burning down. The Arikara joined Like-A-Fishhook but maintained a separate neighborhood and ceremonial facilities (Smith 1972).

The Little Missouri Badlands played a unique role a a region of refuge during times of epidemics and conflict: the Hidatsa established refuge butte sites in the badlands, as for example, Night Walker's Butte (Lippincot 2007). Hollenback 92015;1470 writes: "Site placement in in Little Missouri Badlands at higher elevations was one form of coping with the shifting sociopolitical structure in the region, increased aggression from neighboring groups, and loss of life and ontological security from Old World diseases."

Warfare

The arrival of Europeans to North America and the fur trade and epidemics that they brought caused a demographic upheaval that rippled across the continent from the Great Lakes to the Rocky Mountains. The adoption of the horse resulted in the rise of raiding episodes and endemic warfare (Ewers 1958). Competition for control of trading brokerages stoked the native war fires (Ray 1974).

Epidemics destabilized communities, particularly sedentary ones like the Mandan, placing them at a higher risk of invasion (Fenn 2014). In addition, historical events such as the Iroquoian war and the Pueblo Revolt in the seventeenth century resulted in the displacement of different ethnic groups and subgroups. The Chippewa and Cree, for example, began a westward expansion in the late 1600s that would last until the establishment of the reservation system (Zedeño and Stoffle 2003). Their expansion into the upper Mississippi and Red River valleys in turn pushed Middle Sioux or Nakota and Cheyenne groups to the west (Gibbon 2003; Westerman and White 2012). In this journey these groups encountered the migrating Arikara, not without ensuing conflict (Parks 2001). Among the most difficult geopolitical issue to bear was the loosening up of long-held boundaries and access rights (e.g., the Hidatsa's western boundary and hunting grounds, Beckwith 1938) and the shift in political alliances that had kept people in relative peace. The result was chaos, particularly as the nineteenth century unfolded, when American military expeditions as well as competition for access to buffalo herds during the hide trade brought violence to a critical height.

It is not that warfare was unheard of before European contact. The Hidatsa and the Mandan as well as the Arikara were not always allies and during times of stress they fought each other fiercely (Abel 1932). Yet, the groups knew who they were and had no qualms about it (Hanson 1983). The Arikara were particularly vulnerable to violence as they straddled, during their migration, the hunting grounds of the Teton, the Cheyenne, and the Mandan. They regrouped repeatedly during the protohistoric period as they engaged in situational sedentism (Murray and Swenson 2016). But sometime in the decade of 1790 the Arikara were pushed out of the Cheyenne River by the Teton, and were forced by them to join other communities to the north (Will 1924:303).

Tabeau stated that the Arikara became tired of war and their position of inferiority in such hostilities in relationship with the Mandan, the Hidatsa, and the Nakota (Yankton, Yanktonai, and Teton bands.) He recorded that on August 31, 1804, the Arikara offered to accept the peace pipe from the Mandan and the Hidatsa (Abel 1939:127), but a sub-tribe of the Arikara did not agree with the proposed alliance and rebelled. Thus, only nine of the remaining Arikara tribes allied with the Mandan and the Hidatsa. The unified group was planning to eradicate the rebelling tribe and had made preparations with the Mandan to destroy the renegade tribe. However, an imminent advance of Sioux warriors drew their attention away from the renegades. Lewis and Clark were witness to this event (Abel 1939:128–139). Although they lived alongside the Mandan and Hidatsa, the Arikara kept their distinctive identity as Caddoan-speaking farmers and are known and referred as such by the numerous visitors to their villages (e.g., Abel 1939; Smith 1980; Thwaites, ed. 1906; Catlin 1965).

For their part, the Assiniboine fought neighboring tribes, notably the Blackfoot and Cree initially to safeguard their enviable position as middlemen in the fur trade and, later on, to maintain control of their hunting territory against the Nakota. Lowie (1909:8) noted that the Assiniboine, at the time of Lewis and Clark, were not only in contact with the Missouri River tribes, but effectively hunted

along the north bank of the river. Their westward and southward movement as the fur trade advanced placed them increasingly at odds with the Dakota speakers, the Crow, and the Blackfoot.

Meanwhile, challenges and opportunities associated with the fur trade in the eastern woodlands of Minnesota had pushed the Nakota onto the plains beginning in the late eighteenth century (http://www.ndstudies.org/resources/IndianStudies/spiritlake/historical_migration.html). R. Galler Jr. (2008) notes that travelling across the prairie to the Missouri River Valley and hosting intertribal trade fairs led the Yanktonais to develop relations with the Missouri villagers. Yet, at times these relations turned into outright conflict. Progressive encroachment of the Yanktonai in hunting grounds instigated and inflamed warfare between these migrants and tribes already living in the northern Plains. Aided by the horse, the Sioux quickly expanded toward the upper Missouri River, and by the end of the eighteenth century had gained enormous military advantage over the Plains groups; they were not simply "playing the game of war" but attacking the Mandan, Hidatsa, and Arikara *en masse* and burning their villages (Bruner 1961; Stewart 1974:196). They continued this trend until the Mandan were practically decimated by war and plague and everyone had moved into Like-A-Fishhook Village.

The Hidatsa and Crow were close allies and defended each other, their villages, and their hunting territory (Beckwith 1938). Yet, the smallpox epidemics encouraged violence against the weakened villagers who continuously sought defend their corn stores and goods from Sioux war parties. In his biography, Mandan warrior Crows Heart, who lived thorugh the mid-1800s and early 1900s and grew up in Like-A-Fishhook Village, recorded repeated instances of village raids. He also noted that the villagers often sent war parties against other tribes (Crows Heart, n.d.). It was not unusual to lose 30 able warriors on average during a single raid. Raids affected women and children particularly, as they would be taken prisioner and sold as slaves.

In evaluating the dynamics of Plains Indian warfare it is important to point out that these were not all out wars in which entire ethnic groups confronted one another. It was common to have friends in certain enemy groups and to trade or camp with them in certain occasions such as trade fairs mentioned by Galler (2008) and large ceremonies. In the words of Standing Rock Sioux Tribe:

> When the Middle Sioux moved onto the prairie they had contact with the semisedentary riverine tribes such as the Mandan, Hidatsa, and Arikara. Eventually the Yanktonai displaced these tribes and forced them upstream. However, periodically the Yanktonai did engage in trade with these tribes and eventually some bands adopted the earthlodge, bullboat, and horticultural techniques of these people, though buffalo remained their primary food source. The Yanktonai also maintained aspects of their former Woodland lifestyle. (http://standingrock.org/history/)

Crows Heart (n.d.) mentions these relatively uneasy relationships among different groups and their volatility. Throughout this time period people travelled across the plains but not without incident. Mounted parties of villagers, sometimes accompanied by women and children riding in travois,

routinely visited the Crow. The parties would cross the Little Missouri River at the point where their trail would turn straight east toward the Killdeer Mountains. On the wooded valleys of the Little Missouri they would hunt deer, elk, and antelope (upper river), as well as trap eagles and collect colored earths (Crows Heart n.d.; Beckwith 1938). Sometimes they would be attacked while conducting these activities. For example, Park (1996:287-288) relates a story about a party of Arikara eagle trappers who were attacked by a Sioux party while on their trapping lodges. Many travelers avoided the Little Missouri during time of war, preferring instead to follow the Yellowstone River to the villages rather than to cross the Badlands (Crows Heart n.d.).

The arrival of American traders and government agents after the War of 1812 brought about a new set of political challenges to the Northern Plains tribes. Although initially American traders were interested in furs, by the 1820s the American Fur Company had envisioned a new trade in buffalo hides (Barbour 2001). Hunting buffalo for the hide trade was an activity that mounted groups readily embraced as it did not require middlemen, as noted above. Yet, pursuing the herds led to encroachment on traditional hunting territories, which in turn inflamed the already volatile political relationships of long-time residents and newcomers.

The capitalist nature of fur trading, combined with very different customs and ideologies of property, caused many tensions between the Arikara and Euroamerican traders. For example, violence between the United States military, which used Native American allies to attack Arikara settlements, changed the tone of interactions between the Arikara and Euroamerican traders. In 1822, an employee of American Fur Company trader William Ashley was killed in an Arikara settlement at Cottonwood Creek which prompted military action (Nester 2001:139–147). A joint American-Sioux force attacked the Arikara villages on Cottonwood Creek in 1823 as retribution for the previous year's events. After being shelled with artillery, the Arikara residents fled to the Mandan and Hidatsas under the cover of darkness (Nestor 2001:168–180). An 1824 peace treaty allowed the Arikara to return to Cottonwood Creek in 1825, but the tribe abandoned the villages again in 1833 due to incursions from the Sioux, tensions with Americans, drought, and crop failures (Jensen and Hutchins 2001).

Toward the mid-1800s everyone was deeply involved in the hide trade. At that time the Yankton and Yanktonai groups lived throughout the Coteau des Prairies, between the James and Minnesota rivers and west to the Missouri River. Robinson (1956:56) states that the Oto drove the Yankton and Yanktonai out of present-day western Iowa, consequently they settled in the James River Valley. They also lived around the lower Sioux River and the headwaters of the Little Sioux and Des Moines rivers. Champe cites Tabeau recording that some Yankton were hunting at the mouth of the Grand River and hunted in the territory of the Minnesota River. Tabeau also noted a band of Yankton who lived on the James River and hunted beaver on the Des Moines River, and the east bank of the Missouri River (Champe 1974:268; Howard 1972:286). The Yankton and Yanktonai also hunted west of the Missouri River, sometimes hunting with the Lakota (DeMallie 2001b:777).

Woolworth (1974:153–158) characterizes the period of 1845-1850 as a time when game became exceedingly scarce between the Missouri and Minnesota rivers, thereby causing great hardship for Yankton and Santee Dakota who occupied this region. As a result of game scarcity, these Siouan speakers pressed on toward the west and northwest. Notable Euroamericans who visited the Arikara settlements in the 1830s and 1840s made observations about the continuus violence perpetrated between the expanding Sioux, Crow, and Euroamerican groups. These observations led to the impression that the Plains tribes were exceedingly aggressive people (Catlin 1965:I:203–204; Thwaites, ed. 1906:294). As violence increased during the 1850s and 1860s, so too did political and economic disruption in the region.

The Treaty of Fort Laramie, signed in 1851, was in large part aimed at defining the homelands and hunting territories, both exclusive and joint, of the Plains tribes and thus end endemic warfare. Not every tribe attended the council or signed the treaty, however, territories were defined in the letter of the treaty and later ratified or modified for each tribe (as is the case of the Blackfoot Treaty of 1855). In 1851, four leaders, including the famous Hidatsa war chief Four Bears, attended the Treaty of Fort Laramie, where the Mandan, Hidatsa, and Arikara were assigned one reservation that originally extended, clockwise, from the mouth of the Yellowstone River to the Heart River, and to the Powder River, thus including the Little Missouri Badlands—the modern reservation is only a fraction of the original one. The Assiniboine reserved the area to the north of the Missouri River, and the Crow, Shoshone, and Blackfeet received joint rights to hunt between the Missouri and the Yellowstone. Not all the Sioux bands attended the treaty but they were reserved hunting territories in the Dakotas, Nebraska, and western Wyoming.

Many other treaties and land cessions would follow the Treaty of Laramie to the great discontent of the Plains tribes. In 1856, at Fort Pierre, Sioux chiefs from several bands were summoned to council and treaty for peace between the tribes and the United States. However, tensions were soon to flair as new settlements, white encroachment, and steamboat traffic on the Missouri disrupted Sioux life. Tensions exploded in Minnesota with the Sioux war of 1862 (Westerman and White 2012). Military and civilian forces ruthlessly sought vengeance on the Dakota regardless of participation in the uprising. All Sioux speakers in Minnesota were suspect and therefore targets. W. A. Wilson (2004:187) writes,

> The year 1862 marked perhaps the greatest turning point in the long history of our Dakota people. By the early 1860s, at the hands of the colonizers we had, for at least several decades, already faced tremendous assaults on our land, on our spirituality, on our educational system, on our communal lifestyle, on our subsistence patterns, and on our physical being. In August of 1862 Dakota people were facing starvation because the government had again violated their treaty obligations and was late in producing the gold necessary to fend off starvation. A few Dakota had finally had enough and had struck out by killing a family of white settlers in Acton, Minnesota, after a quarrel when some warriors took some eggs. The next day the Dakota officially declared war upon

the United States government and its citizens. The war, however, was short-lived, and within six weeks the Dakota were defeated by the troops organized against them.

As fleeing Dakota left Minnesota and entered the lands of their relatives, the Yankton and Teton, the military continued their pursuit. American generals Sibley and Sully led army forces against the Sioux, Sibley from Minnesota, and Sully by ascending the Missouri River. Sully's forces fought through the summer of 1864, pursuing the fleeing Santee from Minnesota. At Killdeer Mountain, near the Little Missouri River in North Dakota, Sully killed many Yanktonai and Teton who had nothing to do with the uprising (DeMallie 2001b:781).

In the years 1861–1862, various bands of western Sioux pushed the Crow to the Rockies, attacked the Mandan and the Hidatsas at Fort Berthold killing the great Four Bears, and attacked the remnant Arikara village near Fort Clark. Faced with such aggression, the Arikara abandoned their village near Fort Clark (Barbour 2001:215). The Arikara, feeling the treat on their numbers, moved up the Missouri River and built two villages on the opposite bank of the Missouri from Like-a-Fishhook Village, amalgamating, by 1862, with the Mandan and Hidatsa at Like-a-Fishhook (Murray and Swenson 2015). Parks (2001) states that by 1872, the Arikara section of this village consisted of 43 earth lodges and 28 log cabins, many of which lied outside the village's palisade, thus suggesting ethnic differences were still hard at play during this period.

De Mallie (2001b:781–783) notes that after the conflict between the Sioux and the United States, Peace Commissions were established from 1865 to 1868. The United States government made treaties with all Teton and Yanktonai bands on the Missouri River. Although the intent of these treaties was to establish peace in the region, many Sioux protested the provisions of the treaty, which favored the United States and its colonial interests (Westerman and White 2012). Nonetheless, the U. S. Senate ratified the treaties into law. The Treaty of 1868 established the Great Sioux Reservation in South Dakota west of the Missouri River. All other lands in North Dakota and South Dakota, not previously reserved, were ceded to the United States. The United States government had thought to contain all Sioux people into a relatively small area by creating the "Great Sioux Reservation", but not all Sioux people wanted to live in western South Dakota. More significantly, not all Sioux people wanted to live in such close proximity with all the other Sioux bands that were encouraged to settle on the Great Sioux Reservation.

The Sioux wars of the 1860s brought the Assiniboine and the Yanktonai close together, as the latter refused to settle in the South Dakota reservations. Some Sioux who were still following the bison herds roamed into Montana Territory. More than a thousand Yanktonai ventured to Fort Buford on the Missouri River just near the present border between North Dakota and Montana in the fall of 1869. These Sioux told the commanding officer of the fort that they wished to receive annuities and that they were not yet bound by a treaty. The Yanktonai population more than doubled the following summer. In 1870, Black Eye's band of Lower Yanktonai came to the region, encamping at the mouth of the Poplar River in present day Montana, upstream from Fort Buford. In 1871 there

were 250 lodges of Yanktonai, Yankton, Teton, and Santee Dakota encamped downstream from the Milk River Agency, which was the agency for the Gros Ventre and the Assiniboine. This collection of Sioux and Assiniboine became the Fort Peck Reservation in 1874 (DeMallie 2001b:787). However, definite boundaries were not set until 1888, which included cession of all claims to land outside the reservation boundaries for the Yanktonai, Yankton, and Assiniboine who lived there. They participated in the Ghost Dance movement of 1890 (Mooney 1991).

The early 1880s brought many changes and much suffering. By 1881, all the buffalo were gone from the region. Coinciding with these dramatic changes was the surrender of rebel Sioux leader Sitting Bull at Fort Buford on July 1881. Thereafter, some of his followers, as well as the Yanktonai, remained near Fort Peck and eventually settled and intermarried with Assiniboine. The years 1883 and 1884 are marked by the starvation death of over 300 Assiniboine at the Wolf Point sub-agency and of 400 Blackfeet at Old Agency.

For the villagers, life was only slightly easier as they could sustain themselves and their traditions with farming. But the influence of Euroamerican culture was insidious, causing much distress among tribespeople. In 1894, a small band of Hidatsa and Mandan, led by a Hidatsa proper named Crow-Flies-High, split from Like-a-Fishhook Village and remained in self-imposed exile until 1894, when the band was marched back to the Fort Berthold Indian Reservation (Fox 1988). Crow-Flies-High was a respected warrior but had his own ideas about tradition and governance, and that placed him at odds with his elders. Thus, when leadership of the council at the village came into question, his band broke away (Bowers 1965). According to Crows Heart (n.d., chapter 14):

> Crow Fly High took all his relatives and said that there were buffalo out west instead of the government rations. They took the medicine of the Sun Naxpike along and there were very few left at the old village so it really went west for they held [the ceremony] regularly up there. They did not come back to visit but the rest of us would go out there a great deal visiting for there were buffaloes up there yet and we would go by there visiting when out on the hunt.

From encounters with rancher Marquis de Mores in the early 1890s, it is known that the Crow-Flies-High band frequented not only the Yellowstone River but the upper Little Missouri River, and it is possible that they had an encampment or even a small temporary village by Squaw Creek, near the X Ranch site. This particular piece of information comes from a permanent exhibit case at the Three Affiliated Tribes Museum in New Town, North Dakota, but an independent reference to it has not yet been found. Eventually, disputes with settlers and worries that the band would not cooperate led the US government to coerce them into returning to the Fort Berthold Indian Reservation. In 1894 they were forced to leave their village and escorted back to Fort Berthold (Malouf 1963). The site of Crow-Flies-High's village now overlooks the Four Bears Bridge in New Town.

Lone Man's World

According to Crows Heart (n.d.: 211-216), the villagers sought to keep their ceremonial life and practices (e.g., chasing the few remaining buffalo on the Little Missouri River) despite pressure from missioners, government agents, and their own converts. The last Mandan Okipa ceremony was held in 1895:

> Spotted Eagle was last to give Okipa who was Medicine Stone's syster's son and was Tamisik and after moved out onto reservation. … There was a big crowd, even Sioux and whites came to watch it. … At this last Okipa all the buffaloes were gone but the people had lots of corn and vegetables and I went out hunting as did all the others and got deer and that was the principal thing we ate. I had an ox team and a cow that the government gave me but I could not kill them. There were only a few cattle around that time. There were Arikara, Crow, Blackfeet, Gros Ventre, Sioux, whites and they were camped around in tipis all mixed up so they didn't have to fight…
>
> There were only two Indians I know who wouldn't come because they were going to the Christian church, Poor Wolf who was one of the first to join the Congregational Church and the other was Hawk and they kept their families away too. We felt that the end of the old times had come and that it was getting hard to give the ceremony so we were not surprised when it was never given again. People still dreamed of it but they gave feasts to the cedar and to the drums or to the bundles but we never got together like that again.

In the summer of 2004 Zedeño and her colleagues visited the late Luther Grinnell, a Mandan-Hidatsa elder and World War II veteran who had lived his entire life in the Fort Berthhold Indian Reservation. We asked him about movement and trails. He told us that the trails he took begin and end in the reservation. And yet, Highway 2, the "High Line," follows the old Missouri River trail tribes took long ago; today they continue to follow this trail to visit one another by driving on the highway.

EUROAMERICANS IN THE BADLANDS

INTRODUCTION

> For hour after hour, flatness gave way to more flatness, and Roosevelt must surely have tired of pressing his face against the unrewarding glass. Perhaps he slept, lulled by the steady rush of air and wheels. If so, he missed seeing a corrugation on the western horizon, shortly after midnight; then, within minutes, all geological hell broke loose. On both sides the landscape disintegrated into a fantastic maze of buttes, ravines, mudbanks, and cliffs, smoldering here and there with inexplicable fires. Pillars of clay drifted by—more and more slowly now, as the train snaked down into the very bowels of the Badlands. A sluggish swirl of silver water opened out ahead; the train rumbled across on trestles, and stopped near a shadowy cluser of buildings. The time was two in the morning, and the place was Little Missouri. (Morris 2001:186)

Since the 1880s, Euroamerican ranchers, farmers, and entrepreneurs have established permanent residency near THRO. The Badlands have played an important role in several capitalist ventures including cattle ranching, farming, and oil production. Theodore Roosevelt's tenure on the Badlands left an indelible mark. For the rest of his life, Roosevelt believed experiences in natural landscapes were important to the character of Americans as a people. He devoted much effort toward using his political authority to protect vast expanses of our country from industrial development to be used by future generations. During the early twentieth century, North Dakotans embarked upon a campaign to set aside a portion of the Badlands as a national park to be dedicated to Theodore Roosevelt's spirit of outdoor recreation. In this chapter we aim to provide a framework for understanding how Euroamericans have used the park's resources and how the park's landscape has shaped the way they view their society.

FUR TRADING AND EXPLORATION IN THE BADLANDS, 1800S – 1860S

Native Americans were the principal users of the Badlands prior to the nineteenth century. Cultural remains suggest that most activity in this area was devoted to resource procurement. The Badlands were also an area of refuge where war parties could pass unnoticed and Native people could escape aggressors. The region might have been known to Europeans prior to the first documented visitation as French-Canadian fur trappers named the area "les mauvais terres pour traverse," or "bad lands to travel through" (Morris 2001:198) by the early 1800s. It is unknown if the name was gleaned from interactions with Native Americans or first-hand experience. The first non-Native American known to have entered the region that is now Theodore Roosevelt National Park was Jean Baptiste Le Page who was a French-Canadian fur trapper that descended the Little Missouri River to join the Lewis and Clark Expedition in the winter of 18041805. Le Page was headed to Fort Mandan at

that time. Lewis and Clark would pass the mouth of the Little Missouri on April 12, 1805, but they did not venture into the Badlands (Petty 1968:388).

Steamboat traffic along the Missouri River to Fort Union began in 1832, bringing hundreds of non-Native travelers past the mouth of the Little Missouri. Few of these individuals trekked into the Badlands. The threat of Sioux attacks and reports of the difficult landscape deterred most travelers. Early reports mention vast buffalo herds, elk, deer, antelope, and Audubon sheep in the Little Missouri region. The first account of Euroamerican hunting along the Little Missouri comes from the 1848 report of an Irish hunter named John Palliser. At this time, game, particularly grizzly bear, was plentiful in the Badlands. Palliser took grizzly and buffalo between the Killdeer Mountains and the Little Missouri in a region that may have included the landscape that is now part of the park (Petty 1968:389–390).

The earliest Euroamerican presence in the Badlands came when Brigadier General Alfred Sully campaigned against the Sioux in 1864 following an uprising against Euroamericans in Minnesota. Sully engaged a large Sioux encampment and, upon attack, the Sioux took refuge in the Badlands. Following the battle, Sully's forces traversed the Badlands via the Little Missouri to a point just south of present-day Medora (Petty 1968:390). Railroad surveys during 1871–1872 brought both military and civilians through the Badlands. In 1871, Major Joseph N. Whistler escorted a party across the Badlands near the present south boundary of the park (Petty 1968:391). The military presence in the park continued during the 1870s. In May and early June of 1876, Lieutenant Colonel George A. Custer passed through the Badlands on his fatal campaign with the Sioux at Little Bighorn. He camped along the Little Missouri at a location about five miles south of Medora (Petty 1968:392).

HOMESTEADING, RANCHING, AND SETTLEMENT, 1860S–1880S

Making a living was difficult in the Badlands of North Dakota. Despite the numerous land ordinances that facilitated homesteading and ranching, few were able to wrest a profitable living from this landscape. Its beauty concealed the aridity and spotty forage that caused hardships for Euroamerican agriculturalists. Non-Native emigrants arrived to the area that would become Theodore Roosevelt Park during the second half of the nineteenth century. They hoped to create homes and towns that would serve as testaments to their hard work. The town of Medora was founded by ranching interests but it was the agrarian families of the Badlands that sustained this settlement into the twentieth century. Eventually, large ventures like a meatpacking business started by the Marquis de Mores were joined by family businesses and smaller enterprises.

While life was hard work for those who lived here permanently, the beauty and wildness of the Badlands caught the eye of one of America's most ardent conservationists—Theodore Roosevelt. The time spent riding the range was an indelible period of his life. The conservation movement in

the United States would be forever changed from the time Roosevelt arrived in the Badlands. It was here where he realized the important role that open spaces play in the American identity. In the future, he would take action to make sure open spaces would be available to future generations.

Arid Lands Ranching in the Badlands

In the United States, farms and ranches have always been both businesses and homes. These home-based businesses are central actors in an extensive complex that produces agricultural products both for use on the homestead and for sale within larger markets. Buildings, plants, animals, and people on a farm must be oriented toward efficient output and functionality. In the vicinity of the Theodore Roosevelt National Park, ranches and farms provided the livelihood for the majority of county residents. Agricultural opportunity was the primary reason for Euroamerican settlement of the area until the development of petroleum production during the second half of the twentieth century. One way to view life in the farm families of the North Dakota Badlands and the rest of the United States is to investigate their role in the greater capitalist system.

Throughout its history, agriculturalists in the United States moved into cash crop production as soon as they could progress from subsistence farming. By the nineteenth century, most Euroamerican farms focused on cash crops while also providing for household needs. Agrarian people believed they were producing agricultural products as efficiently as possible within the technological and environmental limitations of the time. Government policies, such as the military land warrants (1847 and 1855), General Homestead Act (1862), Indian Homestead Act (1875), and the Stockraising Homestead Act (1916), promoted the spread of agriculture in the American West (Gates 1963, 1964; Mosk 1963; Shannon 1963). The North Dakota Badlands were no different. Farmers and ranchers in and around Theodore Roosevelt National Park were responding to supply and demand economics on a local, regional, national, and international level (Terrell 2006:22–26).

The capricious combination of nature, market conditions, and the ever-increasing costs of maintaining a productive and profitable farm or ranch were daunting forces that frequently drove many aspiring agriculturalists out of business. The success of Euroamerican agriculture was also a curse: increased, efficient production lowered the prices for farm products, requiring larger investments in land, labor, or machinery in order to increase production. Farmers and ranchers at the close of the nineteenth century found themselves squeezed by ever-shrinking prices for agricultural products and rising operating costs. In order to stay afloat, farmers and ranchers always had to increase production and efficiency or seek outside work (Terrell 2006:22; VanBueren 2004:19–21).

Life for most Euroamericans in the Badlands revolved around ranching, but productivity and profits were only a small part of ranch life. Ranching households have received significant coverage in the historical and archaeological literature (examples include Adams 1990; Cabak et al. 1999; Fite 1966, 1981; Limerick 1987; Stein 1990; Terrell 2006). Through the hard work of maintaining a ranch, families took a pragmatic, conservative approach. Money was scarce, so ingenuity and labor

was used to compensate. Ends were met without spending money. Ranching households operated in a similar manner with regard to consumerism, flexible adaptability, and social conservatism as other working-class and middle-class Euroamerican families. Despite their remoteness, rural households held similar beliefs, values, and practices of urban Euroamericans. They just had to work harder to make these memes a reality.

During the late nineteenth and early twentieth centuries, all Americans were influenced by the wider movements of the day: mass production, advertisement, the expansion of corporatism, social inequality, and labor advocacy (Bucheli et al. 2007; Cook et al. 1996; Stine 1990; Van Bueren 2004:19–20; White 1991:319–320). In the face of these economic forces, rural households maintained a frugal approach to life and consumption. Being closer to the means of production gave rural households a higher degree of self-sufficiency than most urban households. This self-sufficiency decreased greatly after 1900 as mass production and transportation improvements reduced the cost of items that were formerly considered luxuries (Van Bueren 2004:23–24). Eventually, even the most self-sufficient rural households were unable to resist the abundance of cheaper, mass produced products.

The Realities of Ranching in the Badlands

In the process of describing the expansion of cattle ranching in the Great Basin, historians James A. Young and B. Abbott Sparks (2002:xiv) explain the fragility of sagebrush grasslands in the arid west:

> The potential of the environment to support plant and animal life was limited by lack of moisture and often by accumulations of salts in the soil. The native vegetation lacked the resilience, depth, and plasticity to cope with concentrations of large herbivores. When faced with grazing herds of cattle, the plant communities did not adapt; the shattered.

While the grasslands of North Dakota are different than those in the Great Basin, they were still susceptible to environmental degradation from overstocking and poor ranching practices. This is especially true for the Badlands. The North Dakota grasslands had supported herds of bison, elk, and deer for thousands of years. Most of the North Dakota grasslands could easily support cattle herds, especially after the bison herds had been eliminated, as long as the ranchers remained mindful of the environmental impact of their actions. The unique topography and environmental conditions of the Badlands, however, made cattle ranching a more precarious endeavor. Conditions were arid here. Forage was much less robust. The prime grazing lands near the Badlands had been removed from the public domain under the various land tenure acts by the early 1900s leaving behind only submarginal lands. Badlands ranchers used this landscape to supplement privately owned lands.

Ranching in what would become Theodore Roosevelt National Park began in the wake of the Civil War as ranchers based in Texas looked to expand their enterprises. Cattle ranching in North Dakota was an extension of Spanish colonial animal husbandry techniques that were adapted for life in the New World during the sixteenth and seventeenth centuries. The Spanish were well acquainted with livestock herding, specifically sheep and cattle, and they brought these skills with them to their colonies in the Americas. This knowledge continued during the Mexican Period (1821–1845). It was from Hispanic ranchers that Euroamericans learned how to herd cattle in open country and drive them en masse across large distances. Euroamerican cattlemen in Texas employed Hispanic ranching techniques with great success and became major players in the beef industry. It was these Texan ranchers that brought large-scale stockraising to North Dakota (Mattison 1950).

During the Civil War, the Union blockade of the Atlantic and Gulf coasts and control of the Mississippi River prevented Texas cattlemen from exporting their livestock. Their growing herds quickly overstocked the range in Texas (Mattison 1950:4). It was these conditions that prompted cattlemen in the region to look elsewhere for pasture as soon as hostilities ceased. Explorations in the 1870s made Texas ranchers aware of the fruitful conditions on the open ranges of the Dakotas but three main factors prevented them from driving their livestock north at that time: the great buffalo herds that still roamed the range, lack of rail transportation, and Native Americans were at threat (Mattison 1950:2–3).

By the 1880s, conditions had changed. The Northern Pacific Railway crossed the region in 1879–1880, the U.S. Army crusade against the Sioux largely eliminated them as a threat, and pressure from Euroamericans prompted the U.S. Government to dramatically decrease the size of the Sioux reservation opening vast areas of grassland to exploitation (Mattison 1950:2–5). These events created conditions suitable for the expansion of large-scale cattle ranching in the Dakotas, including the Badlands.

The role Texas cattlemen played in the development of ranching in the northern Plains cannot be overstated. Mattison (1950:4–5) explained; "Many of the unwritten laws regulating the range had origins in Texas. The Texans were early to see the possibilities of the northern plains region as cattle country. They were among the first to enter." Cow hands from Texas taught ranchers from other parts of the world how to manage large herds on the open range. Investors from the eastern United States and Europe, who were familiar with profitable ranching in Texas, were encouraged by stories of easy money that could be made from the free grass of the Dakotas. By 1881, the cattle boom had begun (Mattison 1950; Welsh 1955).

From 1880 to 1886, cattle surged toward the Dakotas from Texas with smaller numbers coming from ranches to the east. Despite the fact that the Badlands had been characterized as a barren wasteland, ranchers that understood the variegated landscape of the region thought it still provided opportunity. The first large-scale cattlemen along the Little Missouri in the region that would become the park arrived in 1883. Among them was Theodore Roosevelt who purchased the Maltese

Cross and Elkhorn Ranches, the Marquis de Mores who started a meatpacking and processing facility at Medora, and Pierre Wibaux who started his first herd along the Big Beaver River in Montana (Mattison 1950:9; Welsh 1955:4–7).

At that time, the area from Dickinson to Medora remained unclaimed grasslands that were open for the taking. Reports from Medora during 1884 and 1885 emphasized the suitability of the region for ranching and directed their advertisements to cattlemen on overstocked lands in Texas and the southern Plains. Newspapers described the abundant grass, ample water sources, and sheltered gulches in the Badlands that provided otherwise excellent conditions for large-scale ranching. Roosevelt himself promoted the region in newspaper articles he wrote, however, he also understood that the experiment of ranching had not yet been proven. In 1886, he wrote; "The excellence of the Bad Lands as a country for fattening steers has been proved beyond all doubt; as yet it is too early to say definitively how it will turn out as a region for raising stock…" (Mattison 1950:9–13).

The early 1880s boosterism was successful. By 1885, the cattle industry was well established in Billings County. Approximately 30 percent of the 737 people in the county were engaged in stock raising (Golpen 1947:7). By this time, nearly all of the available range along the Little Missouri had been occupied. Most of this country was utilized by large outfits that were financed by eastern or foreign capital (Mattison 1950:13; Welch 1955). In 1885, Roosevelt's Elkhorn Ranch supported an estimated 1,000 head of cattle with another 500 calves—approximately $4,500 in livestock. Merrifield and Ferris, two of Roosevelt's partners, were running an additional 2,250 head and 650 calves on the Maltese Cross Ranch that were worth another $6,600 (Mattison 1950:13). The Marquis de Mores was also running hundreds of head of cattle in Billings County.

Despite the wealth of cattlemen and cattle on the Badlands, ranching remained an untested experiment. The industry was barely a decade old in this region and these capitalists had never been tested by the vagaries of weather on the northern Plains. The winter of 1886–1887 was the first test for the ranching industry. Conditions were amiable for ranching during 1885. Abundant rain had resulted in excellent pastures and the winter of 1885–1886 was mild, which further enticed cattlemen to bring their livestock north even though the Dakota ranges were already overstocked by this time. A late spring and dry summer during 1886 created a bleak outlook for cattlemen, who were joined again by large droves of cattle from outside the area. By the fall of 1886, the prairies of the West Missouri Slope and Badlands were severely overgrazed and the normal fall rains did not come (Mattison 1950:14–15; Welch 1955:8–9). The grasslands collapsed. Animals could not strengthen themselves for the upcoming winter.

The immense herds across this region, which were already weakened by conditions during the summer and fall, were met with a particularly severe winter that featured several blizzards and deep freezes in December and January. Warm weather finally melted the snow in March, 1887 and cattlemen began counting their losses. By the roundups of late summer, it became clear that thousands of head of cattle on the Badlands had died. Although no official figures of the loss

survive, an estimated 75 percent of all the cattle on the Badlands were lost (Mattison 1950:15; Morris 2001:376; Welch 1955:8).

The hard winter of 1886–1887 saw the demise of large-scale ranching across the open prairies of the Badlands. Roosevelt's and de Mores's were among the dozens of Badlands ranching outfits that went out of business due to their extraordinary losses. Outside investors that had been backing these ventures pulled their funding and liquidated the remaining herds in an attempt to salvage what they could. The winter did much to end the Marquis de Mores' plan of shipping frozen beef on refrigerated boxcars out of Medora. He was out of business by 1887 (Mattison 1950:15–16; Koster 2008:23). While many outfits suffered horrible losses, several cattlemen like Pierre Wibaux were able to purchase the remaining livestock at deeply discounted rates. Wibaux laid the foundation for prosperity during the 1890s from this event (Welch 1955). The demise of large-scale ranching in 1887 was a pivotal moment in Badlands history because, with the withdrawal of outside investment, the region became dominated by smaller outfits that provided feed and shelter for their animals in winter. During the 1890s and early 1900s, homesteaders acquired most of the suitable grazing land, removing it from the public domain. The free ranges were closed (Mattison 1950:16). The stage was set for community development on the Badlands.

Theodore Roosevelt in the Badlands, 1883–1892

During the years from 1884 to 1892, Roosevelt spent much of his time in the Dakotas. While he was away from New York, he familiarized himself with all seasons in the Badlands and northern Great Plains. These transformative experiences were documented in three books written at the end of the nineteenth century: *Hunting Trips of a Ranchman* (1884), *Ranch Life and the Hunting Trail*, and *The Wilderness Hunter* (1893) (Cutright 1985:151). In addition to describing Roosevelt's thoughts on masculine outdoorsmanship, they are also first-hand accounts of what life was like in the American West at the close of the nineteenth century. In *The Wilderness Hunter*, Roosevelt describes life on the Elkhorn Ranch:

> No life can be pleasanter than life during the months of fall on the ranch in the northern cattle country. The weather is cool; in the evenings and on the rare rainy days we are glad to sit by the great fireplace, with its roaring cottonwood logs. But on most days not a cloud dims the serene splendor of the sky; and the fresh pure air is clear with the wonderful clearness of the high plains. We are in the saddle from morning to night (Roosevelt 1893:20).

The plan for his first trip to the Dakotas was born from a conversation in early 1883 with H.H. Gorringe. Roosevelt had recently finished law school at Columbia and had been elected to the New York Assembly. Like other Euroamerican big game hunters, Roosevelt had long wanted to hunt buffalo on the Plains. From his personal experiences in the Dakotas and Texas, Gorringe assured Roosevelt that buffalo could still be hunted in the Little Missouri Trench. Roosevelt agreed to travel to the region later that year, even though Gorringe could not make the trip. He arrived in the

Badlands of the Little Missouri on September 8, 1883 and was immediately taken aback with the natural beauty and abundance of wildlife (Cutright 1985:144–145; Morris 2001: 186; Nelson 1957:171). Roosevelt was 24 years old.

According to Roosevelt's writings, the scenic and natural beauty of the Badlands became the iconic image that he considered the quintessential essence of wild areas. The Badlands are characterized by undulating prairies are dissected by cottonwood-flanked streams and rivers with vast expanses of canyons striped with different colored soils. Extreme temperatures range from more than 100 degrees Fahrenheit in the summer to negative 40 degrees in winter. It was a place that challenged Roosevelt unlike anywhere he had experienced to that point in his life (Cutright 1985:144–146; Jack 2011:275–281).

Upon arriving in Medora, Roosevelt searched for local ranchers to help him find bison to hunt. He quickly found Joe Ferris who was the proprietor of the Maltese Cross Ranch (Morris 2001:191). The Maltese Cross was operated by Ferris, his brother Sylvane, and Bill Merrifield, a Canadian cowboy who had moved to the Dakotas around 1880. Still in their early twenties, the young operators of the Maltese Cross Ranch were surrounded by other young, self-reliant ranchers that included the first wave of European emigrants. Resolute and pragmatic, the Badlands ranchers suffered from a lack of capital for which to improve their enterprises. In order to expand, they even were willing to take investments from New Yorkers like Roosevelt (Cutright 1985:146–148).

Roosevelt convinced Ferris to guide his first buffalo hunt, which was conducted for over two weeks in poor weather and across rough terrain. The Badlands ranchers were impressed by Roosevelt's ability to endure hardship. After two weeks of searching, Roosevelt managed to kill an impressive buffalo. He shipped the head and skin back to New York for taxidermy. This hunting trip and experience with the Ferris brothers, along with discussions of the impending cattle boom, had impressed Roosevelt so much that he decided to go into ranching. Upon the conclusion of his first trip, he named Merrifield and Sylvane Ferris the managers of his ranching enterprises at the Maltese Cross and capitalized the venture with $14,000 (Cutright 1985:146–148; Nelson 1957:171).

Drawing upon a lifelong interest in wildlife, Roosevelt immersed himself in observing the different landscapes of the Badlands. He described the area surrounding the Elkhorn Ranch in numerous writings. While working the land as a rancher, Roosevelt also noted the various game animals in the vicinity like grizzly bear, elk, buffalo, antelope, mountain goat, and bighorn sheep and smaller animals such as skunks, packrats, owls, rattlesnakes and a number of different songbirds (Cutright 1985:151–156).

He acquainted himself with all the different ecological zones of the Badlands, but remained fascinated by the lonely openness of the grasslands. Roosevelt visited the semiarid grasslands almost daily, writing in 1885, "*Nowhere, not even at sea, does a man feel more lonely than when riding across the far-reaching, seemingly never-ending plains; and, after a man has lived a little while on or near them, their very vastness and loneliness and their melancholy monotony have a*

strong fascination for him" (Cutright 1985:155; Jack 2010:277). During the 1880s and early 1890s, Roosevelt took several backcountry hunting excursions to mountainous landscapes further west in Idaho, Wyoming, and British Columbia. His enjoyment of the backcountry was further deepened from these treks as he continued closely observing landscapes, plants, and animals in these areas (Cutright 1985:158).

Elkhorn Ranch History and Layout (1883–1898)

Before returning home to New York in the fall of 1883, Roosevelt purchased the Maltese Cross Ranch south of Medora. He charged Ferris and Merrifield to look after its cattle and serve as the foremen. He also prompted them to purchase more cattle. In 1884, Roosevelt returned and learned that the herd at the Maltese Cross wintered well. He began looking for a second ranch site, which he located in June, 1884 about 35 miles north of Medora. This property would become the Elkhorn Ranch. Roosevelt purchased a site already occupied by a small hunting shack for $400; however, research has revealed that the location upon which the Elkhorn Ranch stands had been granted to the Northern Pacific Improvement Company in the late 1870s. The Company received its patent for this land in 1906 and it was sold by the Company in 1918 (Mattison 1960a:52–54).

Despite suffering the death of his wife and mother as well as a political defeat in 1884, Roosevelt continued working on his ranching enterprises in the Badlands. In 1884, Roosevelt called for his companions William W. Sewall and Wilmot Dow to come out from Maine and manage the operations at the Elkhorn. Neither Sewall nor Dow had any experience in cattle ranching. Sewall and Dow were joined by Bill Rowe and the crew worked on constructing the buildings at the Elkhorn for the remainder of 1884. By mid-December the walls were erected. The roof was shingled and floor installed by February, 1885. The main ranch house was completed in the spring of 1885 (Mattison 1960a:53; Morris 2001:294).

In the spring of 1885, Roosevelt stocked the Elkhorn and increased the herds at the Maltese Cross. Over 1,500 cattle were purchased in Minnesota and shipped to Medora for Roosevelt's ranches. A portion was driven to the Maltese Cross while the remainder were sent to the Elkhorn 9Morris 2001:295). Construction on the Elkhorn continued throughout 1885. Roosevelt returned in August with Sewall's wife and child and Roosevelt's second wife. The Roosevelts went back to New York during the winter of 1885–1886, but six people were living at the Elkhorn at that time: the three Sewalls, Mr. and Mrs. Dow, and Bill Rowe (Mattison 1960a:54–55).

Roosevelt spent much of 1886 traveling the Dakotas and Rockies. By this time, the range had been greatly overstocked and the outlook for the Maltese Cross and Elkhorn operations was not good. This discouraging outlook, along with the hardships and loneliness of raising a family in the Badlands, caused Sewell and Dow to leave the ranching business in the fall of 1886—just before the disastrous winter. They were released from their contract with Roosevelt on September 22, 1886 and returned home to Maine. Management of the Elkhorn was turned over to Ferris and Merrifield (Mattison 1960a:55, 1960b:141).

Roosevelt's ventures as a cattleman came to an abrupt end due to the tragic winter of 1886–1887. This was one of the worst winters in history. Roosevelt lost an estimated $50,000. He would not reverse this financial misfortune for years to come. Tax records show Roosevelt suffered a 40 percent loss in the hard winter of 1886–1887. It broke his enterprises in the Badlands. Despite the financial loss, Roosevelt would always consider his time spent in the Badlands as one of his most cherished experiences, stating that he "would take the memory of my life on the ranch with its experiences close to Nature and among the men who lived nearest her" over all the other experiences of his life (Cutright 1985:161; Mattison 1960a:56–58).

Roosevelt continued to actively maintain both ranches until 1890. Merrifield may have remained at the Elkhorn until 1891 even though Roosevelt pretty much abandoned the ranch in 1890. He visited the Elkhorn in 1892, 1893, and 1896. He left his herds to dwindle. The decision to dissolve the Elkhorn Ranch was made before Roosevelt left to lead the Rough Riders during the Spanish-American War in 1897. He charged his brother-in-law to sell his ranching interests in North Dakota for whatever price he could get. The properties were sold to Ferris soon after (Mattison 1960a:56–58; Nelson 1957:174).

In the next several years, the Elkhorn Ranch was used by other cowboys and hunters before the buildings were dismantled by local ranchers. In 1898, a rancher that once worked at the Elkhorn visited Ferris in Medora and had a conversation about salvaging the lumber from the ranch. With Ferris' consent, the rancher hauled away almost all the lumber at the Elkhorn Ranch. A former Badlands stockman informed Roosevelt in late 1901 just after he assumed the presidency that nearly every scrap of the buildings had disappeared from the ranch site (Mattison 1960a:58; Nelson 1957:174).

Despite his financial losses and eventual retirement from ranching, Roosevelt won the love and respect from the people who saw him work hand in hand with local ranchers and smile at the sight of the land. As Morris (2001:378) notes, this leadership was something people craved, spreading across the country. He quotes Roosevelt's saying, *if it had not been for my years in North Dakota I never would have become President of the United States.*

The Roots of Roosevelt's Environmentalism in the Badlands

These experiences in the Badlands galvanized Roosevelt's resolve to discover a way to set aside nature preserves where future Americans could experience recreation in unsettled spaces. He had seen the environmental damage wrought by overgrazing. He watched as increased settlement in the American West had an adverse effect on wildlife, especially big game animals. An avid hunter, Roosevelt and other big game hunters came to the conclusion that the only way to provide for their own adventures and future generations was to establish nature reserves where the land base for these animals would allow them to exist as the west was settled (Cutright 1985). They also believed outdoor experiences were important for surviving the modern world. Roosevelt wrote; "…after a little experience roughing it, the hardships seem a good deal less formidable than they formerly

did" (Jack 2010:278). While he was writing about spending outdoors, this line from Roosevelt also expresses how roughing it could make everyday life in urban spaces more bearable for those who had the time.

In the 1870s, Roosevelt enjoyed conversations with George Bird Grinnell. Grinnell had much more experience in the West than Roosevelt and had witnessed widespread environmental degradation in previously intact environments across the country (Cutright 1985:167–168). This environmental degradation was also taking place in the eastern United States, but the iconic open spaces of the West had come to characterize the country by this time (Cutright 1985:170–171). Euroamericans had affixed their cultural identity to the pioneers, Native Americans, and iconic animals of the west so the loss of these ideological symbols bore a disproportionately larger existential impact than the polluted streams of Manhattan.

During the 1880s and 1890s, Roosevelt was intimately involved in a conservation movement that was spearheaded by a group of upper class sportsmen who were working in their best interests. A deep-seated vein of masculinity based on hunting and backwoods experiences was at the heart of conservationist groups such as the Boone and Crockett Club. The editors of leading outdoors magazines like *Forest and Stream* (1873) and *Field and Stream* (1874) conveyed these sentiments to large audiences through their publications (Cutright 1985:167–169). Sportsman's groups used these periodicals as platforms where they could discuss the scientific management of forests, game, and the prevention of pollution. By the 1890s, these groups were using their political influence to shape government conservation efforts. Roosevelt was integral to this process, both as an author and rising political figure (Cutright 1985:169–178).

Roosevelt also believed in harnessing scientific observation in order to base political decisions. In the 1890s, he oversaw an investigation of conservation and game management in New York State. The study revealed that government mismanagement and polluting industries were degrading reserves in the Adirondacks and Catskills. Logging was particularly destructive to forests near nature reserves (Cutright 1985:203–206). He realized at this time that nature reserves required skilled management, frequent assessment, and scientific management in order to persevere. The 1899 nomination of Gifford Pinchot as the chief forester and head of the Division of Forestry in the Department of Agriculture by the McKinley Administration was fortuitous because Pinchot had been studied forestry in Europe where the science had been in existence for over a century. During his presidency, Roosevelt collaborated with Pinchot to establish a plan through which millions of acres would be set aside as forest reserves and national parks during the early 1900s (Cutright 1985). This combination of scientific study backed by governmental administration would become the backbone of conservation through national parks and forests in the United States.

BUILDING COMMUNITY IN THE BADLANDS, 1880S–1960S

The seeds for the community of Medora were sewn during the cattle boom of the 1880s, but they did not mature until the early 1900s. There was almost no cattle ranching in the Badlands prior to 1881; however, the cattle boom of the 1880s provided an impetus for the first Euroamericans to stay long-term in the area (Golpen 1947:6). The first non-Native American settlement on the Little Missouri in the vicinity of Medora was established in 1879 by the U.S. Army. The Bad Lands Cantonment was built on the west side of the river near where a Northern Pacific Railroad bridge was projected to cross the river. This post was created to protect railroad workers from Native American attacks. A post office named Comba after the base commander was established in the Cantonment in 1880 (Mattison 1950:18; Williams 1973:30). Until 1883, this small military outpost was the only settlement along the Northern Pacific line in the Badlands. Several businesses and buildings were constructed near the Cantonment including the Pyramid Park Hotel, a bar, and the railroad facilities. The Cantonment was abandoned just before the establishment of the town of Medora and the small number of buildings and businesses were folded into the new town. The village was greatly expanded after the arrival of the Marquis de Mores, who played an instrumental role in the establishment of the town of Medora (Koster 2008:22; Mattison 1950:16–19; Williams 1973:30).

Antoine Amédée Marie Vincent Amat Manca de Vallombrosa, Marquis de Mores was born in Paris in 1858 to a noble family. His paternal ancestors moved from Spain to Sardinia in the seventeenth century and, as a result of their military services to the Spanish Empire, were awarded a fiefdom named the Marquisate de Mores. De Mores was well educated attending a number of prestigious private schools, graduated from the Jesuit College of Poitiers in 1877 and was admitted to the military school of St. Cyr later that year. In 1879, de Mores was accepted to the finest cavalry school in France—Saumur. He was assigned to a military unit in Maubeuge in 1880, but resigned from the military in 1881 in order to pursue a more exiting lifestyle (Golpen 1947:9–10).

De Mores fell in love with Medora von Hoffman during a trip to Paris. Hoffman was the daughter of a successful Wall Street banker and her family regularly vacationed in France. The couple was married in 1882 in Cannes and they set off for the United States later that year. In New York, de Mores became convinced of the possibility for huge profits in the cattle industry. The exciting tales of hunting the wild lands of the Dakotas told by his cousin, Count Fritz-James, fuelled the Marquis' imagination. The decision to come to the Badlands was solidified upon learning about the construction of the Northern Pacific Railroad river crossing at present-day Medora. Medora and its environs offered ample range, lignite coal sources, and a transportation outlet to the eastern United States (Dresden 1970; Golpen 1947:11).

In April 1, 1883, de Mores christened the location of the town where he sought his fortune and named for his wife Medora. The town site was located on the eastern side of the Little Missouri,

across from the former Cantonment. The entire operation in Medora revolved around the activities of the Northern Pacific Refrigerator Car Company, which was created in 1883 to process and ship frozen beef to eastern markets. De Mores was convinced that slaughtering on the range was better than the current strategy of shipping live cattle to distant slaughterhouses. Pre-processed beef would eliminate shrinkage, allow meat to arrive to the consumer in better condition, and help cattlemen to compete with corn shippers who used their product to fatten cows. The whole plan would reduce the number of middlemen, which would reduce costs (Golpen 1947:14–15).

In order to support his scheme, de Mores built a large processing plant in Medora. The Northern Pacific Refrigerator Car Company was incorporated in May 12, 1883 by Antoine de Vallombrosa (the Marquis de Mores), Herman Haupt, Jr., and C. Edgar Haupt. The company was capitalized with $200,000 in stock and de Mores held 330 of the 500 shares. De Mores also acquired extensive land holdings to make sure company livestock had forage. The company purchased over 9,000 acres of land in Billings County and another 12,000 acres in Burleigh County. Most of this land was bought from the Northern Pacific Railroad. Additionally, de Mores bought property in the City of Bismarck in the "Capital Park" tract and wheat fields near Bismarck (Dresden 1970:41–44; Golpen 1947:15–16).

Company facilities in Medora included a spur track from the Northern Pacific mainline, a packing plant that cost over $250,000, ancillary buildings, and cattle holding pens, some of which are in THRO. The first beef were processed in October, 1883 and activity accelerated in late 1884. By the fall of 1884, 30 to 35 cattle were being processed each day. In November and December, thousands of pigs and sheep were also slaughtered (Golpen 1947:17).

As large orders came in from New York, Chicago, and St. Paul, the company looked to expand. A foundation for the cold storage portion of the plant was laid in late 1884. Boilers and machinery for the plant arrived and were installed in the spring of 1885. The fully completed slaughterhouse machinery was set in motion on June 2, 1885. Seventy cattle were slaughtered on the first day. They were put on ice in the new cooler that used 6,000 tons of ice to freeze the beef (Golpen 1947:17–19). An estimated 18,000 cattle were supposed to be slaughtered in 1885. During the first week of June, two cars of beef were shipped each day (Golpen 1947:20–21).

Civic pride prompted de Mores to build a town to accompany his meatpacking experiment. He had maintained a fully stocked general store since the beginning of his enterprises in Medora (Dresden 1970:39–40). In the spring of 1884, he expanded his construction efforts. The Marquis built an entire city block of two-story brick buildings where the upper floors were offices set above shops on the ground floor. The block featured a boarding house, restaurant, and billiard hall. De Mores also constructed a brick church for his wife, a city park, and a large hotel. Large lodging houses were built on vacant lots north of the hotel for company employees (Golpen 1947:12). A school was erected in the old Cantonment in 1884 for the local population (Dresden 1970:92–93). His own residence was the most substantial dwelling in Medora. He had a large, 28-room mansion

constructed on a bluff overlooking the town. Called Château de Mores, the home was finished by 1884 (Dresden 1970:41).

Other businesses in nearby settlements relocated to booming Medora and new enterprises were launched during 1884. By June, 1885, Medora was a respectable town of 251 people with three hotels, a dozen stores, a brickyard, a church, and de Mores' meatpacking plant. The populace was also served by a number of saloons (Dresden 1970:93–94; Golpen 1947:12). As is the case with most boomtowns, Medora earned a reputation as a rough place as, in addition to entrepreneurs, a great number of prostitutes, gamblers, and criminals flooded in to take advantage of the rapid growth (Dresden 1970:95–98). Criminal activity, notwithstanding, Medora residents to this day regard the Marquis de Mores as the engine of progress in the region (Norma Maynard, personal communication, 2015)

Despite initial success, de Mores venture faced enormous obstacles to making it profitable. First, it was difficult to gain access to sufficiently fattened cattle throughout the year. Traditionally, cattle were round up in the late summer and fall. The animals roamed the range for the rest of the year. De Mores' experiment required constant access to cattle, to which the cattle ranching industry was not accustomed. He was forced to purchase livestock and fatten them himself. In order to fatten the livestock, de Mores was forced to feed them silage while keeping them in corrals. This increased costs. Second, de Mores was reliant upon a complex network of railroads, cold houses, and distribution warehouses to get the frozen product to eastern markets. At every node in the network he had to fight deeply entrenched interests that worked against the newcomer de Mores. The major meatpacking trusts had little incentive to work with de Mores on an even footing. Finally, de Mores' made a massive initial investment to get his company off the ground. He spent lavishly in Medora and purchased several other businesses in New York City in an attempt to circumvent the meatpacking trusts. While he was able to land large contracts for his product, they were not large enough to cover the massive investment he had made in starting the company (Dresden 1970; Golpen 1947).

Medora continued to grow until 1885. Approximately 251 people lived in town by this time, up from less than 90 individuals in 1883. Most of this growth was due to de Mores' activities, but by late 1885 the town was showing signs of decline. It became apparent that the frozen meat packing project was unlikely to succeed (Mattison 1950:27). De Mores had spent liberally on his meatpacking project, but was unable to make enough sales to meet his rate of expenditures. During early 1885, eastern newspapers had begun to report that de Mores' enterprises in North Dakota were severely in the red. His investors became aware that he did not have the working capital to make the venture a success. De Mores did not formally announce the closure of the Medora plant. The facility was normally closed in the winter, but, in late 1886, it closed for the last time and was never re-opened (Dresden 1970:183–188). De Mores returned to France and never recouped his losses. His investors lost their entire investment. He continued traveling the world until his death in 1896 (Dresden 1970).

The combination of losing de Mores' financial backing and the hard winter of 1886–1887 caused the town of Medora to wither. The closure of the slaughterhouse greatly decreased the desirability of the town. Most of the people left Medora as quickly as they came. Buildings were literally lifted from their foundations and taken away. During the 1890s, Medora was nearly abandoned as only a couple dozen individuals remained in the town (Dresden 1970).

Homesteading in western North Dakota was slow to develop primarily because the region had not been surveyed. Federal land acquisition legislation had been established during the mid-nineteenth century, but the provisions in those acts only covered land that was within the public domain. Unsurveyed lands, technically, were not yet within the public domain. Aside from the railroad surveys, most of the region remained unsurveyed until the 1890s (Gates 1963; Petty 1968:395). Homesteading in the area that would become the Theodore Roosevelt National Park increased dramatically during the first decade of the 1900s. A large number of Euroamericans and European immigrants were able to acquire farmsteads through a number of different land ordinances, but the Homestead Act was the primary vehicle that was used to transfer land from the public domain into private ownership. Additionally, a large amount of the land granted to the Northern Pacific Railroad was also sold at this time. The population of Billings County exploded from approximately 975 in 1900 to 10,186 in 1910 (Forstall 1995).

European immigrants comprised a large number of the newcomers to the park area during the early 1900s. These immigrants were part of a diaspora from different European countries that sought opportunities in the United States at the dawn of the twentieth century. Most of those who arrived in Billings County were rural folk that were accustomed to hard farm work and were willing to stake their fortune on cheap farmland in North Dakota.

High prices for agricultural products and ample rains during the World War I years helped make farming prosperous near the Badlands. These conditions did not last. A collapse in farm prices and a drought in the years following World War I caused the demise of many of the new farmers in the area (Petty 1968:395). The population of Billings County dropped from 10,186 in 1910 to 3,126 in 1920 (Forstall 1995). It would never rise above 3,500 persons again.

The Great Depression hit the Badlands area especially hard. Farms were lost and the population crashed as people moved away in search of opportunities elsewhere. While most of the residents left the area, a number were able to survive the bad times. Their descendants remain there today. The forced frugality of the agrarian people living in the area helped them make it through the depression even though money was scarce. Those who were fortunate or skilled were even able to improve their economic situation by purchasing farms from the exodus of farmers as they left. Norma Meyers (Personal communication, 2015) recalls that her father, Page Meyers, was one of those who used his skills as an agriculturalist to maintain his family through the hard time. Born to a farming family, Page was accustomed to hard farm work and industriousness. He left Idaho with

his wife Lodema for in Medora sometime during the 1920s. Initially, he worked as a farm hand and supplemented this income working as a miner at the coal mine in Medora.

Norma Meyers recalled that her father did the work of two men. This life of hard labor took its toll and Page Meyers died at the age of 52. He supported his mother, younger brother, and rest of his family in addition to raising his own family—a wife, two daughters, and a son. He purchased a small ranch named the Miles-Marshall Ranch from M.W. Marshall, an out-of-state investor from Massachusetts, after several years of working on other operations. The property was about 7.5 miles from Medora. Page continued to work at the coal mine while also working his homestead for about three years until the farm could sustain itself. He used his understanding of nature and crop cultivation to have successful harvests throughout the Depression. He also maintained a large vegetable garden, which provided ample food for his family. By 1939, Page had also acquired the C.P. Ranch about 3.5 miles from Medora and continued similar operations there (Norma Meyers, personal communication, 2015).

Page Meyers' skills enabled him to expand his properties. Over time, he continued buying small properties. Oats, wheat, corn, and barley were staple crops. Rather than merely raising cattle, Page raised 25 to 30 dairy cattle; animals capable of creating 100 pounds of butterfat each day. During the depression, that herd of dairy cows brought in $300 each month, which was enough to pay for gas, sundries, and other household staples. The Meyers also maintained a small herd of cattle. Livestock were allowed to graze forage from open range on the Badlands. Wild hay was also harvested from this open range. The combination of dairy product sales, the vegetable garden, and haying allowed Page Meyers to provide for his family throughout the Depression with no ill effects (Norma Meyers, personal communication, 2015).

Former North Dakota congressman Don Short recorded an oral history interview in 1974 where he recalled life in Medora during the Depression (Carlson 1976). Short arrived to the Medora area with his family in 1904 when he was an infant. He grew up on a farm near Medora, attending school in town, and remained in the area at least until the 1970s. By the time the Depression hit, Short was working a farm in the Badlands. He discussed the important role the federal government played in reshaping the landscape of the area through property purchases and grazing leases.

It was clear by this time that most of the Badlands was unsuitable for homesteading, although there were small patches of good grazing land. In 1937, the government passed the Bankhead-Jones Farm Tenant Act which authorized the purchase of submarginal lands, including private property and property that had been seized by the county for nonpayment of taxes (Carlson 1976:65). The depression and the drought of 1936 had reduced hundreds of farm families to dire straits. At the time, there were a large number of aspiring homesteaders that were more than willing to sell. Soon after this act was passed, the government started assessing certain farms throughout the area. Properties near the river bottom and larger creeks were not considered for purchase even if they were classified as submarginal. Farms were bought for between $2.00 and $0.50 per acre.

Thousands of acres were brought back into the public domain through this act. Some of this acreage was folded into the Theodore Roosevelt Park while the rest was leased for livestock grazing (Carlson 1976:64–66).

Families from the Medora area scattered across the country in search of work during World War II. Norma Meyers (personal communication, 2015) recalls that the tough times in Medora forced many people off the ranch by the 1940s. During the war, Norma left Medora for Washington, D.C. to work for the FBI. Other men and women from Billings County also left to serve the U.S. Government at this time (Billings County Historical Society, 2015). Following the war, only those who had a ranch or job in the area returned (Norma Meyers, personal communication, 2015).

Ranching and farming remained central to the Badlands economy during the 1950s, 1960s, and 1970s; however, the town of Medora increasingly turned toward tourism as the principal economic vehicle. Raised on a beef and grain farm in Kirkston, Minnesota, Lyle Glass (personal communication, 2015) found out about ranching in Medora around 1972 as a college student in the Equine Management Program at the University of Minnesota. He initially gave trail rides for tourists in Medora and participated in the Medora musical project that was oriented toward the town's tourists. For over 42 years, Glass has worked as a cowboy, actor, and photographer in Medora. He recalls guiding trail rides throughout the Theodore Roosevelt Park on tours lasting between one and three hours. The tours have been greatly curtailed since his arrival to the area (Lyle Glass, personal communication, 2015).

CREATING A MEMORIAL PARK, 1930S–1950S

Theodore Roosevelt National Park was created to memorialize the late nineteenth century activities of Theodore Roosevelt in the North Dakota badlands and preserve some of the last remaining wilderness segments of the northern Plains landscape. Roosevelt's experiences in this area and the way he came to perceive the open spaces of the American West greatly influenced his conservation activities as president. It is believed, had it not been for his experiences as a ranch manager in North Dakota, conservation efforts in the United States may have played out differently than they did (National Park Service 1987:1).

Initially, the park focused on interpreting Roosevelt-related activity areas for the general public. Civilian Conservation Corps (CCC) activity focused on providing outdoor recreation venues for park visitors and their automobiles that would allow them to access landscapes trodden by Roosevelt and others ranchers within the park boundaries. It was later realized that the park was equally as valuable as an intact region of aesthetically pleasing banded hills, grassy upland plains, verdant riparian zones, and unique plants and animals that were increasingly important as other similar landscapes had already been impacted by human activities. Animals that had been absent from the park in its inception, such as bison, bighorn sheep, elk, longhorn cattle, and free-ranging

horses, were reintroduced in an attempt to recreate the historicity of the park and help visitors better visualize the way the landscape must have been when Roosevelt visited the region. Camping and picnicking venues then focused on interpreting the park's flora, fauna, and geography. Forty-two per cent of the park has been designated as wilderness area and is promoted as an opportunity to really experience the area as Roosevelt did in the late nineteenth century. The park became known for its roadless backcountry hiking as well as its historical connection to Theodore Roosevelt (National Park Service 1987:1–2,5,7,11).

By the mid-twentieth century, large deposits of oil and gas in near the park led to the construction of resource extraction infrastructure. These structures and the effects of this development threaten to change the park's character because they are visible from scenic vistas within the park. As these extractive industries expand, they become an increasingly important component to the management of Theodore Roosevelt National Park.

Auto Camping and the Wilderness Experience

The contrast between man and nature, between civilized and wild spaces, has been central to the American identity since its earliest colonial roots. Roderick Nash explains (1983:xi); "From the raw materials of the physical wilderness Euroamericans built a civilization; with the idea or symbol of wilderness they sought to give that civilization identity and meaning." To European immigrants to the New World, the Americas were an untamed wilderness full of wild people. The Americas were not well known by Europeans when they arrived here in the fifteenth and sixteenth centuries, but the concept of wilderness was familiar and, generally, it had a negative connotation. "The wilderness was the unknown, the disordered, the uncontrolled. A large portion of the energies of early civilization was directed at defeating the wilderness in nature and controlling it in human nature" (Nash 1983:xi). This notion contrasted sharply with perspectives held by the indigenous peoples Europeans encountered around the world, especially in the Americas. Indigenous, hunters and farmers depended on natural processes and, in this sense, they were seen as part of nature (Nash 1983:xiii). Indigenous people saw no dualism between man and nature.

European civilization created wilderness as we know it. The English word "wilderness" has roots in the Norse languages where "willed" was shortened to "wild" meaning unruly, disordered. The Old English word "dēor" referred to wild creatures beyond the control of man; thus, the combined word that first appears in the tale *Beowulf* "wild-dēor" was used to describe a land where savage and fantastic beasts lived. Etymologically, "wild-dēor-ness" is the place of wild beasts. Other European languages and concepts from the Bible define wilderness as inhospitable, alien, and void of civilization– a place that should be avoided by human beings unless it could be tamed (Nash 1983:1–4, 13–14).

European explorers in the Western Hemisphere brought these understandings of unsettled lands with them. Undeveloped places represented spaces beyond the shroud of civilization, spaces that people should fear and constantly endeavor to conquer. Nash (1983:23) describes Alexis de

Toqueville's recognition that, "…in Europe people talk a great deal of the wilds of America, but the Americans themselves never think about them;…till they fall beneath the hatchet." Early Euroamericans sought to convert as much of the open spaces that surrounded them into civilized lands, despite the fact that thousands of Native Americans were already living in the "wilderness." During the colonial period, rural people considered the forests and plains of the United States desolate, miserable wastes full of wild beasts (i.e. Native Americans) that required ingenuity and fortitude to subdue in order to make way for civilization. Preservation made no sense. Unsettled spaces stood in opposition of civilization (Nash 1983:24–30).

Romanticism during the nineteenth century that shaped the Euroamerican conception of wilderness into a place that should be experienced for personal transformation and to rejuvenate the connection to the Earth. Artists, authors, and advocates like John James Audubon, George Catlin, Thomas Cole, William Cullen Bryant, and John Muir portrayed the undeveloped expanses of our nation into a wild place where, instead of simply extracting resources, people could experience on a personal and transformative level (Slawson 2006:9). A new philosophy arose. In order to be properly experienced, these areas needed to be preserved as pristine realms separate from where human beings dwelled. There was an acknowledgement that open spaces had once been occupied by Native Americans, but the prevailing beliefs at that time also placed Natives as natural beings, untarnished by civilization and separate from Euroamerica. They belonged in wild nature. The designation of settled, Euroamerican places as separate from undeveloped lands in the public domain was firmly established by the second half of the nineteenth century (Cronon 1995).

Public appreciation for the wilderness increased as the country passed through its pioneer phase. Affluent Euroamericans demanded national parks and efficient ways to access them. Railroads first responded to the demands for recreation in the open spaces. Resorts and hotels were established in eastern places like the Adirondacks. By the 1870s, a combination of rail and stagecoaches increased access from eastern cities to western reserves. Yellowstone (1872) and Yosemite (1890) were the first large wilderness parks and they were located in the western states. The western wilderness parks were administered with federal funds, which created the system of governmental administration of wilderness reserves that would develop into the national park system. Visitors came to Yosemite and Yellowstone on horseback, but railroads built from the 1870s to 1890s quickly increased access. Rude facilities in places like Yosemite were improved into comfortable resorts. Until the 1880s, the western parks were advertised as fashionable pleasure resorts located in the spectacular American West (Demars 1991:11–21, 28; Slawson 2006:8).

By the turn of the twentieth century, advocates worked to infuse a conservation ethos into the federal government through the creation of agencies like the Forest Service (1905) and the National Park Service (1916). Early conservation worked under the premise that parks were pristine, open, natural places—sharp contrasts to the built, urban environment— while forests were resource reserves that could be tapped to increase the nation's prosperity as well as enjoyed for their wildness.

As the parks increased in popularity, the number of amenities within and outside the boundaries also expanded. Architectural design of these early resorts expressed a "rustic" theme that would continue into the twentieth century. Design elements such as minimally shaped stone, exposed wooden beams, and rough-hewn logs proposed to evoke a feeling of being closer to nature and harken to an earlier, pioneering time when dwellings were crafted by woodsmen using local materials and simple tools (Slawson 2006:8–9). Simultaneously, a smaller group of more physically fit and adventurous visitors began venturing deeper into the parks and camping out in tents. Most of these early backcountry campers were less affluent local residents who sought to distance themselves from the crowds of easterners that flocked to the developed camps. These early backcountry adventurers would become some of the most ardent supporters of the conservation movement in the west (Demars 1991).

The creation of the automobile allowed an even greater number of Euroamericans to access the parks. Automobile owners quickly started to explore areas further away from their hometowns on rude, barely passible roads (Slawson 2006:8–9). Fewer than 500,000 cars and trucks were on American roads in 1910. Ten years later, there were over eight million cars registered in the United States (Belasco 1979:8). Using the automobile to facilitate camping was originally restricted to the upper middle class who were forced to sleep outside because there were few roadside lodging venues along most American highways. As they were traveling to points elsewhere, early auto campers stopped at a different spot along the road each night, sleeping in tents and cooking meals over campfires (Belasco 1979:3, 8). Auto camping was an activity of urban dwellers who could afford an automobile and had the time to take vacations in other cities. They were also up for the challenge of traveling along pathways far from a railroad line.

During the 1910s and 1920s, private entrepreneurs along with state and federal government agencies began creating auto camps along American highways (Belasco 1979:7–8, 71–74). The auto camping boom that started in the west become a national phenomenon between 1915 and 1923. In response, the U.S. Forest Service and National Park Service established over 1,500 campgrounds across the country. The railroad remained the most prevalent travel form for most Americans, but auto camps served the burgeoning ranks of people who wished to tour the country in their cars (Mark 1998).

Automobiles had completely permeated Euroamerican society by the 1920s. Over 15 million cars were registered in the United States by 1923. Four million more were registered the following year (Belasco 1979:8; Mark 1998). As car ownership continued to surge between the 1930s and 1960s, car camping became even more prevalent. Hundreds of new auto camps were created during this period. Auto camping came to encompass a wide range of social and economic classes, from upper middle class enthusiasts to lower class folk who could not afford lodging in hotels. During the Great Depression, auto camping took on a new definition as itinerant laborers formed temporary camps as they traveled the country in search of work (Belasco 1979:8, 149).

A postwar construction boom of auto-oriented roadside lodging changed the nature of auto camping. The 1950s and 1960s saw the rise of the motel—a contraction of the words "motor" and "hotel"—and these venues were advertised as an alternative to sleeping in a tent along the highway. Auto camping moved from informal sites along roadways into designated areas on public land (Belasco 1979). Camping out of your car remained popular in the proper area, whereas it mostly died out along the highways of America.

Theodore Roosevelt Recreation Demonstration Area (1934–1947)

The area that would become the Theodore Roosevelt National Park was conceived from the prevailing paradigm that it was the government's duty to bring the people to open spaces. It was also designed to facilitate auto camping. The creation of a wilderness component in the park came decades later.

Despite being available for homesteading since the 1860s, a large portion of the Badlands remained within the public domain by the 1930s. Ranchers in the vicinity of the park's South Unit used the badlands as a free range area where grass could be harvested and cattle could be freely grazed (Norma Meyers, personal communication, 2015). Very little of the land within the park's boundaries was sufficient enough to support livestock raising or agriculture so these lands were determined "submarginal", which was an important designation as marginal lands could be assumed from the public domain though the Desert Land Act of 1877 as long as they were irrigated and improved, the Stockraising Homestead Act of 1916 for lands designated as suitable only for grazing, or the Taylor Grazing Act of 1934 which provided for 10 year grazing leases on suitable public lands (Connelly et al. 2004; National Park Service 1987:5; White 1991). The submarginal designation meant the Badlands were not suitable for any other purpose besides their aesthetic value.

While there was no impetus to establish a national park in the Badlands prior to World War I, Theodore Roosevelt did create the Dakota National Forest on November 24, 1908. The forest was established through presidential decree through an 1891 act that granted the president power to decree forest reserves. The forest was nearly 14,000 acres, including public and private land, and was located along the Little Missouri River about 20 miles south of Medora. This forest reserve was short-lived. It was disestablished in 1917 (Petty 1968:395–396).

Political efforts to establish a national or state park in the Badlands began in 1917. A failed bill was introduced in the U.S. Congress by the two North Dakota senators in 1919. While this bill was never sanctioned, it piqued the interest of other state legislators. A concurrent resolution was filed in 1921 by the North Dakota legislator instructing the state's representatives and senators to assist in making the park a reality. This movement still did not gain traction at the national level, but it increased momentum in the state (Petty 1968:396).

In 1924, a public relations tour brought a group of state and federal officials, railroad representatives, and media interests on a tour of the Badlands with the primary goal of raising interest in the creation of the Roosevelt National Park. The proposed park boundaries were to include portions of the Killdeer Mountains, Badlands, and the Pleasant Valley Ranch. As a result of this tour, the Theodore Roosevelt Memorial National Park Association was established in August, 1924 at the Peaceful Valley Ranch which was owned at that time by Carl B. Olsen. The association was incorporated in Bismarck on September 1, 1924 and a statewide fundraising campaign was launched later that year. Over 40,000 pieces of media were distributed in the massive push, which resulted in the generation of a $5,000 fund dedicated to creating the park (Petty 1968:397–399).

Efforts to create the park accelerated for the rest of the 1920s. From its conception, the park has been a patchwork of unviable farms purchased from homesteaders, state lands in the public domain, and additional acreage gleaned from the federal government. Plans during the 1920s were grand. The original park boundaries would have included over 600,000 acres of federal, state, and private land. Visits by national parks officials in 1925 and 1928 came to the conclusion that a park of this size was financially untenable. It was recommended that the park's size be reduced to a few key locations associated with Roosevelt's tenure in the Badlands and unique landscapes not found anywhere in the United States (Petty 1968:400–404). Following Roosevelt's death, the state of North Dakota turned over about 42,000 acres of public domain land near the badlands to the federal government in 1928 for the purpose of creating a memorial park (Petty 1968:403). Additional lands were accumulated through donation and purchase until, by 1933, a sizable state park could be created.

The 1930s were a time of great expansion for the national parks for two main reasons. First, the nation's highway network had been greatly improved. Whereas early automobile travelers had to traverse unimproved wagon roads, a constantly improving system of paved highways had been expanded across the country during the 1910s and 1920s. Local commerce chambers recognized the financial benefit park tourists could bring to rural communities and were spurred to create additional parks. Second, the depression brought federal funding that could be used to build park infrastructure. The Civilian Conservation Corps, the Farm Credit Administration, and the Federal Emergency Relief Administration would all play a role in the creation of Theodore Roosevelt National Park (Petty 1968:405–406).

The park was created in August, 1934 when two parcels of land were acquired from the Federal government and homesteaders by the North Dakota State Historical Society (NDSHS) and added to the existing property set aside by the state of North Dakota. Additional acreage was bought through an arrangement between the state of North Dakota and federal agencies which allowed the acquisition of certain submarginal lands throughout the Badlands (Carlson 1976).

Most of the park's original infrastructure was built through federal relief programs during the 1930s. Development in the park at this time was accomplished through programs like the Civilian Conservation Corps (CCC), the Emergency Relief Administration (ERA), and Work Projects Administration (WPA) (National Park Service 1987:5). Public relief programs played an integral role in the construction of infrastructure in nearly every national park in the United States and other parks in North Dakota. These relief crews in the parks provided much needed employment for Americans during the Great Depression, particularly for local residents (Hendrickson 1981; Petty 1968; National Park Service 1987:83). The 1936 designation of Theodore Roosevelt State Park as a national recreation demonstration area meant relief crews could be allowed to build campgrounds, roads, and other structures in the park. From 1934 until 1941, most of the work in the park was conducted by crews working for the CCC but several historical features were built as part of the ERA and WPA.

Three CCC camps were established in 1934 for the purpose of creating a national park in the Badlands and rehabilitating former Roosevelt sites. The first camp was created at Watford City for the first group of men who arrived on April 30, 1934. Two other camps were established about 17 miles south of Watford City near the Roosevelt Bridge. About 550 men arrived to fill these camps on August 20, 1934. Another camp was established in the south unit near Medora. The Medora camp was on the west side of the Little Missouri River near the line for Section 16. This camp was manned during the latter part of August, 1934. The first CCC projects included building roads, trails and campgrounds. By the summer of 1936, the Cottonwood Campground had been completed and a road connecting Peaceful Valley junction to the campground, and a connecting road to Highway 10 had been completed (Petty 1968:406–407).

In the south unit, federal relief work crews were housed at numerous camps throughout the park and at the Peaceful Valley ranch. They are responsible for the construction of the unit's south entrance, a stone privy, and a stone pylon that was moved to the Painted Canyon area in 1968. Conservation crews also improved many of the roads in the south unit, built structures at the Cottonwood Creek campground and picnic area, and constructed interpretive signage along the loop road. In the north unit, CCC workers built the camp tender's cabin, two picnic shelters, the Squaw Creek campground and picnic area, and the Little Missouri River overlook shelter (National Park Service 1987:83–84). They also built or improved many of the earliest hiking trails in both units. A full list of CCC-related historical sites and features are listed in the "Euroamerican Archaeolgical Resources" section of this document.

Development of facilities in the park was undertaken by CCC crews beginning in 1933. These crews worked in both the north and south units from August, 1933 to November, 1944 and were responsible for constructing roads, bridges, picnic shelters, overlooks, campgrounds, hiking trails, and signage. Many of the masonry buildings made use of locally available sandstone which was opportunistically quarried at locations throughout the park. For example, Kuehn (1990:173) recorded a sandstone boulder in the park that bore marks of CCC quarrying activities. This feature

was given the site number 32BI722. All of these facilities were well-made and reflect the craftsmanship of their builders and the economic use of local materials (Kuehn 1990:172).

Civilian Conservation Corps crews were largely men working and living far from home. Archaeological materials from their temporary camps—stove parts, building materials, and circular depressions— provide little insight into the social and economic status of the men who helped build this park through this program. Trash dumps associated with these camps have been identified but they have not been explored archaeologically (Kuehn 1990:173). While we may not know the socioeconomic status of CCC workmen, oral history interviews explain that their presence was felt in nearby communities.

Longtime Medora resident Norma Meyers recalls how the CCC workmen used to participate in local celebrations, specifically dances. As a teenager, she remembers being offered dates by CCC men and how they were a perennial presence at local barn dances. Other local girls her age preferred dancing and interacting with the CCC men over other local boys her age. Despite poverty, CCC men all showed up to community dances with suits and shined shoes. This greatly impressed the local girls. By the time she was old enough to date, the CCC projects in the park had ended and Meyers left town for college (Norma Meyers, personal communication, 2015). Conservation Corps workers also shopped in nearby towns, infusing much-needed funds into the local economy through their wages during the Depression. Local businesses benefitted from the presence of these crews in the park during a time when the local economy was extremely depressed.

From 1934 to 1936, the area that would become Theodore Roosevelt National Park was known as Roosevelt Regional State Park and was administered by the state of North Dakota. Much of the park remained in private hands at this time; however, land became easier to acquire by this time because the nearby prairie had been filled by small farms that were financially unsustainable. The economic depression hit these smallholders especially hard. The Rural Resettlement Administration was acquiring farms and placing them back into the public domain for lease as grazing land. An estimated $2 million had been spent by the government purchasing farmland by 1935 (Petty 1968:408–409). Some of these parcels were included in the park.

By 1936, the parcels first acquired by the state were connected with remnants of other public domain lands and state school lands in order to create two parcels that qualified as a recreation demonstration area (RDA). This qualification enabled the park to qualify for federal aid and development through the CCC and other federally administered relief programs (Davidson 1982; National Park Service 1987:5). During the 1930s, lands designated for inclusion in the North and South Roosevelt Regional Park areas was approximately 92,740 with 38,080 in the north unit and 64,660 in the south. The south unit was later reduced to 54,550 (Petty 1968:410).

From 1934 to 1941, CCC camps built the majority of the infrastructure in the park. The last CCC camp closed in the south unit in 1941. The CCC camp in the south unit was vacated on July 1, 1939. About half of the foremen were terminated. The remaining men were transferred to the camp

in the north unit. Following its closure, camp buildings in the south unit remained vacant for some time until they were disposed of by the U.S. Army as surplus. For the next two years, construction was conducted by the CCC camp in the north unit. On October 1, 1939, the camp at the north unit was closed and it was transferred to Section 1 in the south unit. This new south unit camp is responsible for the restoration of the Chateau de Mores and restoration of what remained of the meatpacking plant. The second south unit camp could accommodate 160 men, but it typically had only around 100 (Petty 1968:410–412).

On November 1, 1941, the camp in the south unit was closed for a second time. After the camp was closed, both the south and north units were administered by a project manager and small staff housed at the Peaceful Valley Ranch. From 1939 to 1937, there were no permanent employees at the north unit. After May 11, 1942, a single employee—Weldon Gratton—managed the entire park. Gratton remained the park custodian until April, 1946 (Petty 1968:410–412).

Theodore Roosevelt National Memorial Park and Wilderness, 1947–Present

Advocates within the state of North Dakota continued campaigning for the creation of a Badlands national park. In 1942, President Franklin D. Roosevelt approved a list of recreational demonstration areas that had the potential to become national parks. The Roosevelt Demonstration Area was on this list (Petty 1968:416). Administration of the Roosevelt RDA was transferred from the National Park Service to the U.S. Fish and Wildlife Service in April, 1946. One main concern of the 1940s focused on whether or not the park should be a game preserve or a monument that included both natural and historical features. There was also significant force against creating a national park in the Badlands. Many high-ranking officials did not believe the scenery, natural resources, or ranching legacy was sufficient enough to merit national park status (Petty 1968). The first resolution to create Theodore Roosevelt National Park (TRNP) passed both houses but was vetoed by President Truman on August 10, 1946 (Petty 1968:423). The president did not believe the landscape or ranches related to Roosevelt's life on the badlands were worthy enough to be called a national park, but they were sufficient enough to be called a historical monument or memorial park.

In order to meet the president's criteria, the name of the resolution was changed to the Theodore Roosevelt National Memorial Park. President Truman signed a Congressional bill establishing the park on April 25, 1947 (Petty 1968:425). At this time, the park boundaries were contracted to a smaller area as a concession to local ranchers who were concerned about the fact that the RDA contained good grazing lands that would be unavailable as a national memorial park. Authority to acquire the Elkhorn Ranch site was part of the 1947 bill that created Theodore Roosevelt as a memorial park. Subsequent bills in 1947 and 1948 included provisions for land exchanges that would eliminate private holdings within the park boundaries (National Park Service 1987:5; Petty 1968:427–428). The north unit was added through a congressional resolution on June 12, 1848 (Petty 1968:428). Nearly the entire Roosevelt Recreation Demonstration Area was incorporated

into the final memorial park by 1948. The park was officially dedicated on June 4, 1949 (Petty 1968:428).

The National Park Service objectives for this new memorial park were to complete the historical presentation of the life of open range cattlemen during the time when Theodore Roosevelt lived in the Badlands. Initially, the plan included the recreation of the Elkhorn Ranch, completion of an access road, the construction of a museum in Medora, and improvements on the Peaceful Valley Ranch. In order to capture the historical landscape, the NPS sought to return the range to its natural condition and restore indigenous wildlife. Livestock were to be excluded (Petty 1968:425).

The National Park Service concentrated on doing their best to restore the vegetation within the park to what it was believed to have been like in the 1880s. The NPS also removed livestock, such as free-ranging horses, from the park while reintroducing animals like antelope. In 1953, the park superintendent banned unauthorized wood cutting, haying, grazing, or other forms of cropping within the park. A major horse round-up was conducted in the spring of 1954 to remove all horses. Ranch buildings not associated with Theodore Roosevelt, the Marquis de Mores, or the proprietors of the Peaceful Valley Ranch were removed. The Buddy Ranch buildings were removed and sold for $325 in 1954 (Petty 1968:430–431). In 1956, the National Park Service embarked upon Mission 66. This 10-year mission was designed to, "…develop and staff areas within the National Park Service to permit their wisest possible use, and provide maximum protection of the scenic, scientific, wilderness, and historic resources that give them distinction" (Petty 1968:433). In the Theodore Roosevelt Park, this marks the first important construction program since the depression was initiated to improve park facilities. Campgrounds were modernized, roads improved, and interpretive signs were installed (Petty 1968:433–434).

During the twentieth century, the area of America's forest preserves, national parks, and federally administered undeveloped spaces increased. Yet, this was not enough. Euroamericans wanted spaces completely beyond the reach of development; places that would never be developed. Spaces that would remain wild. By the mid-twentieth century, the conservation concepts pioneered by Thoreau, Muir, Roosevelt, and others culminated into the 1964 act that created the National Wilderness Preservation System (Nash 1983:226). The philosophy of wilderness had lead Euroamericans to establish geographic entities that, they hoped, would forever remain without permanent human presence.

During the 1960s, wilderness conservationists concluded that simply placing geographic regions within government administration was not enough to prevent the loss of relatively untouched landscapes. Lands administered by the U.S. Forest Service, Bureau of Land Management, and National Park Service had one commonality that threatened the concept of pristine landscapes: they could still be accessed by a large number of people using motorized vehicles. Conservationism had long operated under the premise that humans existed separately from nature. The only way wild places could continue to exist was if human beings did not permanently dwell there (Cronon 1995).

The conservation movement pushed to create a new layer of governmental protection that was based on the concept of wilderness—places that could remain outside the realm of human society that could be maintained as such by government administration and management. On September 3, 1964, the Wilderness Act was passed by Congress which allowed the Secretary of Agriculture to establish areas within the public domain as places where, *"…the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain*" (U.S. Congress 1964). The goal of this act was to set aside roadless areas that:

> …shall be administered for the use and enjoyment of the American people in such manner as will leave them unimpaired for future use and enjoyment as wilderness, and so as to provide for the protection of these areas, the preservation of their wilderness character, and for the gathering and dissemination of information regarding their use and enjoyment as wilderness… (U.S. Congress 1964).

The boundaries and land-use strategies for the Theodore Roosevelt Park continued to change in during the 1960s, 1970s, and 1980s, reflecting the federal government's changing role as a public land steward. Big game that had been extinct in the park continued to be reintroduced during the 1960s. Bighorn sheep were brought back to the south unit in 1960 and bison were reintroduced to the north unit in 1962 (Petty 1968:437–438). Also in the 1960s, private interests sought to revive the town of Medora as a testament to the cattle boom of the 1880s. A restoration program for Medora was created in 1965 by a Bismarck businessman. The Rough Riders Hotel was reconstructed during that same year with the hope of providing additional tourist accommodations (Norma Meyers, personal communication, 2015; Petty 1968:441).

During the 1970s, the TRNP was managed in order to reflect the conservationist thinking of its namesake. It has become known as a place where the American public can enjoy the natural and historical significance of this unique landscape (National Park Service 1987:5–7). This shift is reflected in the way the park has come to add livestock that existed in the park during the 1880s and the addition of wilderness areas. The Theodore Roosevelt National Park was designated on November 10, 1978. Simultaneously, this act designated 29,920 acres as wilderness and adjusted the north unit boundaries to what they are today. In 1986, lands at the northern edge of Medora were acquired in order to build a visitors center. (National Park Service 1987:57). The town of Medora has continued address the needs of tourists to the park through the creation of a number of new restaurants, stores, and hotels.

PETROLEUM EXPLORATION AND THE PARK, 1970S–PRESENT

Prior to the official discovery of oil in 1951, a mixture of different individuals from different backgrounds made a number of incongruous attempts to locate the resource in North Dakota (Herz 2013:iv). North Dakota's early exploration was financed by local capital. Formed in 1895, the

North Dakota Geologic Survey was tasked with identifying the state's mineral wealth including petroleum. (Herz 2013). The discovery of natural gas in 1892 and 1907, and the 1916 discovery of a small amount of oil during artesian well excavations hinted at the potential for these resources beneath the prairie sod. These finds also piqued the interest of the geological survey and entrepreneurs throughout the state (Herz 2013:14).

During the 1910s, local businesspeople, government officials, and entrepreneurs used their own money to finance oil exploration. Oil exploration companies were busy searching for the resource in locations across the globe, except for in North Dakota. Herz explains (2013:15); "In 1919 as North Dakotans prepared to drill their first deep oil well, there were roughly 30,000 new wells drilled globally and in 1920 the number climbed to 34,000, consuming all available capital and equipment resources in the market." Natural gas was the focus for most of these explorations at this time. Oil was an afterthought.

The first oil well in the state was drilled in 1916 by the Des Lacs Western Oil Company on a deposit that was inadvertently discovered while drilling a water well near Des Lacs, Ward County, North Dakota (Herz 2013:18–19). This early attempt was a bust and drilling on the first well ceased at almost 4,000 feet because production-level oil had not been struck (Herz 2013:21). Other wells drilled during the 1910s and 1920s also busted and geologists concluded that drilling should extend into the Dakota sandstone and should not continue much beyond 3,000 feet (Herz 2013). Despite these humble beginnings, these small-scale ventures were collecting information about the geological formations across the state with the potential to yield oil. They also demonstrated that local entrepreneurs had the capacity to raise significant funds for the effort. Most importantly, these ventures started promoting North Dakota as an oil-producing state (Herz 2013).

Well-financed petroleum corporations did not begin searching the state for oil until the late 1930s. The 1937 arrival of the California Oil Company marked a shift from the locally sponsored ventures that previously characterized the industry to the corporate-financed ventures that would eventually find productive oil fields (Herz 2013:34). These corporate ventures made good use of experienced geologists, skilled labor force, and improved techniques to re-survey the sites of previous explorations and explore new formations. Wells were drilled faster and deeper, but at a higher cost. Drillings routinely went below 8,000 feet. This work was primarily conducted by experienced, out-of-state companies. They also had the help of petroleum lobbyists who pushed the state legislature to pass legislation favorable to the oil companies. The impact of these large, well-connected oil companies was immediately felt by North Dakotans who saw the petroleum industry as a vehicle for breaking the Great Depression (Herz 2013).

The first productive oil deposit in North Dakota was discovered by the Amerada Petroleum Corporation on April 4, 1951. The Clarence Iverson Well No. 1 drilled into the Williston Basin, south of Tioga, North Dakota and discovered the first petroleum deposit in the state. Drilling at the Clarence Iverson site started in September, 1950 and oil was discovered seven months later. From

this initial discovery, a boom in oil exploration swept across the state. Oil production has become one of the most influential segments of the North Dakota economy (Herz 2013; Reid 1953:173).

The State of North Dakota immediately embraced oil production as a major form of revenue for the state and source of employment. Unfortunately, the industry is constantly vulnerable from the vagaries of the international production industry which has led to alternating boom and bust cycles. Just like mining, oil production is a one-time boon. Profits made today cannot increase in the future because petroleum is a non-renewable resource. From the earliest days of oil production in North Dakota, oil producers have been well aware of the non-renewable nature of their trade. In 1953, Albert Jacobsen, president of the Amerada Petroleum Corporation, contrasted the difference between agricultural production, which has always been the backbone of the North Dakota economy, and oil production. He stated;

> Conservation is…well known to the farmer and cattleman of North Dakota…He can by fertilizing his fields, crop rotation, and strip farming…increase his yield and raise good crops indefinitely. The oil man cannot do that. Every time he takes out one barrel of oil, there is one barrel less left underground (Reid 1953:186).

Oil development has always stated that it is a necessary part of the North Dakota economy because of the jobs and salaries it creates. As early as 1953, industry leaders recognized the power of this argument. This is reflected in Albert Jacobsen's speech at the oil monument dedication banquet in 1953 when he said: "*The benefits brought to North Dakota by the oil industry cannot be measured by the taxes paid by the industry, or by its lease and royalty payments to landowners, including the state…*" Jacobsen continued to say the true benefits to the State came through, *"…payrolls, in purchase of goods and materials of all kinds and in payments of services rendered…*" (Reid 1953:190).

Oil production during the 1950s and 1960s would affect the aesthetic qualities of the unbroken plains landscape that had been valued by so many visitors. Oil pumps, flaming smokestacks, and smoggy refineries were degrading the environmental qualities of the Badlands and the rest of the state. Land management activities shifted toward changing land-use designations within the park during the 1960s and 1970s, with particular emphasis on stemming the drain of mineral resources from within the park boundary and preventing activities outside the park from changing the character of landscapes within the park. The U.S. Geological Survey determined that oil and gas processing was draining valuable minerals from within the park (National Park Service 1987:7).

Petroleum exploration, development, and production has become one of the most important economic activities in North Dakota. In 2012, North Dakota surpassed Texas to become the second largest oil-producing state in the country (Herz 2013:2). Petroleum production has reduced unemployment in North Dakota to less than 1%, but it has also caused a steep climb in cost of living and a severe housing shortage in the western half of the state. The industry has also threatened to damage the scenic integrity of THRO.

RESOURCE INVENTORY

Tribal historian Calvin Grinnell (Mandan-Hidatsa) selecting photographs of familiar birds

Envision a time when knowledge evolved on a need. Long ago, when we had just entered this world, there was quite an animosity by the supernatural (different from the spiritual). When we arrived here [the supernatural forces] tried to rob us out of our humanity. So in defense, we gathered our elite warriors and society members to battle our supernatural enemies, because they wanted dominion of earth. To take the heart out of the people they killed children and to take our knowledge they killed elders—used a club with a stone hammer.

Regardless of people's skills we could not defeat the supernatural. There ensued a cry over the land, beseeching God for help, that is when fasting came, and needs of people began to be fulfilled.

The need to know became broken down: for defense and survival, and for healing of sickness. Healing can't happen unless the spirit is hailed. A plant is only a plant unless it is embodied by spirit. All of these plants, roots, and the stories to go with them belong to societies. There are several societies: the supernatural forces, the spiritual forces, the winged, the four legged, the pawed, the crawlers, and the water beings. These societies relate to plants, own plants; we don't. So as time evolved, people fasted to get allies so that knowledge of plants could be acquired for doctoring. The spirits of the societies who own plants are [contained] in the bundles.

Alex Gwinn, Mandan-Hidatsa, 2011

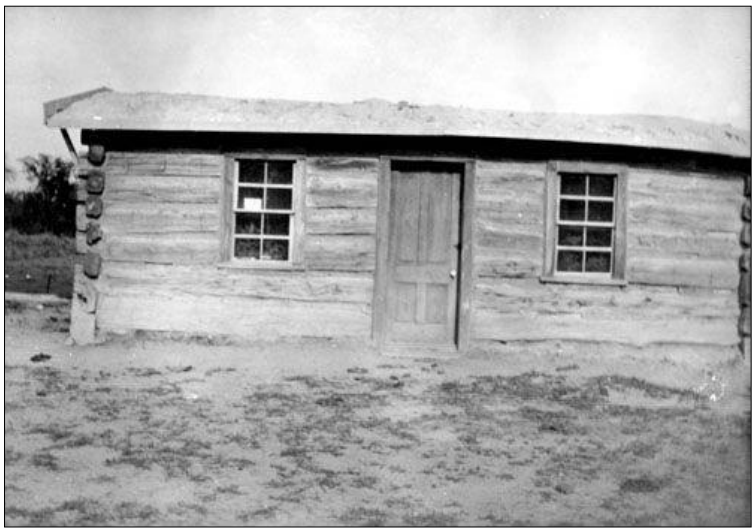
You wonder why we use rocks to make cairns, to hold tipis, to draw effigies. Rocks hold all the goodness in place. So when we find a good place to camp the rocks in the tipis hold the spirits where we need them to be so they will be here when we come back. Similarly when we make an offering or ask help from the Creator make a smudge and we bury our offering, berries, bison meat and the smudge in the dirt, so that our prayer will take hold.

Allan Pard, Blackfoot, 2015

I wanted to come here to see what is available that we do not have at home and conversely, like our mountain cedar. I take note of the plants and the animals. They appear in our origin story.

George Reed, Crow, 2009

ARCHAEOLOGICAL RESOURCES



Roosevelt's Elkhorn Ranch Cabin, 1910-1919 (State Historical Society of North Dakota sh0003139)

As stated, oral history and ethnohistorical records suggests the park area was utilized by multiple ancestral and historic Native Plains groups for hunting, travel, and ritual purposes. Specifically, parts of the Badlands are known to have been traditional Mandan, Hidatsa, and Crow hunting and eagle-trapping territories (Allen 1982; Allen 1983; Bowers 1950; Bowers 1963; Curtis 1976 as cited in Kuehn 1990:130). Groups retaining some ancestral and traditional knowledge associated with the North Dakota Badlands include the Assiniboine and Yanktonai Sioux. Representatives of the Blood (Blackfoot) Nation from Alberta, Canada visited the park in 2004 (Zedeño et al. 2006) and could relate with the significance of the area, however, their connections are associated with Fort Union Trading Post and Knife River Indian Villages national historic sites rather but not with the Badlands *per se.* Euroamerican use of the park area is marked by early exploration in the region followed by homesteading, ranching, and park building activities.

Inasmuch, there is a paucity of historic documentation on the area that defines the boundaries of THRO. During the exploration of western North and South Dakota in 1742 and 1743, the two La Vérendrye brothers traveled through the Badlands leaving behind descriptions of the landscape but little or no information about indigenous groups that might have been in the area (Kuehn 1990:129; Smith 1980). Prior to joining the expedition of Lewis and Clark in 1804 and 1805, the French-Canadian trapper Jean Baptiste Le Page descended the Little Missouri River, passing through THRO region (Petty 1968). Unfortunately, no detailed accounts of the area were left behind. With this dearth of written documentation one must rely even more heavily on archaeological research to gain insights into the prehistory and history of the park.

Archaeological research in Theodore Roosevelt National Park did not begin until 1950. This work, and subsequent work shortly thereafter, concentrated entirely on historical sites within park boundaries like the Peaceful Valley and Elkhorn ranches (Beaubien 1950; Beaubien 1957; Taylor 1959 as cited in Kuehn 1990 and in National Park Service 1993). It was not until 1968 that the focus of archaeological reconnaissance expanded into prehistory (Sperry 1981). Forty-one sites

were identified at this time consisting of stone circles, artifact scatters, rock shelters, conical timbered lodges, eagle traps, cairns, kill sites, and isolated finds. In the years that followed, work within the park produced few new finds, with only 15 new sites between 1974 and 1986; however, through oil and gas related surveys and excavations, a substantial body of information was produced for areas surrounding Theodore Roosevelt National Park (Kuehn 1990:1–4). Successful attempts at synthesizing these data into a regional cultural chronology for western North Dakota are found in the works of Beckes and Keyser (1983) and Gregg and Davidson (1985). Beginning in 1987, David Kuehn directed a three year survey project in Theodore Roosevelt National Park designed to assess heritage resources located near the park's trails, roads, utility corridors, and springs (Kuehn 1989; Kuehn 1990). This survey resulted in the identification of 269 heritage resource sites dating from the Early Archaic to historic periods. From these findings, Kuehn was able to illustrate the variability and complexity of Theodore Roosevelt National Park archaeological record.

The documented record of archaeological resources not only covers the geographical expanse of the western North Dakota Badlands and the Little Missouri River Valley but it provides insight into the deep temporal context of the park's use. Human activity in the park spans over seven millennia. It is the physical record of evolving and continuous social, economic, and ideological practices associated with Native American and Euroamerican groups who were adapting to environmental and political change in the region. Three tribes are affiliated with the park (Three Affiliated Tribes) as the Badlands region is Hidatsa-Mandan-Arikara territory; however it is within the use-area or territorial expanse of other tribes. From 2004 to 2006 an ethnographic resource assessment highlighting the association of the Mandan, Hidatsa, Arikara, Crow, Turtle Mountain Cree, Standing Rock Sioux, Assiniboine, Gros Ventre, and Blood tribes was conducted for the Knife River Indian Villages, Fort Union Trading Post, and Theodore Roosevelt National Park. It states (Zedeño et al. 2006: 4–5, 65):

> *"All tribes [interviewed during the assessment] have a familiarity and depth of knowledge of not only individual plant, animal, and mineral resources [in Theodore Roosevelt National Park] but also use of landscape features. The assessments also indicate that groups who do not have a firm cultural affiliation with the parks' prehistoric and/or historic remains nonetheless are traditionally associated with them, as they have close attachments to ceremonial resources and…there is information on the oral traditions of the Mandan, Hidatsa, and Crow regarding the uses of resources along the Little Missouri River… [These tribes also traversed] the badlands for warfare and trade. Additionally, the Arikara have stories associated with their scouting activities and the Sioux have close traditional associations with the upper Little Missouri River."*

Since then, information on ethnographic resources relevant to THRO have been repeatedly collected in various other NPS projects (Zedeño et al. 2009; Murray 2009; Chandler et al. 2016), including the present project. Archaeological resources encountered by Kuehn (1990) are those

systematically recorded during reconnaissance survey efforts—some have been assessed as to their ability to convey significance per National Register of Historic Places eligibility criteria. They include Native American base camps, temporary habitations typed as field camps, task camps, hunting localities, and procurement areas that are associated with both contemporary and ancestral groups. Territoriality for these groups was practiced with the Badlands serving as the core, and at times, as secondary or tertiary areas of resource procurement and utilization. This perspective further suggests the Little Missouri Badlands represents prehistoric and historic travel routes for numerous cultural groups moving along an upland ridge system between the Yellowstone River and the Missouri River (Zedeño et al. 2006:54). As stated, settlement patterns of this type evidence a continuity in land use practice and resource extraction associated with Native American groups in the park that persisted for thousands of years (Kuehn 1990: ii, 156–157). For more detailed descriptions of temporal contexts and Native American settlement systems in this region see Zedeño et al. 2006 (58–66).

As for Euroamerican groups, Kuehn (1990) documented resources that include structures, buildings, and camps along with infrastructural park developments and individual or family-owned industrial and agrarian enterprises. These resource sites indicate historical period Euroamerican groups like homesteaders, ranchers, and CCC workers cultivated and developed various portions of the park, before and after its establishment, in ways reflective of a changing American economy enmeshed in a variety of political conditions. Most notably associated with the park was its namesake, Theodore Roosevelt himself. Prior to his presidency, Roosevelt built the Elkhorn Ranch, some 35 miles north of Medora, North Dakota and ran cattle in the area.

A total of 362 archaeological resources are spatially represented in the Heritage Center of the North Dakota Historical Society's GIS database. Of these, 87 are not documented in Kuehn's 1990 survey report *The Archeology of Theodore Roosevelt National Park North Dakota: Final Results of the 1987-1989 University of North Dakota Investigations* but they may be described in earlier archaeological reports (Sperry 1981) or in later reports. Therefore, information for these particular resources is not listed in this assessment. Presumably site cards are in existence and accessible upon request from the Heritage Center. Of the resource sites reviewed in various detail by Kuehn and presented in this report, 217 are affiliated with Native Americans and 60 with Euroamericans.

Kuehn (1990) reports 269 heritage resource sites were identified during 1987–1989 field efforts; however, upon further investigation, discrepancies between this number and the Heritage Center's GIS were noted. Although this report is an invaluable body of work and a great contribution to understanding the archaeology of Theodore Roosevelt National Park, a number of typing errors and the lack of a comprehensive site table listing site numbers, types, and other attributes, preclude a definite determination of total sites by type and temporal affiliation. Typing errors in the form of repeated and inverse site numbers as well as incorrect site numbers resulting from confusing county letter designations are among the confounding issues. However, after diligently comparing GIS data along with Kuehn's report, the following text serves as the synopsis of what can positively be

concluded concerning significant cultural and archaeological resources systematically documented at Theodore Roosevelt National Park.

Resource sites systematically recorded and associated with Native American groups total 217 and include base camps, field camps or task camps, conical lodges, quarries and reduction locales, bison hunting areas, and eagle trapping pits. Over half of these resources (*n*=154) have very limited to no descriptive data although Appendix F of Kuehn (1990:301–310) lists all surface artifacts observed at each resource area recorded during 1987–1989. Other Native American archaeological resource sites that may not leave remnant materials such as pigment and plant collecting places and vision questing and fasting places are discussed in this assessment despite having no designated site number or plotted location. Additionally, previous archaeological reports of the park do not list aboriginal trails or rock art either but the significance of these resources is described nevertheless. A total of 60 historical period Euroamerican resources as presented by Kuehn (1990:164–176), were listed. It should be noted that two of these resources (32MZ630 and 32MZ633), typed as historical depressions, do not appear in the Heritage Center's GIS database. Of all Theodore Roosevelt National Park resources, 33 were recommended eligible for inclusion on the National Register of Historic Places during Kuehn's survey. It is unknown under what criteria they may be eligible. As mentioned, 87 resources have no information available at this time. In addition to these systematically recorded resources, Theodore Roosevelt's Elkhorn Ranch and any associated structures or objects is included as a significant Euroamerican resource that currently functions as part of the park system.

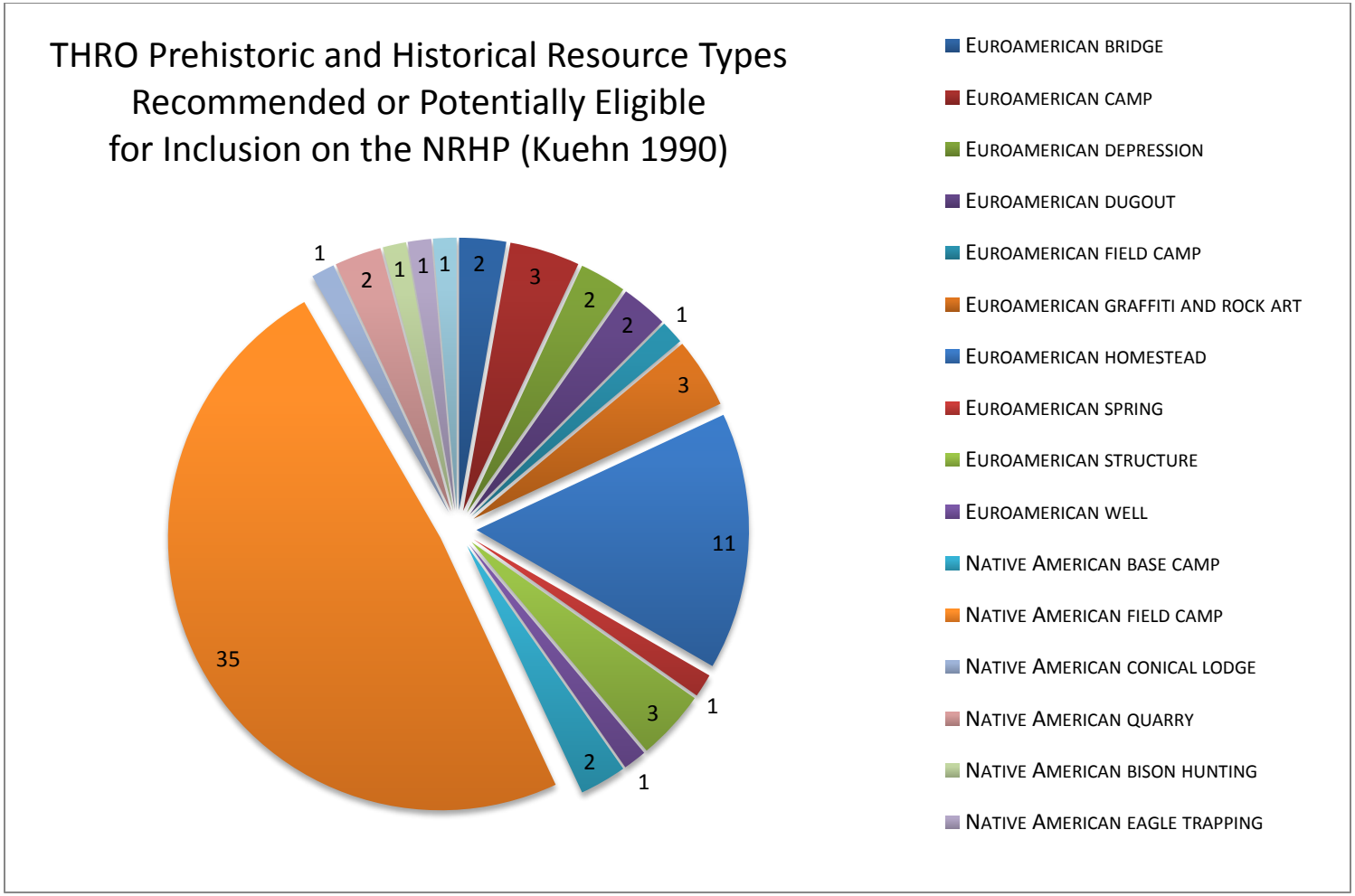


Figure 3 Archaeological Sites Recommended or Potentially Eligible in THRO

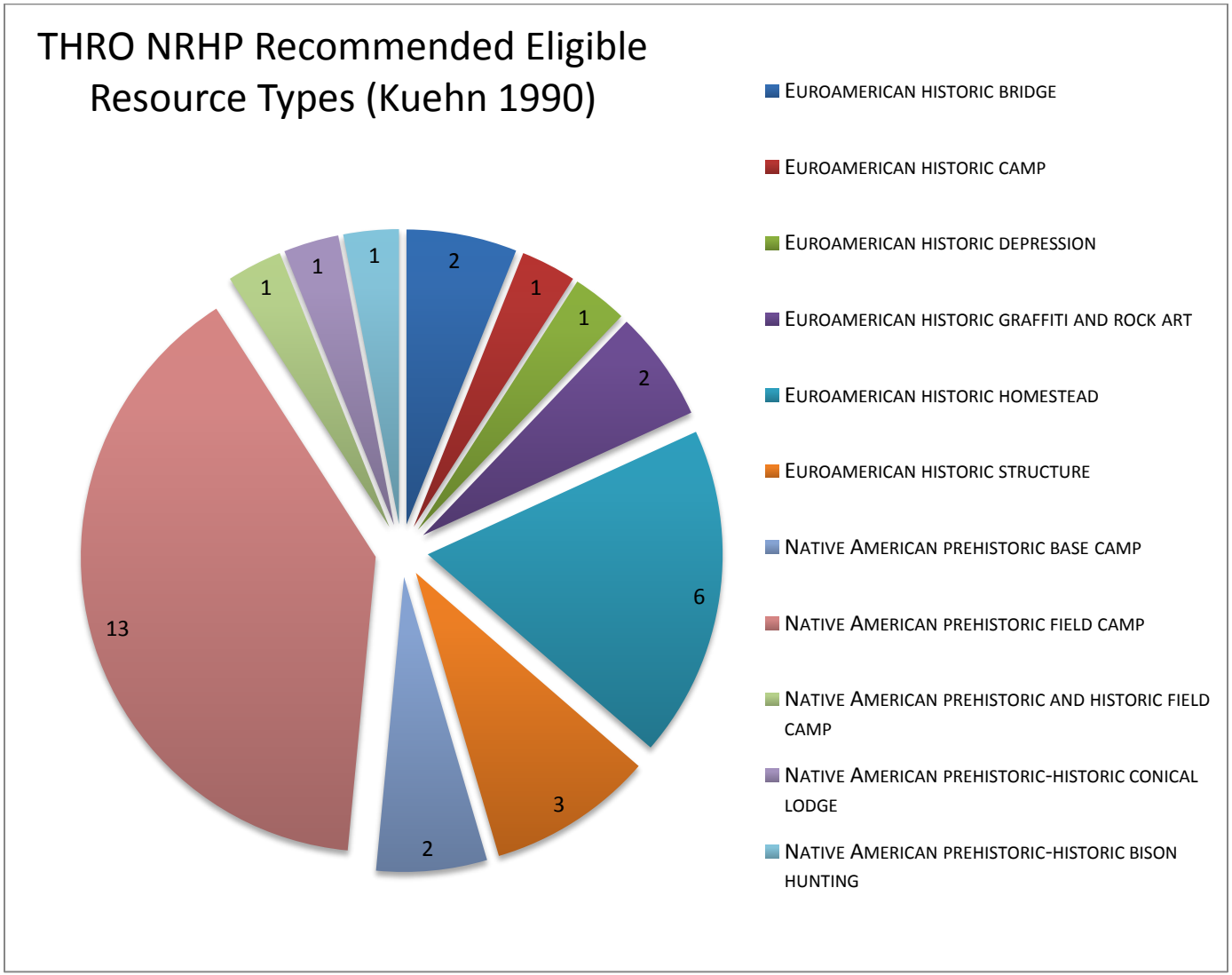


Figure 4 Archaeological Sites Recommended Eligible

Table 1 Resources Potentially Eligible for NRHP Inclusion

Site	Site Type	Site Function/Description	Native American/Euroamerican	Temporal Affiliation	Date	Features	Artifacts (general)	Diagnostics	NRHP Eligibility
32BI549	bison hunting	bison hunting	Native American	Plains Village Tradition	950-100 BP	None noted	lithics, bone, sherd	simple stamped sherd	Recommended Eligible
32BI518	eagle trapping	eagle trapping	Native American	N/A	N/A	1.75x.65m oval depression	N/A		Unknown-potentially eligible
32MZ954	base camp	habitation	Native American	Plains Woodland/Besant	2050-1200 BP	None noted	ceramics, bifaces, bilateral cutting tools, dense FCR, grooved maul	7 Besant side-notched, cord impressed sherds	Recommended Eligible
32MZ957	base camp	habitation	Native American	Plains Woodland/Besant	2050-1200 BP	None noted	bifaces, scrapers, flake tools, perforators, bilateral cutting tools, ceramics		Recommended Eligible
32BI540	bridge	bridge/CCC	Euroamerican	CCC and Park Period	AD 1933-present	arc-type bridge constructed of hand hewn sandstone and cement	N/A		Recommended Eligible
32BI541	bridge	bridge/CCC	Euroamerican	CCC and Park Period	AD 1933-present	arc-type bridge constructed of hand hewn sandstone and cement	N/A		Recommended Eligible
32BI555	camp	CCC camp	Euroamerican	CCC and Park Period	AD 1933-present	16 features: concrete foundations, concrete-lined depressions, wells, loose bricks, coal beds, trash dumps	N/A		Recommended Eligible
32BI721	camp	CCC camp	Euroamerican	CCC and Park Period	1930s	2 collapsed dugouts, likely C.C.C., sheet metal	N/A		Unknown-potentially eligible
32BI724	camp	cultural materials scatter/CCC	Euroamerican	CCC and Park Period	1930s	2 sandstone and cement foundations	olive green glass bottles, soda bottles, coffee cans, cut lumber, bone		Unknown-potentially eligible
32MZ955	conical lodge	habitation, conical timber lodge	Native American	Historic Native American		4 conical timber lodges	N/A		Recommended Eligible

32MZ875	depression	unknown	Euroamerican	Settlement Period	AD 1875-1933	depression	N/A	Recommended Eligible
32BI697	depression	ranching/farming	Euroamerican	Settlement Period	AD 1875-1933	depression	N/A	Unknown-potentially eligible
32MZ998	dugout	unknown	Euroamerican	Settlement Period	AD 1875-1933	3x2-m depression with juniper wall supports and partial roof	wire nail	Unknown-potentially eligible
32MZ997	dugout	ranching	Euroamerican	Settlement Period	AD 1875-1933	5x4-m depression with juniper wall supports	N/A	Unknown-potentially eligible
32BI567	field camp	habitation	Native American	Archaic/Pelican Lake	3500-1700 BP	None noted	obsidian from Obsidian Cliff, Wyoming	Recommended Eligible
32BI614	field camp	habitation	Native American	Archaic/McKean, Pelican Lake, Besant	5000-3500 BP/ 3500-1700 BP/ 2050-1200 BP	5 eroding hearth features	projectile points, obsidian from Bear Gulch, Idaho, quartz flake	1 side-notched Besant (Kuehn 1990: Figure 72c), 1 corner-notched Pelican Lake (Kuehn 1990: Figure 72b), 2 McKean points (Kuehn 1990: 135)	Recommended Eligible
32MZ912	field camp	habitation	Native American	Archaic/McKean	5000-3500 BP	None noted	N/A		Recommended Eligible
32BI649	field camp	habitation	Native American	Unclassified Late Plains Archaic	5000-1200 BP	None noted	N/A	patinated shallow side-notched similar to Avonlea	Recommended Eligible
32BI672	field camp	habitation	Native American	N/A	N/A	hearth	lithics, FCR, bone		Recommended Eligible
32BI731	field camp	habitation	Native American	Plains Village Tradition	950-100 BP	None noted	N/A	Plains Village check stamped and cord impressed sherds (n=93)	Recommended Eligible
32MZ1000	field camp	habitation	Native American	Plains Woodland/Besant	2050-1200 BP	None noted	KNF materials, bilateral cutting tools, projectile points, tools, ceramics, FCR, burned bone, clam shells, burned flaking debris	1 Besant side-notched and 1 possible Besant (Kuehn 1990 Figure 8c and 8e), 2 plains woodland cord impressed sherds	Recommended Eligible

32MZ988	field camp	habitation	Native American	Plains Woodland/Besant	2050-1200 BP	None noted	bone, flakes, stone tools, sherds	3 plains woodland cored-roughened body sherds	Recommended Eligible
32BI670	field camp	habitation	Native American	N/A	N/A	None noted	lithics, FCR, bone		Unknown-potentially eligible
32BI706	field camp	habitation	Native American	Plains Woodland/Besant	2050-1200 BP	None noted	bifaces, endscrapers, projectile points		Unknown-potentially eligible
32BI728	field camp	habitation	Native American	N/A	N/A	None noted	N/A		Unknown-potentially eligible
32BI729	field camp	habitation	Native American	N/A	N/A	eroding hearth	flakes, bones, FCR		Unknown-potentially eligible
32BI730	field camp	habitation	Native American	N/A	N/A	None noted	gray and red porcellanite cores and bifaces		Unknown-potentially eligible
32BI733	field camp	habitation	Native American	N/A	N/A	None noted	endscrapers, diverse lithic raw materials		Unknown-potentially eligible
32BI734	field camp	habitation	Native American	N/A	N/A	None noted	N/A		Unknown-potentially eligible
32BI736	field camp	habitation	Native American	N/A	N/A	None noted	FCR, burnt KRF shatter, unifacial retouched flake, chert, KRF flakes		Unknown-potentially eligible
32MZ984	field camp	habitation	Native American	Plains Woodland/Besant	2050-1200 BP	None noted	cores, flakes, FCR	1 Besant corner-notched dart point	Unknown-potentially eligible
32MZ987	field camp	habitation	Native American	N/A	N/A	None noted	N/A		Unknown-potentially eligible

32MZ990	field camp	habitation	Native American	N/A	N/A	None noted	N/A		Unknown-potentially eligible
32MZ991	field camp	habitation	Native American	N/A	N/A	None noted	N/A		Unknown-potentially eligible
32MZ993	field camp	habitation	Native American	N/A	N/A	3 sandstone and granite cairns	flakes, cores		Unknown-potentially eligible
32MZ994	field camp	habitation	Native American	N/A	N/A	6 m stone circle, rectangular cairn	flakes, quartzite hammerstone		Unknown-potentially eligible
32MZ995	field camp	habitation	Native American	N/A	N/A	None noted	N/A		Unknown-potentially eligible
32MZ999	field camp	cultural materials scatter	Euroamerican	Settlement Period	AD 1875-1933	5-m diameter depression	iron bands, cut lumber		Unknown-potentially eligible
32BI579	field camp	N/A	Native American	Unclassified Late Prehistoric, probably Besant	1390+/-100 bp and 1180+/-90 BP	None noted	N/A		Recommended Eligible
32BI626	field camp	N/A	Native American	Plains Village Tradition	950-100 BP	None noted	N/A	simple stamped sherds	Recommended Eligible
32BI648/32BI122	field camp	N/A	Native American	Unclassified Late Prehistoric		None noted	N/A	reworked Agate Basin, out of context, Plains side-notched	Recommended Eligible
32BI703	field camp	N/A	Native American	Unclassified Late Prehistoric, Archaic/Logan Creek/Mummy Cave	2160+/-70 BP	fire-cracked rock features	N/A	side-notched Simonsen	Recommended Eligible
32MZ915	field camp	N/A	Native American	Plains Village Tradition	950-100 BP	None noted	N/A	Plains side-notched, simple stamped sherds	Recommended Eligible
32BI520	field camp	N/A	Native American	Archaic/McKean	5000-3500 BP	None noted	N/A		Unknown-potentially eligible

32BI522	field camp	N/A	Native American	Archaic/McKean	5000-3500 BP	None noted	N/A		Unknown-potentially eligible
32BI568	field camp	N/A	Native American	Plains Village Tradition	950-100 BP	None noted	sherds, projectile point, jasper	simple stamped sherds, Late Prehistoric arrow point	Unknown-potentially eligible
32BI573	field camp	N/A	Native American	Archaic/Pelican Lake	3500-1700 BP	None noted	N/A		Unknown-potentially eligible
32BI575	field camp	N/A	Native American	Plains Woodland/Besant	2050-1200 BP	None noted	N/A		Unknown-potentially eligible
32BI695	field camp	N/A	Native American	Unclassified Late Prehistoric		None noted	N/A	Plains side-notched	Unknown-potentially eligible
32MZ946	field camp	N/A	Native American	Plains Woodland/Besant	2050-1200 BP	None noted	N/A		Unknown-potentially eligible
32BI548	field camp and trash dump	cultural materials scatter/trash dump	Native American and Euroamerican	Unclassified Late Prehistoric, Archaic/McKean and Besant/Settlement Period	5000-3500 BP/ 2050-1200 BP/ AD 1875-1933	None noted	clear glass, bottle glass, China, crockery, lumber, wire, metal	Plains side-notched projectile point	Recommended Eligible
32BI584	graffiti and rock art	grafitti and rock art	Euroamerican	Settlement Period	AD 1875-1933	sandstone boulder with carved initials and dates 1883-1940s	N/A		Recommended Eligible
32BI623	graffiti and rock art	grafitti and rock art	Euroamerican	Settlement Period	AD 1875-1933	sandstone boulder with initials VA and "L" cattle brand, carved 42 cm high by 13 cm wide cowboy with hat and bola tie	N/A		Recommended Eligible

32BI677	graffiti and rock art	grafitti and rock art	Euroamerican	Settlement Period	AD 1875-1933	4 panels of graffiti and rock art on sandstone, carvings from 1907-1914, headstone-like cross carved	N/A	Unknown-potentially eligible
32BI483	homestead	habitation	Euroamerican	CCC and Park Period	1914-1938	fieldstone foundation, two depressions, dug-out	farm machinery	Recommended Eligible
32BI572	homestead	habitation	Euroamerican	Settlement Period	AD 1875-1933	None noted	N/A	Recommended Eligible
32BI583	homestead	habitation	Euroamerican	Settlement Period	AD 1875-1933	None noted	N/A	Recommended Eligible
32BI574	homestead	habitation	Euroamerican	Settlement Period	AD 1875-1933	cement foundation, depression, 2 wells, sandstone outcrop quarry with graffiti	jasper flake	Recommended Eligible
32BI621	homestead	habitation	Euroamerican	Settlement Period	AD 1875-1933	fieldstone foundation, sandstone cellar	diverse assemblage observed	Recommended Eligible
32MZ911	homestead	habitation	Euroamerican	Settlement Period	AD 1875-1933	None noted	N/A	Recommended Eligible
32BI624	homestead	habitation	Euroamerican	CCC and Park Period	1910-1930s	None noted	N/A	Unknown-potentially eligible
32BI625	homestead	habitation	Euroamerican	Settlement Period	AD 1875-1933	None noted	N/A	Unknown-potentially eligible
32BI680	homestead	habitation	Euroamerican	Settlement Period	AD 1875-1933	None noted	N/A	Unknown-potentially eligible
32BI698	homestead	habitation	Euroamerican	Settlement Period	AD 1875-1933	two depressions, fieldstone foundation	diverse assemblage observed	bottles observed but not described	Unknown-potentially eligible

32MZ974	homestead	habitation	Euroamerican	Settlement Period	AD 1875-1933	None noted	N/A	Unknown-potentially eligible
32BI726	quarry	lithic scatter/procurement	Native American	N/A	N/A	None noted	N/A	Unknown-potentially eligible
32BI735	quarry	lithic scatter/procurement	Native American	N/A	N/A	None noted	Miocene flint core reduction site	Unknown-potentially eligible
32BI576	spring	spring development	Euroamerican	CCC and Park Period	AD 1933-present	None noted	N/A	Unknown-potentially eligible
32MZ1002	field camp/tipi ring(s)	stone features	Native American	Historic Native American	AD 1875-present	3 stone circles (TRSS) and cairns	N/A	Unknown-potentially eligible
32BI602 or 32BI605	structure	structure	Euroamerican	CCC and Park Period	AD 1933-present	brick foundation	N/A	Recommended Eligible
32MZ1003	structure	log cabin/ranching	Euroamerican	Settlement Period	AD 1875-1933	1 standing wall	N/A	Recommended Eligible
32MZ985	structure	scenic overlook shelter/CCC	Euroamerican	CCC and Park Period	1937	structure built from local cut sandstone, cottonwood roof and cedar shingles	N/A	Recommended Eligible
32BI517	unknown	N/A		N/A	N/A	None noted	N/A	Unknown-potentially eligible
32BI519	unknown	N/A		N/A	N/A	None noted	N/A	Unknown-potentially eligible
32BI521	unknown	N/A		N/A	N/A	None noted	N/A	Unknown-potentially eligible
32BI523	unknown	N/A		N/A	N/A	None noted	N/A	Unknown-potentially eligible

32BI524	unknown	N/A	N/A	N/A	None noted	N/A	Unknown-potentially eligible
32BI525	unknown	N/A	N/A	N/A	None noted	N/A	Unknown-potentially eligible
32BI526	unknown	N/A	N/A	N/A	None noted	N/A	Unknown-potentially eligible
32BI527	unknown	N/A	N/A	N/A	None noted	N/A	Unknown-potentially eligible
32BI530	unknown	N/A	N/A	N/A	None noted	N/A	Unknown-potentially eligible
32BI531	unknown	N/A	N/A	N/A	None noted	N/A	Unknown-potentially eligible
32BI532	unknown	N/A	N/A	N/A	None noted	N/A	Unknown-potentially eligible
32BI537	unknown	N/A	N/A	N/A	None noted	N/A	Unknown-potentially eligible
32BI543	unknown	N/A	N/A	N/A	None noted	N/A	Unknown-potentially eligible
32BI544	unknown	N/A	N/A	N/A	None noted	N/A	Unknown-potentially eligible
32BI545	unknown	N/A	N/A	N/A	None noted	N/A	Unknown-potentially eligible

32BI547	unknown	N/A	N/A	N/A	None noted	N/A	Unknown-potentially eligible
32BI551	unknown	N/A	N/A	N/A	None noted	N/A	Unknown-potentially eligible
32BI557	unknown	N/A	N/A	N/A	None noted	obsidian from Obsidian Cliff, Wyoming, basalt flake	Unknown-potentially eligible
32BI558	unknown	N/A	N/A	N/A	None noted	N/A	Unknown-potentially eligible
32BI560	unknown	N/A	N/A	N/A	None noted	N/A	Unknown-potentially eligible
32BI564	unknown	N/A	N/A	N/A	None noted	N/A	Unknown-potentially eligible
32BI565	unknown	N/A	N/A	N/A	None noted	N/A	Unknown-potentially eligible
32BI566	unknown	N/A	N/A	N/A	None noted	N/A	Unknown-potentially eligible
32BI569	unknown	N/A	N/A	N/A	None noted	N/A	Unknown-potentially eligible
32BI570	unknown	N/A	N/A	N/A	None noted	N/A	Unknown-potentially eligible
32BI571	unknown	N/A	N/A	N/A	None noted	N/A	Unknown-potentially eligible

32BI577	unknown	N/A	N/A	N/A	None noted	N/A	Unknown-potentially eligible
32BI578	unknown	N/A	N/A	N/A	None noted	N/A	Unknown-potentially eligible
32BI580	unknown	N/A	N/A	N/A	None noted	N/A	Unknown-potentially eligible
32BI582	unknown	N/A	N/A	N/A	None noted	N/A	Unknown-potentially eligible
32BI585	unknown	N/A	N/A	N/A	None noted	N/A	Unknown-potentially eligible
32BI586	unknown	N/A	N/A	N/A	None noted	N/A	Unknown-potentially eligible
32BI587	unknown	N/A	N/A	N/A	None noted	N/A	Unknown-potentially eligible
32BI588	unknown	N/A	N/A	N/A	None noted	N/A	Unknown-potentially eligible
32BI589	unknown	N/A	N/A	N/A	None noted	N/A	Unknown-potentially eligible
32BI590	unknown	N/A	N/A	N/A	None noted	N/A	Unknown-potentially eligible
32BI591	unknown	N/A	N/A	N/A	None noted	N/A	Unknown-potentially eligible

32BI592	unknown	N/A	N/A	N/A	None noted	N/A	Unknown-potentially eligible
32BI593	unknown	N/A	N/A	N/A	None noted	N/A	Unknown-potentially eligible
32BI596	unknown	N/A	N/A	N/A	None noted	N/A	Unknown-potentially eligible
32BI597	unknown	N/A	N/A	N/A	None noted	N/A	Unknown-potentially eligible
32BI601	unknown	N/A	N/A	N/A	None noted	N/A	Unknown-potentially eligible
32BI628	unknown	N/A	N/A	N/A	None noted	N/A	Unknown-potentially eligible
32BI661	unknown	N/A	N/A	N/A	None noted	N/A	Unknown-potentially eligible
32BI662	unknown	N/A	N/A	N/A	None noted	N/A	Unknown-potentially eligible
32BI666	unknown	N/A	N/A	N/A	None noted	N/A	Unknown-potentially eligible
32BI678	unknown	N/A	N/A	N/A	None noted	N/A	Unknown-potentially eligible
32BI684	unknown	N/A	N/A	N/A	None noted	N/A	Unknown-potentially eligible

32BI685	unknown	N/A	N/A	N/A	None noted	N/A	Unknown-potentially eligible
32BI696	unknown	N/A	N/A	N/A	None noted	N/A	Unknown-potentially eligible
32BI702	unknown	N/A	N/A	N/A	None noted	N/A	Unknown-potentially eligible
32BI704	unknown	N/A	N/A	N/A	None noted	N/A	Unknown-potentially eligible
32BI705	unknown	N/A	N/A	N/A	None noted	N/A	Unknown-potentially eligible
32BI707	unknown	N/A	N/A	N/A	None noted	N/A	Unknown-potentially eligible
32BI708	unknown	N/A	N/A	N/A	None noted	N/A	Unknown-potentially eligible
32MZ865	unknown	N/A	N/A	N/A	None noted	N/A	Unknown-potentially eligible
32MZ866	unknown	N/A	N/A	N/A	None noted	N/A	Unknown-potentially eligible
32MZ867	unknown	N/A	N/A	N/A	None noted	N/A	Unknown-potentially eligible
32MZ869	unknown	N/A	N/A	N/A	None noted	N/A	Unknown-potentially eligible

32MZ870	unknown	N/A	N/A	N/A	None noted	N/A	Unknown-potentially eligible
32MZ872	unknown	N/A	N/A	N/A	None noted	N/A	Unknown-potentially eligible
32MZ873	unknown	N/A	N/A	N/A	None noted	N/A	Unknown-potentially eligible
32MZ903	unknown	N/A	N/A	N/A	None noted	N/A	Unknown-potentially eligible
32MZ904	unknown	N/A	N/A	N/A	None noted	N/A	Unknown-potentially eligible
32MZ905	unknown	N/A	N/A	N/A	None noted	N/A	Unknown-potentially eligible
32MZ910	unknown	N/A	N/A	N/A	None noted	N/A	Unknown-potentially eligible
32MZ913	unknown	N/A	N/A	N/A	None noted	N/A	Unknown-potentially eligible
32MZ916	unknown	N/A	N/A	N/A	None noted	N/A	Unknown-potentially eligible
32MZ917	unknown	N/A	N/A	N/A	None noted	N/A	Unknown-potentially eligible
32MZ942	unknown	N/A	N/A	N/A	None noted	N/A	Unknown-potentially eligible

32MZ945	unknown	N/A	N/A	N/A	None noted	N/A	Unknown-potentially eligible
32MZ947	unknown	N/A	N/A	N/A	None noted	N/A	Unknown-potentially eligible
32MZ956	unknown	N/A	N/A	N/A	None noted	N/A	Unknown-potentially eligible
32BI536	well	well development/ranching Euroamerican	CCC and Park Period	AD 1933-present	extant features were removed upon abandonment	diverse assemblage observed bottles (Kuehn 1990: Figures 76 and 77)	Unknown-potentially eligible

Table 2 Resources Recommended Eligible for NRHP Inclusion

Site	Site Type	Site Function/Description	Prehistoric/Historic	Native American/Euroamerican	Temporal Affiliation	Date	Features	Artifacts (general)	Diagnostics
32MZ954	base camp	habitation	prehistoric	Native American	Plains Woodland/Besant	2050–1200 B.P.	None noted	ceramics, bifaces, bilateral cutting tools, dense FCR, grooved maul	7 Besant side-notched, cord impressed sherds
32MZ957	base camp	habitation	prehistoric	Native American	Plains Woodland/Besant	2050–1200 B.P.	None noted	bifaces, scrapers, flake tools, perforators, bilateral cutting tools, ceramics	
32MZ955	conical lodge	habitation,conical timber lodge	prehistoric-historic	Native American	Historic Native American		4 conical timber lodges	N/A	
32BI567	field camp	habitation	prehistoric	Native American	Archaic/Pelican Lake	3500–1700 B.P.	None noted	obsidian from Obsidian Cliff, Wyoming	
32BI614	field camp	habitation	prehistoric	Native American	Archaic/McKean, Pelican Lake, Besant	5000–3500 B.P./ 3500–1700 B.P./ 2050–1200 B.P.	5 eroding hearth features	projectile points, obsidian from Bear Gulch, Idaho, quartz flake	1 side-notched Besant (Kuehn 1990: Figure 72c), 1 corner-notched Pelican Lake (Kuehn 1990: Figure 72b), 2 McKean points (Kuehn 1990: 135)
32MZ912	field camp	habitation	prehistoric	Native American	Archaic/McKean	5000–3500 B.P.	None noted	N/A	
32BI649	field camp	habitation	prehistoric	Native American	Unclassified Late Plains Archaic	5000–1200 B.P.	None noted	N/A	patinated shallow side-notched similar to Avonlea
32BI672	field camp	habitation	prehistoric	Native American	N/A	N/A	hearth	lithics, FCR, bone	
32BI731	field camp	habitation	prehistoric	Native American	Plains Village TrA.D.ition	950–100 B.P.	None noted	N/A	Plains Village check stamped and cord impressed sherds (n=93)

32MZ1000	field camp	habitation	prehistoric	Native American	Plains Woodland/Besant	2050—1200 B.P.	None noted	KNF materials, bilateral cutting tools, projectile points, tools, ceramics, FCR, burned bone, clam shells, burned flaking debris	1 Besant side-notched and 1 possible Besant (Kuehn 1990 Figure 8c and 8e), 2 plains woodland cord impressed sherds
32MZ988	field camp	habitation	prehistoric	Native American	Plains Woodland/Besant	2050—1200 B.P.	None noted	bone, flakes, stone tools, sherds	3 plains woodland cored-roughened body sherds
32BI548	field camp	cultural materials scatter/trash dump	prehistoric and historic	Native American	Unclassified Late Prehistoric, Archaic/McKean and Besant/Settlement Period	5000—3500 B.P./ 2050—1200 B.P./ A.D. 1875—1933	None noted	clear glass, bottle glass, China, crockery, lumber, wire, metal	Plains side-notched projectile point
32BI540	bridge	bridge/CCC	historic	Euroamerican	CCC and Park Period	A.D. 1933—Present	arc-type bridge constructed of hand hewn sandstone and cement	N/A	
32BI541	bridge	bridge/CCC	historic	Euroamerican	CCC and Park Period	A.D. 1933—Present	arc-type bridge constructed of hand hewn sandstone and cement	N/A	
32BI555	camp	CCC camp	historic	Euroamerican	CCC and Park Period	A.D. 1933—Present	16 features: concrete foundations, concrete-lined depressions, wells, loose bricks, coal beds, trash dumps	N/A	
32MZ875	depression	unknown	historic	Euroamerican	Settlement Period	A.D. 1875—1933	depression	N/A	
32BI584	graffiti and rock art	grafitti and rock art	historic	Euroamerican	Settlement Period	A.D. 1875—1933	sandstone boulder with carved initials and dates 1883-1940s	N/A	

32BI623	graffiti and rock art	grafitti and rock art	historic	Euroamerican	Settlement Period	A.D. 1875–1933	sandstone boulder with initials VA and "L" cattle brand, carved 42 cm high by 13 cm wide cowboy with hat and bola tie	N/A	
32BI483	homesteA.D.	habitation	historic	Euroamerican	CCC and Park Period	1914–1938	fieldstone foundation, two depressions, dug-out	farm machinery	
32BI572	homesteA.D.	habitation	historic	Euroamerican	Settlement Period	A.D. 1875–1933	None noted	N/A	
32BI583	homesteA.D.	habitation	historic	Euroamerican	Settlement Period	A.D. 1875–1933	None noted	N/A	
32BI574	homesteA.D.	habitation	historic	Euroamerican	Settlement Period	A.D. 1875–1933	cement foundation, depression, 2 wells, sandstone outcrop quarry with graffiti	jasper flake	
32BI621	homesteA.D.	habitation	historic	Euroamerican	Settlement Period	A.D. 1875–1933	fieldstone foundation, sandstone cellar	diverse assemblage observed	
32MZ911	homesteA.D.	habitation	historic	Euroamerican	Settlement Period	A.D. 1875–1933	None noted	N/A	
32BI605	structure	structure	historic	Euroamerican	CCC and Park Period	A.D. 1933–present	brick foundation	N/A	
32MZ1003	structure	log cabin/ranching	historic	Euroamerican	Settlement Period	A.D. 1875–1933	1 standing wall	N/A	
32MZ985	structure	scenic overlook shelter/CCC	historic	Euroamerican	CCC and Park Period	1937	structure built from local cut sandstone, cottonwood roof and cedar shingles	N/A	
32BI549	bison hunting	bison processing	prehistoric-historic	Native American	Plains Village TrA.D.ition	950–100 B.P.	None noted	lithics, bone, sherd	simple stamped sherd
32BI579	field camp	N/A	prehistoric	Native American	Unclassified Late Prehistoric , probably Besant	1390+/-100 B.P. and 1180+/-90 B.P.	None noted	N/A	

32BI626	field camp	N/A	prehistoric	Native American	Plains Village TrA.D.ition	950—100 B.P.	None noted	N/A	simple stamped sherds
32BI648/32BI122	field camp	N/A	prehistoric	Native American	Unclassified Late Prehistoric		None noted	N/A	reworked Agate Basin, out of context, Plains side-notched
32BI703	field camp	N/A	prehistoric	Native American	Unclassified Late Prehistoric, Archaic/Logan Creek/Mummy Cave	2160+/-70 B.P.	fire-cracked rock features	N/A	side-notched Simonsen
32MZ915	field camp	N/A	prehistoric	Native American	Plains Village TrA.D.ition	950—100 B.P.	None noted	N/A	Plains side-notched, simple stamped sherds

NATIVE AMERICAN ARCHAEOLOGICAL RESOURCES AND MATERIAL CULTURE

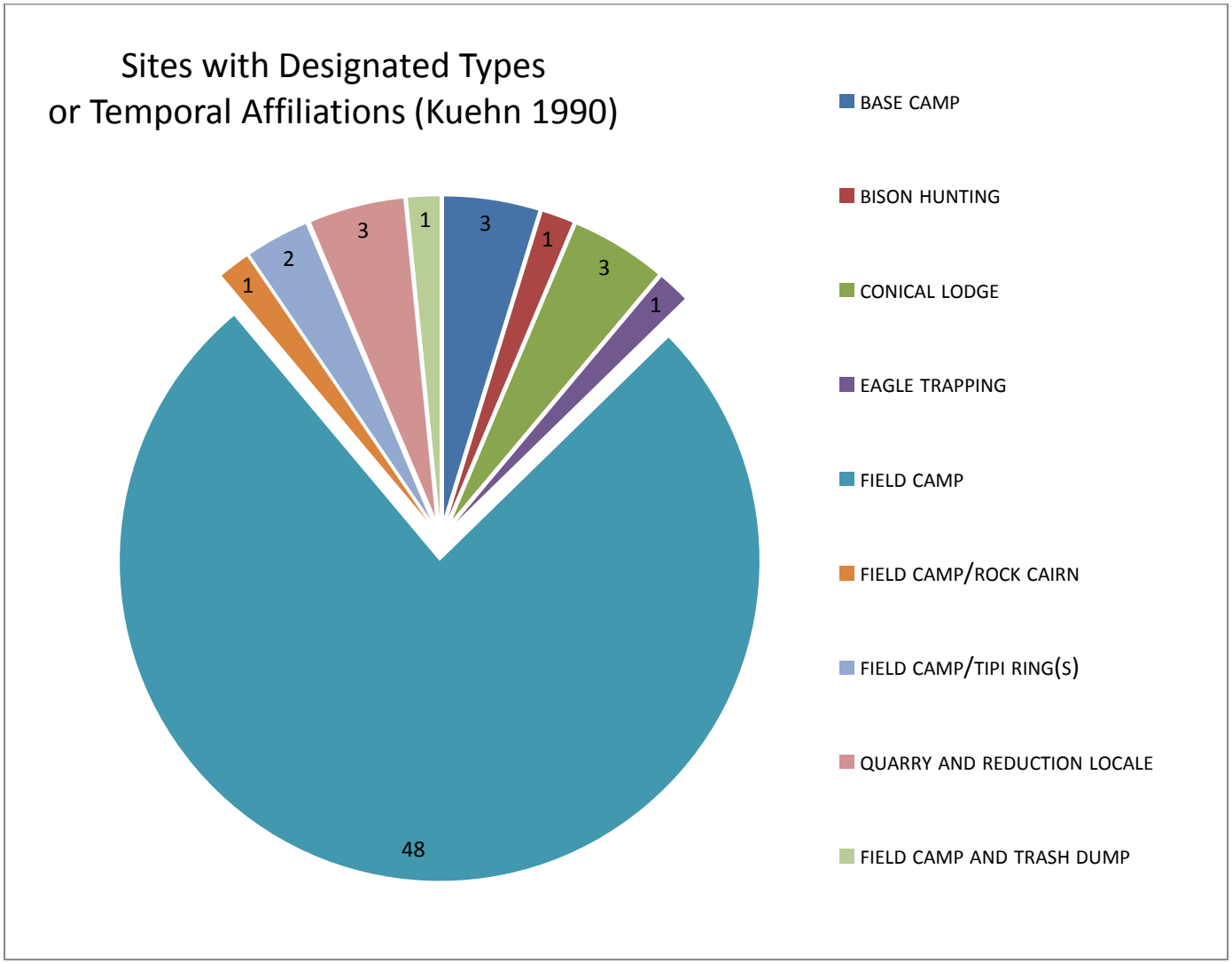
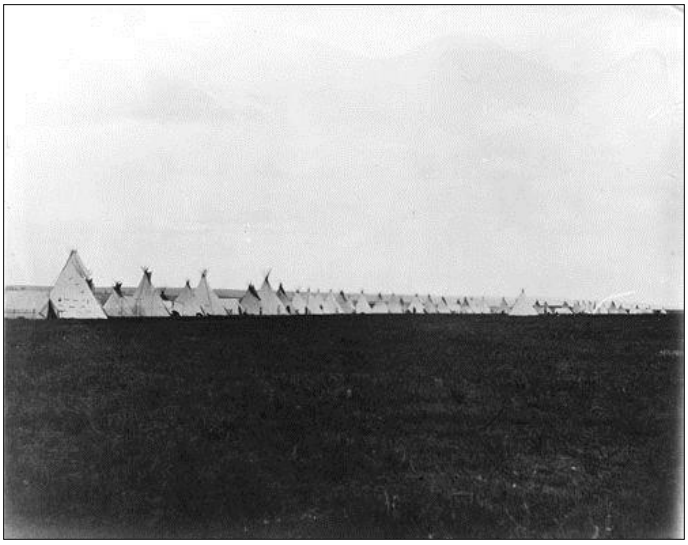


Figure 5 Prehistoric Sites with Known Typologies

CAMP SITES



Tipis in a Meadow, Frank Bennett Fiske, 1900-1920 (State Historical Society of North Dakota sh19520131)

GENERAL DESCRIPTION: Camp sites are those resources associated with the habitation, subsistence, and sacred activities of ancestral and historic Native American groups that occupied and traveled all areas the park. Camp sites include archaeological resources typed as base camps, field camps, and task camps, as well as places where specific resource extraction and use was carried out, as in the case of conical timbered lodges used for eagle trapping. The temporal chronology presented by the construction and use of base camps, field camps, task camps, and conical timber lodges suggests lifeways associated with camp site resources within the park span nearly 7000 years (Kuehn 1990). Archaic and Woodland groups are represented in the archaeological record but this area is traditionally known as the core territory of the Late Prehistoric Plains Village Tradition, a tradition thought to represent historic groups such as the **Mandan** and **Hidatsa**. Additionally, ethnographically based evidence further suggest the **Hidatsa** and **River Crow** specifically, camped and trapped eagles in the winter and fall along the Little Missouri River (Kuehn 1990: 126–127, Bowers 1948, Curtis 1009:4; Wilson 1928; Beckwith 1937, 1938; Hollenback 2015). The Little Missouri Badlands are also located within the traditional historic territory of the **Mandan**, and in the outer edge of **Sioux** and **Assiniboine** (Denig 1961; Hoebel 1960; Kuehn 1990:130) hunting grounds; thus, camp site resources may be associated with these tribes as well. Time period designations used for camp sites follow Kuehn (1990:26–32) and Zedeño (2006:58–66).

Ethnographic interviews note most tribes retained knowledge of topographic considerations for setting up camps. A **Turtle Mountain Cree Chippewa** consultant remarked of camp sites in the park stating that task camps would be dedicated to hunting and could be found on the plateaus, whereas larger band (base) camps would have been set up in the lower elevations, near the river. Members of the **Fort Belknap** tribe stated camping would occur on terraces above the river, depending on the season, especially in the Petrified Forest area of the park. A member of the **Standing Rock Sioux Tribe** stated the north unit of the park was used for vision questing, ceremonies, teaching apprentices, traveling, and camping by men in the summer and both men and women in the winter. Hunting camps along the Little Missouri River and in the foothills were

notably important to all tribal members as hunters would follow animals along the river and drink from it as they went. An **Assiniboine** consultant from the **Fort Belknap Tribe** remarked

> *"Hunting camps, as opposed to other camps, were placed on high points for survival. Women would come here too, to butcher the animals, break the bones, and tan the hides. They would bring the tipi poles to stretch the hide and use the brain to break down the fiber in the hide. Children came along and helped. These places were secure. In the spring and fall they would camp…where the air was nice and warm, as the cold air would be in the lowest point. It gets buggy down by the river. But there would be camps near water if you needed to haul water for certain chores. The buffalo, too, escaped from the bugs by making a wallow, a hole in the mud where they would roll* (Zedeño et al. 2006:254)."

The following resource pages introduce several camp sites locales identified in the boundaries of the park.

BASE CAMPS

Tipis and Drying Racks, 1880-1889 (McLean County Historical Society dmMC32)

GENERAL DESCRIPTION: Base camps, as described by Binford (1980) and used in Kuehn's classificatory settlement schema for the prehistoric and early historic period, function as residential bases which represent the hub of subsistence activities and from which hunting/gathering forays originate. Base camps are the areas where the widest range of subsistence activities took place (Kuehn 1990:135–137). Hanson (1983:1404) remarks that in the North Dakota region base camps are the foci of subsistence activities for nomadic hunter-gatherers during the prehistoric period and were generally inhabited by a nuclear family, stem family, or band-level group (Hanson 1983). The physiographic location of base camps has much to do with proximity to riverine environments and critical resources and their seasonal variability. Sites identified as base camps at Theodore Roosevelt National Park have high artifact diversity indices and dense artifact concentrations. All exhibit evidence of domestic activity and occupation over a length of time (Kuehn 1990:135–137).

Base camps are generally located in the foothills and on stream terraces of timbered river bottoms like the Little Missouri River. The significance of the river on the landscape therefore controlled many seasonal camping activities. Lifeways associated with base camps include subsistence activities related to food preparation and consumption, tool and craft production, and child rearing and represent a way of life that developed in the prehistoric period and persisted into the historical period. **Assiniboine** and **Gros Ventre** consultants of the **Fort Belknap Tribe** interviewed in the earlier ethnographic assessment remarked that

> *"[T]he terraces above the river, some distance from the water, would have been used for generalized camping, likely in the cool seasons. Most chores were carried out at these camps: craft making, plant and wood gathering, cooking, and hunting of small game and water fowl. Women and children would have been the main occupants of these larger camps* (Zedeño et al. 2006:255)"

SITE NUMBERS: Three base camp resources (**32MZ954, 32MZ957,** and **32MZ1000**) were recorded by Kuehn during the 1987–1989 survey of the north units (Kuehn: 1990:61, 165–167). Located in the foothills around a prominent eastern bend of the Little Missouri River, these sites were likely

inhabited for a significant amount of time (Kuehn 1990:136). A spring called Mandal Spring is also nearby. All were occupied during the Plains Woodland/Besant period (A.D. 50–800) and all were recommended eligible for inclusion on the National Register of Historic Places.

REPRESENTATIVE RESOURCE DESCRIPTIONS: 32MZ954 covers an area 108,000 m². The assemblage is one of the densest in the park and includes bifaces, bilateral cutting tools, numerous pieces of fire cracked rock, a grooved maul, seven Besant side-notched projectile points, and cord impressed sherds. Four of the seven points were collected. **32MZ957** is 24,500 m² and located near 32MZ954. The assemblage includes ceramics and a large number of lithic tools such as bifaces, scrapers, flake tools, perforators, and bilateral cutting tools. **32MZ1000** is a dense scatter situated on a low river terrace near the mouth of an intermittent stream just north of the Little Missouri. It is sheltered from prevailing northwest winds by sheer canyon walls. Artifacts observed include knife river flint debitage (KNF), bilateral cutting tools, other lithic tools, fire cracked rock, burned bone, clam shells, burned flaking debris, two Besant side-notched points, and two Plains Woodland cord impressed sherds (Kuehn 1990:136).

LOCATION WITHIN THE PARK: Of the base camps located during previous archaeological work, all are located in the north unit of the park.

TEMPORAL OR GROUP AFFILIATION: Native American

FIELD AND TASK CAMPS

Cattle Dressing, Erwin Joseph Lawfer, 1885-1945 (NDSU Institute for Regional Studies rs004335)

GENERAL DESCRIPTION: Field and task camps are the most prominent archaeological resource in the park. Temporal chronology indicates ancestral and historic Native American group activities associated with these resources span 7000 years. Typically field and task camps display a lesser degree of activity over a shorter period of time than base camps. They do not always have features or artifacts related directly to sustained domestic life. Defined by Binford (1980:10) as "temporary operational centers for a task group…where a task group sleeps, eats, and otherwise maintains itself away from the residential base" (Kuehn 1990:137), this assessment considers field and task camps as significant resource areas that have resulted from behaviors associated with general subsistence.

Consultants interviewed in 2004 as part of an ethnographic assessment noted field camps and task camps may have been associated with migrations to cross the Little Missouri River and traverse the Badlands as part of pilgrimages to visit band members or sacred areas on the landscape during annual hunting, collecting, and trapping cycles (Zedeño et al. 2006:241). Kuehn identified 131 field camps in Theodore Roosevelt National Park. Grouped into this category are those areas representing cultural material scatters and lithic scatters. Of these, only 52 field camps were explicitly listed as such in Kuehn's (1990) report. A few were selected for discussion in this assessment.

Many of the field camps and task camps in Theodore Roosevelt National Park are found on ridge tops, plateaus, and along terraces. A lesser number are those located on saddles, in the floodplain, and in the foothills of the Little Missouri River Valley (Kuehn 1990:26–32). Archaic period field camps include one with an early Archaic component (Logan Creek/Mummy cave), six with middle Archaic components (McKean), and five with Late Archaic components (Pelican Lake). Additionally, two resources are listed as Unclassified Late Archaic field camp resources with Woodland complexes such as Besant total eight and are generally located in the foothills. Late Prehistoric (n=6) and Plains Village Tradition (n=5) field camp resources, when mentioned, are found in the floodplain, on terraces, and in the foothills of the Little Missouri River Valley. A **Blood** consultant observed that archaeological sites typed as field or task camps "could have been used as

[vantage points or lookouts] and also as a…camp for tool making in hunting expeditions" (Zedeño et al. 2006:257).

SITE NUMBERS: The following site numbers are listed as field camps by Kuehn (1990): 32BI520, 32BI522, 32BI557, 32BI562, 32BI567, 32BI568, 32BI573, 32BI575, 32BI579, 32BI614, 32BI615, 32BI626, 32BI629, 32BI648/32BI122, 32BI649, 32BI670, 32BI672, 32BI695, 32BI703, 32BI706, 32BI725, 32BI728, 32BI729, 32BI730, 32BI731, 32BI732, 32BI733, 32BI734, 32BI736, 32MZ1001, 32MZ767, 32MZ868, 32MZ912, 32MZ915, 32MZ935, 32MZ943, 32MZ946, 32MZ948, 32MZ984, 32MZ986, 32MZ987, 32MZ988, 32MZ989, 32MZ990, 32MZ991, 32MZ995, 32MZ996, 32BI548, 32MZ993, 32MZ1002, and 32MZ994

REPRESENTATIVE RESOURCE DESCRIPTIONS: Site **32BI703** is a field camp resource situated on a ridge top in Petrified Forest area of the park's south unit. Temporally associated with the Logan Creek/Mummy Cave phase (5,500–3,250 B.C.) of the Early Archaic, an Unclassified Late Prehistoric (A.D. 500–1750) component also exists. The Late Prehistoric designation follows Zedeño et al. (2006: 64). Fire cracked rock features were present along with a Knife River Flint (KRF) Simonsen projectile point (5,500–3,300 B.C.) which was discovered during profile excavations by Kuehn. This point may represent an extant Early Archaic deposit (Zedeño et al. 2006:62). One biface, 3 scrapers, 170 pieces of flaked stone debitage, 4 shatter, 1 core, 443 fragments of fire cracked rock, and charcoal were observed at the resource site. Knife River Flint, porcellanite, and agate were among the raw materials utilized. Additionally, pollen samples were taken from three dated paleosols representing the Pleistocene and the Early and Late Holocene in an attempt to understand the paleoclimate. The Pleistocene paleosol, referred to as the Leonard paleosol, contained more pine pollen than Holocene soils while grasses were less abundant. This soil also produced a high frequency of Cheno-am and contained some hackberry pollen. Pollen from the Early Holocene is similar to the Pleistocene sample but a decline in pine pollen indicates a warming episode in the region's climate. The latest Holocene paleosol displays a pollen signature suggesting even higher temperatures coupled with increasing moisture as pine pollen continues to decrease and grasses increase (Cummings 1990 from Kuehn 1990 Appendices). This climatic episode may have contributed to an increased presence of Woodland and Plains Village groups that began to cultivate and utilize areas in the park as well as later Native American groups. The site is recommended eligible for inclusion on the National Register of Historic Places.

Plains Village groups associated with field camp resources were horticultural-hunter-gatherers that followed a settlement pattern of semipermanent summer and winter earthlodge villages along the Missouri River. In the summer seasonal hunting rounds and unscheduled hunts based on resource needs would likely have occurred in adjacent territories and resulted in the deposit of field camp resources (Bowers 1948, 1965; Wilson 1928; Hanson and Gregg 1983; Kuehn 1990:158). Of the Plains Village Tradition, Zedeño et al. (2006:69) states that regional archaeologists generally agree that the historic **Mandan** derive from a stable and long-lived sedentary, agricultural, "Plains Village" adaptation that probably developed as early as A.D. 800 (Ahler 1993; Benn 1983; Bruner 1961; Glassner 1974; Henning 1983; Lehmer 1971; Tiffany 1983; Wedel 1961; Winham and

Calabrese 1998; Winham and Lueck 1994; Wood 1967, 2001). This association is limited to the later variants of the Plains Village Tradition. An example of a Plains Village field camp site at Theodore Roosevelt National Park is **32BI568**, located near the mouth of Paddock Creek. The site is noted to contain simple stamped sherds, a projectile point, and jasper flaked stone debitage. Simple stamped or cord impressed sherds are noted at most Plains Village camps in Theodore Roosevelt National Park.

Field camps affiliated with Historic Native American (A.D. 1742–1880s) groups include several resources with stone constructions. **32MZ1002** and **32MZ994** contain probable tipi rings while **32MZ993** has three sandstone and granite cairns. **32MZ993** and **32MZ994** are in the upland grassland ecozone off the Scenic Drive Road in the north unit of the park (Figure 7 in Kuehn 1990:37) and produced flakes, cores, and a hammerstone. **32MZ1002**, noted to contain three tipi rings, is near a trail in the north unit adjacent to a portion of the Little Missouri River bottoms and foothills (Zedeño et al. 2006:65). No artifacts were noted by Kuehn (1990) during his investigations.

Tipis are significant to many historic Native American groups with connections to the park. For example, interviews conducted during the previous ethnographic assessment by Zedeño et al. (2006) describe the **Crow's** interest in using the park as an educational area to relate origin stories appropriately to the public. One such origin story is that of the tipi. The origin of the tipi is tied to the foundation of Crow and **Hidatsa** secret societies. For them the tipi symbolizes the "Sacred Mother and should not be pitched for recreational purposes or without a serious reason, as having an empty tipi is a bad omen and invites death" (Zedeño et al. 2006:247).

LOCATION WITHIN THE PARK: Field and task camp locales are located in both the north and south units of the park.

TEMPORAL OR GROUP AFFILIATION: Native American

CONICAL LODGES

Conical Lodge, Theodore Roosevelt National Park Site Visit 2004

GENERAL DESCRIPTION: Conical timbered lodges are a structural element attributed to historic Native American groups throughout the Northwestern plains and central Rocky Mountains. They can be referred to as war lodges (Ewers 1968) and wickiups (Kingsbury 1986; Zier 1987) in the Rocky Mountains of western Montana and the Bighorn Mountains of Wyoming (Davis 2015). Historic tribal affiliations vary. Groups known to have used these are the **Shoshone** (Kingsbury 1986), **Blackfoot** (Ewers 1968:117–130), **Cheyenne** (Grinnell 1923), **Plains Cree**, **Crow**, **Sioux**, **Gros Ventres**, and **Assiniboines** (Ewers 1968:177–130). The lodges located in Theodore Roosevelt National Park are likely **Mandan** and **Hidatsa** and associated with **eagle trapping** but their presence over geographical expanses and the transitory nature of many tribes in this area during the Historic period indicates Crow, Sioux, Assiniboine, Cheyenne, and others may be affiliated with them as well (Kuehn 1990:130).

All tribal consultants interviewed by Zedeño et al. (2006) shared knowledge related to the significance of the lodges in Theodore Roosevelt National Park and strategies for eagle trapping. When a **Standing Rock Sioux** consultant was questioned about the possible uses of the conical lodges, the consultant suggested that:

> *"[L]odges have different uses depending on their location relative to the bluffs. If high on a cliff and close to a spring, they are used for something sacred. Individuals would have camped in the lower ledges with some tree shade and close to water. The position of the lodge would have been against the weather and for use during the cold seasons. The* ***Mandan*** *used to come to the lodges to put on* blackroot *medicine and then they would set the eagle trap. They would pierce and prepare medicine food as well as bait. The lodges would also be used for ceremonies in preparation for gathering paints."* (Zedeño et al. 2006:249)

The conical lodges are some of the most enduring remnants of the eagle trapping ceremonies. These sites have a particularly significant value to Plains people because of their ceremonial and spiritual association.

Murray (2009:53) indicates that consultants she interviewed at Fort Berthold,

> "are aware of lodge site locations, and interpret them to be structures that were built to conduct ceremonies, and which were deliberately hidden in the brush. Their purpose gives them special status, and HT referred to them as heirlooms. The Cultural Preservation Office has identified them as traditional cultural properties (Calvin Grinnell 2008, personal communication). Two consultants had visited lodges inside THRO's North Unit. HT said that unless lodges were constructed with long-lasting cedar or juniper poles, they have most likely collapsed and would be difficult to find… Lodges are believed to be extremely powerful places, and are good places for seeking visions."

For more information on the origins of eagle trapping and its relation to the Mandan and Hidatsa sacred complexes and bundles see Murray (2009, 2011), the bald and golden eagle resource pages in this report, and site **32BI518** in this assessment. Site **32BI518** is a resource procurement site used specifically for eagle trapping.

SITE NUMBERS: Three resource areas with the remains of conical lodges are present in the park (**32MSZ101**, **32MZ955**, and **32MZ116**). They are thought be related to sacred eagle trapping in the area and were likely used by the **Mandan** and **Hidatsa**. Two of these resources were constructed during the Historic Native American period (A.D. 1742–1880s) and one is attributed to the Plains Village Tradition and Historic Native American period (A.D. 1050–1880s).

REPRESENTATIVE RESOURCE DESCRIPTION: Site **32MZ101** is located in the foothills of the Little Missouri River in a juniper and ash thicket along a tributary of Appel Creek below a scenic overlook in the north unit of the park. Originally recorded by James Sperry in 1968 (1981), the site contains a conical timber lodge. Sperry excavated a 4 by 4 ft unit in the interior of the lodge which uncovered a fire hearth and produced Plains Village ceramics, a projectile point, jasper debitage, bone fragments, a painted bison skull, sandstone pieces, charcoal, and calcined materials (Kuehn 1990:64–65, 130). Jasper is a non-local lithic material that may have sources originating the Rocky Mountains. Its presence suggests some level of trade or travel was involved to secure this resource. Some of the ceramics were tentatively identified as Fort Yates ware on the basis of a large S-rimmed vessel (Kuehn 1990:129–130). 32MZ101 is temporally associated with the Plains Village Tradition and the Historic Native American period. The site remains unevaluated in reference to its National Register eligibility status.

Site **32MZ955** is a **Hidatsa** and **Mandan** eagle trapping resource located in the north unit of the park near Sperati Point. The site contains four conical lodges and, on the basis of these structural remains, is dated to the Historic Native American period (A.D. 1742–1900). Axe and saw cut marks observed on the juniper posts used in the lodges' construction and the good state of preservation of poles and brush at two of the structures supports this temporal designation. Two of the structures were collapsed during Kuehn's 1989 assessment (Kuehn 1990:130) and two were standing. The site was recommended eligible for inclusion on the National Register of Historic Places. A member

of the Three Affiliated Tribes with eagle trapping knowledge visited this site as part of the previous ethnographic assessment and explained (Figures 4.18 and 4.19 Zedeño et al. 2006:238):

> *"[T]he conical lodge locations were based on visions or feelings. Eagle trapping here would usually have been in the fall when the eagles migrated. These lodges were probably winter lodges and used after the eagles molted in November. This is a very good place and probably was along a regular route*."

Site **32BI116** was a conical lodge located by Sperry in 1968 (1980) in the north unit of the park just north of Achenbach Spring. The resource is interpreted as an animal trapping place. Sperry excavated a 5 by 5 ft unit in the lodge interior which produced a tin can, bone fragments, charcoal, and a shallow hearth (Kuehn 1990: 129, Sperry 1980:30) further dating the site to the Historic Native American period (A.D. 1742–1880s). Kuehn was unable to relocate this site in a later survey of the north unit.

LOCATION WITHIN THE PARK: Conical lodges identified in the park are located in the north unit.

TEMPORAL OR GROUP AFFILIATION: Hidatsa, Mandan

CERAMICS

GENERAL DESCRIPTION: Ceramics are noted at numerous resource sites with Woodland, Plains Village, and Historic Native American components (Kuehn 1990:301-310). Pieces of conoidal vessels are present and most are characterized by surface treatments including simple stamping, cord roughening, and cord impressing. Some plain wares were also observed. Ceramics are useful archaeologically to build chronologies of the use history of the land by groups and to differentiate between cultural groups in boundary areas like Theodore Roosevelt National Park. Ethnographic evidence suggests ceramics were significant for everyday utilitarian use, for ceremonial purposes, and for trading or gifting (Hollenback 2012).

Mandan Vessel ca. AD 1450, Huff Indian Village (example from an archaeological site in proximity to Theodore Roosevelt National Park)

> *"Clay pots were sacred items, believed to forewarn death when they cracked. They were associated with water and snakes and thus were used in rainmaking ceremonies (Bowers 1992:347). The Awaxawi kept a very large sacred pot that was beaten and sang to in times of drought. The last sacred pot was buried during the 1837 epidemic and its keeper died without revealing the burial place (Weitzner 1979:264). Pots were also used to hold coals for smudging during ceremonies (Bowers 1992:348). Pottery making was, by extension, a sacred ritual imbued with secrecy (Coues 1897: 328). Rights to pottery making knowledge were purchased, and so were the songs that went along with the craft. The best clay was collected from the lower Little Missouri River; yellow and blue clay were collected along the Missouri River outcroppings near Like-a-fishhook. Rotten granite taken from the firepit of a sweatlodge was used as temper (Weitzner 1979:260). Cottonwood paddles were used to even out and shape the pots (Bowers 1992:374)."*

Ceramic materials have been a primary topic of research in North Dakota (Ahler 1993; Mitchell 2011; Hollenback 2012), as they are the most abundant and diagnostic material to demonstrate change through time as well as more subtle geographical and cultural variations. Hollenback (2012) indicates that ceramic knowledge and technology among the earthlodge tribes, particularly the Hidatsa, suffered changes after the smallpox epidemics of 1780 and 1837 due to deaths of knowledgeable potters and concomitant loss of knowledge. Yet, people continued making ceramics

as a means to maintain identity in times of duress. These changes, in turn, may be used to refine historical chronologies of sites wih ceramics. Ceramics at THRO fall within the Plains Village Tradition further suggesting these ceramics were likely associated with the **Mandan**, **Hidatsa,** or **Arikara**. Additionally, a tribal member noted preferred sources of clay suitable for pottery making were in the park. *"Other clays, particularly a light gray clay, was collected for making pottery and for strengthening the lodge walls on the outside*" (Zedeño et al. 2006:240). (For details of specific ceramic traditions in this region see Ahler 1993; Hollenback 2012; Mitchell 2013).

TEMPORAL OR GROUP AFFILIATION: Native American

PROJECTILE POINTS, LITHIC TOOLS, AND DEBITAGE

Knife River Flint Projectile Point

GENERAL DESCRIPTION: A majority of the sites recorded by Kuehn (1990:301-310) produced lithic tools and debitage, and a number of point-located isolated artifacts were lithic tools. Many of these sites were located in the in the south unit of the park at Big Plateau and Petrified Forest Plateau (Kuehn 1990:161). Eleven distinct local raw material types were observed by Kuehn (1900) and included Knife River flint (KNF), Tongue River silicified sediment (TRSS), Rainy Buttes silicided food, Antelope chert, Miocene flint, Theodore Roosevelt National Park quartzite, chalcedony, porcellanite, chert, quartzite, petrified wood, and agate. All were present in lithic assemblages at resource sites although an overwhelming majority of debitage was KNF. Imported materials noted in assemblages were limited to obsidian which was sourced to Wyoming and Idaho, Spanish Diggings quartzite, jasper, green chert, quartz, and basalt (Kuehn 1990: 149–150). The Badlands are also known as a source of porcellanite of various colors, which may be found in archaeological sites as far to the north as Canada, thus indicating broad regional procurement or exchange of this material.

Lithic tools were central to prehistoric technologies that enabled Native groups to exist on the Great Plains. Stone tools were created to address a variety of needs. Some lithic tools like projectile points have become a central element to archaeological interpretations, while mundane tools such as scrapers and utilized flakes are expedient tools that were used to address myriad needs. Expedient lithic tools are ubiquitous to prehistoric sites across North America and are an artifact type that can be used to interpret processing activities that took place in the past.

All stone tools were created through various lithic reduction techniques. In addition to creating formal tools, these reduction techniques resulted in a much larger amount of flakes. Some flakes were used as expedient tools, but the majority of flakes were unutilized. Flake distribution and density are an archaeological marker that can interpret site function and some of the activities that took place at that location in the past.

Projectile points are a principal dating tool for archaeologists that were used to create temporal chronologies of the northern Plains. Archaeologists noted that projectile points were one of the artifact types that demonstrated the greatest change throughout time and could be used as a time

marker in stratified sites. Early chronologies focused recording these changes in projectile points in THRO throughout time (Foor 1985:126–127). Points were designed for specific projectiles (i.e. points designed for spear throwers or arrows) and changes in projectile points were also used to infer changes in weapon technologies. These technological changes were also used as evidence for larger changes in lifeways and foodway strategies, which were divided into archaeological complexes (Foor 1985). Projectile points have become a key diagnostic artifact that chronicles changes that would have affected the other aspects of prehistoric societies.

Projectile points are important temporal markers for sites in THRO. Dart and arrow point types noted in the park include Plains Archaic period points such as the Early Archaic Simonsen side-notched, the Middle Archaic McKean lanceolate, Mallory, Yonkee, and Hanna point varieties, and the Late Archaic corner-notched Pelican Lake point. Plains Woodland period points mark the adoption of bow and arrow technology and include Besant corner-notched and the Avonlea side-notched points. Late Prehistoric/Plains Village Tradition and Historic period points were limited to a few side-notched arrow points (Zedeño et al. 2006:64–66. Ethnographic accounts concerning lithic technologies like point making are rather narrow at THRO. Native American consultants that visited the park noted that, although they could not comment directly about arrow making, the park contains all the necessary resources for projectile point and arrow manufacture. Historical documents however detail some of the practices behind arrow making:

> "Arrow-making was a craft given to the people by supernatural beings, notably Flaming Arrow, also referred to as Burnt Arrow (Weitzner 1979). Arrow-making was a closely guarded right, as many arrow materials were thought to be poisonous and used mainly for war. Arrows were mostly made of Knife River Flint, but other materials, including buffalo tendon tissue, horn, wood, and beaver teeth were also used. Historically, points were also fashioned from suitable metal implements such as butcher's knife blades. Feathers of various birds were used to give "wings" to arrowshafts. The fletching patterns were, too, associated with creation stories and therefore very sacred. Eagle feathers were the preferred ones, but as they were also very expensive, poor men used duck, goose, or hawk feathers. These were carefully prepared and split before fletching (Weitzner 1979:240–242). Quivers and bow cases were made of the skins of buffalo, otter, lion, badger, and beaver. Lances made of ash and fastened with a horn or flint tip were also used in hunting buffalo." *(Zedeño et al. 2006:90)*

TEMPORAL OR GROUP AFFILIATION: Native American

GROUND STONE

GENERAL DESCRIPTION: In addition to flaked stone tools, ground stone technologies were central in defining prehistoric lifeways for those inhabiting THRO area. Ground stone tools are represented by items that are shaped by grinding and used for a variety of purposes. Plant processing, especially corn grinding, was largely done with ground stone items. Ground stone was also important for making pemmican. Ground stone implements are reported at several resource sites in Theodore Roosevelt National Park.

While most prehistoric artifact assemblages on the Plains are relatively uniform, certain ground stone items were important markers of moiety membership. For example, ground stone items at Big Hidatsa and Rock Village resemble ceremonial stone hammers used by the Hidatsa Stone Hammer Society (Lehmer et al. 1978:428). Stone pipes are also a type of culturally significant ground stone artifact. The Mandan commonly used catlinite stone pipes for social purposes but preferred black pipes for their ceremonies (Zedeño and Basaldú 2003). No pipestone has been so far reported in THRO.

TEMPORAL OR GROUP AFFILIATION: Native American

BONE AND SHELL

GENERAL DESCRIPTION: Animals represent significant resources for Native American groups as they were integral in activities related to diet, ceremony, and spirituality. Faunal remains are reported at many resource sites in Theodore Roosevelt National Park (Kuehn 1990:301–310) and 32MZ1000, a field camp, produced both animal bone and shell. Specified faunal types present at base, field, and task camp resource sites are limited to bison, elk, deer, and antelope while the shell was identified as calcined clam and likely freshwater. Additionally, butchered bison bones were observed at site 32BI549, the Bison Jump Site in the south unit of the park.

Buffalo Bird Woman harvesting squashes with a scapula hoe (Wilson 1917).

Presumably, the fauna present at Theodore Roosevelt National Park resource sites is deposited refuse resulting from general subsistence activities like grease rendering and consumption as none of the bone was specially worked. Historical accounts describe the use of fauna in various activities. For example feather quills and tin strips were fastened to reddened bison buffalo bones and used for tattooing. Bison bones specifically, were fashioned into many tools such as hoes, pickaxes, and splitting wedges; antler racks were fashioned into rakes (Wilson 1917).

TEMPORAL OR GROUP AFFILIATION: Native American

PROCUREMENT SITES

Red Pigment, THRO

GENERAL DESCRIPTION: A previous ethnographic assessment (Zedeño et al. 2006) details tribal members' knowledge concerning various activities in the park that may have resulted in the formation of certain archaeological resources sites. These activities are related to resource procurement and include extraction and/or exchange of significant resources such as stone and pigments. Other activities include bison hunting, eagle trapping, plant gathering, and vision questing.

STONE QUARRIES AND REDUCTION LOCALES

Knapping stone, Theodore Roosevelt National Park, 2004

GENERAL DESCRIPTION: Located on plateaus and ridge tops stone quarries and reduction locales are classified as locations by Binford (1980) and Kuehn (1990). Quarries, reduction sites, and locations differ from task camps in that they represent resource extraction activities that occurred over relatively short periods of time. Kuehn states 77 location resources were identified during 1987–1989 surveys but only three were explicitly listed as such. A quarry noted near the Knife River Indian Villages was an important locale that the Mandan and Hidatsa used intensively to collect Knife River Flint, trading the resource for other goods (Gregg 1987; Root 1997). Archaeological evidence indicates Knife River Flint has been widely traded since the Archaic Period throughout the Badlands (Gregg 1987).

Prehistoric groups used stone quarries for generations, developing cultural or traditional attachments to the surrounding landforms and resource locale (Zedeño et al. 2006:17). A member of the **Standing Rock Sioux Tribe** stated:

> *"…[A]ll rocks have powerful spirits and need to be fed*: stones are medicine and they will ask to make a sacrifice if you pray for it. *The red pipe bowl represents the female heart and the stem the male messenger. The joint is where the mystery resides and where prayers bring blessings. The Yuwipi Priests, who are among the most mystical and powerful of men, use these small rocks that are* shiny like crystals. *Sandstone is a curing rock.* Granite *is a thunderstone. The park is also a good source of sweat rocks."*

Importantly the raw material known as *porcellanite*, which occurs in the Badlands, was extensively procured and/or traded across the northern Plains and is found in sites as far away from THRO as Head-Smashed-In in Alberta, Canada.

SITE NUMBERS: 32BI723, 32BI726, and 32BI735

REPRESENTATIVE RESOURCE DESCRIPTION: Lithic materials were obtained from quarries, but, oftentimes, lithic reduction took place at other locations. An example of a lithic reduction resource is site **32BI735**. Located on a ridge top in the Petrified Forest Trail area, this resource represents a flint knapper's workshop. A single core of local Miocene flint was reduced at the site resulting in a total of 21 flakes. In addition to flint, a chalcedony flake and an agate flake were also present. The Petrified Forest Trail was noted by **Blood** consultants as a suitable place for tool manufacture in hunting expeditions (Zedeño et al. 2006:258).

Flint knapping and tool manufacture are culturally significant activities mentioned in numerous oral traditions and tribal stories. **Nakota** oral traditions recall that, at one time, all of the flint in the world was on the body of Bear. Since this material was essential for arrowhead manufacture, Rabbit went to Bear to chip off some pieces of flint. Rabbit's strikes did not produce large enough flakes, which annoyed Bear, so Bear suggested Rabbit hit the flint harder. Rabbit struck with all his might, breaking Bear in half, making flint available for all people (McLaughlin 1916:31–33). Among the **Mandan**, only certain individuals had the right to make arrows (Bowers 2004:282) **Assiniboine** elders recall that spent arrowheads were ceremonially disposed of in the same way as other living beings (Zedeño et al. 2006:254).

LOCATION WITHIN THE PARK: Known quarries are in the south unit.

TEMPORAL OR GROUP AFFILIATION: Native American

PIGMENT QUARRIES

Red Pigment, Site Visit Theodore Roosevelt National Park 2004

GENERAL DESCRIPTION: Pigments and clays are an extremely significant resource for Native American groups. This significance is embedded in the cultural landscape of most local groups. The right to collect clays used in paints and dyes was protected by cultural custom because these resources had spiritual significance. Rights to collect and apply sacred paints could be obtained through visions and through formal transfer. **Blackfoot** consultants have repeatedly indicated that red paint, in particular, was used to consecrate objects and people, as well as to heal. They kept paints of all colors inside sacred bundles (Zedeño 2008). Rare paints were sought after well outside the boundaries of their territory; the **Blackfoot** indicated that their elders would travel as far as whyoming and North Dakota in search of those paints.

While commenting on the wealth of paint resources in the south unit of the Theodore Roosevelt National Park, a **Crow** consultant with rights to painting noted that (Zedeño et al. 2006:245):

> *"The right to paint often comes in a dream; the person is shown how to use the paints in terms of color, design, and placement in the body; horses also get painted for safety. The consultant and her husband obtained the right to paint from a man who had it and when he was about to die he transferred the right to them. The female elder also has the right to sing along with men and be the head dancer among the women. She uses yellow and red paint. Her brother transferred the designs to her and taught her how to use these paints. Body paints include bright red, pink, blue, yellow, and white pigments. Red paint was first used by the Creator to line the eyes of the prairie chicken—in turn the totem of one of the original Hidatsa-Crow clans. Red and blue are used for medicine on the arms and face; bows and arrows are also painted in red and blue. White paint is medicine. Chokecherry and buffalo berry can be used to make vegetable dyes. Ashes or coals from wood fires are used to make black paint*."

The continued significance of paints to local tribes has been ethnographically documented. **Mandan** and **Hidatsa** ethnographies have numerous references about the locations of paint sources. Paints were used to ceremonially decorate humans, animals, and material culture. For the

Crow specifically, paint was a crucial element to all ceremonies and was often necessary for bundles (Bowers 1992; Denig 2000; M 1922a). Feathers, in particular, were painted in various colors depending of their purpose.

Beckwith (1938) noted that paint resources in the Theodore Roosevelt National Park were a source of warfare that connected warriors to the park. This was corroborated by consultants from the **Three Affiliated Tribes** who stated that the right to use paint came from the animals, and that making medicine by painting faces with paint was the origin of war paint.

> *"There were two warriors out hunting along the river, scouting, when they saw a bear painting his face, he would grab clay from the river with his paw and spread the mud across his face. The hunters kept watching the bear, going toward the river and pretty soon a buffalo appeared. The bear attacked the buffalo to see who had stronger medicine, but the bear was rebuffed. He came at it again and again and each time the buffalo threw him up in the air. Finally the buffalo hit him again and the bear split in two. In another version of the story, the bear gave up and then the hunters saw him spit something. When they went to see what it was they realized it was his lungs. But bear medicine is strong; the bear gave us eagle trapping medicine.*"

Traditionally, the clay hills of Little Missouri River were well-known for their paint sources. The river contained a number of different colors that were integral for ceremonies like the Sun Dance (Zedeño et al. 2006:240)

SITE NUMBERS: Although no pigment and clay quarries have been systematically recorded by archaeological investigations in the park and no petrographic analyses have been done, quarrying pigments and clays in the park is ethnographically documented; consultants who have visited the park have consistently pointed them out and tested them for their quality.

REPRESENTATIVE RESOURCE DESCRIPTION: The geologic sedimentary nature of the Badlands indicates the formation of clays is ongoing. Kuehn (1990) conducted intensive columnar soil analyses noting numerous pigment and clays sources. For example In Soil Area C, Kuehn notes three clay rich strata. Stratum 7 is a sandy clay containing 23.3 percent clay. This stratum was observed 0-46 cm below ground surface. Stratum 6 of this unit, observed 46-85 cm below ground surface, is a clayey sand layer containing 43.3 percent clay. Stratum 5 contains 20 percent clay and is 85–201 cm below ground surface. This particular paleosol is referred to as the Pick City formation (Kuehn 1990: 276, Figure 52).

LOCATION WITHIN THE PARK: Pigment sources exist throughout the park, specifically red and yellow sources are known in Painted Canyon; the North Unit would provide gray and white clays as well.

TEMPORAL OR GROUP AFFILIATION: Native American

BISON HUNTING

Lone Bison, Theodore Roosevelt National Park Site Visit 2014

GENERAL DESCRIPTION: Bison was one of the most important faunal resources to Plains tribes. Big game hunting has been the focal point of the Plains economy since the Paleoindian period and archaeological data suggests Plains people developed specialized strategies for bison procurement following the extinction of megafauna during the Archaic Period (Gregg and Davidson 1985; Johnson and Wood 1980; Loendorf and Borchert 1991:9; Reeves 1983). This specialization towards bison exploitation intensified during the Plains Woodland Tradition (A.D. 1–1200), which is characterized by a hunting and gathering economy lived by small, nomadic groups that traveled seasonally across a specific territory (Beckes and Keyser 1983:103–108; Kuehn 1990:30). Bison procurement strategies and ceremonialism may have reached a peak in Western North Dakota during the Besant (A.D. 1–800) and Sonota (A.D. 1–600) Complexes (Neuman 1975; Reeves 1983). Bison remains are frequently associated with ceremonial features during this period (Gregg 1985:120–121; Neuman 1975). During the late prehistoric period (A.D. 500–1750), bison remained an important resource; however, some groups on the Little Missouri River supplemented hunting by establishing a semi-sedentary horticulturalist lifestyle (Ahler 1993; Lehmer 1971; Lovick and Ahler 1982). Ethnographic sources indicate semi-sedentary groups in Theodore Roosevelt National Park traded agricultural products for bison, among other things.

Historical and ethnographic references corroborate the importance of bison hunting during the protohistoric and late historical periods. Archaeologists have suggested that densely populated areas of the eastern woodlands pushed some eastern groups onto the plains during the Woodland Period where they could benefit from bison hunting and horticulture resulting in the Middle Missouri Tradition (Toom 1992:141, 2004). These semi-sedentary people are considered ancestors of the **Mandan** and **Hidatsa**. Bison hunting was a principal economic endeavor for the **Arikara** who, like all other Plains groups, used every part of the animal (Berry 1978:56–57). Mobile Plains groups relied more heavily on bison hunting than semi-sedentary villagers. Catlin (1965) notes that, in addition to being a central foodstuff, the **Crow** near Fort Union used the skins and hides for their dwellings and for trade. The highly mobile **Assiniboine** and **Blackfoot** mastered bison hunting strategies and supplemented their subsistence with plant foods and other resources.

The importance of bison made it a central element in the ideology and belief systems for all Plains groups. For the **Assiniboine**, elaborate ritual and ceremony marked seasonal rounds based on bison herd movement. Children and tribal organizations were named after the animals (Long 1942). Bison names were even used for features on the landscape. At the Buffalo Jump site in the south unit of Theodore Roosevelt National Park, an interview with a **Crow** elder highlights the antiquity and spiritual significance of buffalo jumps in Plains culture:

> *"In the origin stories the buffalo jump was given to people by Old Man Coyote, who lured the buffalo over the cliff. Old Man Coyote challenged the buffalo to a race. He said: we'll close our eyes and run. That's how he made the buffalo jump. Buffalo jump sites are mystic sites and have a lot of power in them because of all the ceremonies that were conducted before the hunt. All the buffalo jumps are connected with one another. Among the Crow there is a clan, its name is, 'Úu saa waa chi' which means 'clan who brings home game without shooting'. That clan is connected to the buffalo jumps, too*."

The significance of buffalo hunting and processing sites is exemplified by the ceremonies that were performed prior to their use. Bison hunting features were smudged and incense was burned after the animals had been driven over the cliff. Other offerings were made. As whole families participated in the hunts, multiple generations took part in honorifics associated with bison hunting and the significance of the resource was passed on throughout time. Bison remain central to the spiritual practice and cosmological beliefs of Plains people. An **Assiniboine** visitor to the Theodore Roosevelt National Park stated:

> *"Modern herds continue to have a central place in Native American religion. There is an annual ceremonial buffalo killing at Fort Belknap. The gun that will be used to kill the buffalo is smudged, and an offering is wrapped in red cloth and placed on a sandstone ledge. The color red means the western direction, which is powerful as it is connected to the thunderbird. The buffalo life parallels human life, so we sing a buffalo song to the Creator. The offering will have tobacco, sweetgrass, and stick matches for the spirits. After the pipe is smoked the hunter and the warden will jump in and chase the herd. One young buffalo will stand alone and it will be shot*."

Beyond the rituals immediately preceding the hunt, the **Blackfoot** also maintained corporate institutions known as "societies" where bison renewal ceremonies were performed throughout the year. Bison was not simply a subsistence resource, but the center of their social organization and ceremonial calendar. A **Blackfoot** consultant expressed in 2014,

> "We had to be experts in ecology, astronomy, geography, and hydrology to be able to plan our hunts ahead of the bison and be successful."

Bison also have the capability to imbue landscapes with spiritual meaning. Plains groups explain that the locations in Theodore Roosevelt National Park that are used by the bison and contain salt plant fields and wallows also retain spiritual significance. A **Crow** elder explains

> *"The buffalo come to the wallows to make medicine during their rutting [and] to trap females. From the buffalo we also learned how to have dreams. In full moon the buffalo would come to high places, like knolls, and fast to cleanse their system*."

Today, THRO plays a significant role in providing culturally affiliated tribes with bison to maintain or start their bison conservation programs.

SITE NUMBERS: 32BI549

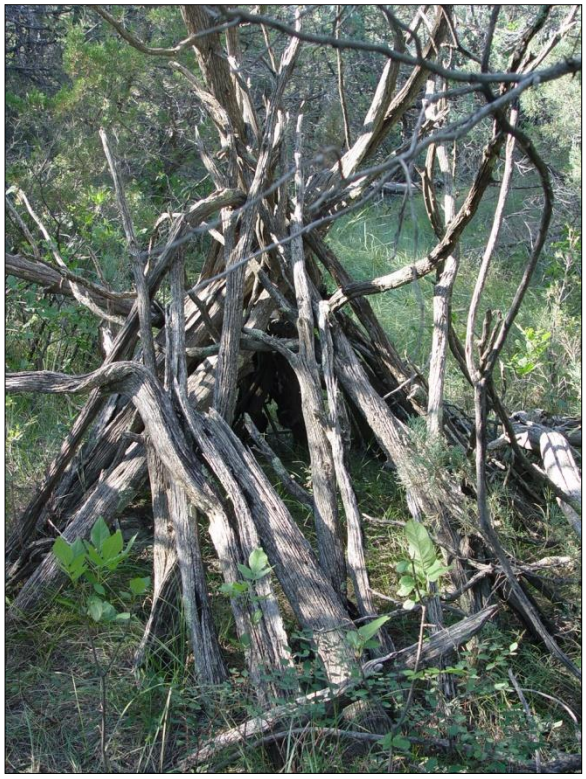
REPRESENTATIVE RESOURCE DESCRIPTION: Site **32BI549** is a bison hunting and processing resource at the base of the Little Missouri Escarpment in the Southeast Corner survey unit of Theodore Roosevelt National Park. Identified in 1989, the site is affiliated with the Plains Village Tradition (950–100 B.P.). Numerous butchered bison bones were observed below an 18 m high cliff of the escarpment (Kuehn 1990:141). A number of different activities took place at bison processing sites. Processing the animals was taken on by the entire band and each person had assigned roles and chores. Bison processing was intended to make all parts of the animal useable to the group. Consultants remarked that the archaeological remains left by ancient hunters still visible at certain places in the Theodore Roosevelt National Park reflect the ceremonial use of a spiritual animal resource in the past. This form of hunting and processing has been documented at other archaeological sites and was important to Plains economies until the late historical period.

LOCATION WITHIN THE PARK: The buffalo jump is located in the south unit of the park.

TEMPORAL OR GROUP AFFILIATION: Native American

EAGLE TRAPPING

GENERAL DESCRIPTION: Plains people understand that the natural world is imbued with spiritual power. When aspects of that power are uniquely found in people or animals, it is called medicine. The eagle is one of the most important ceremonial animals for Plains people. Eagle trapping was central to ceremonies for Plains people and the rights to trap eagles were reserved to certain individuals. **Mandan** and **Hidatsa** had similar eagle trapping ceremonies. Among the Mandan, an eagle trapping bundle was owned by the person responsible for building eagle traps. This bundle remained with that person even in death (Bowers 1950:39). Bowers (2004:236) noted the variety of items included in a Mandan eagle bundle. Many of these elements are commonly found in the lodge alter at eagle trapping camps. A **Sioux** elder recalled the spiritual origin of the eagle:



Conical Lodge, Theodore Roosevelt National Park

> *"The eagle is a human transformed into an eagle. The eagle was once a twin, not created like others. He saw that people were selfish so he left. The people went looking for him and sent his twin to find him. He did, but he could not convince the eagle to come back because he didn't like the way people lived. People went to the sweat lodge and asked him why and then prayed until he went soaring and said, "from now on I will be a messenger for people". He stood on the sweat lodge and brought medicine*."

A Hidatsa-Mandan consultant indicated:

> "In all of the creation stories you hear, whenever the eagles are involved…whatever's going on, they're always somewhere along there, and people will consult the eagle. Because of his high-flying ways, he sees a lot of things, and he can get there a lot faster. A lot of times, the eagle is too proud to get involved with meager mortal issues. *(Murray 2009:50)."*

As recorded in Wilson (1928:99–245), eagle trapping was given to the Mandan and Hidatsa by Black Wolf. Mythical trapping sites were in the vicinity of where black and brown bears had been sighted. Eagle trapping required the construction of a ceremonial conical lodge in a wooded area near the actual trapping pit, which was on a hillside near a cliff. The Mandan and Hidatsa claimed

trapping rights to a large area that included several choice trapping locations. **Hidatsa** and **Mandan** consultants indicated that, to the east of the Missouri River, the trapping sites were for bald eagles whereas to the west of the Missouri the sites were for golden eagles (Murray 2009).

Eagles were trapped for their feathers, which played an important role in ceremonies for Plains people. Golden and bald eagles and hawks were trapped in a process that was a religious activity. An informant from the **Three Affiliated Tribes** explained:

> *"There are different uses for different feathers; for some things you use the tail feathers, other things just the center feather, the straightest one. Fans from the wings, too. All feathers have a spiritual reverence about them, each feather whether it is young or old, even if it is a little tiny feather or a plume. The women mostly use the plumes, they are all fluffed out and under the tail feathers. They used them for naming ceremonies, all different things. First of all they had to have the right to wear the feather. That depends on what kind of lifestyle you lived, if you are a leader of your people, if you are good at war; many years ago, it was usually war. Or, if you did something really good for your tribe or in the tribe, they would bestow an eagle feather upon you. But nowadays it is not like that, they just buy the rights for it and then they just put it on these little, even little kids. The ladies don't have the eagle feather right, just the men. Women do not have the right to eagle feathers; they do not have rights to smoke a pipe, the men would do that—that was it.*"

According to a **Hidatsa** consultant, the lodge poles were made from whatever wood was available in the area, however, *the [ancestors] habit of reusing lodges would have made cedar an ideal choice,because it preserves well* (Murray 2009:47). In addition to constructing the conical lodge and trapping pit, the trapping ceremony included interpretations of astrological formations, singing songs, and fasting. The ceremony was reserved strictly for men. The eagle trapper had to be intimately familiar with the spiritual value of the trapping location and all of the associated cosmological and astrological signs associated with the ceremony. He had to conduct rituals before, during, and after the trapping session in order for the obtained feathers to have the proper spiritual qualities (Murray 2009).

SITE NUMBERS: 32BI518, 32MZ101, 32MZ955, and 32MZ116

REPRESENTATIVE RESOURCE DESCRIPTION: Site **32BI518** is an eagle trapping pit in the Sheep Butte Spring survey area of Theodore Roosevelt National Park. Eagle trapping reflects a unique and specialized type of faunal procurement and can likely be attributed to the Mandan and Hidatsa (Allen 1982; Wilson 1928) (Kuehn 1990: 141). However, numerous other tribal consultants shared knowledge of eagle trapping activities in the park (Zedeño et al. 2006:238–239,244).

As described on the resource page Conical Lodges, three resource areas (**32MZ101, 32MZ955,** and **32MZ116**) are known to have been used to procure eagles by historic Native American groups, likely the Mandan and Hidatsa. A consultant that visited conical lodge sites in the Theodore Roosevelt National Park stated that:

> "*…[T]he conical lodge locations were based on visions or feelings. Eagle trapping here would usually have been in the fall when the eagles migrated. These lodges were probably winter lodges and used after the eagles molted in November. This is a very good place and probably was along a regular route*."

The conical lodge and trapping pits are the most enduring remnant of the eagle trapping ceremonies. These sites have a particularly significant value to Plains people because of their ceremonial and spiritual association.

LOCATION WITHIN THE PARK: Eagle trapping resource sites are known in the north unit of the park.

TEMPORAL OR GROUP AFFILIATION: Hidatsa and Mandan

PLANT COLLECTING

Sagebrush, Theodore Roosevelt National Park Site Visit 2004

GENERAL DESCRIPTION: Plants are collectively one of the most significant resources at Theodore Roosevelt National Park as their presence is vital in understanding the cultural landscape of the park. Ecozones present in the Little Missouri Badlands present bounties of resources known to have been used by ancestral, Historic Native American, and Euroamerican groups. The physiographic composition of the region includes river bottoms, hardwood draws, upland grasslands, rolling grasslands, terraces, upland breaks, river breaks, toe slopes, and hilly scoria (Beckes and Keyser 1983:26–43). These nine ecozones provide critical habitat for a variety of edible and medicinal plants. Plants gathered for consumption are known to grow in the riparian environments of the Little Missouri River Valley. Responding to a climatic episode of warming during the Holocene, an increasing abundance of wild plant foods in the environs of the river valley likely brought the earliest Archaic people to the park.

All tribal members interviewed during an earlier ethnographic assessment of the Little Missouri River retained ethnobotanical knowledge that expressed an intimate connection to the plants of the region and Zedeño and colleagues (2009) describe in great detail the known uses of numerous plants in every day and ceremonial contexts. Traditional knowledge concerning wild plant locations, identification, collection, and subsequent use are associated with many aspects of contemporary group behavior and reliance on wild plants dominated subsistence strategies for centuries prior. Plants were gathered to eat, cure illness, convene with spirits, construct shelter and containers such as tipis and baskets, and in some cases, the occurrence of plant stands also aided hunters. For example, the presence of a plant might indicate certain game animals preferred specific locations as was observed by members of the **Crow**. The Crow noted salt plants near the Buffalo Jump Site (32BI549) explaining this meant the site was a good place for buffalo (Zedeño et al. 2006:242). Plants used medicinally were noted specifically in the north unit of the park by members of the **Three Affiliated Tribes** and the Crow along with plants gathered for everyday use. Lichen moss, observed in the south unit at the Buffalo Jump Site was said to cure a sore throat when boiled while other useful plants described at the site include (Zedeño et al. 2006:240, 244):

> "[R]osehips *[which] are collected and pulverized to make rosehip pemmican. Bergamot is used to make a crown that people would place on the heads of returning heroes or warriors, who would then go through the camp singing victory songs. The consultants said that there are Crow songs about bergamot. The glossy leaves of* bearberry *or kinnickinnickk and* bearroot *are mixed into* tobacco. *This mix is called "crazy bottom." Creeping juniper is used as incense also in different ceremonies, including the adoption into the Sacred Tobacco Society, where* willow *and* cottonwood *are also used to make an altar.* Greasewood *makes good pipe tampers. Wood of the* mountain birch *was once used to make arrowshafts and sweat lodge poles".*

SITE NUMBERS: Plant collecting areas have not been documented by systematic archaeological investigation but the nature of such sites might not leave physical remnants over the landscape. Nevertheless, the ethnographic account of plant gathering places indicates this resource site type is a very significant one. For a complete list of plants with documented traditional uses at Theodore Roosevelt National Park see the plant resource pages of this assessment.

REPRESENTATIVE RESOURCE DESCRIPTION: No systematically recorded locations associated with plant collecting are known in the park, however, ethnographic site visits conducted in 2004 and 2015 suggest many plants in the park would have been collected for a variety of purposes.

TEMPORAL OR GROUP AFFILIATION: Native American and Euroamerican

VISIONING AND FASTING PLACES

Cliffs along the Little Missouri River, Theodore Roosevelt National Park

GENERAL DESCRIPTION: Visioning and fasting places remain significantly tied to the cultural landscape of Theodore Roosevelt National Park. Tribal members interviewed in a previous assessment (Zedeño et al. 2006) discuss the locations, associations, and processes of visioning and fasting activities that were practiced in various portions of the park's geography. Consultants from the **Three Affiliated Tribes** suggested many buttes along the river and its vicinity house various animals and beings and people would travel there to seek visions (Zedeño et al. 2006:237)**.**

> *"There are stories and songs about the badlands. There are certain spirits that they say are in each place [in the badlands]. Individuals would go there to get help from the particular spirit that could help; that spirit's place might be used by a society. There were places for rites of passage; the Hidatsa would stake [young] people out, or tie them to a tree, and pierce them. They'd leave them until they had a vision, then come back for them. It would be sacred ground after that. Women had their ceremonies; they had other places. Their fasting places were usually way out where nobody would go, where nobody would walk; like this place. They were very isolated but not necessarily on high spots*."

Vision questing and fasting were ways to acquire types of power and knowledge and are connected to many sacred realms of Native American life. Members of the **Three Affiliated Tribes** acknowledged the connection between visioning and sacred beings stating,

> *"[T]here was once a group of people that began seeking visions very early in their lives and acquired so much power that they became too holy to stay on the earth and thus they went to the heavens where they became stars. These were the people who left their medicines behind for humans to use them".*

A **Crow** consultant describes the process of visioning and fasting (Zedeño et al. 2006:243):

> *"People made a vow, they call, that a certain day they would go fast. They would stay there for three days, and come back on the fourth day. Sometimes the spirits told them that they had to come back to fast again, other times, one man was sent back home by the spirits. While you are fasting you only collect plants or anything when and if you are told by the spirits. Then you go barefoot—mostly in the summer, then sometimes in the winter. Sometimes you had to use red paint, 'úww'.*"

Visioning is also integral in various specific rights such as the tattooing process, as it is required before one can be tattooed (Zedeño et al. 2006:90).

SITE NUMBERS: Due to the ephemeral physical nature of these significant ceremonial resource sites as well as their placement in generally inaccessible areas, no ceremonial resources have been systematically recorded in the park. However, the literature systematically identifies buttes and elevated spaces such as those along the north and south units as having a mythical as well as a ceremonial value to people who fasted in them (Hollenback 2015:155).

REPRESENTATIVE RESOURCE DESCRIPTION: See above subsection.

LOCATION WITHIN THE PARK: According to a member of the **Turtle Mountain Cree Chippewa** "the north and south units [of the park] contain many mystical places that would have been used in the old days to acquire power and knowledge" (Zedeño et al. 2006:252). A consultant from the **Standing Rock Sioux** tribe suggested the north unit of the park, namely the Petrified Forest trail, served many uses including vision questing and ceremonies. "This place would have been used in the summer and winter, by men and women. Women also had dreams, they had to carry out that dream. "They didn't have to do this and that, but they went out and fasted, too" (Zedeño et al. 2006:249). The **Arikara** also mentioned the significance of the Badlands as vision questing areas particularly for eagle trapping and warfare (2015).

TEMPORAL OR GROUP AFFILIATION: Native American

Table 3 Native American Archaeological Resources

Native American Resource Site	Site Type	Temporal Affiliation	NRHP Eligibility
32MZ1000	base camp	Unclassified	Unknown-potentially eligible
32MZ954	base camp	Unclassified	Unknown-potentially ineligible
32MZ957	base camp	Unclassified	Unknown-potentially ineligible
32BI549	bison hunting	Plains Village Tradition	Unknown-potentially eligible
32MZ101	conical lodge	Unclassified	Unknown-potentially eligible
32MZ116	conical lodge	Unclassified	Unknown-potentially eligible
32MZ955	conical lodge	Unclassified	Unknown-potentially ineligible
32BI518	eagle trapping	Woodland/Besant	Recommended Eligible
32BI520	field camp	Historic Native American	Recommended Eligible
32BI522	field camp	Plains Village Tradition and Historic Native American	Unknown
32BI557	field camp	Unclassified	Unknown-potentially ineligible
32BI562	field camp	Unclassified	Unknown-potentially eligible
32BI567	field camp	Unclassified	Unknown-potentially eligible
32BI568	field camp	Unclassified	Unknown-potentially eligible

32BI573	field camp	Unclassified	Unknown-potentially ineligible
32BI575	field camp	Unclassified	Unknown-potentially eligible
32BI579	field camp	Woodland/Besant	Recommended Eligible
32BI614	field camp	Unclassified	Not Eligible
32BI615	field camp	Unclassified	Not Eligible
32BI626	field camp	Unclassified	Not Eligible
32BI629	field camp	Unclassified	Not Eligible
32BI648/32BI122	field camp	Unclassified	Unknown
32BI649	field camp	Unclassified	Unknown
32BI670	field camp	Unclassified	Unknown-potentially eligible
32BI672	field camp	Unclassified	Unknown-potentially eligible
32BI695	field camp	Unclassified	Unknown-potentially eligible
32BI703	field camp	Unclassified	Unknown-potentially eligible
32BI706	field camp	Unclassified	Unknown-potentially eligible
32BI725	field camp	Unclassified	Unknown-potentially eligible
32BI728	field camp	Unclassified	Unknown-potentially eligible
32BI729	field camp	Unclassified	Unknown-potentially eligible
32BI730	field camp	Unclassified	Unknown-potentially eligible
32BI731	field camp	Unclassified	Unknown-potentially eligible
32BI732	field camp	Unclassified	Unknown-potentially eligible

32BI733	field camp	Unclassified	Unknown-potentially eligible
32BI734	field camp	Unclassified	Unknown-potentially eligible
32BI736	field camp	Unclassified	Unknown-potentially eligible
32MZ1001	field camp	Unclassified	Unknown-potentially eligible
32MZ767	field camp	Unclassified	Unknown-potentially eligible
32MZ868	field camp	Unclassified	Unknown-potentially eligible
32MZ912	field camp	Unclassified	Unknown-potentially ineligible
32MZ915	field camp	Unclassified	Unknown-potentially ineligible
32MZ935	field camp	Unclassified	Unknown-potentially ineligible
32MZ943	field camp	Unclassified	Unknown-potentially ineligible
32MZ946	field camp	Unclassified	Unknown-potentially ineligible
32MZ948	field camp	Unclassified	Unknown-potentially ineligible
32MZ984	field camp	Unclassified	Unknown-potentially ineligible
32MZ986	field camp	Unclassified	Unknown-potentially ineligible

32MZ987	field camp	Unclassified	Unknown-potentially ineligible
32MZ988	field camp	Unclassified	Unknown-potentially ineligible
32MZ989	field camp	Unclassified	Unknown-potentially ineligible
32MZ990	field camp	Unclassified	Unknown-potentially ineligible
32MZ991	field camp	Unclassified	Unknown-potentially ineligible
32MZ995	field camp	Unclassified	Unknown-potentially ineligible
32MZ996	field camp	Unclassified	Uknown
32BI548	field camp and trash dump	Plains Village Tradition	Unknown, potentially ineligible
32MZ993	field camp/rock cairn	Unclassified	Unknown-potentially ineligible
32MZ1002	field camp/tipi ring(s)	Unclassified	Unknown-potentially eligible
32MZ994	field camp/tipi ring(s)	Unclassified	Unknown-potentially ineligible
32BI723	quarry and reduction locale	Unclassified	Unknown-potentially eligible
32BI726	quarry and reduction locale	Unclassified	Unknown-potentially eligible

32BI735	quarry and reduction locale	Unclassified	Unknown-potentially eligible
32BI516	unknown	Woodland/Besant	Recommended Eligible
32BI517	unknown	Woodland/Besant	Recommended Eligible
32BI519	unknown	Plains Village Tradition	Recommended Eligible
32BI521	unknown	Historic Native American	Unknown
32BI523	unknown	Unclassified	Unknown-potentially eligible
32BI524	unknown	Archaic	Recommended Eligible
32BI525	unknown	Archaic	Recommended Eligible
32BI526	unknown	Archaic	Recommended Eligible
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32BI537	unknown	Archaic-Woodland/Besant-Unclassified Late Prehistoric	Recommended Eligible

32BI543	unknown	Archaic-Woodland/Besant-Unclassified Late Prehistoric/Settlement Period	Recommended Eligible
32BI544	unknown	Historic Native American	Unknown
32BI545	unknown	Plains Village Tradition	Recommended Eligible
32BI546	unknown	Plains Village Tradition	Recommended Eligible
32BI547	unknown	Plains Village Tradition	Recommended Eligible
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32BI570	unknown	Unclassified	Unknown-potentially eligible

32BI571	unknown	Unclassified	Unknown-potentially ineligible
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32BI586	unknown	Woodland/Besant	Recommended Eligible
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32MZ956	field camp	Unclassified	Unknown-potentially ineligible

EUROAMERICAN HISTORIC ARCHAEOLOGICAL RESOURCES

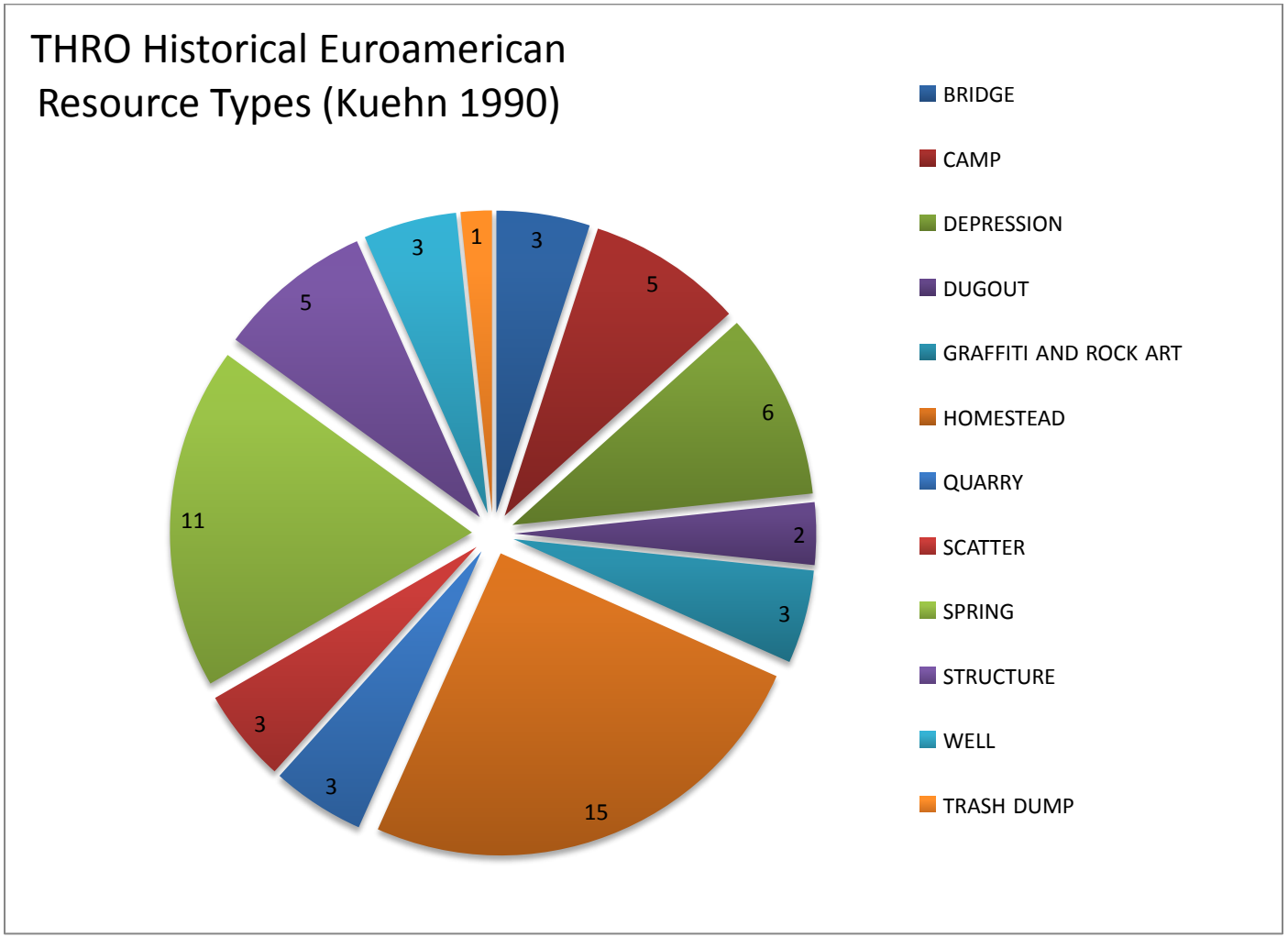


Figure 6 Historic Archaeological Sites in THRO

HOMESTEADS AND FARMS

GENERAL DESCRIPTION: Both ranching and homesteading on the Badlands are intrinsically linked. Ranchers established the earliest non-Native presence in the area during the 1890s and, through sheer persistence, a small number of Euroamericans continued residing in Medora through the 1890s and first decade of the twentieth century. Around the turn of the twentieth century, a wave of homesteaders began arriving in Billings and McKenzie Counties (Billings County Hist of these newcomers were European immigrants seeki various federal acts (Carstensen 1963). Emigrants to Billings County at this time hailed from a variety of different countries including the Ukraine, Norway, and former Austria-Hungary (Billings County Historical Society 2003). The homesteading boom in the Badlands area took place from 1900 to 1910, but most had given up on the project by 1920. From 1920 onward, a small number of families continued farming in the area with the number continuing to dwindle throughout the century (Forestall 1995).

Landscape of the Elkhorn Ranch, Site Visit 2015

The story of early twentieth century homesteaders in the Badlands is similar: there are many tales of hardship and few success stories. Days were characterized by hard, manual labor; however, hard work was no stranger to many of these folk, especially the European immigrants. Early twentieth century farmers recall their immigrant parents retained many of the farming practices they were accustomed to in Europe (Billings County Historical Society 2003:200). Most of these farms were without electricity, so much of the work was done by the resident family members. With so much work to be done, families were large.

Like other homesteaders, those who chose farming on the Badlands did their best to establish self-sufficient farms. Consultant **Norma Meyers** (2015) recalls how, during the Great Depression, her family farm provided much of the food required to sustain the family. The dairy cows also provided milk and dairy products that were sold locally, providing much needed income. Nevertheless, like other farming families, Meyers' father worked off the farm for income. He was no different than other farming families. In fact, few homesteads were economically viable. More often than not, farming families also took work off the farm in order to supplement the household income. The Northern Pacific Railroad and the coal mine near Medora provided employment for many of the local farming families (Billings County Historical Society 2003; Carlson 1976).

Unlike Badlands ranches, homesteads in this area were usually modest. Early homesteaders constructed simple sod dugouts or wood-frame buildings, some of which had multiple rooms. Most homesteaders were unable to establish financially viable farms after receiving their patients and sold out to interested farmers like Page Meyers (Norma Meyers, 2015). From the 1920s through the Depression, a large number of farms were sold to those who were able to make a living from agriculture in the Badlands.

Badlands homesteads are usually characterized by a small number of features, depressions, relict foundations, and material culture scatters. The majority of the historical archaeological sites categorized as homesteads have been joint classified as ranches because most twentieth century farmers also ran small cattle herds. Additionally, both ranches and homesteads had similar infrastructure with fewer buildings and structures erected on homesteads.

SITE NUMBERS: Thirteen sites may have been part of either a ranch or homestead: 32BI574, 32BI607, 32BI621, 32BI624, 32BI625, 32BI680, 32BI697, 32BI698, 32BI698, 32MZ911, 32MZ972, 32MZ974, and 32MZ975 (Kuehn 1990:166-167).

REPRESENTATIVE RESOURCE DESCRIPTION: The V.A. Well homestead, 32BI621, is typical of homestead sites in THRO. This site has been characterized by an assortment of historical artifacts in association with a fieldstone foundation and a cellar depression. The homestead was deeded to James Mullaney in 1917 and sold to V.A. Baker in 1919 (Kuehn 1990:168).

LOCATION WITHIN THE PARK: Homestead remains have been identified in both the north and south units.

TEMPORAL AND GROUP AFFILIATION: Euroamerican

ADDITIONAL REFERENCES: Kuehn 1990

RANCHES

Stone Ranch House in Theodore Roosevelt National Park, 1937, Location Unknown (State Historical Society of North Dakota sh1082501019)

GENERAL DESCRIPTION: Following the arrival of the United States Army near the present-day location of Medora in 1879, cattlemen were the first non-Native Americans to permanently reside in what is now THRO. The earliest ranching interests were cattlemen traveling north out of the southern plains, particularly Texas, in search of grazing land that was still within the public domain (Mattison 1950; Welsh 1955). A wealth of unclaimed land existed in western North Dakota at the time that remained untrammeled by cattle herds. From 1880 to 1886, Texas cattle surged into the area (Mattison 1950; Welsh 1955).

Prime grazing land with access to water was seized immediately while less viable terrain, like the Badlands, were ancillary grazing areas. The Badlands and adjacent grasslands were unfenced at that time and the whole region was treated as a commons—an "open range" where the first ranchers to arrive helped themselves to the region's resources. As happened in other areas of the American West, the grasslands of western North Dakota were rapidly depleted by massive herds that overgrazed the arid landscape. The grazers that surged into the region did not know the actual carrying capacity of the range nor did they know exactly how many cattle were using this fragile resource base (Cassity 2007:100–101; Collins 2002). As articulated by Garrett Hardin (1968), this "tragedy of the commons" juxtaposed the unlimited expectations of capitalist cattlemen with the very real limits of the environment. Ranges were flooded with cattle and, in 1886, a severe winter caused massive a die-off on the northern Plains (Mattison 1950). Fortunes were lost by many Badlands cattlemen and their investors, including Theodore Roosevelt, and the grasslands of the northern Plains were irreversibly damaged.

Following the collapse of the cattle industry in the 1880s, cattle ranching has persisted on the Badlands but at a more sustainable rate. Nevertheless, most of what is now the Theodore Roosevelt National Park remained a commons that was leased by agriculturalists centered in Medora. During the 1930s, local farmers who also ran cattle organized themselves into various cattlemen's associations and established a democratic forum where grazing allotments within the public domain could be distributed (Carlson 1976). These associations worked with government agencies to run an appropriate number of cattle that could be grazed without degrading the grassland (Carlson 1976).

Long-time resident Norma Maynard (personal communication, 2015) recalls that every farming family in the Medora area grazed a few cattle. Her family grazed land that is now within the boundary of the park. The creation of the park removed some grazing land that, although classified as submarginal, had long been used by local families to provide food and income. The removal of this land from the local economy was not popular with a number of families that depended on Badlands grazing allotments. Other nearby ranchers continue to raise cattle, but the size of their herds are a tiny fraction of what has formerly been grazed on the Badlands (John Heiser, personal communication, 2015).

During the mid-twentieth century, some ranches embraced tourism and became oriented toward providing horses for Badlands tours. This type of tourism has antiquity in THRO. Theodore Roosevelt's first visit in 1879 may have been one of the earliest instances of an individual coming to this part of the Badlands simply to explore on horseback (Cutright 1985; Nelson 1957). Horseback Badlands tours continued into the twentieth century, increasing after the automobile made the region more accessible; but, after the creation of the park, horseback tours became one of the main attractions (Petty 1968). These ranches may have continued to run a small cattle herd, but erected facilities—corrals, stables, and hay barns—that facilitated trail horses (Lyle Glass, personal communication, 2015).

The Badlands Cattle Ranch Complex

A cattle ranch is composed of a number of buildings and structures designed to support the herd and group of cowboys that maintain it. In the American West, a cattle ranch includes a complex of buildings and structures that are situated on the landscape in the vicinity of grazing land. Ranch houses, barns, corrals, and other ancillary structures like chicken coops, wells, windmills, and sheds are all part of a ranch complex. Roads, garages, and workshops became commonplace on ranches after the widespread adoption of the automobile onEuroamerican farms in the 1920s and 1930s.

Ranch families lived in a variety of different house types of differing quality and characteristics. In his description of ranch house architectural styles during the late nineteenth and early twentieth centuries, Collins (2002) notes that the main house oftentimes reflected the regional architectural styles which sometimes were influenced by cultural and ethnic norms. The Peaceful Valley Ranch had a two-story, balloon frame dwelling that housed the resident family. This building had multiple additions during the years while it functioned as a ranch house. Norma Meyers (2015) recalled that, while her home had multiple rooms and housed her entire family, others in the Medora area lived in simple shacks during the 1930s. Her family also erected a separate building for the small number of ranch hands who were usually young males, some of whom had families of their own. Larger ranches, like the Peaceful Valley Ranch, typically maintained a separate dwelling for ranch employees.

Barns and cattle sheds were among the structures dedicated to animal husbandry. The Elkhorn Ranch had a small stable for the horses and a small barn, called a cattle shed, where milk cows could be sheltered while they were being milked (Mattison 1960a). The Peaceful Valley Ranch

featured a large stable and barn that was made from rough-hewn logs. Later, this barn was converted into housing for CCC workers. Norma Meyers (2015) recalled how her family had a larger barn because her family primarily raised dairy cows. The barn also housed a large quantity of hay, much of which was freely harvested from public grasslands near Medora. Badlands ranches, like the Elkhorn and the Meyer's home, also frequently had chicken coops to shelter their poultry.

Ranch complexes also had a constellation of other outbuildings that served specific functions. The Elkhorn and Peaceful Valley Ranches both had a blacksmith shop (Mattison 1960a), whereas those facilities were unnecessary on later ranches. Early ranches like the Elkhorn and Peaceful Valley also supported a well while twentieth century ranches had pumps, either manual or powered by electricity.

After the 1880s, Badlands ranches had a range of corrals, fences, and other structures that were used to aggregate cattle for branding, shelter, and to transfer animals to vehicles where they could be loaded for transport to market. Finally, twentieth century ranches were connected to the local road network via privately maintained roads.

SITE NUMBERS: A total of seven archaeological resources within the park have been recorded as part of ranching complexes: 32BI483, 32BI556, 32BI572, 32BI583, 32MZ997, and 32MZ1003. Additionally, thirteen sites may have been part of either a ranch or homestead: 32BI574, 32BI607, 32BI621, 32BI624, 32BI625, 32BI680, 32BI697, 32BI698, 32BI698, 32MZ911, 32MZ972, 32MZ974, and 32MZ975 (Kuehn 1990:166-167). Many sites contain foundations and depressions that are likely related to the buildings and structures on a ranch or homestead.

REPRESENTATIVE RESOURCE DESCRIPTION: The Elkhorn and Peaceful Valley Ranches (see below)

LOCATION WITHIN THE PARK: Archaeological remains classified as part of ranching complexes are known in both the north and south park units.

TEMPORAL AND GROUP AFFILIATION: Euroamerican

POSSIBLE ASSOCIATED FEATURES AND SITES: In addition to the structural remains of ranching complexes, historical graffiti panels are among archaeological features related to ranching and farming activities in THRO. Three sites—32BI584, 32BI623, and 32BI677—are sandstone boulders or panels that featured inscriptions created by historical period residents of the park. The largest of these is 32BI677, which is a four-panel area of carvings created from 1909 to 1914. A number of initials and geometric insignias have been carved into the sandstone by Euroamericans who lived in the area at this time. The panel contains the names/initials of several notable ranching families including Mike Auney and J.M. Aunie who operated ranches nearby (Kuehn 1990:166–167, 171).

ADDITIONAL REFERENCES: Kuehn 1990

THE ELKHORN RANCH

Sandstone foundation slabs at the site of Theodore Roosevelt's Elkhorn Ranch, 2015

GENERAL DESCRIPTION: Roosevelt described the Elkhorn Ranch in detail in a passage of his book Ranch Live and Hunting Trail (1899:25–26). He said the ranch included activity areas on both sides of the Little Missouri and was about 10 miles from the nearest ranch. The ranch buildings were in an open meadow flanked by thick timber stands. Thick cottonwoods and undergrowth formed a wall around the meadow. A line of mature cottonwoods shaded the ranch house from the hottest summer sun and winter wind. Bluffs with abrupt cliffs walled the river bottom and separated the meadow where the ranch buildings were located from the bottom. Access to the nearby plateaus could be had via steep grassy slopes or dry coulees.

A number of different buildings comprised the main ranch area. The ranch house was constructed of rough-hewn logs. A stable, sheds, and other outbuildings were located nearby as was a holding pen where cattle were corralled during the winter. A fenced garden was located at the edge of nearby woods while, in the center of the meadow, a high, circular horse corral with a snubbing post in the center was where the ranch horses were kept. About four miles away from the main ranch was a large cattle corral that was built to make herding the animals easier (Roosevelt 1899:26).

William Sewall recalled that the ranch house was partially constructed from large cottonwoods that were logged on the property and imported lumber. The cottonwood timber was hewn beginning in early October 1884 and most of the materials had been delivered by New Year's Day, 1885. Approximately 16,000 board feet of pine boards were also procured from the village of Little Missouri, about 40 miles away. These were used on the floor and interior rafters. The roof was clad in pine shingles. Sewall designed the house and estimates it was about 60 feet long, 30 feet high, and 7 feet high with a flat shingled roof and a veranda. Based on sketches made in 1890, the house had either 8 or 10 rooms and the floor plan may have been altered between 1885 and 1890. Other accounts state that the ranch house had a cellar or basement that was used by Roosevelt for photograph development (Mattison 1960a:60–62).

Both Sewell and Roosevelt recall sitting on the low veranda of the ranch house during the pleasant summer evenings with his fellow ranch workers and their families. It was the center of after work

activity where the ranchers could unwind and relax. Sewall recalls Roosevelt reading poetry in a rocking chair on the veranda while Roosevelt himself simply recalls gazing out at the relaxing scenery. In the morning, the ranch hands met on the veranda before they ate breakfast and head out for the day. Winters were spent beside the fireplace where a set of elk antlers decorated the mantle. Rifles were stacked neatly in the corner (Mattison 1960a:59–60,62).

Some of the other buildings were also noted in historical documents. The horse stable was located near the ranch house. Tax records indicate Roosevelt paid taxes on about 20 to 30 horses from 1886 to 1889. The stable was about 16 by 20 feet with a sloping roof that was covered with dirt for insulation (Mattison 1960a:62–63). A cattle shed was built where two to three milk cows could be tied up and milked. These animals provided plenty of milk for butter. This was also an area where cattle could be stored during the winter (Mattison 1960a:63). A chicken coop was built in order to supply the ranch with eggs and meat whenever luck ran out on hunting. This structure was not very secure as Roosevelt noted that predators frequently destroyed many of the chickens (Mattison 1960a:62–63). Although it was not noted in historical documents, archaeological work revealed the ranch also had a blacksmith shop where Dow probably served as blacksmith (Mattison 1960a:64). Finally, facilities for a haying operation were noted on the ranch. Harvesting hay from the nearby grasslands was a common activity at the ranch and Sewall noted collecting over 8 tons of hay in the summer of 1886 to get the cattle through the winter (Mattison 1960a:64). Roosevelt also mentions that the ranchers cut their own firewood and quarried coal on the ranch (Mattison 1960a:65).

Today, the ranch is an archaeological ruin. Several of the markers left behind by archaeological work conducted in the 1930s and 1940s, and the sealed well shaft are also visible. Several depressions and berms are also visible, including what must have been the basement for the main lodge; however, no architectural elements remain.

Location Within the Park: The Elkhorn Ranch ruin is in its own unit of the Theodore Roosevelt National Park, approximately halfway between the North and South Units.

Temporal or Group Affiliation: Euroamerican: Theodore Roosevelt

Additional References: Kuehn 1990

THE PEACEFUL VALLEY RANCH

Peaceful Valley Ranch (2014)

GENERAL DESCRIPTION: The Peaceful Valley Ranch has a long history and has played an important role in the development of the park. The first known occupation of this location by non-Native people began in the early 1880s in the form of a modest cabin built by Eldridge Paddock. This location remained an active cattle ranch operated by a number of different families until 1930s when it came under government administration. The ranch complex became an administrative center for THRO during the 1940s before the new park headquarters were constructed in Medora in 1959 (Penny and Larson 1993). Although several buildings have been destroyed or sold as surplus, the Peaceful Valley Ranch remains an excellent example of a Badlands ranch of the late nineteenth and early twentieth centuries.

In the summer of 1883, Eldridge G. (Gerry) Paddock completed a log cabin on the property that is now the Peaceful Valley Ranch. Paddock was an everyman around the Medora area who made his living by hunting animals to provide meat to Northern Pacific Railroad crews. He supplemented this income through several businesses in what would become Medora, including joining the partnership that formed the Pyramid Park Hotel, and serving as a hunting guide. He became an employee of the Marquis de Mores during the cattle boom of the 1880s (Mattison 1950; Penny and Larson 1993).

Paddock did not live in his cabin for very long. In December, 1883, he sold the place to Norman Lebo who was another big game hunter and who, among other clients, guided Theodore Roosevelt's trip to the Bighorn Mountains. Lebo and his family stayed in the cabin for little more than one year before they too sold the property (Penny and Larson 1993). In 1885, Benjamin Lamb bought the property as part of an attempt at cattle ranching on the Badlands. Lamb was a smallholder but was very active in local stockraising associations during a time when they were dominated by large cattlemen. He is also responsible for building the original frame ranch house on the site. Lamb also constructed the original barn and blacksmith shop on the property (Mattison 1950; Penny and Larson 1993). The first ranch house was a simple two-story, wood-frame building, but it is unique because it was built at a time when most Badland ranch buildings were rough-hewn log structures.

Badlands ranching changed dramatically after the die-off of 1886–1887 and the closure of the range in the early nineteenth century. Ranching at the turn-of-the-twentieth century was dependent upon

leased public domain land that was used to supplement privately owned pasture. The result was smaller herds and smaller outfits. Ranches in the Medora area were particularly well-positioned to take advantage of tourism which came to become a central element in the local economy. The nearby rail station provided a way for tourists who were familiar with Theodore Roosevelt's experiences on the Badlands to come out and have their own experiences (Penny and Larson 1993).

During the early twentieth century, the Peaceful Valley Ranch reoriented itself towards catering to the growing dude ranch phenomenon. The property was sold to Harry W. Olsen in 1915 and a number of different transactions from 1915 to 1924 led to the ranch falling into the hands of Carl B. Olsen. The Peaceful Valley transitioned into a dude ranch and took in visitors who were interested in experiencing the cowboy life on the range. Ranch visitors were particularly taken by the rustic architecture and scenic beauty of the property. Olsen made sure the property resembled the public conception of what a ranch should look like by maintaining many of the essential features such as the corral, barns, guest bunks, and barns. On March 9, 1922, Carl Olsen officially registered the property as the Peaceful Valley Ranch—the moniker for which the site remains known (Penny and Larson 1993).

Carl Olsen was one of the most ardent supporters for the creation of the Theodore Roosevelt National Park. He was a major booster behind the effort to create the park during the 1920s and 1930s, allowing legislators and other noteworthy visitors to stay at his ranch (Carlson 1968; Penny and Larson 1993). Olsen sold the ranch to the federal government in 1936 and the property was used as the administrative offices for the Theodore Roosevelt Regional Park. The ranch also housed CCC, ERA, and WPA workers during the 1930s. The Peaceful Valley remained the headquarters for THRO from its creation until the current headquarters in Medora was finished in 1959 (Carlson 1968; Penny and Larson 1993).

Throughout its history, a number of different buildings have been erected on what is now the Peaceful Valley Ranch complex; however three buildings are considered contributing elements to the National Register eligibility of this site. Building 1 is the two-story, wood-frame ranch house built by Benjamin Lamb between 1883 and 1890. Additions have been made to the house, all of which are also wood frame, except for an extension added to the northernmost elevation that is of log construction (Penny and Larson 1993). Building 4 is a log lodge that was constructed in the 1920s for Carl Olsen's ranch guests. This building was dedicated to dances and other social events for ranch visitors. The chimney on the west elevation is made from locally procured scoria boulders. Building 15 is a log barn that was constructed in 1905. Architects believe this building may have been constructed in two sections (Penny and Larsen 1993. During the 1930s, the federal government also erected a number of other buildings at Peaceful Valley. The last of these structures were sold as surplus in 1965 (Carlson 1968).

Potential historical archaeological deposits dating to the 1880s are likely on the Peaceful Valley Ranch site. While the first log cabin at this site no longer exists, the ranch house built by Lamb is contemporaneous with the Elkhorn Ranch and is one of the best existing examples of ranch housing from the open range period in North Dakota (Penny and Larsen 1993).

SITE NUMBER: Also known as the Lamb Ranch, the site number for the Peaceful Valley Ranch is 32BI167.

LOCATION WITHIN THE PARK: In the south unit 5 miles north of the town of Medora.

TEMPORAL OR GROUP AFFILIATION: Euroamerican

ADDITIONAL REFERENCES: Penny and Larson 1993

TRASH DUMPS

GENERAL DESCRIPTION: For the majority of human history, refuse has consistently been deposited in open trash deposits, pits, or other depressions. This has been the prevailing system of waste management for most societies, including both Native American and Euroamerican residents of THRO. Sewage and solid waste treatment in the United States remained rudimentary prior to the twentieth century when urban areas began enacting legislation designed to improve sanitation. In cities, waste management was left to freelance privy cleaners and scrappers; however, larger municipalities had waste management services by the late nineteenth century (Melosi 2000; Sullivan and Griffith 2005:9–11). Rural property owners commonly disposed of refuse in burn piles or dumps in their property, typically depressions or adjacent to roadways (Sullivan and Griffith 2005).

During the mid-twentieth century, national sanitation legislations were passed that required rural areas to deposit their garbage in sanitary landfills. The 1965 Solid Waste Disposal Act was enacted to assist states and local governments in planning, installing, and operating solid-waste management programs (Sullivan and Griffith 2005:12). Additionally, the 1970 Clean Air Act set standards on burning solid waste, the 1972 Clean Water Act prohibited discharging pollutants into waterways, and the Resource Conservation and Recovery Act (RCRA) of 1976 recognized solid-waste management as a national issue. The RCRA was the first national regulation mandating environmentally sound solid waste management, officially prohibiting open dumping (Sullivan and Griffith 2005:13).

The historical archaeological sites in THRO related to ranches and homesteads were created during a time period when residents most likely followed an old trash disposal philosophy that can be summed up with the phrase, "out of sight, out of mind." While not entirely uncontrolled, the refuse generated from the CCC camps of the 1930s was also discarded in open dumps. These activities have resulted in the existence of a number of informal waste dumps that have been recorded as archaeological sites.

SITE NUMBERS: A total of five informal trash dumps have been recorded in THRO: 32BI54, 32BI581, 32BI594, 32BI724, and 32MZ999 (Kuehn 1990:166–167).

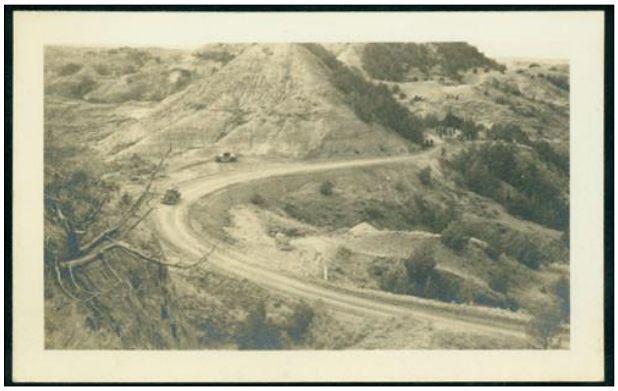
REPRESENTATIVE RESOURCE DESCRIPTION: A variety of different informal waste dumps have been recorded throughout the park. These dumps range from small surface scatters to informal dump sites. Small artifact scatters include 32BI581 and 32MZ999, which are characterized by architectural debris in association with material culture (i.e. bottle glass and ceramic fragments). Site 32BI724 is a CCC camp and includes bottle glass and cans near a cement foundation and two sandstone blocks. Sites 32BI548 and 32BI594 are small, informal dump located in small draws (Kuehn 1990:171).

LOCATION WITHIN THE PARK: Historical trash dumps have been identified in both the north and south units.

TEMPORAL OR GROUP AFFILIATION: Euroamerican

ADDITIONAL REFERENCES: Kuehn 1990

ROADS AND BRIDGES



Civilian Conservation Corps Road construction 1937 (State Historical Society of North Dakota sh1082501023)

GENERAL DESCRIPTION: The construction of roads and bridges throughout the United States during the early twentieth century was one of the most important factors that facilitated the establishment of THRO. The creation of highways for automobile use made this remote region more accessible. As Americans embraced the automobile, federal relief programs and highway funding helped provide roads to and within national parks. Collins (1968:405) explains the social, economic, and legislative context that made this possible:

> "*The roads and highways of the nation were improved during this time period, partially as a result of the various relief programs. The nation's leaders recognized that additional recreational facilities, parks and historical sites needed to be set aside for the expanding population with more leisure time owing to technological improvements. Chambers of Commerce became increasingly aware that increased revenue would come to those communities with tourist attractions.*"

The synergy between federally funded highway construction, public relief programs, and enthusiastic local communities coalesced to make THRO a reality during the 1930s. Most of the roads and bridges throughout the park today were originally built as part of 1930s relief programs. On March 4, 1933, a flurry of federal relief legislation was launched that were designed to assuage drought conditions and the widespread unemployment. The Civilian Conservation Corps, Farm Credit Administration, and Federal Emergency Relief Administration all had a direct role in the creation of THRO (Collins 1968:405–406).

The first CCC projects were to build a road from the Medora CCC camp to Highway 10 and extend it to a newly constructed picnic ground. The crews were also tasked with the construction of a horse and foot trail and to clear overgrown vegetation. The CCC crews helped build the road to the Cottonwood Campground between 1934 and 1935 (Collins 1968:407). Most of the other main roads in the north and south units were built by CCC, ERA, and WPA crews during the 1930s.

Road building was outsourced to private companies following World War II as was some road maintenance. In 1951, a contract for improving the road base and resurfacing portions of the existing roadway was awarded. Seven miles of road between the east entrance and the park headquarters at Peaceful Valley was paved at this time (Collins 1968:429). A significant park improvement initiative was launched in 1956 that saw the chip sealing with bituminous surface of the campground road and parking areas. Roadside signs and markers were also built (Collins 1968:433–434). A new entrance road was constructed from U.S. Highway 85 into the north unit in

1960 (Collins 1968:436). The construction of Interstate 94 was completed in August, 1966, which has greatly facilitated transportation to the south unit of the park (Collins 1968:441).

The Old East Entrance was designed by Weldon Gratton, during the 1930s. Although it is no longer in use, this sandstone entrance typifies the style of architecture that was used on the original park buildings.

SITE NUMBERS: While none of the roads has been recorded as an archaeological site, two bridges, 32BI540 and 32BI541, are among the historical resources attributed to the CCC in the park.

REPRESENTATIVE RESOURCE DESCRIPTION: The two CCC-built bridges are examples of the architectural style used in the park. The also demonstrate the resourcefulness of CCC engineers and architects as they are both made from rough-hewn sandstone that was procured from within the park. Both bridges have a single-arc and span some of the smaller drainages within THRO. They were quarried from local sandstone, possibly at site 32BI722, and the blocks may have been finished on site (Kuehn 1990).

LOCATION WITHIN THE PARK: Roads, bridges, and other transportation-related infrastructure built by the CCC have been recorded in both the north and south unit.

TEMPORAL OR GROUP AFFILIATION: Euroamerican

ADDITIONAL REFERENCES: Kuehn 1990

CAMPGROUNDS, LOOKOUTS, AND RECREATION

Riverbend Overlook in the north unit, view northwest (2004)

GENERAL DESCRIPTION: From its inception, THRO has been dedicated to providing outdoor recreation opportunities for Euroamericans. The infrastructure required to provide those opportunities—campgrounds, picnic areas, lookouts, and roads linking these features—were first constructed during the 1930s through public relief programs. Since then, the National Park Service has assumed maintenance of these now historic features. The park continues to provide opportunities for visitors to experience intact Badlands and northern Plains grassland environments and the plants and animals that make this landscape unique.

By the 1920s, auto camping was increasingly popular activity in the United States. Improved roadways were providing access to regions that had previously only been accessible by foot or on horseback. The mystic of the outdoors created during the late nineteenth century had instilled an appreciation of undeveloped spaces within Euroamerican culture. The automobile allowed a greater proportion of the nation's population to enjoy what had once been a pastime of the leisured class: vacationing in the great outdoors (Belasco 1979; Mark 1998).

The auto camping trend only increased throughout the twentieth century. Automobile ownership ballooned throughout the century and Euroamericans increasingly wanted places to go in their cars. In response, the United States government invested in improving our highways and funded the construction of outdoor recreational facilities on public lands (Belasco 1979). Publicly funded infrastructure construction in THRO started with relief programs like the CCC and WPA (Collins 1968). The National Park Service has continued to maintain these facilities; however, new construction has been much less than it has been in the past.

Constructing campgrounds and picnic areas was among the first tasks for CCC crews in the 1930s. Most of the current outlooks and picnic areas were also built at this time. The Cottonwood Campground was first laid out in the summer of 1936 and had a total of 26 campsites at that time (Collins 1968:407). Workers at the second south unit camp made further improvements to the Cottonwood Campground between 1939 and 1941 (Collins 1968:412). Picnic areas here were constructed using local sandstone and scoria but roofing, cross, and support beams were made from imported redwood.

By the time THRO had been established as a national park in 1947—1948, many of the CCC work camps had been dismantled. The headquarters at Peaceful Valley was the only administration facility for the entire park. In 1947, the NPS rehabilitated the Peaceful Valley facility was rehabilitated to serve as a temporary park headquarters. A fire truck, trash truck, and road grader was procured and stored at Peaceful Valley. Water and sewer systems at this headquarters was improved (Collins 1968:426). Although the park headquarters were transferred to Medora in the 1950s, Peaceful Valley remained a picnic site and included other ancillary buildings in addition to the original ranch buildings. In 1965, surplus buildings at Peaceful Valley were sold as surplus except for two historically significant buildings (Collins 1968:440).

The first major park improvement program in THRO was launched in 1956. As a result of the Mission 66 program, the park revived over $100,000 for park improvements. At this time, two modern comfort stations, an electrical system, camp tables, fireplace, and garbage receptacles were built at the Cottonwood Campground. The number of campsites was also increased and a facility for showing movies was built (Collins 1968:433). Interpretive signs were installed at the Beef Corral Bottom and Wind Canyon and the Peaceful Valley picnic area was improved. The water systems at the Cottonwood and Squaw Creek Campgrounds were also improved (Collins 1968:433–434).

By 1959, the visitor center and Medora park entrance had been completed along with two employee residence buildings in Medora. In the north unit, the Squaw Creek Campground was expanded, a utility building was added, and interpretive signage was installed. The Long X Nature Trail was also completed at this time. In 1960, the Cottonwood Campground was expanded from 25 to 51 sites and an extended water system was installed at Squaw Creek (Collins 1968:436). These two campgrounds have continually been maintained since the 1960s, but they remain approximately the same size.

The infrastructure of THRO facilitate two types of park visitors: campers and day trippers. Visitors who want to view the park for only a few days are serviced by the picnic areas and overlooks scattered along the park's roadways. While individuals visiting the park for a few days typically find lodging in Medora or other nearby towns, park visitors who intend to camp in the park have two options. They can rent a space at one of the campgrounds or travel into the roadless region of the park and establish a backcountry camp. Auto camping at one of the park's campgrounds has been an element of visiting the park since its creation in the 1930s (Collins 1968). The roads and camping areas are oriented toward this type of visitor. While backcountry camps have undoubtedly been frequented by park visitors, the establishment of the wilderness portion of the north unit during the 1970s was made to encourage those who want to experience the park as Theodore Roosevelt might have in the 1880s.

SITE NUMBERS: None of the campgrounds, picnic shelters, or overlooks has been inventoried as archaeological resources.

REPRESENTATIVE RESOURCE DESCRIPTION: The Cottonwood Campground in the south unit is an excellent example of auto camping facilities in THRO. Originally built in the 1930s, this has remained one of the most frequented camping facilities in the park and has been consistently updated since its construction.

LOCATION WITHIN THE PARK: Overlooks, picnic areas, and campgrounds are found in both units of the park. Most of these were constructed in the 1930s and have been updated and expanded since then.

TEMPORAL OR GROUP AFFILIATION: Euroamerican

ADDITIONAL REFERENCES: Collins 1968

CAMPS

Civilian Conservation Corps Activity, Theodore Roosevelt National Park, 1934-1937 (State Historical Society of North Dakota sh1082501074

GENERAL DESCRIPTION: Work camps related to ranching activities had long been present in THRO, but the arrival of workers for the Civilian Conservation Corps (CCC) and Works Progress Administration (WPA) introduced a completely different type of work camp. The archaeological remains of these CCC and WPA camps have been identified in both the North and South units of the park. Within the park, several work camps were created to house the dozens of workers that came to build campsites, picnic areas, roads, bridges, and overlooks.

In 1935, the Watford City site was chosen as a CCC camp near the north unit. A well, water tower, mess hall, kitchen and tent sleeping quarters were prepared for the arrival of the first group of men who came to Watford City on April 30, 1934 (Collins 1968:406–407). Two additional camps were created, "in the Badlands northwest of the Roosevelt Bridge about 17 miles due south of Watford City" (Collins 1968:407). The first group of men arrived to this camp on August 20, 1934. The camps were populated with a mélange of engineers, officers, surgeons, camp superintendents and other personnel and had a combined population of about 550 men (Collins 1968:407).

Another CCC camp was created in the south unit near Medora in July, 1934. In order to get the south unit camp created, the North Dakota State Historical Society purchased state land that had been reserved for educational purposes in Township 140N, Range 102W, Section 16. The Medora CCC camp was on the west bank of the Little Missouri River next to the east line of Section 16. Men arrived to this camp in late August, 1934 and their first projects were confined to Section 16 as the surrounding land was still private property (Collins 1968:407). Work later moved to the east bank as additional park land was acquired.

The Medora CCC camp was vacated on July 1, 1937. Approximately half of the foremen employed there were terminated and the remaining half was transferred to the north unit. The South unit building stood vacant for a short period of time before the Army disposed of them as surplus (Collins 1968:410–411).

Work continued through the north unit camp until October 1, 1939 when it was transferred to a new location in the south unit. This new camp was in Section 1, adjacent to the east bank of the Little Missouri River directly south of Jones Creek. At this time, the CCC focused its efforts at the Chateau de Mores and the ruins of the de Mores meatpacking plant (Collins 1968:411). The second south unit CCC camp was constructed to accommodate about 160 men but it typically was only occupied by about 100 persons. This camp remained in operation until November 1, 1941 when it was closed at the onset of World War II (Collins 1968:411–412).

A small group of project management staff remained in the south unit at the Peaceful Valley Ranch after the closure of the south unit CCC camp in 1941. This headquarters had originally been created in connection with the Emergency Relief Administration (ERA). The ERA was tasked with employing local labor on projects in the park. Most of these men came from the surrounding area. Every morning, government trucks left the ERA headquarters to pick up the men from different locations and returned them home at night. It was these ERA workers who were responsible for building the East Entrance Station and the road that connected this entrance with the CCC-built roads within the park. In the late 1930s, there was a transition from ERA to WPA projects. By late 1939, there were no longer any ERA projects in the park and, on June 30, 1942, the WPA projects were closed down as well (Collins 1968:412).

There were no permanent CCC, ERA, or WPA crews stationed at the north unit from October, 1939 to 1947. Both units were administered from the Peaceful Valley headquarters after October, 1939. Occasionally CCC crews were sent from the south to the north unit to do maintenance from October, 1939 and November, 1941 (Collins 1968:412).

After the removal of the south unit camp in 1941, a single employee served the entire area until May 11, 1942 (Collins 1968:412–413). A graduate of the University of Illinois-Champaign, Weldon Gratton was hired by the North Dakota Historical Society in the 1930s to draw plans for the forthcoming CCC projects. He was hired as a landscape architect by the National Park Service when the first CCC camps were established in Section 16. Gratton designed the entrance walls, the roads around the Chateau de Mores, the east entrance and many of the road plantings throughout the park. He also designed the city park in Medora. He later became superintendent of THRO during the 1940s (Billings County Historical Society 2003:82–83).

Since the 1940s, construction work in the park has been contracted out to private firms.

As an archaeological site type, work camps are characterized by the remoteness of their location, the demographics of their occupants, impermanence, and the motivations behind their creation. In the American West, work camps were erected in landscapes where a significant construction event was taking place. These remote locations kept workers away from most of the amenities of urban life but also created communities that were completely dependent upon importing the vast majority of the necessities of everyday life. Processed and prepackaged goods were made available through the company or organization sponsoring the camp; however, in some instances, such as the Medora

CCC camp, local towns benefitted from the worker's reliance on commercial products (CalTrans 2013:14–15).

Work camps are also characterized by the typical diverse population of transient men that inhabit them. The workers come from a number of different ethnicities, religions, and nationalities, creating uniquely diverse communities in remote areas. Social identities are still maintained in work camps, but on a different scale than can be found in urban settings. Ethnic and national identities can be found in the archaeological record through small finds because the more salient artifact frequencies and quantities associated with ethnic groups are rarely found in work camp sites. Women and children are uncommon in work camps like the ones the CCC created in THRO, so the institutions that sustain families—churches, schools, and women's institutions—are rarely established within the camp. Buildings and structures are focused on housing with a smaller number of ancillary buildings like mess halls, workshops, and sheds. Because the camp is a temporary manifestation, little investment is made in constructing significant buildings (CalTrans 2013:14–17; Rogge 1995).

Work camps in THRO were substantial when compared to ranching camps that had preceded them. The camps in both the north and south units were composed of multiple dormitory buildings with an assortment of ancillary buildings and structures. Historical photographs of the south unit camp in the late 1930s shows a well-organized settlement of over twenty buildings, most of which are long dormitories. The buildings appear to be wood framed with wood cladding and corrugated metal roofs (Collins 1968:416). Oral histories and archaeological research indicates that, in addition to these buildings, the CCC camps also included a number of smaller outbuildings and structures. The camps were connected by a number of unpaved walkways and roads. For example Keuhn (1990) recorded a number of well explorations and spring development areas throughout the park as well as some depressions that may have been dynamite storage buildings. Finally, CCC projects forced the workers to procure resources from the local environment. A stone quarry, gravel pit, and a scoria pit associated with CCC activity have also been identified.

SITE NUMBERS: Four CCC camps have been recorded as archaeological sites: 32BI555, 32BI906, 32BI909, and 32MZ721. The largest of these sites is 32BI555, which includes a number of archaeological features like concrete depressions and wells in association with material culture and architectural debris (Keuhn 1990). Site 32BI724 is an artifact scatter that dates to the 1930s and has been associated with CCC activity in the park. A CCC sandstone quarry, 32BI722, has been identified based on several drilled holes in a 7 by 2.5-m area, and a scoria pit used by the CCC, 32BI671, has also been recorded. Site 32BI603 is a gravel pit that has also been included as a CCC resource procurement site. Eleven spring development sites have also been associated with CCC activities: 32BI 482, 32BI 552, 32BI 559, 32BI 576, 32BI598, 32BI599, 32MZ871, 32MZ874, 32MZ907, 32MZ914, and 32MZ949. Two well development sites, 32BI604 and 32BI622, have been attributed to the CCC period in THRO (Keuhn 1990).

REPRESENTATIVE RESOURCE DESCRIPTION: Camps, quarries, spring and well developments

Location Within the Park: CCC camps were created in both the north and south units. Other archaeological sites attributed to this period have also been found in both units.

Temporal or Group Affiliation: Euroamerican

Additional References: Kuehn 1990

Table 4 Euroamerican or Historical Archaeological Resources

Euroamerican or Historic Resource Site	Site Type	Temporal Affiliation	NRHP Eligibility
32BI536	well	CCC and Park Period	Unknown-potentially eligible
32BI540	bridge	CCC and Park Period	Recommended Eligible
32BI541	bridge	CCC and Park Period	Recommended Eligible
32BI552	spring	CCC and Park Period	Not eligible
32BI555	camp	CCC and Park Period	Recommended Eligible
32BI559	spring	CCC and Park Period	Not eligible
32BI576	spring	CCC and Park Period	Unknown-potentially eligible
32BI581	scatter	Settlement Period	Not eligible
32BI584	graffiti and rock art	Settlement Period	Recommended Eligible
32BI594	scatter	Settlement Period	Not eligible
32BI598	spring	CCC and Park Period	Not eligible
32BI599	spring	CCC and Park Period	Not eligible
32BI605	structure	CCC and Park Period	Recommended Eligible
32BI603	quarry	CCC and Park Period	Not eligible
32BI604	well	CCC and Park Period	Not eligible
32BI622	well	CCC and Park Period	Not Eligible
32BI623	graffiti and rock art	Settlement Period	Recommended Eligible
32BI671	quarry	CCC and Park Period	Not Eligible
32BI677	graffiti and rock art	Settlement Period	Unknown-potentially eligible
32MZ1003	structure	Settlement Period	Recommended Eligible
32MZ871	spring	CCC and Park Period	Not Eligible
32MZ874	spring	CCC and Park Period	Not Eligible
32MZ876	structure	CCC and Park Period	Not Eligible

32MZ906	camp	CCC and Park Period	Not Eligible
32MZ907	spring	CCC and Park Period	Not Eligible
32MZ909	camp	CCC and Park Period	Not Eligible
32MZ914	spring	CCC and Park Period	Not Eligible
32MZ949	spring	CCC and Park Period	Not Eligible
32MZ973	depression	Settlement Period	Unknown, potentially ineligible
32MZ998	dugout	Settlement Period	Unknown-potentially eligible
32MZ999	scatter	Settlement Period	Unknown-potentially eligible
32BI482	spring	CCC and Park Period	Not eligible
32BI529	depression	Settlement Period	Not eligible
32BI697	depression	Settlement Period	Unknown-potentially eligible
32BI721	camp	CCC and Park Period	Unknown-potentially eligible
32BI722	quarry	CCC and Park Period	Not Eligible
32BI724	camp	CCC and Park Period	Unknown-potentially eligible
32BI727	bridge	CCC and Park Period	Not Eligible
32MZ630	depression	Settlement Period	Unknown
32MZ633	depression	Settlement Period	Unknown
32MZ863	depression	Settlement Period	Not Eligible
32MZ875	structure	Settlement Period	Recommended Eligible
32MZ985	structure	CCC and Park Period	Recommended Eligible
32MZ997	dugout	Settlement Period	Unknown-potentially eligible
32BI548	trash dump	Archaic-Woodland/Besant-Unclassified Late Prehistoric/Settlement Period	Recommended Eligible
32BI483	homestead	CCC and Park Period	Recommended Eligible
32BI556	homestead	Settlement Period	Not eligible

32BI572	homestead	Settlement Period	Recommended Eligible
32BI574	homestead	Settlement Period	Recommended Eligible
32BI583	homestead	Settlement Period	Recommended Eligible
32BI607	homestead	Settlement Period	Not eligible
32BI621	homestead	Settlement Period	Recommended Eligible
32BI624	homestead	CCC and Park Period	Unknown-potentially eligible
32BI625	homestead	Settlement Period	Unknown-potentially eligible
32BI680	homestead	Settlement Period	Unknown-potentially eligible
32BI698	homestead	Settlement Period	Unknown-potentially eligible
32MZ911	homestead	Settlement Period	Recommended Eligible
32MZ972	homestead	Settlement Period	Unknown, potentially ineligible
32MZ974	homestead	Settlement Period	Unknown-potentially eligible
32MZ975	homestead	Settlement Period	Unknown, potentially ineligible

NATIVE AMERICAN FAUNAL RESOURCES

AMERICAN BISON

SCIENTIFIC NAME: *Bison bison*

FAMILY: Bovidae

American bison. Photo Credit: M. Nieves Zedeño

GENERAL DESCRIPTION: Bison, also known colloquially as buffalo, are the most significant animals for Native American groups known to have used the Theodore Roosevelt National Park area. They are emblematic of past lifeways that centered on the incorporation of this big-game species into every realm of their existence. Bison and all its geographical and ecological associations therefore figure into the development of indigenous economy, ideology, and belief systems. Elaborate seasonal rounds, steeped in propitiatory rituals characterized bison hunts and these hunts, are representative of an ancient way of life that continued into the ethnographic present. Every part of the bison, including bones, marrow, fat, flesh, brain, tongue, horns, and hooves were purposed.

With so many uses, bison were an integral, keystone species to many Native American groups, and later, Euroamerican settlers. This was so much so that "no other wildlife species has exercised such a profound influence on the human history of the continent" (Gates and Gogan 2010:2). Potter et al. (2010:10) add that:

> *"Few species enjoy a history as rich in archaeology, paleontology, story and legend, oral and documentary history as the American bison. Nor is there another North American species for which the cultural and political significance of an animal is so great. For thousands of years various forms and populations of bison have coexisted with humans in North America, providing sustenance and shaping human social and economic patterns, and influencing national history and international political relationships."*

For these reasons, the disappearance of bison herds through overhunting, the overexploitation of the hide market, and wanton killing would drastically alter the lives of Native Americans throughout the Plains.

TRADITIONAL USE[1]: Bison were hunted, skinned, eaten, used for tools, adornments, decorations, and clothing, figured into individual identity and corporate institution making, were traded, were currency, were sacred, were power, were spirits—in sum, the buffalo was the lifeblood of many Plains tribes. It is difficult to parse out what should be considered traditional uses of bison from uses associated with folklore and various other spiritual connections. Consequently, there is overlap between these uses. That being said, bison or buffalo constituted an important part of Plains people's diets and hunting them was a ritually sanctioned activity for centuries—an activity that was carried out well into the 1800s and usually involved drive lines, jumps, and impounds. Organizing such a bison drive was both complex and tedious, requiring a combination of patience, deception, and fear. The actual stampede could not occur until the herd was properly in position. Starting too early meant the bison herd had more time to lose cohesion and become strung out, growing weary, overcoming their fear, and diverting course. Conversely, starting too late meant the stampeding bison would not get up to the full blind sprint necessary to continually propel bison over the cliff (Brink 2008:137–141). Thus, moving the herd was a delicate procedure that necessitated an intimate knowledge of bison behavior and a purposeful investment in the landscape (Brink 2008; Zedeño et al. 2014).

Bands of **Sioux,** most highly mobile, hunted bison extending their hunts into the Missouri River watershed and its tributaries. In the summer, there were large communal bison hunts. During these times, especially among **Lakota** bands, a soldier's society would act as tribal police to maintain order in the hunt and in the traveling camps. Similarly, in **Mandan** society, moieties were responsible for organizing bison hunts and later distributing meat (Bowers 1950).

Before the horse, Sioux people used buffalo jumps and traps to hunt the bison. These hunts had to be organized as the imprudent actions of a single hunter may chase the herd away. Bison could also be hunted throughout the year by individual hunters. But this hunting behavior is quite different from the organized communal hunting of the summer (Anderson 1984; Pond 1986; Zedeño et al. 2014).

Sperry (2007:13–14) reports the westward movement of the **Plains Chippewa Cree** into areas as far as the Upper Missouri River Breaks in Montana in the late Prehistoric and Protohistoric periods. Cree groups likely would have paused in parts of North Dakota during this time as well. Their economy had been adapted to bison hunting as resource depletion and westward expansion occurred.

For the **Arikara** bison hunting was regulated by warriors chosen specifically for the occasion and all parts of the bison were used (Berry 1978:56–57). Tabeau (Abel 1939:72–174), an ethnographer living with the Arikara in the early nineteenth century, observed that hides were used for clothing,

[1] The traditional uses and folklore included in this resource page are by no means exhaustive, but are representative examples.

including shoes, in any season, and for lodgings. Horns and bones were worked into tools. For example, the horn was used to split wood while the shoulder blade served as a pickaxe. Sinew was used for thread, stomachs functioned as vessels, and bison wool was spun for textiles.

The **Crow**, like all other tribes known to occupy the Badlands, engaged in bison hunting to procure meat for sustenance, skins and hides for blankets, mattresses, clothing and for lodge covers, and hides and skins were traded (Catlin 1965; Denig 1961). Women tanned hides and made leather pouches from bison skins, at times using a bison rib called a beaming tool (Lowie 1956:77, 217–218). Rawhide served as pots for boiling using the heated stone method and bison pericardium was used as water bottles (Lowie 1922:212, 216). Bison shoulder blades could be used as serving plates, dung was burned as fuel, brains were used to tan deerskins, hooves ground and mixed with chokecherry gum was used to make paints, and neck and shoulder sinews were used as flexible bands (Linderman 1972:33; Frey 1987:12; Voget 2001:699). Hunting bison was mainly a masculine activity for the Crow and as Voget (2001:698) notes, hunting methods included surrounding them, driving them over a precipice, and impoundment. In later times the Crow, hunting communally, used the horse, bow and arrow, and the gun to ride to herds and shoot animals (Lowie 1935). Rituals of prayer and callings by medicine men were paramount for successful bison hunts.

The **Hidatsa** were described as gifted and aggressive buffalo hunters in 1897 (Coues) and they were said to move frequently and cover enormous distances during their seasonal hunts.

Assiniboine lodges were many times covered with bison hides. Long (1942) stated that an average lodge used 6 to 14 bison hides, while extra large lodges were constructed with 20 hides. Bison hides were also used to make bullboats as they were stretched over willow frames to produce a buoyant craft. Bison hair provided padding and warmth inside large sized moccasins used in cold weather and white clay was mixed with bison ankle sinew glue to coat and strengthen bows (Long 1942:149).

Blackfoot may have ventured as far south as the Badlands prehistorically and were certainly in the area in historical times at Fort Union. McClintock (1905:3,435) even noted that some Blackfeet expeditions would on occasion travel the Old North Trail southward to northern Mexico. Their subsistence economy focused on bison, and Blackfeet annual movements revolved around bison migrations. Oral tradition and ethnographic history characterize the Blackfeet as "roving bison hunters, dwelling in teepees and shifting periodically from place to place" within their primary hunting grounds along the headwaters of the Missouri and Milk Rivers (O'Hara 1934:5–6; Battaglia et al. 2014). The Blackfeet used hides for tipi covers, robes, blankets, and other apparel, bison fat was used in soups, bison meat was mixed with berries and dried to make pemmican, marrow was collected from the bones, and horns and hoof strings were fashioned for ceremonial headdresses and dances (Brink 2008:188–190; Ewers 1958:73–74; McClintock 1910:99–100). In sum, the Blackfeet were heavily dependent upon bison both as a food source and for raw materials. Therefore, the depletion of this keystone resource, according to McClintock (1910:506), caused "poverty, suffering, Government relief, and a rapid moral decline."

FOLKLORE AND BUNDLES: Bison served as a ceremonial and holy symbol for many Plains groups. Gilmore (1926) notes the significance of bison skulls for the **Arikara** and cites specifically the story of a sub-chief named Soldier who kept a skull as a religious symbol that would further overlook a home's entrance (Gilmore 1926:75–76). Songs, prayers, and offerings were made to the spirit of the buffalo to ensure food and sustenance would be brought to Arikara families and villages.

The **Crow** place great importance on the pipe in their life and in religious activities. The story of the pipe incorporates imagery associated with the bison. Reed (n.d.) describes the pipe as a "celestial gift, a bison woman presented…to Bison Boy and [this pipe was] the pipe of the Seven Bison Bulls, the brothers of Bison Boy". Bison parts also figure prominently in the medicine bundles and magico-religious practices of the Crow (Wildschut 1975).

For the **Assiniboine** bison were at the crux of many religious relationships. For example, the Buffalo Chaser Society, still active today, led the highest of ceremonies involving bison, including the annual ceremonial hunt. Additionally the Sundance, central to their religious system, was closely associated with the bison hunt.

Mandan origin myths mention bison in recounting the creation of the earth by culture hero "Lone Man". "Lone Man" was said to have populated the earth with buffalo people, fish people, bear people, eagle people, corn people, and others "whose history was inaugurated into myths of the sacred bundles" (Bowers 1950:26). Bison appear consistently in Mandan oral traditions, origin myths, and ceremonies. Examples include the Small Hawk Ceremony and the Snow Owl Ceremony (Bowers 2004:280) while the myth of the Woman Above bundle speaks of obtaining the rights to buffalo skulls. The Mandan believed that the spirits of the buffalo lived in buttes before they came to the surface. These were sacred places where people left offerings and prayed. Buffalo calling rituals and buffalo impersonators figured prominently in the ceremonial calendar and specific rites of the Mandan. Buffalo skulls were present in every important bundle as well as ceremony. Buffalo was, in fact, the central figure of the Okipa ceremony.

Ceremonial bundles of Plains tribes often time included the bison. For example, the eagle trapping bundles of the **Mandan** and **Hidatsa** contained elements of the buffalo and the buffalo's spirit contributed to the power of the bundle (Bowers 2004). The Sacred Robe bundle of the Mandan contained buffalo moccasins and enacting the Snow Owl bundle ceremony gave a person buffalo calling rights, among others (Bowers 2004:184, 282). The Mandan also had a Buffalo Calling Ceremony which took place over four days—its associated bundle contained an arrow straightener made from a buffalo rib, a buffalo robe, and other elements from plants, birds, and mammals (Bowers 2004). For the Blackfeet, bison are well represented in the Beaver Bundle in the form of the i*niskim,* or sacred buffalo stone (Zedeño et al. 2014). **Blackfoot speaking Blood** consultants who visited the park in 2004 remarked of the sacred nature of the bison in the creation of group identity and for use in obtaining power (Zedeño et al. 2006:262):

"[T]he elders in the Matoki Society own their own [buffalo] robes. The consultant who belongs to this society has her own robe. This robe has special meaning for her as it was the first she used and it parallels her history of participation in the society. In this and other society's ceremonies, a robe is also laid inside the lodge, with the tail pointing in the direction of the rising sun. She has had it for 14 years, and some other members borrow it for ceremonial purposes. Women's headdresses were originally made of buffalo hide; women may acquire power from buffalo. All parts are used, particularly in ceremonies, and that includes dung for fuel."

They also recanted the story of the Blackfoot word for death and stated that it is further rooted in the word for bison, or iniwaa. A long time ago the bison, which was a giant, used to hunt humans. The creator/trickster Napi said: "this is not how I planned or meant it to be". So he wanted to stop him from harming humans. But before the rules changed, the chief of the bison wanted to eat one more human so he hid him under his front arm. Hence, the word for this part of the body means "person" (Zedeño et al. 2006:260).

LOCATION WITHIN THE PARK: Bison herds currently reside in the park and are actively managed by park staff. In 2004 consultants spoke of the ideal conditions presented by the physiography of Theodore Roosevelt National Park in promoting habitation by diverse game species. Features of the landscape consequently encourage the health and fecundity of large and small game, especially the *buffalo.* In addition to this herd, strategies for past buffalo hunting exploits by ancestral Native American groups are evidenced at Site 32BI549, a bison jump and processing locale. This is not surprising as bison kill sites are common in the Badlands of North Dakota. A painted bison skull was recovered at Site 32MZ101, a conical timbered lodge with an associated hearth. Unearthed by Sperry (1981) in 1968, the skull was located inside the lodge perimeter and would have been used ceremonially.

As for the buffalo jump (Site 32BI549) **Crow** elders emphasized the significance of the buffalo for the Plains people since the beginning of times during a previous visit to the park Zedeño et al. 2006:241):

"In the origin stories the buffalo jump was given to people by Old Man Coyote, who lured the buffalo over the cliff. Old Man Coyote challenged the buffalo to a race. He said: we'll close our eyes and run. That's how he made the buffalo jump. Buffalo jump sites are mystic sites and have a lot of power in them because of all the ceremonies that were conducted before the hunt. All the buffalo jumps are connected with one another. Among the Crow there is a clan, its name is, "Úu saa waa chi" which means "clan who brings home game without shooting". That clan is connected to the buffalo jumps, too."

The consultants further suggested the rocks used to build drive lines were smudged and incense would have been burned while the buffalo were being driven over the cliffs. Offerings were made and the pipe was smoked. Hunters would have camped just below the cliff, where it is warmer and

water is available in the springs, likely during winter months. During buffalo drives, women and children would have come along with the hunters to help with the butchering and processing of meat and hides.

Crow elders also observed that the abundance of wallows and salt plants at Site 32BI549 indicates that this was an ideal place for bison herds. *The buffalo come to the wallows to make medicine during their rutting [and] to trap females. From the buffalo we also learned how to have dreams. In full moon the buffalo would come to high places, like knolls, and fast to cleanse their system.*

LOCATION WITHIN THE PARK: In 2004, during an initial ethnographic assessment, members of the Three Affiliated Tribes (**Mandan, Hidatsa,** and **Arikara**) noted that they have had regular contact with park staff regarding many issues, including bison and elk management (Zedeño et al. 2006:240).

PRONGHORN ANTELOPE

SCIENTIFIC NAME: *Antilocapra americana*

FAMILY: Antilocapridae

Antelope. Photo credit: Mark Gocke, blogs.usda.gov

GENERAL DESCRIPTION: Antelope, also known as pronghorn in this region, are ethnohistorically referenced as an important food and clothing source for most tribes known to have used the Theodore Roosevelt National Park area. Usually antelope were hunted by men and were impounded, trapped, or driven over a drop near watercourses. In addition, the antelope figure prominently in the oral traditions of Plains tribes, notably the Hidatsa.

TRADITIONAL USE: All parts of the antelope were used, serving utilitarian and sacred purposes for many tribes. Once the animals were procured, their skins, hair, and ears among other parts were used for clothing and adornments as well as medicinally.

During a 2004 park visit a consultant from the **Standing Rock Sioux** tribe remarked of the animal's use stating "[t]he antelope are female custodians; their ears are used to make medicine pouches" (Zedeño et al. 2006:250). The **Yankton Sioux**, although not directly linked to using the park area, were known to fashion antelope skin into leggings which were then traded (Abel 1939:122–123).

Antelope hides served as buckskin for the **Assiniboine** and were the thinnest and lightest of all buckskin (Long 1942:134). Long (1942:97) reported that "antelope skin, in particular, served as the dress for a young girl who participated in a specific ceremony."

The **Crow** used antelope hair as stuffing material in bison pericardium which was then made into a children's ball (Linderman 1972:35).

Further utilitarian use of the antelope by the **Arikara** tribe is recorded by the ethnographer Tabeau. "[A]ntelope and deer hides could be made into clothing and other ornaments… Tabeau also … noted that antelope hide provided fine garments for both men and women" (Abel 1939:76–78).

Hunting antelope was both a ceremonial and subsistence based activity for many tribes in the region including the Hidatsa, Arikara, Mandan, Crow, Assiniboine, and Blackfeet. The **Blackfeet** hunted antelope for food in addition to deer, elk, and buffalo. The **Assiniboine** easily tracked antelope in winter by following hoof prints in the snow and hunted them in the summertime near watering places (Zedeño et al. 2006:134, 185). The Cheyenne appear to have hunted antelope at the

headwaters of the Little Missouri River, at least once in 1865. They called the river "Antelope Pit River (Hyde 1968).

Weitzner (1979:195) describes how the **Hidatsa** hunted antelope; "Antelope were taken in a pound or trap constructed with poles and skins and set at the base of a high hill. Antelope were driven to the hilltop and pushed over the crest and into the pen. This was supposedly part of a ceremonial sequence not revealed to [the ethnographer Wilson,] at the time."

Tabeau, who lived with the **Arikara,** reflected on their hunt for buffalo, deer and antelope, and their gathering of certain species of plants, and fishing among other things. Antelope were hunted by driving them over a drop and into a coulee or other trap. Those antelope that survived the fall were shot by awaiting hunters. Abel (1939:77–78) reports:

> *"Antelope were hunted twice a year as they crossed the Missouri River, in the spring and autumn. Tabeau said that the Arikara would wait for the antelope herd to enter the stream. From bluffs they shot arrows at them, while another group of hunters placed on the opposite bank would frighten the herd, which would return to the water, to be fired upon and shot. The Arikara hunters who were good swimmers would swim out and bring back many antelope bodies".*

Hunting of antelope and deer by the **Crow** consisted of driving the animals into corrals, at times on level ground (Lowie 1935:72). Ceremony, prayer and ritual preceded the hunt. Afterwards, antelope skins were sometimes smoked by Crow women so they resisted hardening when dried if they were exposed to wetness (Lowie 1935:76–77).

FOLKLORE: The Hidatsa have oral traditions reflective of the antelope's significance. Stories related to the culture hero Packs Antelope detail his exploits as they are associated with the ceremonies of the Missouri River bundles, namely the Thunder bundles (Zedeño et al. 2006:92-93; 192). Bundles were used to attain the power of Packs Antelope and the six gods of the river. Rain, pottery, bullboats, and doctoring were made with these powers (Bowers 1992:371–373).

The **Mandan** considered trapping antelope a sacred activity with relegated knowledge. Bowers (2004:255–259) reports that "[m]en with rights to sacred snares could call up their magical powers to trap…animals and to doctor and officiate at the buffalo and antelope pounds."

LOCATION WITHIN THE PARK: Pronghorn spend the majority of time in open areas. They are typically spotted in the prairie grasslands and other areas of open terrain. Pronghorn only spend time in depressions, near watercourses, and in coulees long enough to get water and are rarely spotted in these locations.

BADGER

SCIENTIFIC NAME: *Taxidea taxus*

FAMILY: Mustelidae

GENERAL DESCRIPTION: The ground dwelling badger is primarily associated with the sacred activities of Plains tribes. A significant dichotomy that exists between above and below-ground animals is invoked by the presence of the badger in ceremony and myth. Although the eating badger was rare, once killed, its skin served a number of practical purposes and is commonly present in the contents of several sacred bundles.

Badger. Photo Credit: National Park Service

TRADITIONAL USE: Badger were hunted and trapped by the Hidatsa, Arikara, Mandan, Assiniboine, Blackfeet, and Crow. At times **Crow** war parties were known to eat badger (Lowie 1922:210), while the **Assiniboine** hunted and trapped badger along with fox and coyote for food. Traps for these small game animals were made of wooden stakes with a collapsing roof and their skins and claws were later used for clothing, ornaments, and ritual. The **Hidatsa** used badger skin to construct quivers and bow cases (Zedeño et al. 2006:90, 134).

Badger skin is also present in the Sacred Robe bundle of the **Mandan** and the Beaver bundle of the **Blackfeet**. These are discussed in the Folklore subsection of this page.

FOLKLORE AND BUNDLES: Badgers are included in the **Arikara**'s traditional histories of origin and migration. Badgers, along with snakes and various insects, are described in the creation myth detailing how above and below-ground-dwelling animals came to be. Of the animals created in the womb of Mother Earth, below-ground-dwellers did not emerge from the earth as it was closed before they had the chance (Zedeño et al. 2006:97).

Badger skin was used in the corn ceremony bundles of the **Mandan**, specifically the Sacred Robe bundle. According to Bowers (2004:184), the Sacred Robe bundle contained the following articles: Good Furred Robe's robe painted with a map of the world that showed the Missouri River as a great snake and the hole through which the corn people reach the earth; Good Furred Robe's wood pipe with a carved goose, a headdress of fox skins, a bundle of white sage, moccasins of buffalo hide, a clay pot; a strip of elk hide, a dried gourd for a rattle, corn silk, several ears of corn, a narrow strip of badger skin, blackbird heads, a mallard head, a white-tailed deer skull with antlers, three dried squash, one sunflower head, a robe made of fox hides, and a braid of cornhusks. Many of

these items, particularly the birds, were associated with Old Woman Who Never Dies myth, which engaged a wide variety of animals, plants, and minerals in its story (Bowers 2004:200–204). This bundle had geographical associations in the Round Lodge and Yellow Earth (Double Ditch) sites and belonged to the Nuptadi Mandan.

Badger is among the animals represented in the Beaver bundle of the **Blackfeet**. The Beaver bundle was given to the people as a gift from the underwater spirits; the animals in it taught people about plant medicine. Sometimes likened to Noah's Ark, the bundle contains a representative item from all the beings that inhabit the above, ground, and below portions of the universe. Birds and waterfowl, water mammals, forest dwellers, and prairie animals are all represented in this bundle and some are thought to contain upwards of 100 animals. Buffalo is well represented in this bundle, in the form of the i*niskim*, as are plants, including roots and tubers, grasses, trees, and berries. Among the animals commonly represented are: beaver, otter, badger, meadowlark, loon, magpie, mallard, lynx, wolverine, fox, woodpecker, chickadee, crow, dog, moose, frog, and buffalo.

EAGLE

SCIENTIFIC NAME: *Haliaeetus leucocephalus* (bald eagle); *Aquila chrysaetos* (golden eagle)

FAMILY: Accipitridae

Bald eagle. Photo Credit: National Park Service

GENERAL DESCRIPTION: Eagles are a source of power for many Plains tribes and are noted in various origin myths. Today, bald eagles are migrants in THRO. They represent the spirit power of spirit beings and figure in offerings, bundle making, medicine and healing, vision questing, identity and society making, and other sacred and ceremonial activities with sometimes restricted knowledge. The most significant attributes of eagles are their feathers and claws as the flesh is not eaten. Specialized eagle trapping practices are associated with the Hidatsa and Mandan in the park specifically but were practiced by many Plains tribes. These tribes communicate a concern for continued eagle-trapping in the park and cite the significant connection of eagles to the Little Missouri River. Eagle feathers, particularly from the golden eagle, were widely traded across the Plains in the prehistoric and historic periods IChandler et al. 2016).

TRADITIONAL USE: During a visit to Theodore Roosevelt National Park in 2004, a member of the Three Affiliated Tribes (**Hidatsa, Mandan,** and **Arikara**) describes the birds taken during the sacred and religious activity of trapping. "Both *golden* and *bald eagles* would be trapped; also *hawks*. The consultant explained that immature golden eagles have white feathers with a black tip whereas the old ones have white strips on them, and they are dark. The young bald eagles are speckled, particularly the tail feathers, but they become white as they age" (Zedeño et al. 2006:238). It was also stated that women did not have the right to the eagle feather, only men. However, women in the US military service can receive eagle feathers for their sacrifice, as was shown by an **Arikara** consultant (Chandler et al. 2016).

Murray (2009) completed an extensive research on the contemporary significance of eagles in the three North Dakota parks for the NPS. Her research included past and present uses and significance. Trapping was done by erecting a ceremonial conical timbered lodge in sheltered wooded areas and constructing the actual baited trapping pit on the hillsides near a cliff. The **TAT** believe that the spirit animal bear gave them eagle trapping medicine. Some of the preparations associated with eagle trapping would include,

- *The aspiring trapper would first acquire eagle rights and songs that go with eagle trapping, by transfer or by visions.*

- *The trapper had fast in an area with stone circles or rock alignments, also called "prayer lines" which would, in turn, be correlated with the stars and the moon.*
- *The person to trap the eagles would fast and pierce the night before; the lodges were probably used for these ceremonies.*
- *He would select the special place where the lodge would be placed—an individual selection rather than a convention.*
- *A pit would be built below the ridge and would be covered with branches; a carcass placed above the branches attracted the eagle.*
- *A trapper had to learn astrological connections to medicines, because that is where some medicines originate.*
- *Women would follow along but stay at a distance from the lodges, preparing food and taking care of the main camp.*

Once procured, many eagle parts, especially feathers, were then used in bundles and as various adornments, all representative of great power.

Zedeño et al. 2006 (121) documents the significance of the eagle and its feathers for the **Crow**. Eagle feathers were and are medicine. Their use as ornaments or in prayer and ceremony was not taken lightly. Some war bonnets were made of eagle feathers, while dancers used eagle feathers in their bustles, headdresses and other regalia. Eagle feathers may also be seen ornamenting a very sacred pipe. In some ceremonies, a whistle made of an eagle wing bone was blown. This whistle figures prominently in the Sun Dance. Additionally eagle feathers, plumes, claws, and heads are included in the medicine bundles of the Crow (Wildschut 1975).

For the **Hidatsa** eagle feathers were used as offerings among other things, at the buffalo spirit buttes. These buttes were visited summer hunts and offerings of feathers from the speckled (juvenile) eagle were made to increase the buffalo herds. Feathers were tied in bundles to buffalo skulls placed near caves under overhanging cliffs. The bundle contained two very large rattles made of buffalo hide; the head, two wings, and two claws of the speckled owl; red and black clay; white sage; and a buffalo skull. Feathers represented swallows and hawks (Chandler et al. 2016).

The **Assiniboine** used sacred eagle feathers to decorate the stem of the sacred pipe (Long 1942:140) while the Dog Soldier's of the **Cree** used feathers in the Sun Dance. Eagle feathers were also said to have been collected by the Cree while on the path near the Little Missouri River. In addition to eagle feathers, an eagle bone whistle was also used during the Cree's participation in the Sun Dance (Zedeño et al. 2006:149; 252).

The **Blackfoot** were uniquely situated to trap golden eagles along the Rocky Mountain Front and supplied large numbers of feathers for the trade. There According to a Peigan consultant (2015), *My ancestor, Brings-Down-the-Sun and his family were eagle trappers by occupation. He traded in eagle feathers all over. He became a wealthy man, who sustained upward to 17 wives and children with all of them.*

As stated, eagle parts are noted in numerous bundles of the **Blackfoot, Hidatsa, Mandan,** and **Crow** and are further discussed in the Folklore section of this page.

FOLKLORE AND BUNDLES: Eagles represent spirits, helpers, people, and groups of people and have many myths and bundles associated with them. For example, the eagle is said to have given tobacco to the **Arikara** for use in rituals and to have told the Arikara how to trap raptors for feathers and plumes (Chandler et al. 2016).

During a previous visit to the park a member of the **Standing Rock Sioux** tribe described the significance of the eagle stating (Zedeño et al. 2006:249):

> *"The eagle is a human transformed into an eagle. The eagle was once a twin, not created like others. He saw that people were selfish so he left. The people went looking for him and sent his twin to find him. He did, but he could not convince the eagle to come back because he didn't like the way people lived. People went to the sweat lodge and asked him why and then prayed until he went soaring and said: "from now on I will be a messenger for people;" he stood on the sweat lodge and brought medicine*."

Another oral tradition of Plains tribes fixes on "Lone Man", creator of the **Mandan.** "Lone Man" is said to have made the eagle people along with the buffalo people, fish people, bear people, corn people, and others "whose history was inaugurated into myths of the sacred bundles" (Bowers 1950:26). By 1930 only four Mandan clans remained, one of which was the speckled eagle clan. The Mandan also had an eagle trapping bundle. The bundle belonged to the clan of the person building the eagle trap, and remained within the clan even after that person died (Bowers 1950:39).

The **Hidatsa** include eagle down in the contents of the sacred Grizzly Bear bundle, a bundle associated with personal and origin stories. The Grizzly Bear bundle myth is connected to the sacred arrows, one red and one black, a bear hide, parts of buffalo, bear, elk, deer, and dog; a rattle with owl skin cover and decorated with raven feathers, white eagle down, and a snare made of a vine (unknown kind) for the enemy (Bowers 1992:348–358).

LOCATION WITHIN THE PARK: Three conical lodge sites (32MZ101, 32MZ116, 32MZ955) and an eagle trapping pit (32BI518) are located in the park. The latter is associated with the Woodland/Besant archaeological period and is recommended eligible for inclusion on the National Register of Historic Places. These archaeological resources remain significant to tribes known to have used the park area. Eagles were also seen at the buffalo jump site (32BI549).

The conical lodges still stand. One notable lodge is found at Site 32MZ101 in the north unit of the park. Documented by Kuehn (1990:63-64) and Sperry (1981), the lodge contained a hearth, painted bison skull, projectile point, and Fort Yates ware sherds. Additionally, a consultant from the **TAT** visiting the park in 2004 remarked that (Zedeño et al. 2006:238):

> *"[T]he conical lodge locations were based on visions or feelings. Eagle trapping here would usually have been in the fall when the eagles migrated. These lodges*

> *were probably winter lodges and used after the eagles molted in November.* [Site 32MZ955] *is a very good place and probably was along a regular route*."

It should be noted that other tribal members (**Blood** and **Crow**) did not see a direct relationship between the lodges and eagle trapping (Zedeño et al. 2006:262) but agreed they were significant nonetheless. Generally they interpreted the lodges as war lodges rather than eagle trapping structures. But a cursory review of the eagle trapping literature among the **Blackfoot speakers** indicates that they did not use lodges in their trapping rituals (McClintock 1999).

BEAVER

SCIENTIFIC NAME: *Castor canadensis*

Beaver. Photo Credit: National Park Service

FAMILY: Castoridae

GENERAL DESCRIPTION: The beaver is significant for Plains tribes and figures in many origins myths; primarily those of the Blackfeet. Claws and teeth also have documented utilitarian uses but the beaver's mythical prowess is most noteworthy.

TRADITIONAL USE: The **Hidatsa** used beaver for utilitarian purposes. Beaver teeth served as materials for arrows and skins were used to make quiver and bow cases. "Arrow-making was a craft given to the [Hidatsa] by supernatural beings, notably Flaming Arrow, also referred to as Burnt Arrow (Weitzner 1979). Arrow-making was a closely guarded right, as many arrow materials were thought to be poisonous and used mainly for war. Arrows were mostly made of Knife River Flint, but other materials, including buffalo tendon tissue, horn, wood, and beaver teeth were also used" (Zedeño et al. 2006:90).

For the **Assiniboine** beaver claws served as ornamental decorations for the corners of buckskin diamond-shaped bags which were used to hold severed umbilical cords of newborns (Long 1942).

A consultant from the **Standing Rock Sioux** tribe describes the importance of the beaver as medicine (Zedeño et al. 2006:250):

Trees chewed by the beaver are also good medicine. Trees that have been chewed but not felled will be taken down without letting the tree touch the ground, using shawls and blankets to catch it. Medicine is placed beside the tree before taking it down. Pregnant women carry sticks trimmed from this tree for an easy pregnancy and delivery. The tea made of juniper heals stomach illnesses. Offerings and prayers must be made before cutting trees.

FOLKLORE AND BUNDLES: The beaver is very sacred to the **Blackfeet** whose "worldview centers on the Creator Sun and the Star people as well as on supreme beings—Napi and Bloodclot—that created the earth and gave people the sacred gifts they needed to survive" (Zedeño et al. 2006:182). According to elder Carol Murray (2015), *the Beaver Bundle contains all the knowledge of the Blackfoot universe. Many people need to hold the bundle for all that knowledge to come out.*

The beaver is one of these gifts. Beaver are credited with giving sacred knowledge and tobacco seeds to the Blackfeet. "Beaver…taught people the power of plants and roots and the use of

different paints as well as the seeds of the sacred tobacco, the lunar calendar, and the curing songs, prayers, and dances" (McClintock 1999:108). Additionally, the beaver are said to have given the Blackfeet red paint (Zedeño et al. 2006:185). The Beaver bundle of the **Blackfoot** is associated with some of the most powerful medicine. McClintock (1999:108–112) states the Beaver bundle was given to the people as a gift from the animal world; animals taught people about plant medicine. Sometimes likened to Noah's Ark, the bundle contains a representative item from all the beings that inhabit the above, ground, and below portions of the universe. Birds and waterfowl, water mammals, forest dwellers, and prairie animals are all represented in this bundle and some are thought to contain upwards of 100 animals. Buffalo is well represented in this bundle, in the form of the fossils called i*niskim*, as are plants, including roots and tubers, grasses, trees, and berries. Because the bundle contains *iniskim*, it is also associated with ceremonies directed at bison hunting (Zedeño et al. 2014). Among the animals commonly represented in the Beaver bundle are beaver, otter, badger, meadowlark, loon, magpie, mallard, lynx, wolverine, fox, woodpecker, chickadee, crow, dog, moose, frog, and buffalo.

In **Hidatsa** traditions beaver have numerous associations with ceremonial bundles. For example ceremonies associated with the Thunder bundle were performed to capture the power of the beaver along with other water spirits like the toad, turtle, otter, mink, muskrat, and snake (Bowers 1992:358). Beaver fur and claws along with otter skin, turtle shell, buffalo skull, mink skin, dried frog, blackroot, peppermint, sage, cedar, muskrat skin, and watersnake skin were included in the Missouri River bundles (Zedeño et al. 2006:93). These ceremonies were enacted to attain the power of the culture hero Packs Antelope.

For the **Mandan**, the beaver was said to have given them arrow making knowledge. Bowers (2004:283) noted the songs associated with arrow making along with a tradition that said the beaver was the first to secure stone tips for arrows. Arrow making was given to Black Wolf by two snow owls and rights to arrow making were associated with the Snow Owl bundle among others (Bowers 2004). During a 2004 visit to the park, consultants from the **Crow** tribe detailed one origin myth that included the beaver who was given the gift of dancing" (Zedeño et al. 2006:200).

The beaver is associated with mythical origins and human or protohuman ancestry for the **Cree** people (Zedeño et al. 2006:143). The Chippewa-Cree were also active participants in the fur trade, trapping beaver and hunting bison, though these activities are not well documented by the Cree in Theodore Roosevelt National Park (Zedeño et al. 2006:230).

LOCATION WITHIN THE PARK: Beaver are also occasionally seen at the Elkhorn Ranch and south units, and have been spotted in the north unit by consultants. Within the park, they often burrow into the riverbank rather than building their traditional beaver dams in order to avoid detection.A beaver lodge was observed in the north unit during a visit to the park which occurred in 2004 (Zedeño et al. 2006:262). At this time members of the **Blood** tribe and other consultants remarked of its significance. Beavers were also observed near the buffalo jump site in the south unit of the park (32BI549). We again saw a lodge in 2015 when accompanied by consultants who ratified its place in native culture and society.

BLACKBIRD (YELLOW-HEADED)

SCIENTIFIC NAME: *Xanthocephalus xanthocephalus*

Blackbird. Photo Credit: National Park Service

FAMILY: Icteridae

GENERAL DESCRIPTION: A variety of birds are sacred and powerful to the tribes known to have used Theodore Roosevelt National Park. The blackbird is among these. In particular the heads and bodies of blackbirds were used medicinally and included in the contents of sacred bundles.

TRADITIONAL USE: As stated, the blackbird is represented in the bundles of the **Mandan** and **Hidatsa**. Additionally, blackbirds along with chickadees, woodpeckers, meadowlarks, and geese (Schaeffer 1934; McClintock 1999) are said to be powerful medicine for the **Blackfoot**.

FOLKLORE AND BUNDLES: Blackbird heads are represented in several sacred bundles of the **Mandan** that are associated with planting and corn ceremonies. According to Bowers (2004:184), the Sacred Robe bundle contained the following articles: Good Furred Robe's robe painted with a map of the world that showed the Missouri River as a great snake and the hole through which the corn people reach the earth; Good Furred Robe's wood pipe with a carved goose, a headdress of fox skins, a bundle of white sage, moccasins of buffalo hide, a clay pot; a strip of elk hide, a dried gourd for a rattle, corn silk, several ears of corn, a narrow strip of badger skin, blackbird heads, a mallard head, a white-tailed deer skull with antlers, three dried squash, one sunflower head, a robe made of fox hides, and a braid of cornhusks. The birds in this bundle, along with other items, were further associated with Old Woman Who Never Dies myth, which engaged variable animals, plants, and minerals in its story (Bowers 2004:200-204). This bundle had geographical associations in the Round Lodge and Yellow Earth (Double Ditch) sites and belonged to the Nuptadi Mandan. However, Old Woman Who Never Dies is considered the deity of all vegetation, and its mythical origins likely predate agriculture in the Plains (Bowers 1992:332). The association with wild vegetation and Old Woman Who Never Dies resulted in the widespread use of the bundle by nomadic tribes including the **Hidatsa**.

The second corn and planting bundle of the Mandan contained three human skulls representing Good Furred Robe, and two other mythical persons, corn silk, white sage, a headdress of fox skins, and a wooden pipe. This bundle originally was inherited along the same line as the Sacred Robe bundle but became separated during the smallpox epidemic; in the 1920s it was in the possession of the Awaxawi (Bowers 2004:186). Associated bundles included those of Old Woman Who Never Dies, also connected with the Women's Goose Society. The principal bundle had a corn basket, an elk skin robe, a clay pot, a wooden pipe, a deer skull and antlers, corn, beans, squash, sunflowers,

blackbird heads, a bullsnake skin, young white sage, duck heads, swan feathers, goose heads, a strip of grizzly bear skin, gourd rattles, and a scalp. Secondary bundles and composite bundles that became intermixed in more recent times and after the death of bundle owners complemented the corn ceremonial complex of the **Mandan**.

Blackbirds are also included in the ceremonial bundles of the **Hidatsa**, namely Old Woman Who Never Dies and the closely related Robe bundle. These bundles are associated with the use of plant foods and are also connected to **Mandan** myths. The Robe bundle was said to contain a buffalo robe said to have been worn by the Mandan culture hero known as Good Furred Robe, on which a map of the world had been painted showing the Missouri River as a huge snake and the hole through which the people believed to have passed in reaching the earth, a carved wooden pipe with the head of a goose, a fox skin headdress, white sage, buffalo hide moccasins, a clay pot, a piece of elk hide, a gourd rattle, corn silk, three ears of corn each from a different variety, a strip of badger skin, several blackbirds and one green-head duck's head; a deer skull to rest the bundle on, three dried squash, a sunflower head, and a robe made of kit fox hides (Bowers 1992:346).

BOBCAT

SCIENTIFIC NAME: *Lynx rufus*

FAMILY: Felidae

GENERAL DESCRIPTION: The bobcat is primarily a sacred entity further associated with spirit beings for several Plains tribes.

TRADITIONAL USE: See Folklore subsection of this resource page.

FOLKLORE: The **Mandan** and **Plains Chippewa Cree** consider the bobcat and lynx sacred and for the latter group, these animals are said to represent a water spirit (Zedeño et al. 2006:148).

Bobcat. Photo Credit: National Park Service

COYOTE

SCIENTIFIC NAME: *Canis latrans*

FAMILY: Canidae

Coyote. Photo Credit: National Park Service

GENERAL DESCRIPTION: Coyotes are considered powerful spirits, are often associated with origin myths, and figure in the ceremonies associated with sacred eagle trapping for Plains tribes. They are also included in the contests of sacred bundles and used as medicine. Though rarely eaten, coyotes were hunted and trapped for their meat, skins, heads, and tails.

TRADITIONAL USE: The **Assiniboine** hunted and trapped small game including the coyote. Parts of the coyote may have been eaten or used for clothing and ornaments or in rituals and for other ceremonial purposes. Animal parts used in **Crow** medicine bundles and analyzed by Wildschut (1975) include coyote skins and tails among many other types of fauna. Additionally, coyotes were noted as important medicine animals by **Crow** consultants. The coyote is referenced in the eagle trapping ceremonies of the **Blackfeet**. Their general eagle trapping practices included digging a hole, covering it, and using bait to attract the eagles, while performing medicine songs associated with coyote. The coyote was at times used as bait (McClintock 1999:428). For more information on the coyote's relationship to eagle trapping complexes see the Folklore subsection of this page under **Mandan** and **Hidatsa**.

FOLKLORE AND BUNDLES: The coyote is also associated with creation and origin stories of the **Crow**. Old Man Coyote is credited with giving knowledge of the buffalo jump to the Crow and coyote is instrumental in the creation of many animals. Crow consultants report the presence of coyote at Wind Canyon during a previous park visit and a consultant later details the story of the Creator and coyote in an interview at the Knife River Indian Villages (Zedeño et al. 2006:200–201, 241, 245):

> *"There was a time when it rained 100 nights. The Creator found two ducks who were equal; he sent them to find mud. The first duck went and found no mud. The second duck went and found no mud. He sent the first duck again; it took a long time, but when the duck came back he had mucus and dirt under the bill. The Creator mixed them and put it in water to make mud. The ducks wanted to leave, but there was no water back home. Coyote came into the picture and danced around the ducks. Coyote wanted company and so the Creator made animals and humans, all male, from mud…*

> *…After a while Coyote became lustful. He asked for females to reproduce. So the Creator made females, but since they were equal he put a garter belt on females to restrict their abilities. They reproduced and along came the clan system, in this way. Coyote (whose name was Sore Lip) first came upon a chipmunk and asked, "what is your name?" "Chipmunk!" He asked again, "what is your name?" Chipmunk said, "Live with Snakes." Then he asked the prairie chicken, "what is your name?: And he responded, "I scare animals." So Coyote started naming people living in groups. He named twelve groups, of which three are extinct. The thirteenth group was "Sore Lip" or Coyote Clan.*"

As for the use of coyote in sacred bundles of the **Hidatsa**, the warfare-related Wolf bundles of the Awaxawi, closely associated with the Missouri River bundles of the **Mandan**, include the animal in their contents. The Wolf bundles contain coyote or fox which are thought to represent warring scouts. One of the Wolf bundles, the Sunrise Wolf bundle contained a coyote cap decorated with two raven feathers, four coyote manes with feet attached to be worn as manacles, a wolf hide, two canes with four dark strips (made of chokecherry wood), red grass, and a buffalo skull (Bowers 1992).

Trapping complexes associated with the capture of eagles by the **Mandan** and **Hidatsa** (Wilson 1928:99–245) are nearly indistinguishable from one another. Coyote are among the animals represented in bundles associated with this activity. Eagle trapping bundles "contain elements of black bear, coyote, snake, buffalo, and young eagle—all spirits that contributed to the power of the bundle. Old Black Bear contributed numerous songs for the lodge, the sweatlodge, the bait, the pit, the snare, the goose, the swan, the little bear, and the bear. Coyote, eagle, and buffalo each contributed one song [to the power of the bundle]" (Zedeño et al. 2006:77–78).

In addition to the inclusion of the coyote in sacred bundles, the **Chippewa-Cree** considered the coyote a spirit being. Specifically, coyote was a trickster (Zedeño et al. 2006:148).

CRANE

SCIENTIFIC NAME: *Grus canadensis*

FAMILY: Gruidae

GENERAL DESCRIPTION: The use of the crane is primarily a sacred one for the Three Affiliated Tribes of Theodore Roosevelt National Park.

TRADITIONAL USE: See Folklore subsection of this page.

Sandhill Crane. Photo Credit: National Park Service

FOLKLORE AND BUNDLES: The bundle of the Old Woman Who Never Dies, deity of all vegetation, contains elements of the crane. Although the bundle is of **Hidatsa** origin, it is a fairly widespread bundle and for the **Mandan**, the bundle is associated with the Goose Society. The principal bundle of the Mandan contained representative items that included corn, beans, pumpkin, sunflower, elk, deer, bear, dog, blackbird, goose, duck, and crane (Bowers 1992:344–345).

Not only is the crane associated with the ceremonies for growing corn and other produce, but it is also linked to the harvest of a sacred root. Several **Blackfoot** stories relate how a crane came to a young woman to show her how to dig the "sacred root," sometimes referred to more specifically as a "sacred turnip" (Wissler and Duvall 1908:59). A woman who lived in the sky with her husband, Morning Star, was warned by the Moon not to pick a large turnip; however, she became curious about it one day and tried to dig the root (McClintock 1910:494). When her digging stick became stuck in the ground, the Crane showed the woman how to correctly use her digging stick[2] and taught her certain songs to sing as she dug and picked the turnip. In another story about the Medicine Bonnet, a woman was visited by an elk who called on many other animals to give her power; the crane offered the use of his bill to dig the sacred turnip for a woman to use as medicine (Wissler and Duvall 1908:83–84). The sacred turnip digger is always tied to the Medicine Case of the Blackfeet, which contains the Medicine Bonnet given to the woman by the elk (McClintock 1910:500).

The crane sometimes has associations with war, and it is referenced by several sources as a vicious-natured bird that is prone to attack, according to the Scarface story of the **Blackfoot** (Grinnell 1920:100; Wissler and Duvall 1908:63). Medicine-crow, one Lowie's key informants, received a vision of a crane after going out into the prairie to mourn and fast for a friend who had been killed

2 In some versions the crane offers its beak for the woman in the sky to dig out the sacred turnip.

recently in battle (Lowie 1919:164; Lowie 1922b:341). The crane appeared to Medicine-crow with a fresh scalp around its neck, and near the bird was a bush full of ripe cherries. He believed that he would avenge his friend's death during the season when the cherries were as ripe as his vision, and indeed he killed a Dakota during that season. He also bought crane power from another man to strengthen the power he already had, and went on to become a leader in war. The Blackfeet word for the crane, *sikam*, is used also in the phrase "running crane" or *sikamokskatsi* to signify the way that a war scout runs in a zigzag pattern like a crane (**Blackfoot** consultant, 2011).

The Sandhill crane was mentioned by an **Assiniboine** consultant (2013) as culturally significant. The reddish-brown (rufous) coloring of the sandhill crane (*Grus canadensis*) is explained through the Assiniboine story of the Crane and the Otter. Otter was asked by a mother-crane to watch over her son while she flew south, as he was yet too weak to fly. However, Osni' (Cold) came with winter, killing Otter and kidnapping the young crane to his home. The crane was forced to stoke Osni's fire with his bill, which caused the fire to burn his back and give his skin a rufous color which persists today. The sandhill crane has a red crown and rufous coloring on its wings, especially in juveniles where it is especially pronounced on the head, neck, and back (Sterry and Small 2009:112).

The crane is known to have brought about the existence of four seasons later on, according to **Assiniboine** traditions (MWP 1942:30). Whereas there had previously been only two seasons each year after Inktomi and his animal helpers stole summer, the headmen of the Assiniboine decided that cranes should carry summer back and forth as they migrated over the year. When men took summer south with them, they travelled so quickly that winter came on quickly with stark contrast to summer; however, cranes were the first of the migratory birds to go south, and they moved gradually southward with many stops along the way to feed. Winter would follow them as they moved slowly southward, and that transitional time would be called "fall"—*Pdanyedu*. As the cranes returned northward, plants and animals would show signs that summer was on its way back; this time was called "spring"—*Wedu*. In another version of this Assiniboine story, Frog travels east to find spring and then wraps it into a bundle and sends it on the backs of two cranes to bring spring to the West (Denig 2000:220).

CROW

SCIENTIFIC NAME: *Corvus brachyrhynchos*

FAMILY: Corvidae

Crow. Photo Credit: National Park Service

GENERAL DESCRIPTION: The crow is considered sacred and serves medicinal purposes for some Plains tribes. At times the crow is associated with origin myths, vision quests, dreams, and personal identity-making ceremonies.

TRADITIONAL USE: Blood elders remarked of the presence and importance of the crow along with numerous other animals. They stated that animals, animal power, and ways to approach significant animals are all learned in vision quests, dreams, and through initiation in the bundle groups and religious societies. Vision quest sites are noted in the park. Significant animals mentioned by the consultants, include bison, golden eagle, beaver, *wolf, rabbit, kit fox, crow, dove, raven, rattle snake,* and *lizard* (Zedeño et al. 2006:263).

FOLKLORE AND BUNDLES: Several birds including the crow, loon, and kingfisher figure prominently in the origin stories of the **Chippewa-Cree** (Dusenberry 1962).

Crow are represented in the Beaver bundle of the **Blackfeet**. A **Blackfoot** consultant stated (2012):

> "The crow or raven has a hairpiece, the whole body, and the Beaver Bundle gives it to the person, the owner--it lends that hairpiece out. They tie it to their hair. And as they are riding through enemy country, that bird pecks their head. It helps them to be alert, finding the enemies."

For more information on the Beaver bundle see the Beaver resource page. Also, see the Raven resource page as it is also relevant for understanding the significant of the Crow.

DEER

SCIENTIFIC NAME: *Odocoileus hemionus*

FAMILY: Cervidae

White-tailed Deer. Photo Credit: National Park Service

GENERAL DESCRIPTION: Mule and white-tailed deer are all found in Theodore Roosevelt National Park; however, mule deer are more prevalent than white-tailed deer in THRO as most of the terrain is uplands. Deer were utilized for utilitarian, medicinal, sacred, mythical, and ritualistic purposes but they primarily served as important food and clothing sources for Plains tribes. For some groups hunting deer was a gendered and specialized activity relegated to men and young boys. Once deer were procured their skin, hair, sinews, skull, antlers, and flesh were purposed in a variety of ways.

TRADITIONAL USE: Deer along with buffalo, elk, and pronghorn antelope were important food resources for the **Blackfeet**. The **Hidatsa** hunted mule deer and, less frequently, white-tailed deer, pursuing them in the forested areas of the Badlands (Weitzner 1975). White-tailed and mule deer were a significant food resource for the **Arikara** and were hunted often.

Deer was a staple food for the **Assiniboine** especially in times when buffalo were scarce. Hunting deer successfully required knowledge and was rewarded with power. Denig (2000:142) describes deer hunting as a skillful art, the hunter requiring skill in tracking, stealth, and marksmanship, as well as intimate knowledge of the habits of the deer. Deer Society members possessed a hunting charm made of the 'short prong of a deer horn' (Long 1942:172, 177), which brought good fortune to the hunter allowing him to bring home deer meat.

Deer are among the most important animals for subsistence among the **Crow**. "Hunting was mainly a masculine activity. Voget (2001:698) points out that the Crow used the "surround, precipice jump, and impoundment methods" when felling bison, deer, and elk hunting. Individual hunting methods could also be employed, especially for deer. Hunters would sometimes wear buckskin masks with horns to disguise themselves while stalking deer at watering holes (Lowie 1956:72). Deer and antelope were also driven into corrals, but Lowie (1935:72) noted that it was done on level ground. Ceremony, prayer, and ritual preceded and accompanied such endeavors.

Deer were trapped by the **Mandan** following the introduction of the horse on the Plains. Households kept game pits or traps that were privately owned by the old people. Wolves, deer, elk, and buffalo were subsequently caught in these traps (Bowers 2004:97).

Along with procuring deer, activities surrounding the processing of their hides are noted among the **Crow**. Antelope and deerskin were sometimes smoked; the women would make a small dome-like structure over a smoldering fire of rotten wood, and place the skins over the framework. Often times the rotten wood was willow. Smoked skins resisted hardening when dried if they were then exposed to wetness (Lowie 1956:76–77).

Buckskin, made from tanned deer hides, was diversely used for personal adornment among the Assiniboine. Members of the Fort Belknapp tribe noted that specific crystals found in Theodore Roosevelt National Park were used for lightening such deer hides during processing because the scouring properties they possessed (Zedeño et al. 2006:256). Additional utilitarian uses among the Assiniboine included stuffing deer hair in saddles (Long 1942:140).

FOLKLORE AND BUNDLES: Deer are included as significant players in origin stories and medicinal ceremonies and they are often present in the sacred bundles of tribes known to occupy areas of Theodore Roosevelt National Park. For example, how deer came to be is explained in one **Arikara** origin story that details the Arikara people encountering a large and dense forest through which they crossed with prayer and exertion. Those beings that could not cross in time today remain forest dwellers and deer are among these animals (Zedeño et al. 2006:97).

Deer were powerful medicine for the **Crow**. The hair of the mule deer and the skin and sinews of white-tailed deer are included in their medicine bundles (Wildschut 1975). A Crow consultant spoke of fasting and obtaining deer medicine during a visit to the north unit of Theodore Roosevelt National Park stating (Zedeño et al. 2006:245–246):

> *"Some people got deer medicine. Like when they fast, that's when they get it. They get the medicine from them, from these animals. They don't just inherit it, they got to earn it. Earn the medicine. You can't buy it from other people. Either they give it to you or they show you, they teach you how to use it. They pass it on to you; we always say they pass it on to us. That's why they got to teach you; there's certain things that they're scared of like the women's periods, and so forth; certain foods that you are not supposed to eat. There's a lot of things to these medicines."*

A member of the **Standing Rock Sioux** tribe who visited Theodore Roosevelt National Park in 2004 and noted the significant power of the deer remarking"[that d]ifferent species of deer have different medicine; for example, the *mule deer* is a mystical animal and has a lot of power and protective medicine; he can move a rock with his antler. There is a very rare type of deer that has a black stripe around or across the eyes; it is better not to look at it" (Zedeño et al. 2006:250).

Deer are included in numerous bundles of the **Mandan**. They are represented in the Sacred Robe and Good Furred Robe bundles of the Mandan. These bundles are associated with the culture hero Good Furred Robe and corn and planting ceremonies. A white-tailed deer skull with attached

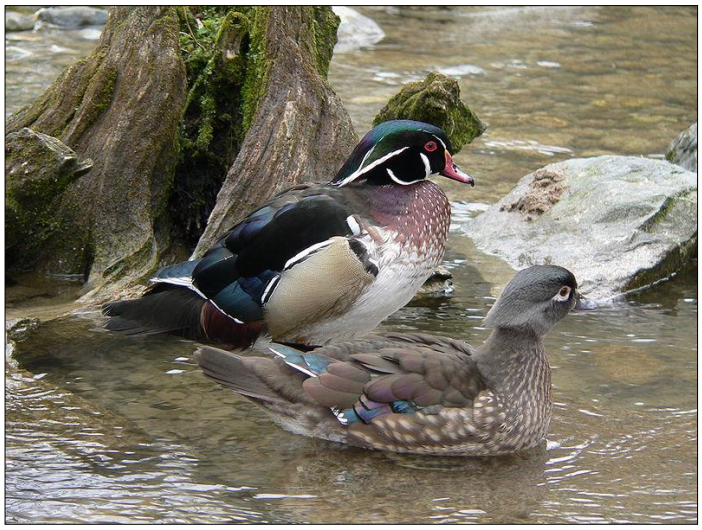
antlers are among both bundle's contents (Bowers 2004:184). Deer, along with numerous other flora and fauna, are represented in the Old Woman Who Never Dies bundle. Associated with the Goose Society of the Mandan, the bundle is actually of Hidatsa origin but shared association exists among the Hidatsa and Mandan. This bundle represents cyclical fertility of the earth's wild vegetation (Bowers 1992:332,344–345).

In addition to the Mandan bundles, deer are represented in several sacred bundles of the **Hidatsa,** namely those that are concerned with plant use and hunting or warring. The Robe bundle, derived from origin stories of the **Mandan** culture hero Good Furred Robe, contained a deer skull on which the bundle was meant to be rested after its opening. Deer are also included in the Grizzly Bear bundles which were used to enhance power, ensnare enemies, and keep buffalo close to villages. Sacred arrows were also associated with the Grizzly Bear bundle myth. These arrows (one red and one black), a bear hide, parts of buffalo, bear, elk, deer, and dog; a rattle with owl skin cover and decorated with raven feathers, white eagle down, and a snare made of a vine (unknown kind) for the enemy were among the contents of this bundle (Bowers 1992:348–358).

DUCK

FAMILY: Anatidae

GENERAL DESCRIPTION: Due to its location along their major migratory flyway, a large variety of ducks and waterfowl inhabit areas of Theodore Roosevelt National Park. Additionally, the nearby prairie pothole region is a major duck breeding ground. Ducks were trapped and eaten by Plains tribes, their then feathers, flesh, and heads serving utilitarian and ritualistic purposes. However, ducks are more prevalent and perhaps significant, in their representations as, and associations with, symbolic and sacred entities.



Wood Duck. Photo Credit: National Park Service

TRADITIONAL USE: The **Assiniboine** hunted and trapped small animals for food, clothing, ornaments, rituals, and other purposes. Ducks for instance, were snatched from the water by hand (Long 1942:163–165).

Among the **Hidatsa**, bird trapping was a task usually given to young males and children (Weitzner 1979:197–198). However, migratory birds, including geese and numerous species of ducks, were captured by adults (Wilson 1928:239). Duck feathers were used in the process of making arrows. They were prepared and split before fletching and acted as "wings" for arrowshafts (Weitzner 1979:240–242). Eagle feathers were preferred but because they were rather expensive, poorer men used duck, goose, or hawk feathers for arrowshafts. The Hidatsa also used the feathers and beaks of the mallard, teal, and other ducks to make pipestems or "dancing calumets". Bird feathers and paints figured prominently in war customs of the Hidatsa and were used in doctoring (Weitzner 1979).

FOLKLORE AND BUNDLES: Birds and more specifically, ducks are included in the sacred and medicine bundles of the **Crow**, **Hidatsa**, **Mandan**, and **Blackfoot**. For example, one Crow medicine bundle contains a society pipestem on which the head of a duck is carved (Wildschut 1975).

Ducks are represented in the sacred bundles of the **Hidatsa** and **Mandan** bundle. Namely the bundle associated with Old Woman Who Never Dies. This figure is the deity of all vegetation, and watched over the return of the leaves in spring, the ripening of the berries in the summer, and the gardens. "In the principal bundle of the Hidatsa there was a corn basket, a wooden pipe with a duck head carved on the stem representing the change of seasons, two sacred clay pots representing water and snakes, a fox skin headdress, white sage, a circular drum decorated with bird tracks, and whistles made of stalks (Bowers 1992:344–345)."A green-head duck is also noted in the contents

of the closely related Robe Bundle. This bundle is also associated with the Goose Society of the Mandan. The Mandan bundle contains representative items of corn, beans, pumpkin, sunflower, elk, deer, bear, dog, blackbird, goose, duck, and crane.

Other **Mandan** bundles containing duck parts are associated with planting and corn ceremonies. For instance, duck heads are found in the bundle representing Good Furred Robe and two other mythical persons. The Sacred Robe bundle contained a mallard head (Bowers 2004:184).

Lastly, ducks are among the animals commonly represented in the Beaver Bundle of the **Blackfeet**. Animals include the beaver, otter, badger, meadowlark, loon, magpie, mallard, lynx, wolverine, fox, woodpecker, chickadee, crow, dog, moose, frog, and buffalo (McClintock 1999:108–112). **Blackfoot** consultants (2012) repeatedly make references to the significance of various species of waterfowl. They stated that duck eggs were a food eaten ceremonially during feasts. Ducks were round up with fire to be hunted, and their eggs collected.

ELK

SCIENTIFIC NAME: *Cervus elaphus*

FAMILY: Cervidae

Elk. Photo Credit: National Park Service

GENERAL DESCRIPTION: Elk, also known by their indigenous name Wapiti, are ethnohistorically referenced as an important food source for most tribes known to have used the Theodore Roosevelt National Park area. In addition, elk figure prominently in the oral traditions of tribes, namely the Crow. They are included in the contents of numerous sacred bundles and have specialized knowledge associated with their procurement. All parts of the elk were used either for food, as clothing, and for medicinal or ritual purposes.

TRADITIONAL USE: Elk are among the animals commonly hunted for food by the **Blackfeet**. They are also considered a status symbol and associated with sexual power and fertility. Elk ivory was a sign of wealth, and the wives of hunters proudly exhibited their ivory collections by affixing them to their dance costumes (Zedeño et al. 2006:185).

Crow methods for hunting elk involved surrounding them, pushing them toward a precipice jump, and impounding them below (Voget 2001:698). Elk meat, smoked hides, bone and antler were utilized and fashioned into strong bows, and rawhide bags for storage of pounded and dried meat. Lowie (1922:222) also notes a whip stock made of elk antler (Lowie 1956:75).

Elk also served as an important food source for the **Mandan** and were hunted and trapped. "Households kept game pits or traps even after the introduction of the horse. These were privately owned by the old people; wolves, deer, elk and even buffalo were caught in these pits" (Bowers 2004:97).

The **Assiniboine** used elk for general subsistence and hunted them by tracking their footprints in winter snows or waiting for them by watering holes in the summer. Elk hunting is done by parties of men on foot (Denig 2000). "Large numbers of elk could be found in the wooded river bottoms of the Yellowstone and the Missouri Rivers. Parties of men would locate a herd and fire upon them. Elk could also be hunted single with the same precautions as that of hunting deer (Denig 2000:143) Elk horn could be used to make whip stocks. Women made hide scrapping tools by attaching stone to horn handles… The tips of elk horn were sometimes fastened to one end of a bow to be used as a kind of bayonet (Denig 2000:149)." Their hides were tanned and used as buckskins and elk teeth decorated the most valuable of women's buckskin dresses (Long 1942:135).

FOLKLORE AND BUNDLES: Elk are included in the oral traditions of the Crow as well as their medicine bundles. Elk are among the animals said to have taught the **Crow** to trap in the past. Certain landforms found at Theodore Roosevelt National Park represent the houses of those first animals. In 2004 (Zedeño et al. 2006:241):

> *"Crow consultants told that there are many sacred landmarks in and around the park that have origin stories attached to them…The buttes around the park are the houses of the original animals, which were much larger than they are today.* Elk, eagle, *and* black bear, *who taught people who to trap* eagles, *live there*."

The consultants also remarked of the medicine associated with elk stating: "*A lot of guys use it to be strong*" (Zedeño et al. 2006:245). Medicine bundles of the **Crow** include representative items of elk and oftentimes, love medicine robes were fashioned from elk skin specifically. These robes were made according to visions of the elk (Wildschut 1975).

As for sacred bundles, elk are represented in the **Hidatsa** and **Mandan** bundles associated with Old Woman Who Never Dies and the closely related Robe bundle. The Grizzly Bear bundle, related to personal and origin-stories of the Hidatsa, includes elk in its contents. Among the Mandan, the Sacred Robe contains a strip of elk hide. A second bundle, one that is associated with Good Furred Robe, a culture hero of the Mandan, contains an elk skin robe. These bundles are integral in planting and corn ceremonies (Bowers 2004).

LOCATION WITHIN THE PARK: Consultants from **Fort Belknap**, including a member of the Gros Ventre and Assiniboine tribes, visited the park in 2004. They noted the presence of elk tracks near the Buffalo Jump site in the south unit of the park (Zedeño et al. 2006:256). According to a 2004 interview with members of the **Three Affiliated Tribes** (Mandan, Arikara, and Hidatsa), they are in regular contact with officials at Theodore Roosevelt National Park regarding the management of elk within the park units (Zedeño et al. 2006:240). Dialogue concerning elk management should remain open with the tribes.

BLACK-FOOTED FERRET

SCIENTIFIC NAME: *Mustela nigripes*

FAMILY: Mustelidae

GENERAL DESCRIPTION: While there are no known black-footed ferrets in North Dakota today, they were present in the past and used by Native American groups. The ferret figures in the sacred bundles of the Mandan and Hidatsa, two of the Tree Affiliated Tribes of Theodore Roosevelt National Park.

TRADITIONAL USE: See the Folklore subsection of this page.

Black-footed Ferret. Photo Credit: National Park Services

FOLKLORE AND BUNDLES: The **Mandan** and **Hidatsa** share many bundles, one of which is the Big Bird bundle. The Big Bird bundle is further associated with the Thunder ceremonies of the Hidatsa and was said to contain a ferret skin (Bowers 1992). This bundle contained one "sleep feather" of the golden eagle as well as a white feather near its tail, a head feather and a claw feather; 12 bird sticks painted red; a bullsnake skin representing the Grandfather in the Missouri River; a turtle shell, an otter skin, a ferret skin, sage, a wooden sword with an image of lightning on each side, a flint knife, rattles, and a wooden pipe. The "bird sticks" were chokecherry sticks painted in red and often decorated with eagle tail feathers.

Fox

Species Name: Vulpes

Family: Canidae

General Description: Although rarely eaten, foxes are hunted and trapped for their meat, skins, heads, and tail. Fox headdresses are common and foxes figure prominently in many ceremonial and bundle making activities. Foxes are also considered medicine and are sacred to many Plains tribes.

Fox. Photo Credit: National Park Service

Traditional Use: The **Assiniboine** were known to hunt and eat fox. Foxes were caught by building a trap made of wooden stakes with a collapsing roof (Zedeño et al. 2006:134).

The use of foxes is noted in the signaling of warrior honors among the **Hidatsa**. Kit fox tails along with golden eagle feathers, used in combination with other elements such as scalps, weasels, raven feathers, and minks figured in these honors (Weitzner 1979).

Folklore and Bundles: Blood consultants noted the importance of many animals including the fox during a visit to the park in 2004:

> *"Animals, animal power, and ways to approach them are all learned in vision quests, dreams, and through initiation in the bundle groups and religious societies. Significant animals [include] bison, golden eagle, beaver,* wolf, rabbit, kit fox, crow, dove, raven, rattle snake, *and* lizard. *These animals may give power to people and also have many songs, stories, meanings and associations."*

The association of animals and power is reified in the naming of **Blackfoot** social societies. One such is the society of the Kit Fox (2012).

As for the use of foxes in sacred bundles, those of the **Hidatsa** and **Mandan** contain headdresses and robes. The Sacred Robe bundle of the Mandan contained a headdress of fox skins and a robe made from fox hides among many other articles. The bundle representing Good Furred Robe also contains a headdress of fox skins. These bundles are associated with planting and corn ceremonies (Bowers 2004:184).

Additionally, a fox skin headdress is included in the contents of the **Hidatsa** bundles associated with Old Woman Who Never Dies (Bowers 1992:344–345) and the closely related Robe Bundle. The Robe Bundle also contains a robe made of kit fox skins.

Foxes are among the animals represented in the Beaver bundle of the **Blackfoot** (2012). For more information on the significance of the Beaver bundle see the beaver resource page of this report.

FROGS AND TOADS

SPECIES NAME: Scaphiopus

FAMILY: Ranidae

GENERAL DESCRIPTION: The skin or body of a frog is associated with the ceremonies of the sacred bundles of the Hidatsa and the Blackfeet tribes.

TRADITIONAL USE: Frog skins were used medicinally and for ritual purposes as detailed in the Folklore subsection of this page.

Leopard Frog. Photo Credit: National Park Service

FOLKLORE: Frogs are among the animals represented in the Creek Bundles of the Awatixa and Awaxawi (**Hidatsa**). "The bundles were associated with spirits that resided in the tributaries of the Missouri River, and particularly with the snake said to live in the Little Missouri River. The Creek Bundles were propitious for good hunting. A complete bundle contained beaver fur and claws, otter skin, turtle shell, buffalo skull, mink skin, dried frog, blackroot, peppermint, sage, cedar, muskrat skin, and watersnake skin" (Bowers 1992:380). The contents of the Creek Bundles were similar to those of the Thunder and Missouri River bundles however songs accompanying the Creek bundles were distinctive and had their own myth.

The power of various water spirits including toads are captured by performing the ceremonies associated with the Thunder Bundles of the Hidatsa (Bowers 1992:358).

Lastly, frogs are among the animals included in the Beaver bundle of the **Blackfoot**. The toad is also closely associated with the Blackfoot pipe bundle and bundle owner, who characteristically wore his hair on a top knot to signify its association with the toad (**Blackfoot** consultant, 2010). Toads are also depicted in various items of Blackfoot manufacture, including parfleches and tobacco containers. For more information on the significance of the Beaver bundle see the beaver resource page of this report.

GOLDEN EAGLE

SCIENTIFIC NAME: *Aquila chrysaetos*

FAMILY: Accipitridae

Golden eagle. Photo Credit: National Park Service

GENERAL DESCRIPTION: Eagles are a tremendous source of power for many Plains tribes and are noted in many origin myths. Golden eagles are regular, year-round residents of THRO. They represent the spirit power of spirit beings and figure in prayers and offerings, bundle making, medicine and healing, vision questing, identity and society creation, and other sacred and ceremonial activities. The most significant attributes of eagles are their feathers and claws; flesh is not documented as being consumed. Specialized eagle trapping practices are associated with the **Hidatsa** and **Mandan** in the park specifically but were practiced by many Plains tribes. These tribes communicate a concern for continued eagle-trapping in the park and cite the significant connection of eagles to the Little Missouri River. For more information on the use of eagles see the Bald Eagle resource page of this report.

TRADITIONAL USE: Golden eagle feathers were used in various rituals and ceremonies associated with the **Hidatsa, Mandan, Arikara, Crow, Blackfoot,** and **Assiniboine**. For example, during a visit to Theodore Roosevelt National Park in 2004, member of the **Three Affiliated Tribes** discussed the significance, procurement, and use of golden eagles and other birds of prey. "Both *golden* and *bald eagles* would be trapped; also *hawks*. The consultant explained that immature golden eagles have white feathers with a black tip whereas the old ones have white strips on them, and they are dark. The young bald eagles are speckled, particularly the tail feathers, but they become white as they age (Zedeño et al. 2006:238–239):

> *"There are different uses for different feathers; for some things you use the tail feathers, other things just the center feather, the straightest one. Fans from the wings, too. All feathers have a spiritual reverence about them, each feather whether it is young or old, even if it is a little tiny feather or a plume. The women mostly use the plumes, they are all fluffed out and under the tail feathers. They used them for naming ceremonies, all different things. First of all they had to have the right to wear the feather. That depends on what kind of lifestyle you lived, if you are a leader of your people, if you are good at war; many years ago, it was usually war. Or, if you did something really good for your tribe or in the tribe, they would bestow an eagle feather upon you. But nowadays it is not like that, they just buy the rights for*

it and then they just put it on these little, even little kids. The ladies don't have the eagle feather right, just the men. Women do not have the right to eagle feathers; they do not have rights to smoke a pipe, the men would do that—that was it."

In **Arikara** ceremonies golden eagles figured prominently as well (Abel 1939:69). "Eagle plumes were used in many ceremonies both corporate and personal. Tabeau specifically referred to the golden eagle as the "calumet bird", showing that the feathers of this bird have, throughout historic times on the Missouri River, been associated directly with the pipe and with religious ceremonies. Moreover, Tabeau described how the Arikara captured eagles by lying in a pit covered by brush, and baited the eagles with the carcass of a rabbit or some another small prey. When the eagle grabbed the prey, the hunter reached up to grab the bird (Abel 1939:90–91). The act of trapping an eagle was a highly ritualized activity across the plains. The seeker must fast, pray and purify in a sweat lodge before hunting the eagle (Abel 1939:90–91). Representative items of eagle were also a frequent presence in medicine bundles.

The **Hidatsa** used golden eagle feathers to signal warrior honors (Weitzner 1979) and the most prominent feature in **Blackfoot** warrior bundles and war bonnets is the golden eagle feather. Eagle trapping, practiced by the Blackfeet by digging a hole, covering it, and using bait to attract the eagles, was accompanied by medicine songs (McClintock 1999:428). The Blackfeet trapped eagles to collect feathers; therefore trapping is connected closely to warrior rituals as well as with society rituals that require the use of eagle feathers and bonnets. The Buffalo Woman Society is an example of a group that uses eagle feathers.

The **Assiniboine** considered eagle feathers to be sacred and important to religion, ceremony, ritual, and society. Eagle tail feathers were used to decorate the stem of the sacred pipe, in making war-bonnets, and for fletching on arrows (Long 1942:48, 96, 151).

For the **Crow** eagles were trapped much in the same way as other plains tribes did. The golden eagle specifically, is significant for Crow society, especially in ritual and ceremonial life (Wildschut 1975). Eagle feathers were, and are today medicine. Their use as ornaments or in prayer and ceremony was not taken lightly by the Crow. Some war bonnets were made of eagle feathers, while dancers used eagle feathers in their bustles, headdresses and other regalia. Eagle feathers may also be seen adorning a sacred pipe. Additionally, in some ceremonies, a whistle made of an eagle wing bone was blown. This whistle figures prominently in the Sun Dance.

Also significant was the use of golden eagle feathers in rituals that promoted successful hunting among the **Hidatsa**. The Hidatsa, who were opportunistic fishers, at times purchased fishing rights from the Mandan. Once fish traps were built, sage bundles and golden eagle feathers were used in the rituals associated with them (Weitzner 1979:204, 210).

FOLKLORE AND BUNDLES: During a previous visit to Theodore Roosevelt National Park a member of the **Standing Rock Sioux** tribe remarked that golden eagles were very powerful spirit animals, much like the buffalo (Zedeño et al. 2006:250). They are included in the contents of several sacred bundles for this reason.

Golden eagle feathers are found in the **Hidatsa** thunder bundle of Big Bird. "This bundle contained one 'sleep feather' of the golden eagle as well as a white feather near its tail, a head feather and a claw feather; 12 bird sticks painted red; a bullsnake skin representing the Grandfather in the Missouri River; a turtle shell, an otter skin, a ferret skin, sage, a wooden sword with an image of lightning on each side, a flint knife, rattles, and a wooden pipe. The "bird sticks" were chokecherry sticks painted in red and often decorated with eagle tail feathers" (Bowers 1992).

LOCATION WITHIN THE PARK: Tribal members from **Fort Belknap** (Assiniboine and Gros Ventre) visited Theodore Roosevelt National Park in 2004 and noted the presence of golden eagles near the Buffalo Jump site (32BI549) in the park's south unit (Zedeño et al. 2006:256).

Following a visit to the park and the aforementioned Buffalo Jump site, members of the Blackfoot speaking Blood tribe noted the significant association between golden eagles and ceremonies to procure buffalo. The consultants also cited the golden eagle as having many songs, stories, associations, and meanings. They further stated (Zedeño et al. 2006:263, 260):

> *"[A]ll the resources needed for buffalo hunting were present in the area: springs, wood, and ceremonial resources; there is very little here that isn't [used in a] ceremony, and very few times that do not call for ceremony. The presence of two golden eagles near the site also contributed to their interpretations of the great significance of buffalo jump sites in general and this site in particular."*

As stated members of the **Three Affiliated Tribes** communicated a concern for continued eagle-trapping in the park, recanting the significant connection of eagles to the geographies of the Little Missouri River specifically. Consult Murray (2009) for more information on contemporary concerns and uses of eagles.

NORTHERN POCKET GOPHER

SCIENTIFIC NAME: *Thomomys talpoides*

FAMILY: Geomyidae

GENERAL DESCRIPTION: The gopher is rarely mentioned in ethnohistorical documents. However, the gopher is a very significant animal associated with healing.

Pocket Gopher: Photo Credit: National Park Service

TRADITIONAL USE: Dirt from the mounds of prairie dogs and gophers was used medicinally by old men of the **Hidatsa**. It should be noted that prairie dogs and gophers were not hunted by the Hidatsa (Zedeño et al. 2006:89).

FOLKLORE: Crow consultants indicated that the gopher figures prominently in creation stories.

CANADA GOOSE

SCIENTIFIC NAME: *Branta canadensis*

FAMILY: Anatidae

Canada goose. Photo Credit: National Park Service

GENERAL DESCRIPTION: Geese are a significant waterfowl species that are associated with sacred activities such as society-naming, bundle making and ceremonies, and medicinal practices. They are considered very powerful beings. Geese also served as important food sources for a number of tribes using Theodore Roosevelt National Park.

TRADITIONAL USE: Geese served several utilitarian purposes for the **Hidatsa**. Goose feathers were at times used in the process of making arrows. They were prepared and split before fletching and acted as "wings" for arrowshafts (Weitzner 1979:240–242). Eagle feathers were preferred but because they were rather expensive, poorer men used duck, goose, or hawk feathers for arrowshafts. In addition, geese were often trapped by adult males and eaten by the Hidatsa (Wilson 1928:239).

Although not directly associated with the park, the **Middle Sioux** were known to trap and hunt geese. Migratory and resident waterfowl species, such as geese and duck, were trapped or hunted for food alongside other animals during the spring and early summer seasons. Waterfowl was considered good food, especially the flightless molting geese, which were easy prey (Woolworth and Woolworth 1980:78).

Goose feathers were collected by the **Assiniboine** during the summer when the birds were molting, and their feathers would be stored in the lower jaw of a pelican, wrapped in buckskin, and packed away for later arrow-making (Dusenberry 1960:54).

FOLKLORE AND BUNDLES: Birds considered to be powerful among the **Blackfoot** include geese, chickadees, woodpeckers, meadowlarks, and blackbirds (Schaeffer 1934; McClintock 1999). In addition to being powerful spirits, they are oftentimes included in the contents of sacred bundles. In their migratory flights, geese carry on their backs a sacred root of the Blackfoot**. Peigan** consultants also indicated that geese were once believed to be the souls of warriors killed in battle (2012).

Geese are found to in association with several significant bundles of the **Mandan** and some of the **Hidatsa**. The goose is represented in connection with Black Bear and the eagle trapping bundles. Additionally the goose is among the resources (bird sticks) involved in the transfer of ceremonies for eagle trapping. Generally made of chokecherry wood and decorated with a piece of Knife River flint, a strip of rabbit skin, and white sage, bird sticks were thought to represent the 12 tail feathers of the eagle, and also the kinds of eagles and birds recognized by the Mandan. These birds include

bald, speckled, four stripes, calumet or black tipped, spotted-barred tail, half feather good and half bad, black hawk with white tails, I'pamasina, chicken hawk, goose, and small goose (Bowers 2004:236). Lastly, a wooden pipe with carved goose head is noted in the contents of the Sacred Robe bundle (Bowers 2004).

The significance of geese is further evidenced in the naming of a **Mandan** women's society. Called the Goose Society, a bundle representing Old Woman Who Never Dies, a figure in Hidatsa and Mandan folklore, is associated directly with this society. Goose heads and many other animals are included in the contents of Old Woman Who Never Dies' bundle (Bowers 2004:186, 200–204). The Goose Society of the Mandan, Hidatsa, and Arikara was a women's society associated with the seasonal migrations of geese and the summer corn ceremonies (Bowers 2004:196, 324). Geese are the representatives of Old-Woman-Who-Never-Dies, a spirit woman associated with agriculture, similar to Mother Corn in the Arikara tradition. The society adopted the goose specifically for the corn ritual because the geese "wished to have something to do with the ceremony" (Lowie 1915a:678). In general, waterbirds are often associated with corn and the harvest because they arrive in the spring when the planting begins and depart in the fall after the harvest (Lowie 1915a:678). The Mandan and Hidatsa believe that each spring Old-Woman sends the geese to represent corn, swans to represent gourds, and ducks to represent beans to be planted for the harvest (Will and Hyde 1964:248). This is another instance of birds as intermediaries connecting humans and the supernatural.

The Goose Society had its origins with Good-Furred Robe, a Mandan culture hero, who began the society to ensure good crop yields (Bowers 1992:201; Gilman and Schneider 1987; Will and Hyde 1964:274). Women of the Goose Society searched for signs of the arrival of the geese in the spring, and then blessed the corn fields and prayed for a good harvest, while small children sat in the fields symbolizing blackbirds which are considered "garden helpers" to Old-Woman-Who-Never-Dies (Peters 1995:110–112). Other ceremonies and dances were held throughout the spring and fall and offerings were made to the geese and to corn, which were in some cases considered to be one entity (Will and Hyde 1964:274). The Arikara have similar beliefs about the connections between geese and the harvest:

> "In the founding myth, a Goose spoke to the Arikara as follows: "I will go to the edge of the big rivers. When it is time for you to prepare something for me to eat, I shall return. When I shall have come back, you may proceed with your garden work, and you will be sure of success. That is why the geese always came in the spring, when the sowing began, and why they departed after the harvest." *(Mails 1973:150)*

A **Mandan** consultant (2012) further indicated that geese and other waterfowl are reincarnations of women's souls.

For further information on geese see Chandler and colleagues (2016).

THIRTEEN-LINED GROUND SQUIRREL

SCIENTIFIC NAME: *Ictidomys tridecemlineatus*

FAMILY: Sciuridae

GENERAL DESCRIPTION: The ground squirrel is rarely mentioned in ethnohistoric or contemporary documents. However, the ground squirrel is a significant animal associated with medicine.

TRADITIONAL USE: Spirit helper or familiar.

Thirteen-lined ground squirrel. Photo Credit: National Park Service

FOLKLORE: During a previous visit to Theodore Roosevelt National Park a consultant from the **Crow** tribe noted the significance of the squirrel in ceremonial contexts associated with obtaining medicine (Zedeño et al. 2006:245).

> *"My medicine is the squirrel; I had this vision that there were squirrels jumping all in front of my eyes I could see them. They gave me paint, white and black, for my face. I use the skin of a squirrel on my back, you know, for ceremonies*."

HAWKS

FAMILY: Accipitridae

Red-tailed hawk. Photo Credit: National Park Service

GENERAL DESCRIPTION: Hawks and other raptors, namely eagles, are a source of power for many Plains tribes and are noted in various ceremonial and individual events and activities. They represent the spirit power of spirit beings and figure in offerings, bundle making, medicine and healing, vision questing, identity and society making, and other sacred practices. The most significant attributes of hawks, like eagles, are their feathers and claws. Specialized trapping practices are associated with the Hidatsa and Mandan in the park specifically but similar behaviors were conducted by many Plains tribes. These tribes communicate a concern for continued bird-trapping in the park.

TRADITIONAL USE: The utilitarian use of hawk feathers for many tribes centers on their use for on arrowshafts. Hawk feathers were used often due to the expense of eagle feathers, they were considered a cheaper alternative. Large eagle or hawk wing feathers were used by the **Assiniboine** for fletching on arrows (Long 1942:151). Similarly, the **Hidatsa** used the feathers of hawks, magpies, and white breasted swallows to replenish bundles and fashion "wings" on arrowshafts (Weitzner 1979:240–242). These birds were considered sacred to the **Hidatsa** and neither hunted nor eaten.

Additionally, hawks are among the resources (bird sticks) involved in the transfer of **Mandan** ceremonies for eagle trapping. Their feathers are used to make bird sticks which were further made of chokecherry wood and decorated with a piece of Knife River flint, a strip of rabbit skin, and white sage. Bird sticks were thought to represent the tail feathers of the eagle, and the kinds of eagles and birds recognized by the **Mandan**: bald, speckled, four stripes, calumet or black tipped, spotted-barred tail, half feather good and half bad, black hawk with white tails, I'pamasina, chicken hawk, goose, and small goose (Bowers 2004:236).

FOLKLORE AND BUNDLES: Hawks figure in the sacred and medicine bundles of the **Hidatsa, Arikara, Mandan,** and **Crow** as well as creation stories and other myths. They are also significant to the **Blackfeet** as hawks, along with buffalo, are at the center of the *Matoki* or Buffalo Woman Society (Zedeño et al. 2006:184). Another example involves the Small Hawk Ceremony of the Mandan. In describing the significance of the buffalo to **Mandan** lifeways, oral traditions, and ceremonies, Bowers (2004:280) reports the connection between the myth of the Small Hawk Ceremony and the buffalo. Buffalo figure in this myth as well as others related to birds.

Hawk feathers are used in the medicine bundles of the **Crow** and information gathered from a primary source details the significance of hawks in medicine dream. Wildschut (1975:6) recorded a Crow man's medicine dream in which power and medicine was imparted to him by the chicken hawk. The dream occurred when the man was once camped on the Missouri River and was scouting. At night he dreamt of a chicken hawk that flew near to him, lighted and changed into a man. Then enemies came to the camp and the hawk-man fought and defeated them all. After the man had the same dream later, he knew that it was a medicine dream, and so, the man made medicine of a chicken hawk and carried it with him while he was doing scout duty for the U.S. Army.

Varieties of hawk and falcon skins and feathers, as well as owls, could be found in sacred bundles of the **Arikara** (Abel 1939:90–91).In addition hawks are represented in some bundles of the **Hidatsa**. The Buffalo Calling and Red Stick bundles were specifically used to ensure good hunts, and were in recent times combined with other bundle rites. The myth of these bundles relates the discovery of buffalo by First Creator and Lone Man, and introduces Blood Clot Man and Buffalo Woman, who fed the starving people. Some of the resources involved in the annual ceremony included hawk or owl claws, branches of creeping juniper, a buffalo robe, sage leaves, a dog medicine bag, and a rattlesnake (Bowers 1992:444–445).

HORSE

SCIENTIFIC NAME: *Equus caballus*

FAMILY: Equidae

Horse. Photo Credit: National Park Service

GENERAL DESCRIPTION: The horse was acquired by Native Americans in the Northern Plains via an indigenous pan-American trade network in the eighteenth century, prior to the appearance of the first Europeans in the region (Wood 1972, 1980). They moved south to north on the Plains and by the mid-eighteenth century their presence significantly altered the subsistence economies of Native groups in the region (Gregg 1983:4.14) as people, food, and other resources could be transported over greater distances at a more rapid pace. In a relatively short period of time, the horse became a symbol of wealth and a tool used in territorial circumscription, also aiding in the development of communal bison hunting complexes among Native Americans of the Plains. In sum "[t]he Plains Indian horse culture represents the ultimate anomaly—ecological imperialism working to Indian's advantage" (Hämäläinen 2003:833).

TRADITIONAL USE: As bison herds declined in the Plains, the every day lives of many tribes in the area followed the habits of horses rather than bison. The **Blackfoot** for example became hunter-pastoralists who lived by the terms of their horses, gearing annual subsistence activities and labor organizations around the needs of their horses. They spent winters in river bottoms seeking shelter, water, and food such as cottonwood bark, for horses (Hämäläinen 2003). Horses were integral in the powerful trade operations of the **Mandan** as they became a prized European commodity (Thiessen 1993).

FOLKLORE: Horses are a great source of power both for warriors and hunters for many Plains groups. Good riders figured into important aspects of hunts and often times were also bundle holders and leaders. The **Crow** for example, painted their horses with red pigment following powerful visions that also came with songs, these painted horses also carried numerous taboos. Dyed and decorated horsehair had several uses in signaling warrior honors (Weitzner 1979). Crow consultants indicated that the Crow had the largest horse herds in the Plains and thus they were victim of raids by other tribes, particularly the **Blackfoot.**

For the **Hidatsa** it is thought the swallow and hawk brought the horse. By appearing to a poor Hidatsa man and his wife, the swallow and hawk told the man they would "bring horses down from the heavy timber to replace the dogs." (Bowers 1992:435).

On separate interviews (2015) **Arikara** and **Blackfoot** consultants spoke of the origin of horses in North America citing oral traidtions that referenced the extinct horses of the Pleistocene. They stated that people have always had (or knew of) horses.

LOCATION WITHIN THE PARK: Free-ranging, or feral, horses are found in the south unit of the park. There are no horses in the north or Elkhorn Ranch Units. An Arikara consultant noted the presence of horse and bison hair left from rubbing rocks when visiting the Petrified Forest area of the park in 2015.

LOON

SCIENTIFIC NAME: *Gavia immer*

FAMILY: Gaviidae

GENERAL DESCRIPTION: The loon is considered a sacred bird and used ceremonially by some tribes known to have used the park area.

TRADITIONAL USE: Included in bundles of several tribes.

FOLKLORE AND BUNDLES: Birds are often powerful beings that are referenced in origin myths and ritual. For instance, birds figuring prominently in the origin stories of the **Plains Chippewa Cree** include the loon, crow, and kingfisher (Dusenberry 1962). Additionally, the loon is among many animals included in the contents of the sacred Beaver bundle of the **Blackfoot**. A Blackfoot consultant indicated,

Loon. Photo Credit: National Park Service

> The loon, "fine charger," is very significant in the Beaver Bundle. Kind of like a chief. The loon and the otter are used to bring rain by the Beaver Bundle people. It's rain medicine.

The loon is also prominent in several waterfowl traditions and ceremonies. The **Blackfoot** added the loon in their counting sticks as it is the finest weather bird (Schaeffer and Schaeffer 1934).

The loon has an important role in **Arikara** origin stories associated with Mother Corn (Dorsey 1904).

As loons are so difficult to obtain for bundles, the **Blackfoot** elders are always on the lookout for naturally dead loon and would appreciate any information about a dead loon from THRO.

LYNX

SCIENTIFIC NAME: *Lynx canadensis*

FAMILY: Felidae

GENERAL DESCRIPTION: The lynx is primarily a sacred entity further associated with spirit beings for several Plains tribes. It is represented in a sacred bundle of the Blackfeet.

TRADITIONAL USE: See Folklore subsection of this page.

Lynx. Photo Credit: National Park Service

FOLKLORE: The **Plains Chippewa Cree** believe the lynx represents a water spirit (Zedeño et al. 2006:148) while the lynx is among the animals commonly represented in the Beaver bundle of the **Blackfoot**. Other animals include the beaver, otter, badger, meadowlark, loon, magpie, mallard, wolverine, fox, woodpecker, chickadee, crow, dog, moose, frog, and buffalo (McClintock 1999:108–112).

BLACK-BILLED MAGPIE

SCIENTIFIC NAME: *Pica hudsonia*

FAMILY: Corvidae

Black-billed Magpie. Photo Credit: National Park Service

GENERAL DESCRIPTION: Primarily serving medicinal purposes, the magpie was considered sacred by many Plains tribes. Its head, body, and feathers were often found preserved in sacred bundles. Magpies were rarely, if ever, eaten.

TRADITIONAL USE: Considered sacred to the **Hidatsa** magpies, hawks, and white breasted swallows were neither hunted nor eaten. They were used for replenishing bundles (Weitzner 1979:240–242). Magpies are also represented in the ceremony called the Buffalo Neckbone. Elements in this ceremony included white sage, magpie feathers, rose hips, poles made of ash, and red paint (Bowers 1992:465).

FOLKLORE: Magpies are among the animals commonly represented in the Beaver bundle of the **Blackfoot**. Other animals include the beaver, otter, badger, meadowlark, loon, lynx, mallard, wolverine, fox, woodpecker, chickadee, crow, dog, moose, frog, and buffalo. Their significance is also evidenced in that the Blackfeet thought the magpie to be one of the most magical birds. It was said the magpie brought people power and freedom, helping the ancestral Blackfeet on numerous occasions. Other powerful birds are the chickadees, woodpeckers, meadowlarks, blackbirds, and geese (Schaeffer 1934; McClintock 1999).

Additionally, magpies are included in the contents of the bundle used during the **Mandan's** Buffalo Calling ceremony. The Buffalo Calling ceremony was associated with Buffalo Woman, who lived in Dog Den Butte, just to the east of the Painted Woods. This complex four-day ceremony involved numerous resources; a complete bundle contained an arrow-straightener of buffalo rib with perforations, a wooden groover, a rawhide with sand glued to it as polisher, a grapevine, tanned fawn skin, two feet of a white owl, two feet of a small owl, yellow and black clay for painting, one large white-owl wing feather, gray sage, bow and lance, buffalo robe, magpie tail feathers, and plain black elbow pipe (Zedeño et al. 2006:80–81).

Magpies are also found in the **Mandan** bundle associated with the Woman Above (the Mother). The Woman Above Bundle was a powerful, often dangerous bundle that called upon the power of the Sun, the Moon, and Old Woman Above (the Mother), and was used by owners to doctor insanity, paralysis, feeble-mindedness, spasms, and fits. It was also thought to cause these illnesses to those who were not supposed to open it or witness its opening. Plants such as sweet pine (sub-

alpine fir) imported from the Rocky Mountains and sweetgrass were used as smudges in the ceremony, and these and other plants, including blackroot, were used in doctoring. Magpie feathers and an ash digging stick were also associated with doctoring and this bundle. The myth also speaks of obtaining the rights to buffalo skulls, to digging turnips, and to use the chokecherry tree for various purposes. Lastly, the opening of this bundle involved the use of magpie feathers. Bowers (2004:302) describes six magpie tail feathers, said to represent the Holy Women, among other bird feathers, in the bundle.

In a Crow story, the magpie gained the white coloring on its wing as the result of a gambling hand-game between all the winged and wingless creatures which was instigated by Old-Man-Coyote (Lowie 1922a:236). Old-Man-Coyote alternately helped each group as they gambled for perpetual daylight or darkness. They played all night, and in the morning in the birds finally won; magpie was the first to enter into the daylight, and as it struck his wing it became white and remained that way ever since.

LOCATION WITHIN THE PARK: During a 2004 visit to Wind Canyon a **Crow** consultant noted the significance of numerous animals citing their reference in songs or their use as medicine. The magpie was among these animals (Zedeño et al. 2006:244).

MINK

SCIENTIFIC NAME: *Mustela vison*

FAMILY: Mustelidae

GENERAL DESCRIPTION: Used medicinally and considered to be sacred, the mink is most often mentioned in association with the Hidatsa. It should be noted the Hidatsa and the Mandan share some oral traditions and ceremonies.

Mink. Photo Credit: Awesome America

TRADITIONAL USE: For the **Hidatsa,** the significance of the mink is evidenced in their use of its skin for sacred purposes, primarily to signal warrior honors. Minks used in combination with golden eagle feathers and other elements such as scalps, weasels, kit fox tails, and raven feathers figured in these honors (Weitzner 1979).

FOLKLORE: Ceremonies performed to capture the power of various water spirits, including the mink, are conducted during the opening of the **Hidatsa** Thunder bundles and in recanting the myth of the culture hero Packs Antelope (Bowers 1992:358).

Additionally, the skin of a mink is used in the Missouri River bundles of the **Hidatsa**. The Missouri River bundles, identical to the Grandfather Snake bundles of the **Mandan**, were used variously to attain the power of Packs Antelope and the six gods of the river, to make rain, to make pottery, to make bullboats, and to doctor (Bowers 1992:371–373). Closely associated with these bundles were the Creek Bundles of the Awatixa and Awaxawi. The bundles were associated with spirits that resided in the tributaries of the Missouri River, and particularly with the snake said to live in the Little Missouri River. The Creek Bundles were propitious for good hunting. A complete bundle contained mink skin along with beaver fur and claws, otter skin, turtle shell, buffalo skull, dried frog, blackroot, peppermint, sage, cedar, muskrat skin, and watersnake skin. Although the contents of these bundles were similar to those of the Thunder and the Missouri River, the accompanying songs were very distinctive and had their own myth (Bowers 1992:380).

BIGHHORN SHEEP

SCIENTIFIC NAME: *Ovis canadensis californiana*

FAMILY: Bovidae

Bighorn sheep. Photo Credit: National Park Service

GENERAL DESCRIPTION: Bighorn sheep are ethnohistorically referenced as an important food and clothing source for most tribes known to have used the Theodore Roosevelt National Park area. Bighorn were hunted by impounding, trapping, or driving them over a drop. In addition, bighorn sheep figure prominently in the oral traditions of Plains tribes, and at times were sought in vision quests and dreams.

TRADITIONAL USE: Bighorn sheep were hunted and carefully dressed as their skins were prized by the **Hidatsa** (Weitzner 1979). The **Crow** also hunted bighorn sheep and made strong bows from elk antler and sheep horn (Lowie 1956:72; Voget 2001:698–699). Additionally, horn from the bighorn that were hunted up the Little Missouri River was used by the **Mandan** (Will and Spinden 1906; Bradbury 1986 [1817]:159–160). The **Crow** used hair from the bighorn sheep in their medicine bundles (Wildschut 1975).

Along with hair and antler, sheep skins were used for utilitarian as well as ritual purposes. During a 2004 visit to the park a consultant from the Three Affiliated Tribes (**Arikara, Mandan,** and **Hidatsa**) reported "[w]omen used *bighorn sheep* to make fancy outfits" (Zedeño et al. 2006:220). The consultant also stated that bighorn sheep are among the animals sought out by people in dreams and are further associated with numerous ceremonies. It was said that "[a]nimal hides would be kept as part of the dream and at the time of the ceremony the spirit of the animal would come and inhabit the hide" (Zedeño et al. 2006:220).

Although the **Blackfoot** did not hunt bighorn sheep in any significant way, they occasionally used bows made of their antler, which could have been traded from other tribes.

FOLKLORE: See Traditional Use subsection on this resource page.

MICE AND RATS

FAMILY: Cricetidae

GENERAL DESCRIPTION: Mice and rats were at times hunted and eaten.

Deer Mouse. Photo Credit: National Park Service

TRADITIONAL USE: Tabeau, the ethnographer, (Abel 1939:74) noted in one of his narratives of the symbiotic relationship between mice and the **Arikara** during lean times or times of starvation. Arikara women would search for the cache pits of bean mice and the meadow vole, taking away their stored beans but leaving instead corn. In this manner, the mice would not be left destitute. That would be a violation of mutual interdependence and proper relationships (Parks 2001:369–371; Gilmore 1925d).

Long (1942:69) reported that young **Assiniboine** boys would use dried grass arrows and small wooden bows to hunt mice for food.

MUSKRAT

SCIENTIFIC NAME: *Ondatra zibethicus*

FAMILY: Cricetidae

GENERAL DESCRIPTION: The muskrat is primarily a sacred entity further associated with medicine and spirit beings. It is represented in creation myths and bundles of the Blackfeet and Hidatsa.

Muskrat. Photo Credit: National Park Service

FOLKLORE AND BUNDLES: The muskrat is a medicine animal for the **Blackfoot**. It is said "[w]ater animals, including beaver, otter, and muskrat, have power of their own and bring medicine to the Blackfeet people when they are a part of a bundle" (Zedeño et al. 2006:185). These animals figure prominently in creation myths and oral traditions concerning the Blackfeet universe and are givers of numerous gifts.

During the Thunder Bundle ceremonies of the **Hidatsa** performances meant to capture the power of numerous water spirits, included the muskrat (Bowers 1992:358). Additionally, muskrat skin was among the contents of the Missouri River bundles (Zedeño et al. 2006:93).

GREAT HORNED OWL

SCIENTIFIC NAME: *Bubo virginianus*

FAMILY: Strigidae

GENERAL DESCRIPTION: Although parts of the owl were used for utilitarian purposes, they figure in the sacred bundles ceremonies of the **Hidatsa**, **Arikara**, **Crow**, and **Mandan**. The owl also has a place in origin myths for several Plains tribes.

TRADITIONAL USE: Owl quills were used by the **Hidatsa** in the process of tattooing. Once the quills were sharpened they, along with tin strips, were fastened to reddened buffalo bones and used to cut into one's flesh. Lastly, a blue hue created with charcoal from kinnickinnick bark would be dabbed into the incisions to finish the tattoo (Zedeño et al. 2006:89).

Great horned owl. Photo Credit: National Park Service

FOLKLORE AND BUNDLES: Numerous varieties of hawk and falcon skins and feathers, as well as those from owls, could be found in the sacred bundles of the **Arikara** (Zedeño et al. 2006:105). Owls are also included in the sacred bundles of the Mandan, Hidatsa, and Crow.

Twelve owl feathers are among the contents of The Woman Above Bundle, a powerful and often dangerous bundle of the **Mandan** that called upon the power of the Sun, the Moon, and the Old Woman Above. The bundle was used to doctor insanity, paralysis, feeble-mindedness, spasms, and fits. Bowers (2004:302) describes the remainder of its contents noting a copper ring representing Old Woman Above, a copper ring representing Sun, a copper crescent representing Moon, one large gourd rattle, six magpie tail feathers to represent the Holy Women, a human scalp representing a Cheyenne killed by the Moon, left arm and skull of Grizzly Bear, hide and hair from various parts of buffalo, left buffalo horn and buffalo skull, and one stuffed jackrabbit representing the Sun.

Owls are also associated with the Grizzly Bear Bundle of the **Hidatsa**. The Grizzly Bear bundles related personal and origin stories of the Hidatsa and contained sacred arrows (one red and one black), a bear hide, parts of buffalo, bear, elk, deer, and dog; a rattle with owl skin cover and decorated with raven feathers, white eagle down, and a vine snare made for the enemy (Bowers 1992:348–358).

Other Hidatsa bundles containing owl parts are the Dog Medicine bundle and the Earth Naming bundle. Recently combined with bundle rites associated with the Buffalo Calling and Red Stick bundles, which were used to ensure good hunts, the Dog Medicine bundle was used to cure mad dog bites and snake bites (Bowers 1992:444–445). The myth of these bundles relates to the discovery of buffalo by First Creator and Lone Man, and introduces Blood Clot Man and Buffalo

Woman, who fed the starving people. Resources involved in the annual ceremonies of these bundles include branches of creeping juniper, a buffalo robe, hawk or owl claws, sage leaves, a dog medicine bag, and a rattlesnake. The Earth Naming bundle contains speckled owl claws and has associated origin myths detailing the geographic homes of spirit animals (Zedeño et al. 2006:93–94). Many spirit animals are said to reside in the buttes near the park.

Lastly, the owl is included in a list compiled by Wildschut (1975:76–81) that details animal parts used in medicine bundles of the **Crow**. Specifically, owl feathers were considered medicine and owl skull medicine bundles were also documented. Skull medicine bundles had as their main article, a human skull. The skull was kept with beads, shells, feathers, red ochre, tobacco, and other articles. These bundles were opened and consulted at times for dreams, protection, direction, for success in raiding or warfare, for vengeance and other purposes depending upon the need of the petitioner and the quality of the medicine bundle.

Blackfoot consultants (2014) indicated that the owl is closely associated with the Pipe Bundle and often it is a reincarnation of dead Pipe men.

SNOWY OWL

SCIENTIFIC NAME: *Bubo scandiacus*

FAMILY: Strigidae

GENERAL DESCRIPTION: Owl quills, claws, and skins were used for utilitarian purposes however, the snowy owl figures more prominently in the sacred and medicine bundles ceremonies of the Hidatsa, Arikara, Crow, and Mandan[3].

TRADITIONAL USE: See Great Horned owl page for the use of owl quills in tattooing.

Snowy owl. Photo Credit: National Park Service

FOLKLORE: A **Crow** consultant remarked of the significance of owls when visiting **Wind Canyon** in the south unit of Theodore Roosevelt National Park. The *coyote, magpie, raven, owl, bear* and *cougar* are culturally important to the Crow (Zedeño et al. 2006:244). This is further evidenced by the owl's affiliation with the origin myth of Crow tipis. The Crow recognize the tipi as a symbol of their last transition into the human realm and believe the tipi was acquired from the animal/bird world, more specifically from the *white owl* (Zedeño et al. 2006:200, 225). Crow consultants recommended that the full story of the tipi should be explained if tipis are to be erected at the park (Zedeño et al. 2006:225):

> *"{P}eople* [should] *know how sacred the tipis are and what…their religious meaning* [is] *for the tribes. For example, the tipi was given to the Crow by a white owl…our tipi had 19 poles inside, two outside, and one extra that stood for the cycle of life. It required up to 18 bison hides to be fully covered. Our tipi was different from those of other tribes. It should be made clear that we each have our own tipi and story that goes with it.*"

The snowy owl or a white owl is referenced repeatedly as a significant figure in the oral traditions, ceremonies, and bundles associated with **Mandan** society and culture. For example, Bowers (2004:280) reports that there is a connection between the buffalo and the Snow Owl ceremony. Although the Mandan were horticulturalists, in years of drought buffalo hunting constituted a large portion of their diet. The fact that buffalo are represented in the Snow Owl ceremony attests to the

[3] Please see the Great horned owl page for additional resource uses involving owls in general. Many ethnographic resources with references to owls do not specify which type, either by their common or scientific name.

significance of the snow owl in Mandan traditions (Zedeño et al. 2006:76). Additionally, the feet of white owls and a white owl wing feather can be found in the physical contents of the Buffalo Women bundle, opened during the Mandan Buffalo Calling ceremony (Zedeño et al. 2006:80).

Many rights to these ceremonies as well as the rights to doctoring, and craft and ritual knowledge, were acquired through bundles; the Snow Owl bundle being one. Bowers (2004:282–283) states:

> *"[T]hrough the Snow Owl bundle one could acquire the right to give a feast for the owls, the arrow making rights, the buffalo calling rites, and the Woman Above rights, all of which had their own bundle and ritual complex. The myth that accompanies this "nested" bundle refers to Black Wolf's misadventures while imprisoned by the snow owl. Warriors made a pledge of feast and wore an article from the Snow Owl bundle into battle. Bundle inheritance was, as others, associated with dreams and purchases, although it could also be inherited within the family.*
>
> *Arrow making rituals were associated with two snow owls in the bundle and also refer to Black Wolf, who was given the gift of arrow making by the owls as payment for his services. Arrow making rights were associated with other bundles as well, e.g., eagle trapping, Big Biid. In the old days people without rights purchased arrows from arrow makers, as this was a secret art just like pottery making. There were songs that went with the arrow making process and also a tradition that said beaver actually was the first to secure the stone tips."*

PORCUPINE

SCIENTIFIC NAME: *Erethizon dorsatum*

FAMILY: Erethizontidae

North American Porcupine, Photo Credit: National Park Service

GENERAL DESCRIPTION: While porcupines are fixtures in the origin myths of the **Hidatsa** and **Crow** in association with the Knife River (Zedeño et al. 2006:201), they are found in Theordore Roosevelt National Park as well. Ethnographic accounts note the significance of porcupine parts such as quills and tails in making clothing and clothing adornments for Northern Plains groups.

TRADITIONAL USE: Many Native groups used porcupine quills and other parts as decorative elements on clothing. Whether woven into intricate designs on moccasins or brightly dyed and affixed to shirts, quillwork was a common activity amongst these groups. Gilmore (1925c) describes the **Arikara's** use of selenite crystals, heated and crushed, in porcupine quillwork. The crystals gave quillwork a distinctive glossy finish. The **Crow** dyed quills and sewed them onto animal hide clothing and also used the tails of the porcupine as combs (Linderman 1972:33). The **Assiniboine** made decorative patterns on variable objects especially dresses, shirts, moccasins and other pieces of clothing with dyed quills (Long 1942:67, 97, 135). **Nakota** tattooing consisted of pricking the skin with large porcupine quills and rubbing charcoal onto the wounded skin (Long 1942:137).

FOLKLORE AND BUNDLES: Porcupine quills are involved in the transfer of ceremonies associated with eagle trapping activities of the Hidatsa and Mandan (Bowers 2004).

PRAIRIE DOG

SCIENTIFIC NAME: *Cynomys ludovicianus*

FAMILY: Sciuridae

Prairie dog: Photo Credit: Rebecca Toupal 2004

GENERAL DESCRIPTION: Prairie dog towns are found in Theodore Roosevelt National Park. They can most often be seen while driving the loop road in the south unit of the park. Their towns occupy the silty flats below canyon bluffs and are a large draw for visitors. Plains tribes used prairie dogs and dirt from their holes for food and medicinal purposes.

TRADITIONAL USE: During a previous ethnographic interview a member of the **Standing Rock Sioux** tribe stated that *prairie dogs* are used as both food and medicine by the Sioux (Zedeño et al. 2006:250). Similarly, old men of the **Hidatsa** who were sick often used the dirt from prairie dog mounds as medicine. The Hidatsa did not hunt or eat prairie dogs.

FOLKLORE: Upon visiting **Wind Canyon** in the south unit of the park, **Crow** consultants noted that *prairie dogs* are culturally significant and are mentioned in Crow songs (Zedeño et al. 2006:244).

(Also, see Northern Pocket Gopher resource page).

PRAIRIE FALCON

SCIENTIFIC NAME: *Falco mexicanus*

FAMILY: Falconidae

GENERAL DESCRIPTION: Falcons and other birds of prey are powerful symbols in Native American ontologies. For tribes using the Theodore Roosevelt National Park falcons are significant birds that are used medicinally and figure in bundle contents and ceremonies.[4]

FOLKLORE AND BUNDLES: Falcons are considered sacred by the **Arikara** and various kinds of falcon skins and feathers, as well as skins and feathers of owls and hawks, could be found in their sacred bundles (Zedeño et al. 2006:105).

Prairie falcon. Photo Credit: Utah Birds

Crow consultants that were taken to **Wind Canyon** in the south unit of the park stated that *prairie falcons* are used specifically as medicine (Zedeño et al. 2006:244).

No additional information about the prairie falcon was obtained in more recent interviews.

[4] Ethnographic references that mention all falcons, with no specificity as to species, are cited on this resource page

RATTLESNAKE (PRAIRIE)

SCIENTIFIC NAME: *Crotalus viridis*

FAMILY: Viperidae

Prairie rattlesnake. Photo Credit: Herpetology of North Dakota

GENERAL DESCRIPTION: Numerous rattlesnakes can be found on the Plains but the Prairie rattlesnake is abundant at Theodore Roosevelt National Park. Rattlesnakes figure in bundle ceremonies and are included in Native American folklore. Traditional uses related to making and administering medicines that included snake parts or were said to heal bites are also noted ethnographically.

TRADITIONAL USE: Rattlesnakes were used medicinally by the **Assiniboine**. Denig (2000:29) describes patients that were "made to drink decoctions of roots or powders made by the doctors of pulverized roots, rattles of the rattlesnake, calcined bones, etc." during doctoring ceremonies. Bowers (1992:128) details the medicinal use of rattlesnake parts by the **Hidatsa**. Pulverized rattlesnake rattles were to be taken with mint tea and water in combination with blackroot and scrapings from the turtle. This mixture was used to ease childbirth.

FOLKLORE AND BUNDLES: Rattlesnakes are also considered sacred and represented in the ceremonial bundles of the **Hidatsa**. Associated with the myth of First Creator and Lone Man at the time when they discover the buffalo, the Buffalo Calling and Red Stick bundles contain a rattlesnake. Recently combined with the rites of the Dog Medicine bundle, the ceremonies performed using these bundles are to ensure good hunts. Blood Clot Man and Buffalo Woman are also introduced in the myth of the Buffalo Calling and Red Stick bundles (Bowers 1992:444–445).

Lastly, a member of the **Standing Rock Sioux** tribe remarked of the medicinal significance of rattlesnakes and bullsnakes during a visit to the park in 2004. "*Rattlesnakes* are medicine. The rattle is love medicine; also, the rattle is used wrapped around the bow of the Wolf Dreamers. Sometimes someone throws a *bullsnake* to another person for bad medicine" (Zedeño et al. 2006:250).

FOLKLORE: The **Blackfoot** have a cultural aversion of snakes. It dates far in time when, as told by consultants, the culture hero known as *Kutoyis* or Blood Clot killed the evil snakes that were enslaving his people.

RAVEN

SCIENTIFIC NAME: *Corvus corax*

FAMILY: Corvidae

GENERAL DESCRIPTION:

TRADITIONAL USES: Raven feathers were used by bundle holders and in several important ceremonies including the **Mandan** Okipa and the **Blackfoot** Okan or Medicine Lodge.

Raven. Photo Credit: Gary Stolz, U.S. Fish and Wildlife Service

FOLKLORE: Ravens are fixtures in the oral histories and folklore of many Plains groups. Their feathers and bodies are also used in ceremonial contexts. The **Chippewa Cree** consider the raven a spirit being, more specifically, a trickster (Zedeño et al. 2006:148). During a previous visit to the park, a **Crow** consultant noted the cultural significance of the raven and remarked of its presence at Theodore Roosevelt National Park (Zedeño et al. 2006:244). A member of the **Blood** tribe who also visited the park in 2004 spoke of the power of animals including the raven in their account (Zedeño et al. 2006:263):

> *"Animals, animal power, and ways to approach [animals] are all learned in vision quests, dreams, and through initiation in the bundle groups and religious societies. Significant animals…in addition to bison, golden eagle, and beaver, are* wolf, rabbit, kit fox, crow, dove, raven, rattle snake, and lizard. *These animals may give power to people and also have many songs, stories, meanings and associations."*

Raven feathers are considered sacred to the **Hidatsa** and were historically used in combination with scalps, weasels, kit fox tails, golden eagle feathers, and minks to honor or symbolize warriors (Weitzner 1979). Feathers of the raven are also included in the contents of numerous Hidatsa bundles. Raven feathers covering an owl skin rattle were observed in the Grizzly Bear bundle (Bowers 1992:348–358) and raven feathers were used to decorate a coyote cap that is present in the Wolf Bundles. There are three Wolf bundles, Wolf Woman, Sunrise Wolf, and Sunset Wolf, and they refer to different stages and events in the history of the Hidatsa sub-tribe (the Awaxawi). The Wolf bundles were further used in association with warfare (Zedeño et al. 2006:93).

Raven is among the most significant birds in **Blackfoot** culture, perhaps even more powerful than thunderbird, according to one consultant, who related the story of how Raven and Thunder fought and Raven won. A man's wife was stolen by Thunder. A raven invited the man into his lodge and offered to help him defeat Thunder and get his wife back. Raven is considered the only one who is more powerful than the Thunder. When the man doubted Raven's power, Raven took him outside

and by rubbing some medicine on the man's eyes, enabled him to see his camp that was located many days' travel away from Raven's lodge. With renewed confidence and help from the Raven, the man was able to defeat Thunder and in the process he received the Medicine Pipe.

The Blackfoot *Okan or* Medicine Lodge (Sun Dance) is one of the most revered ceremonies, given to their culture hero Scarface by the Sun after he killed vicious birds who were attacking people in Sun's land. Scarface was given two raven feathers to use for the Medicine Lodge ceremony, because the raven is the "smartest" of all (Grinnell 1920:101).

In the Crow story of "The Dwarf's Ward," a young man is given raven feathers by his parents as protection (Lowie 1918:165-169). He uses these feathers to send out a call for help when his new wife's seven brothers try to kill him with lightning. The raven feather is sent up through the smoke-hole of the tipi, and is answered by a raven whose "caw" brought a severe blizzard to the tipi. His enemies were frozen stiff, and only the young man and his wife were able to resist the cold by huddling together. Again he sent out the feather to tell all of his helpers that the brothers were frozen; the feather came back as a cawing raven.

SNAKES

FAMILY: Colubridae

Yellow-bellied racer. Photo Credit: National Park Service

GENERAL DESCRIPTION: At times regarded as dangerous but powerful, many curing ceremonies and were dedicated to healing snake bites for the native peoples of the Plains. Snakes are medicine for these groups and also figure in many of their origin stories. For this reason, they are considered sacred.

TRADITIONAL USE: Historically, traditional treatments for bites were developed by the **Hidatsa**. Black medicine or red baneberry root, used mythologically (in the Charred Body myth) to cure lameness, was also used in snake curing rituals and the rites of the Dog Medicine bundle (Bowers 1992:307, 444–445).

For the **Crow**, snakes are an important medicine animal and primarily used for healing. Wildschut (1975:136–138; Zedeño et al. 2006:121) recounts the origin stories for the snake medicine bundle:

> *"[T]he importance [is] not only the snake but also the snake's home, which is a sacred spring. The visionary who received medicine from the snake was led by this animal to a spring which transformed into a medicine lodge filled with other snakes. These snakes turned into human form. They had gathered to doctor and heal a real human who was brought into the lodge. The visionary was given medicine and taught how to use the medicine to heal people."*

In 2004 a Crow consultant relayed the story of snake medicine while visiting Theodore Roosevelt National Park. When asked how people get power, the consultant answered that power was obtained through animal medicine. The consultant elaborated stating (Zedeño et al. 2006:245):

> *"There's a lot of things to these medicines. My grandfather, he got snake medicine; his medicine was the snake. My grandfather got that medicine, he wrapped black cloth around a little fur, deer; he wrapped it around with a black cloth and put on the forehead [or] where you are sick and that thing moved like a snake; that's how he got his medicine too. But you got to have faith to get them; you got to be a man to get medicine."*

FOLKLORE AND BUNDLES: The **Arikara**, like numerous other indigenous groups, have traditional histories recanting their original migration (Ludwickson, Blakeslee, and O'Shea 1981) and snakes

are included in these narratives. Gilmore (1926e:198) recorded one tradition from Four Rings, an old man of the Arikara:

> *"All living beings were "first contained and took substance in the womb of Mother Earth". All the living beings in embryo, in the womb of the Earth, prayed and exerted themselves to emerge and live upon the lap of Mother Earth, under the Sun. First the mole dug up to the surface, but blinded by the sudden light, he remained living within the Earth. Living beings emerged onto the lap of Mother Earth, but the Earth closed before all beings had emerged. As a result, living beings still live in the earth, like snakes, 7s, and various insects."*

Snakes are sacred to the **Hidatsa** and are included in important ceremonies, origin myths, and in the contents of several bundles. Snakes, along with clay pots and water, are associated with rainmaking ceremonies (Bowers 1992:347). This pairing represents a symbolic connection between snakes and water that is repeated in Hidatsa culture. For example, the bundle of Old Woman Who Never Dies, also associated with the Goose Society of the Mandan, contained two sacred clay pots representing water and snakes. A watersnake skin is among the contents of the Hidatsa Missouri River bundle complex and specifically, the Creek bundles of the Awatixa and Awaxawi.

The Missouri River bundles, identical to the Grandfather Snake bundles of the Mandan, were used to attain the power of Packs Antelope and the six gods of the river, to make rain, to make pottery, to make bullboats, and to doctor (Bowers 1992:371–373). The Creek bundles were associated with spirits that resided in the tributaries of the Missouri River, and particularly with the snake said to live in the Little Missouri River. The Creek Bundles were propitious for good hunting and a complete bundle contained beaver fur and claws, otter skin, turtle shell, buffalo skull, mink skin, dried frog, blackroot, peppermint, sage, cedar, muskrat skin, and watersnake skin.

Hidatsa ceremonies enacting the Thunder bundle complex are also meant to capture the power of the snake and other water spirits. For example, the Big Bird thunder bundle contained a bullsnake skin representing the Grandfather in the Missouri River, along with one "sleep feather" of the golden eagle as well as a white feather near its tail, a head feather and a claw feather; 12 bird sticks painted red, a turtle shell, an otter skin, a ferret skin, sage, a wooden sword with an image of lightning on each side, a flint knife, rattles, and a wooden pipe (Zedeño et al. 2006:92–93).

Additionally, snakes figure prominently in the origin myths of the **Mandan** as well as their sacred bundles. The Sacred Robe bundle for example, contained the robe of Good Furred Robe. This garment was painted with a map of the world which depicted the Missouri River as a great snake. The principal bundle of Old Woman Who Never Dies also had a bullsnake skin in its contents along with a corn basket, an elk skin robe, a clay pot, a wooden pipe, a deer skull and antlers, corn, beans, squash, sunflowers, blackbird heads, young white sage, duck heads, swan feathers, goose heads, a strip of grizzly bear skin, gourd rattles, and a scalp (Zedeño et al. 2006:79–80).

Lastly, the eagle trapping bundles of the **Hidatsa** and **Mandan** contain elements of snake along with the black bear, coyote, buffalo, and young eagle—all spirits that contributed to the power of the bundle.

NORTHERN FLYING SQUIRREL

SCIENTIFIC NAME: *Glaucomys sabrinus*

FAMILY: Sciuridae

GENERAL DESCRIPTION: The flying squirrel is a medicine and spirit animal for several Plains tribes[5].

TRADITIONAL USE: During a previous visit to Theodore Roosevelt National Park a consultant from the **Crow** tribe noted the significance of the squirrel in ceremonial contexts associated with obtaining medicine (Zedeño et al. 2006:245).

> *"My medicine is the squirrel; I had this vision that there were squirrels jumping all in front of my eyes I could see them. They gave me paint, white and black, for my face. I use the skin of a squirrel on my back, you know, for ceremonies."*

Northern flying squirrel. Photo Credit: National Park Service

FOLKLORE: Considered sacred and of plains ancestry by the **Chippewa**, the flying squirrel is among the animal spirits believed to communicate by speaking the native language of the Chippewa. Other animals such as the buffalo, moose, bear, and horse together are spirits that are said to speak languages intelligible only to conjurers. The flying squirrel is also described by the Chippewa as a hunter's trickster and a comic, much like the wolverine (Zedeño et al. 2006:147–149).

[5] The Crow reference on this page may be associated with squirrels in general rather than the Northern flying squirrel.

SWALLOW

FAMILY: Hirundinidae

GENERAL DESCRIPTION: Although the white-breasted swallow is mentioned specifically by the Hidatsa, swallows in general, are used medicinally and considered sacred to Plains groups.

TRADITIONAL USE: Neither hunted nor eaten, swallows were thought to be thunderbirds and were used for replenishing the ceremonial bundles of the **Hidatsa** (Wilson 1928:239; Weitzner 1979:197–198).

Tree swallow. Photo Credit: Elk Lake Resort

FOLKLORE AND BUNDLES: According to the **Hidatsa, s**wallow, along hawk, are spirits who live in Ghost Singing Butte, North Dakota. Swallows are associated with bundles and used medicinally in **Crow** society. Swallow feathers along with a plethora of other animal parts are represented in medicine bundles analyzed by Wildschut (1975). Other elements of animals included in Crow bundles are the skin and sinew of white-tailed deer, bison hide used to wrap and keep a bundle, bison hide or robe to place the bundle upon (for opening, displaying, and petitioning the bundle), bison horn, bison bone, hair from the bighorn sheep, hair from mule deer, otter skin, skunk skin, weasel skin, hair from horses, owl feathers, eagle feathers, eagle plumes, eagle claws, eagle heads, hawk feathers, the head of a duck on a medicine society pipe stem, abalone shell, hair and claws of the bear, coyote skin, coyote tails, and wolf skins.

Swallows are called fire birds by the Blackfeet because they are believed to have brought the first fire to Indians (McClintock 1910:483).

WHISTLING SWAN

SCIENTIFIC NAME: *Cygnus columbianus*

FAMILY: Anatidae

GENERAL DESCRIPTION: Swans are important figures in several Plains tribes' oral traditions and they are included in the contents of sacred and medicine bundles for some.

Whistling swan. Photo Credit: National Park Service

TRADITIONAL USE: Birds provided bones and feathers for multiple craft and ceremonial uses in Nakota society. For example, a swan down feather was used in the making of a particular medicine bundle (Dorsey 1894:440).

According to MacGowan (1942), swan feathers were "held in high estimation" for the headdresses of the Arikara. The use of swan feathers in Lone Man's war-bonnet trailer during the Bull Dance on the third day of the Okipa ceremony is significantly linked to a Mandan origin story, mentioned above, where a raven and three white swans helped to direct Lone Man toward Dog Den Butte to free the animals that were imprisoned there by Hoita (Bowers 2004:139-140, 349). Raven and swan feathers are also attached to Lone Man's staff in alternating rows. Because the swan and raven are so closely associated with Lone Man for the Mandan, the two men who represented swans in the ceremony for the third day of the Okipa were required to have Lone Man rights (Bowers 2004:131). Swanskins are used in the two bonnets worn by the Horn Society during the Buffalo Dance of the Blackfeet, given to Calf, Cow, and Black-Crow by the buffalo in their dreams in the North Peigan version of "The Horns and The Matoki" (Wissler and Duvall 1908:120).

FOLKLORE AND BUNDLES: Swans figure in the oral traditions of the **Mandan** and are also included in folklore associated with their sacred bundles, most notably, eagle trapping bundles. Swans are mentioned in the songs that Old Black Bear contributed to the eagle trapping lodge. It should be noted that the Mandan and the **Hidatsa** shared almost indistinguishable eagle trapping ceremonial complexes and the significance of the swan in this oral tradition should be extended to the Hidatsa.

Swan feathers are among the contents of the principal bundle associated with Old Woman Who Never Dies, the deity of vegetation in **Hidatsa** society. Secondary bundles and composite bundles related to this bundle became intermixed in more recent times and after the death of bundle owners. They were then used to complement the corn ceremonial complex.

The swan is most often mentioned as a helper to travelers, helping them to traverse long distances or tough terrain on their journeys. In fact, the **Blackfoot** word for the swan is *tsekomkhkayii*, means

"white going home," referring to their status as travelers (Blackfeet consultant, 2011; see also Schaeffer 1950:40). A swan and an otter help a man who was accused of adultery and deserted on an island to return safely to his home, after which he adopted the otter-skin and swan-skin for his medicine (Wissler and Duvall 1908:98–99). Two swans help Scarface cross a large body of water that seems impassable on his journey to the Sun's lodge to get his permission to marry his love, who had promised herself to the Sun (Grinnell 1920:95–103). In another story, two swans also help a group of children to flee from an old cannibal witch by forming a bridge over the river with their necks. However, after the witch offends the swans, they trick her into crossing their necks only to throw her off midway across to drown (Lowie 1909:142–144).

Blackfoot consultants noted that swans are not as common now as they were in the past.

BLUE-WINGED TEAL

SCIENTIFIC NAME: *Anas discors*

FAMILY: Anatidae

Blue-winged teal. Photo Credit: Wikipedia

TRADITIONAL USE: The **Mandan** used the feathers and beaks of teal, mallard, and other birds to make pipestems or "dancing calumets" (Weitzner 1979).

FOLKLORE: According to **TAT** representatives, ducks in general are considered children and representatives of Old-Woman-Who-Never-Dies, sent by her to carry the corn spirits and other important plant spirits to the people. Ducks are also women's birds; a **Mandan** consultant indicated that they are reincarnations of women's souls (2012).

SNAPPING TURTLE

FAMILY: Chelydridae

Snapping Turtle, Photo Credit: National Park Service

GENERAL DESCRIPTION: Turtles were eaten and their parts fashioned into various crafts by Native American groups in the Badlands. Additionally, turtle elements are noted in medicinal concoctions. They were also considered sacred, figuring in origin myths, landform naming conventions, and numerous bundle ceremonies.

TRADITIONAL USE: Long (1942:138–140) reports that turtle carapaces were used for utilitarian purposes by the **Assiniboine**. The smoothed out carapaces served as cups and large clamshells were used as other kitchen utensils. Turtles served both utilitarian purposes and were considered sacred to the **Hidatsa**. Bowers (1992:128) notes that the scrapings of turtles were used in combination with pulverized rattlesnake rattles, water, and mint tea to ease childbirth.

During a visit to Theodore Roosevelt National Park in 2004 a consultant from the **Blood** tribe noted the association between children and animals, notably the turtle.. "[M]ale children are associated with lizards and female children with turtle; these animals are represented in the pouches the children carry with their umbilical cord until they come of age and give it as an offer to the Creator" (Zedeño et al. 2006:263). During this same visit a member of the **Standing Rock Sioux** tribe noted the significance of the turtle stating that squash is offered to turtles as it is a sacred being and must be fed to garner blessings.

FOLKLORE AND BUNDLES: The snapping turtle specifically, figured in a story relayed by a **Crow** consultant on a previous trip to the north unit of the park. The consultant spoke of the power of resources in the park, namely the buffalo (Zedeño et al. 2006:244–245):

> *"I guess they [buffalo] want to find out who's got the strongest medicine. The most powerful medicine. The buffalo got the medicine. A bull buffalo was once drinking water, went in, drunk water, and the snapping turtle grabbed him by the nose. That snapping turtle pulled the buffalo into the deeper water, but he made medicine, they said that he could see yellow paint, made medicine and pulled out, not all the way out but half way, but the snapping turtle also made medicine and dragged him back into the water. He made medicine again and pulled out, but the snapping turtle dragged him back in, so they went back and forth, four times. Until another bull came along and the first one said, "help me brother", The second bull went into*

the water with his horns, made medicine. The first bull got out, sat back and from his place he could see the blood of the snapping turtle. That is why I said they got powerful medicine, they talk to each other and that's one of the true stories. I guess the people who watched them were Crow warriors. These animals, they got medicine. Eagles too, eagles the same way. And coyotes. If they adopt you, you're lucky you got medicine. Elk, they got the medicine too. A lot of guys use it to be strong."

A band of **Plains Chippewa** are named for the turtle, in reference to a mountain in North Dakota. They are a federally recognized tribe called the Turtle Mountain Chippewa. This bespeaks the significance of the turtle in both naming the landscape and its people (Zedeño et al. 2006:138).

The significance of the turtle to the Chippewa is further evidenced in the belief that in animal world, turtles could speak the Chippewa-Cree language (Ojibwa) and translate the language spoken by other spirits. Additionally the snapping turtle is associated with the creation myth detailing how the Chippewa world came to be, the Midewiwin or Grand Medicine Society, and the shaking tent ceremony (Zedeño et al. 2006:147–148). Turtles are memorialized on the landscape through the construction of stone effigies across North Dakota; a **Hidatsa** elder noted that these effigies are associated with the story of the fog.

Turtles are extremely significant in **Mandan** origin stories; turtle drums are still in possession of Mandan elders, particularly one elder we interviewed on several occasions. In 2015 An **Arikara** consultant also noted that

> "Cedric Redfeather has turtle medicine. He needs the Missouri river in order to keep and feed his medicine. The Mandan turtle drums are associated with the mythical figure Lone Man who gave the people four turtle drums, but one was lost because the turtle was given the wrong feathers. The turtle escaped from those holding it by the tail and slid back into the river."

The ceremonies of the **Hidatsa** Thunder bundles were performed to capture the power of various water spirits including the turtle and a turtle shell was among the contents of the Big Bird bundle, one of the Thunder bundles (Bowers 1992:358). In addition to the Big Bird bundle, **Hidatsa** bundles known to contain turtle shells include the Creek bundles and the Clan bundles. The Creek bundles were propitious for good hunting and associated with the spirits of the Missouri River's tributaries. The Clan bundles, specifically the Water Buster Clan bundle, are associated with the four eagle villages in the sky where Spring Boy was tortured. Eagles are said to have given the elements of the Water Buster Clan bundle and they include: a wooden pipe, peppermint to cure illness, a turtle shell in which to place the peppermint, cornballs and pemmican, and buffalo skulls. The bundle is used to make rain (Bowers 1992:467). It is still in use and is shared with the **Mandan** (Bowers 1992:380). A **Hidatsa** consultant indicated that when the Water Buster Bundle was repatriated, rain clouds gathered and a storm ensued as the bundle entered the Fort Berthhold Reservation.

WESTERN PAINTED TURTLE

SCIENTIFIC NAME: Chrysemys pida

FAMILY: Chelydridae

GENERAL DESCRIPTION: Turtles were eaten and their parts fashioned into various crafts by Native American groups in the Badlands. Additionally, turtle elements are noted in medicinal concoctions. They were also considered sacred, figuring in origin myths, landform naming conventions, and numerous bundle ceremonies. The western painted turtle and the snapping turtle can be found today in Theodore Roosevelt National Park.[6]

Western painted turtle. Photo Credit: Reptile Channel

Folklore: According to **Mandan** and **Hidatsa** elders, painted turtles were decorated with bead necklaces and placed in bundles.

[6] Turtles in general are included in this resource page unless otherwise specified by a common name. Also see the snapping turtle/turtle resource page of this report for additional information on the significance of turtles.

WEASEL

SPECIES NAME: Mustela

FAMILY: Mustelidae

GENERAL DESCRIPTION: Included in this resource assessment are the long weasel and least weasel. For groups traditionally associated with Theodore Roosevelt National Park, the weasel is considered sacred and serves medicinal purposes.

Weasel. Photo Credit: National Park Service

TRADITIONAL USE: Weasel skins were used primarily in sacred contexts by the **Hidatsa**. Hawk feathers and hawk skins attached to weasels were prominent figures in the war customs and doctoring practices (Zedeño et al. 2006:89). Along with hawk and weasel parts, other bird feathers such as those of the golden eagle were used in combination with paint, scalps, kit fox tails, raven feathers, and minks for warriors honors (Weitzner 1979).

As documented by Wildschut (1975), weasels are used medicinally by the **Crow**. Weasel skins are among the animals used in medicine bundles along with hair from the bighorn sheep, hair from mule deer, otter skin, skunk skin, hair from horses, owl feathers, eagle feathers, eagle plumes, eagle claws, eagle heads, hawk feathers, swallow feathers, the head of a duck on a medicine society pipe stem, abalone shell, hair and claws of the bear, coyote skin, coyote tails, wolf skins, and bison parts.

WILD TURKEY

SCIENTIFIC NAME: *Meleagris gallopavo*

FAMILY: Phasianidae

GENERAL DESCRIPTION: Flocks of wild turkeys are a common sighting for those visiting Theodore Roosevelt National Park. Plains tribes ate the turkey and used it medicinally but, the bird was also considered sacred to some tribes.

Wild Turkey, Photo Credit: M. Nieves Zedeño, Peaceful Valley Ranch, 2014

TRADITIONAL USE: Some factions of the **Sioux** reportedly used turkey feathers for various religious ceremonies in addition to eating, turkey meat (Zedeño et al. 2006:169).

FOLKLORE: Turkey feathers are utilized in the **Arikara** Hot Dance; dancers arranged their hair with turkey feathers to resemble a turkey's tail from the back, and they additionally wore a headdress of turkey feathers (Mails 1973:149). The **Assiniboine** Grass Dance, which featured the rooster tail belt mentioned above, also incorporated a roach of turkey feathers from the "beard" of the turkey into their dance cap, as well as a single golden eagle feather attached to a bone tube (VanStone 1996:11, see photo on p. 54). For the Dog Society headdress of the **Hidatsa**, turkey or hawk feathers created the fan at the back of the headdress (Mails 1973:167).

LOCATION WITHIN THE PARK: A consultant from the **Fort Belknap Tribe** commented on the presence of turkey tracks around the Buffalo Jump site in the southern unit. Along with turkey tracks, elk and golden eagle prints were observed (Zedeño et al. 2006:256).

During site visits in 2014 and 2015, University of Arizona researchers observed several flocks of turkeys while driving the south unit loop road. Four birds were photographed at the Peaceful Valley Ranch. Turkey feathers often are used instead of eagle feathers in social dances due to the difficulty in acquiring the latter.

WOODPECKER

FAMILY: Picidae

Downy woodpecker. Photo Credit: National Park Service

GENERAL DESCRIPTION: Ethnographic research suggests woodpeckers were trapped, eaten, and used medicinally by Plains groups. They are also considered sacred by some, namely the Blackfeet.

TRADITIONAL USE: Woodpeckers were trapped by the **Hidatsa** along the banks of rivers, notably the Missouri River. "Bird trapping was a task usually given to young males and children (Weitzner 1979:197–198)." The Hidatsa specifically trapped the golden winged woodpecker (Zedeño et al. 2006:89) however; other woodpeckers considered sacred and sought after were the black spotted winter woodpecker, the yellow woodpecker, and the red woodpecker. The **Mandan** used the red chests of woodpeckers in ceremonial paraphernalia. They may have traded them from other tribes along the Missouri River (Chandler et al. 2016).

FOLKLORE AND BUNDLES: The woodpecker is considered a powerful bird by the **Blackfoot** (Schaeffer 1934). The red-headed woodpecker has three songs for the Beaver bundle, because "in the beginning, when the birds have their songs to the Beaver Medicine, the woodpecker gave three" (McClintock 1910:98, 111). Other animals represented in the contents of the bundle are the beaver, otter, badger, meadowlark, loon, magpie, mallard, lynx, wolverine, fox, chickadee, crow, dog, toad, and buffalo.

WESTERN MEADOWLARK

SCIENTIFIC NAME: *Sturnella neglecta*

Family: Icteridae

General Description: Meadowlarks are generally considered sacred birds with misterious abilities. Meadowlarks are well represented in historical accounts of tribal regalia.

TRADITIONAL USE: Meadowlarks were important to the **Mandan** as trade item with a mythological tribe called the Maniga that lived on the opposite side of the Mississippi where it flows into the ocean; the yellow crescent on its chest was traded with the Maniga for shell bowls (Bowers 2004:132, 156).

Western Meadowlark. National Park Service

Meadowlarks were sometimes dropped into the river as the **Mandan** crossed it to calm rough waters.

FOLKLORE AND BUNDLES: The meadowlark was described in one **Hidatsa** story as "the yellow birds (who can almost talk Hidatsa)" (Wilson 1908:73–74). It is not a surprise that the meadowlark frequently appears in Hidatsa stories as a messenger. A **Crow** consultant noted that the meadowlark has two souls, but could not elaborate on the story. A **Blackfoot** consultant noted that the meadowlard has a particular temperament that often comes out in a singer singing a meadowlark song. The crafty bird makes the singer say unsettling remarks.

> "The thing that's common about [the meadowlark], you'll notice how they sing in the morning. Sometimes they can almost say, it seems like they're almost saying, "Did you wash your face?" [laughs]. You know, how they sing and it sounds like they're talking?"

Despite their cheeky personality, meadowlarks were good to people. They would warn a camp of approaching enemy attack; there are many stories in which the meadowlark warns people of danger or attack so that they are able to escape in time (Beckwith 1937; Bowers 2004; Parks et al. 1978; Parks 1991). The meadowlark is almost always correct about predicting danger and attack, as those who do not heed its warning find out. A **Mandan** story relates this through the experience of Speckled Arrow, who disregarded the meadowlark's advice to fortify his village with palisades and watched it be destroyed as nefarious enemies lit his village on fire and everyone was killed (Parks et al. 1978:85–89).

Meadowlarks have also been known to have healing qualities according to the experience of a **Hidatsa** man (Weitzner 1979:197). Meadowlarks are rarely shot because the Hidatsa believed that

the meadowlark, being such a loquacious bird, would scold them and call them bad names (Wilson 1911:100). However, when they are eaten they are said to cure deafness and muteness:

> "When anyone in our village grew deaf so that he could neither hear nor speak, his elder brother or someone else went out and killed a meadow lark for the sick man to eat. We kept feeding deaf and dumb persons on meadow larks until they got better and could talk. We thought the lark was such a talker it would make the sick man talk.
> There was a man named White Face who believed this old story about larks. He had a brother, a boy named Bears-on-flat. Bears-on-flat heard a little but could not talk. White Face took this boy out hunting with him and they brought in many larks which the boy ate, and he got well and talked." *(Wilson 1911:100)*

Meadowlarks are sometimes oracles who speak of future events, like in the widespread story of a boy who is carried into the nest of a family of Thunderbirds in order to help them kill a water monster. In Ella P. Water's **Arikara** adaptation of the story, the boy—Tied Face—is visited by a meadowlark early in the story who warns him, "This is what is going to happen" (Parks 1991:952). Other times the meadowlark can offer key information to someone in a dangerous situation, as is the case later in the Thunderbird story when in his battle against the water monster, a meadowlark told the boy where to aim in order to kill the serpent (Parks et al. 1978:55–57). After the serpent was killed, he invited all the birds to come and feed on the water monster's carcass.

In the **Arikara** story of "Forked Feather" a woman is warned by Four Grandmother Mice that her future husband is going to kill her (Parks et al. 1978:100–101). Just as the woman is about to be pushed by her husband into the river to be eaten by fish, a meadowlark flies by and tells her to steal her husband's necklace. The necklace contained her husband's heart, and she kept it with her to subdue her husband. Similarly, in **Mandan** stories explaining the origin of the Nuptadi and Awatixa Shell Robe Bundles, a meadowlark saves a young man from the deadly clutches of his evil sister (Bowers 2004:369–372). The meadowlark first warns that his sister is plotting to kill him and use his scalp in her robe. Later the meadowlark explains that the only way to kill his sister is by shooting arrows at the magpie feathers on her head; the boy splits the magpie feathers—which are his sister's heart—with his arrow and the sister dies, passing on her robe to him for victory in battles

There are many variations on another well-known story about a woman and her son living in the sky. The boy is warned never to shoot meadowlarks by his father, who is a Star (Bowers 1992:334; McCleary 1997:38). However, when a meadowlark begins bothering the boy, he shoots at it; he is told by the bird that he is actually from the earth below and does not belong in the sky world, so he and his mother return to earth through a hole in the sky. It becomes apparent that the boy has strong powers and he goes on to complete many holy tasks.

Table 5 Significant Animals (Native American)

Common Name	Scientific Name or Family	Group	Food Uses	Utilitarian Uses	Medicinal Uses	Sacred Uses	Other Uses	THRO
American bison (Buffalo) - reintroduced	*Bison bison*	Sioux	X	X	X	X	X	X
American bison (Buffalo) - reintroduced	*Bison bison*	Hidatsa	X		X	X		X
American bison (Buffalo) - reintroduced	*Bison bison*	Arikara	X	X	X	X		X
American bison (Buffalo) - reintroduced	*Bison bison*	Assiniboine	X	X	X	X	X	X
American bison (Buffalo) - reintroduced	*Bison bison*	Blackfeet	X	X		X	X	X
American bison (Buffalo) - reintroduced	*Bison bison*	Crow	X	X	X	X	X	X

American bison (Buffalo) - reintroduced	*Bison bison*	Mandan	X	X	X	X	X	X
American bison (Buffalo) - reintroduced	*Bison bison*	Plains Chippewa	X	X	X	X	X	X
Antelope (Pronghorn)	*Antilocapra americana*	Hidatsa	X			X		X
Antelope (Pronghorn)	*Antilocapra americana*	Arikara	X	X				X
Antelope (Pronghorn)	*Antilocapra americana*	Mandan				X		X
Antelope (Pronghorn)	*Antilocapra americana*	Assiniboine	X	X		X	X	X
Antelope (Pronghorn)	*Antilocapra americana*	Sioux			X			X
Antelope (Pronghorn)	*Antilocapra americana*	Blackfeet	X	X				X
Antelope (Pronghorn)	*Antilocapra americana*	Crow	X	X			X	X
Badger	*Taxidea taxus*	Hidatsa			X	X		X
Badger	*Taxidea taxus*	Assiniboine	X					X
Badger	*Taxidea taxus*	Blackfeet				X		X
Badger	*Taxidea taxus*	Arikara				X		X

Badger	*Taxidea taxus*	Crow	X					X
Badger	*Taxidea taxus*	Mandan		X	X			X
Bald eagle	*Haliaeetus leucocephalus*	Sioux		X	X			
Bald eagle	*Haliaeetus leucocephalus*	Hidatsa		X	X			X
Bald eagle	*Haliaeetus leucocephalus*	Arikara			X			X
Bald eagle	*Haliaeetus leucocephalus*	Mandan		X	X			X
Beaver	*Castor canadensis*	Hidatsa		X	X			X
Beaver	*Castor canadensis*	Sioux		X				X
Beaver	*Castor canadensis*	Mandan			X			
Beaver	*Castor canadensis*	Crow			X			
Beaver	*Castor canadensis*	Chippewa Cree			X			
Beaver	*Castor canadensis*	Assiniboine			X		X	X
Beaver	*Castor canadensis*	Blackfeet		X	X		X	X
Blackbird (Yellow-headed)	*Xanthocephalus xanthocephalus*	Hidatsa		X	X			X
Blackbird (Yellow-headed)	*Xanthocephalus xanthocephalus*	Blackfeet			X			X
Blackbird (Yellow-headed)	*Xanthocephalus xanthocephalus*	Mandan		X	X			X
Bobcat	*Lynx rufus*	Mandan			X			X

Bobcat	*Lynx rufus*	Plains Chippewa				X	X		X
Coyote	*Canis latrans*	Hidatsa				X	X		X
Coyote	*Canis latrans*	Assiniboine	X						X
Coyote	*Canis latrans*	Blackfeet						X	X
Coyote	*Canis latrans*	Crow				X	X		X
Coyote	*Canis latrans*	Mandan				X	X		X
Coyote	*Canis latrans*	Plains Chippewa				X	X		X
Crane (Sandhill)	*Grus canadensis*	Mandan					X		X
Crow	*Corrus brachyrhynchos*	Blackfeet					X		X
Crow	*Corrus brachyrhynchos*	Plains Chippewa				X	X		X
Deer	*Odocoileus hemionus*	Sioux	X	X				X	X
Deer	*Odocoileus hemionus*	Hidatsa	X			X	X		X
Deer	*Odocoileus hemionus*	Arikara	X	X				X	X
Deer	*Odocoileus hemionus*	Assiniboine	X	X			X		X
Deer	*Odocoileus hemionus*	Blackfeet	X	X					X
Deer	*Odocoileus hemionus*	Crow	X	X		X	X	X	X
Deer	*Odocoileus hemionus*	Mandan	X			X	X		X
Duck (Mallards, Various)	*Anas* sp.	Sioux	X						X
Duck (Mallards, Various)	*Anas* sp.	Hidatsa	X			X	X		X

Duck (Mallards, Various)	*Anas* sp.	Assiniboine	X						X
Duck (Mallards, Various)	*Anas* sp.	Mandan					X		
Duck (Mallards, Various)	*Anas* sp.	Blackfeet					X		X
Duck (Mallards, Various)	*Anas* sp.	Crow				X	X		X
Duck (Mallards, Various)	*Anas* sp.	Mandan	X			X	X		X
Elk (Wapiti) - reintroduced	*Cervus elaphus*	Sioux	X	X				X	X
Elk (Wapiti) - reintroduced	*Cervus elaphus*	Hidatsa	X			X	X		X
Elk (Wapiti) - reintroduced	*Cervus elaphus*	Arikara							X
Elk (Wapiti) - reintroduced	*Cervus elaphus*	Assiniboine	X	X				X	X
Elk (Wapiti) - reintroduced	*Cervus elaphus*	Blackfeet	X	X					X
Elk (Wapiti) - reintroduced	*Cervus elaphus*	Crow	X	X		X		X	X
Elk (Wapiti) - reintroduced	*Cervus elaphus*	Mandan	X			X	X		X

Ferret (Black-footed) - extirpated	*Mustela nigripes*	Hidatsa		X	X		X
Ferret (Black-footed) - extirpated	*Mustela nigripes*	Mandan			X		X
Fox (Sweet, Red)	*Vulpes* sp.	Hidatsa		X	X		X
Fox (Sweet, Red)	*Vulpes* sp.	Assiniboine	X				X
Fox (Sweet, Red)	*Vulpes* sp.	Blackfeet			X		X
Fox (Sweet, Red)	*Vulpes* sp.	Mandan		X	X		X
Frogs & Toads	*Bufo, Rana, Scaphiopus* sp.	Hidatsa		X	X		X
Frogs & Toads	*Bufo, Rana, Scaphiopus* sp.	Blackfeet			X		X
Golden eagle	*Aquila chrysaetos*	Sioux		X	X		X
Golden eagle	*Aquila chrysaetos*	Hidatsa		X	X		X
Golden eagle	*Aquila chrysaetos*	Arikara		X	X		X
Golden eagle	*Aquila chrysaetos*	Assiniboine			X	X	X
Golden eagle	*Aquila chrysaetos*	Blackfeet			X	X	X
Golden eagle	*Aquila chrysaetos*	Crow		X	X	X	X
Golden eagle	*Aquila chrysaetos*	Mandan		X	X		X
Golden eagle	*Aquila chrysaetos*	Plains Chippewa		X	X		X
Gopher	*Geomyidae*	Hidatsa		X			
Goose	*Anatidae*	Sioux	X				X

Goose	*Anatidae*	Hidatsa	X			X	X		X
Goose	*Anatidae*	Blackfeet					X		X
Goose	*Anatidae*	Mandan				X	X		X
Thirteen-lined ground squirrel	*Sciuridae*	Crow							
Hawk (Various)	*Accipitridae*	Hidatsa				X	X		X
Hawk (Various)	*Accipitridae*	Arikara				X	X		X
Hawk (Various)	*Accipitridae*	Assiniboine						X	X
Hawk (Various)	*Accipitridae*	Blackfeet					X		X
Hawk (Various)	*Accipitridae*	Crow				X	X		X
Hawk (Various)	*Accipitridae*	Mandan					X		X
Horse (Feral) - introduced	*Equus caballus*	Sioux	X	X		X	X		X
Horse (Feral) - introduced	*Equus caballus*	Hidatsa		X					X
Horse (Feral) - introduced	*Equus caballus*	Arikara		X					X
Horse (Feral) - introduced	*Equus caballus*	Assiniboine	X	X				X	X
Horse (Feral) - introduced	*Equus caballus*	Blackfeet		X					X
Horse (Feral) - introduced	*Equus caballus*	Crow		X		X	X	X	X

Horse (Feral) - introduced	*Equus caballus*	Mandan			X	X
Horse (Feral) - introduced	*Equus caballus*	Plains Chippewa		X	X	X
Loon	*Gavia immer*	Blackfeet			X	X
Loon	*Gavia immer*	Plains Chippewa		X	X	X
Lynx	*Lynx canadensis*	Blackfeet			X	X
Lynx	*Lynx canadensis*	Plains Chippewa		X	X	X
Magpie (Black-billed)	*Pica hudsonia*	Hidatsa		X	X	X
Magpie (Black-billed)	*Pica hudsonia*	Crow		X		X
Magpie (Black-billed)	*Pica hudsonia*	Blackfeet			X	X
Magpie (Black-billed)	*Pica hudsonia*	Mandan		X	X	X
Meadowlark (Western)	*Sturnella neglecta*					
Mink	*Mustela vison*	Hidatsa		X	X	X
Mink	*Mustela vison*	Mandan			X	X
Bighorn sheep	*Ovis canadensis californiana*	Hidatsa	X			X
Bighorn sheep	*Ovis canadensis californiana*	Arikara	X			X

Bighorn sheep	*Ovis canadensis californiana*	Mandan		X					X
Bighorn sheep	*Ovis canadensis californiana*	Blackfeet		X				X	X
Bighorn sheep	*Ovis canadensis californiana*	Crow	X	X					X
Mouse & Rats	*Peromyscus, Mus, Neotoma* sp.	Hidatsa			X	X			X
Mouse & Rats	*Peromyscus, Mus, Neotoma* sp.	Assiniboine	X						
Mouse & Rats	*Peromyscus, Mus, Neotoma* sp.	Arikara				X			
Muskrat	*Ondatra zibethicus*	Hidatsa				X			
Muskrat	*Ondatra zibethicus*	Blackfeet			X	X			X
Owl (Great horned)	*Bubo virginianus*	Hidatsa			X	X			X
Owl (Great horned)	*Bubo virginianus*	Arikara			X	X			X
Owl (Great horned)	*Bubo virginianus*	Crow			X	X			X
Owl (Great horned)	*Bubo virginianus*	Mandan			X	X			X
Owl (Snowy)	*Bubo scandiacus*	Hidatsa			X	X			X
Owl (Snowy)	*Bubo scandiacus*	Arikara			X	X			X

Owl (Snowy)	*Bubo scandiacus*	Mandan	X	X		X
Porcupine	*Erethizon dorsatum*	Assiniboine			X	X
Prairie dog	*Sciuridae*	Hidatsa	X			
Prairie falcon	*Falco mexicanus*	Arikara	X	X		X
Rattlesnake (Prairie)	*Crotalus viridis*	Hidatsa	X	X		X
Rattlesnake (Prairie)	*Crotalus viridis*	Assiniboine	X			X
Raven	*Corvus corax*	Hidatsa	X	X		X
Raven	*Corvus corax*	Plains Chippewa	X	X		X
Snakes (Bullsnake, Western Plains, etc)	*Colubridae*	Hidatsa	X	X		X
Snakes (Bullsnake, Western Plains, etc)	*Colubridae*	Crow	X	X		X
Snakes (Bullsnake, Western Plains, etc)	*Colubridae*	Mandan	X	X		X
Squirrel (Northern flying)	*Glaucomys sabrinus*	Plains Chippewa	X	X		X

Swallow	*Hirundinidae*	Sioux				X	X	X
Swallow	*Hirundinidae*	Hidatsa				X	X	X
Swallow	*Hirundinidae*	Crow				X	X	X
Swan (Whistling)	*Cygnus columbianus*	Mandan				X	X	X
Teal (Blue-winged)	*Anas discors*	Mandan					X	X
Turtle (Snapping)	*Chelydra serpentina*	Hidatsa				X	X	X
Turtle (Snapping)	*Chelydra serpentina*	Assiniboine	X	X				X
Turtle (Snapping)	*Chelydra serpentina*	Plains Chippewa				X	X	X
Turtle (Western painted)	*Chrysemys pida*	Hidatsa				X	X	X
Turtle (Western painted)	*Chrysemys pida*	Assiniboine	X	X				X
Turtle (Western painted)	*Chrysemys pida*	Mandan				X	X	X
Turtle (Western painted)	*Chrysemys pida*	Plains Chippewa				X	X	X
Weasel (Long, Least)	*Mustela* sp.	Hidatsa				X	X	X
Weasel (Long, Least)	*Mustela* sp.	Crow				X	X	X
Wild turkey	*Meleagris gallopavo*	Sioux	X			X	X	X
Woodpecker	*Picidae*	Hidatsa	X			X	X	X
Woodpecker	*Picidae*	Blackfeet					X	X

Woodpecker	*Picidae*	Mandan	X	X
Western Meadowlark	*Sturnella neglecta*	Mandan	X	X
Western Meadowlark	*Sturnella neglecta*	Hidatsa	X	X
Western Meadowlark	*Sturnella neglecta*	Arikara	X	X
Western Meadowlark	*Sturnella neglecta*	Crow	X	X
Western Meadowlark	*Sturnella neglecta*	Blackfoot	X	X

EUROAMERICAN FAUNAL RESOURCES

PRONGHORN ANTELOPE

Pronghorn, Photo Credit: Tim Fitzharris

SCIENTIFIC NAME: *Antilocapra americana*

FAMILY: Antilocapridae

LOCATION WITHIN THE PARK: Pronghorn can be seen throughout all units of the park drawing visitors and avid photographers to the area.

SIGNIFICANCE: Described as part of the *bounty of the Great Plains*, pronghorn antelope are a native species to the park (John Heiser personal communication 2015). For many modern users the opportunity to view animals in their native habitat is a large draw to the area. Historically antelope would have been hunted periodically to supplement the diets of homesteaders and ranchers in lean years (Norma Meyers personal communication 2015); however, their current signicifance is underpinned by one's viewing experience. Today, the *sense of place* imbued by the Badlands is tied to nature and geography including the presence of the antelope.

BEAVER

Beaver, Photo Credit: North Dakota Game and Fish

SCIENTIFIC NAME: *Castor canadensis*

FAMILY: Castoridae

GENERAL DESCRIPTION: Beaver are a keystone species found in the Little Missouri River Valley.

LOCATION WITHIN THE PARK: Beaver are found throughout the park units, generally on or in close proximity to the Little Missouri River. They often do not construct dams, as they are frequently destroyed by winter ice and spring floods, and are typically found in burrows in THRO.

SIGNIFICANCE: Beaver were sought historically for the use of their pelts. The fur trade in this area is best understood in examining the industries centered on trapping in the Upper Missouri River (Barbour 2001). Fur traders first appeared in the region as early as 1730 organzing in nearby Fort Union and trading with the Native Americans tribes there (Barbour 2001). Although French-Canadian fur trapper Jean Baptiste Le Page traversed the Little Missouri River and passed through the park area in the early 1800s, he left no detailed accounts of the expedition (Petty 1968). Beaver were likely trapped in the park area but were not exploited with the same voracity as in other areas of the Plains.

BIGHORN SHEEP

Bighorn sheep, Photo Credit: North Dakota Game and Fish

SCIENTIFIC NAME: *Ovis canadensis californiana*

FAMILY: Bovidae

GENERAL DESCRIPTION: Bighorn sheep were once bountiful in THRO before the establishment of the park. Prior to the 1930s, the Badlands' grassland was open range for grazing livestock. Domesticated sheep and cattle were among those animals introduced to the area. The introductions of domesticated sheep are largely responsible for the depletion of bighorn sheep populations in the area as they carry lungworm disease–a communicable and deadly parasite (Lyle Glass personal communication 2015).

LOCATION WITHIN THE PARK: Today, bighorn sheep are a large draw for visitors who come to view wildlife. They can be found year-round in the north unit and passing through the south unit. Theodore Roosevelt also commented on the presence of bighorn during his time spent in the Badlands (Cutright 1985).

BISON

American bison. Photo Credit: M. Nieves Zedeño, 2015

SCIENTIFIC NAME: *Bison bison*

FAMILY: Bovidae

GENERAL DESCRIPTION: The decimation of native bison in the Badlands occurred in the 1860s and 1870s. Reintroduced to the park in 1964, bison herds are now a character defining feature of Theodore Roosevelt National Park. Back country ranger John Heiser (personal communication 2015) spoke of the significance of bison in the park's ecosystem and of his intimate knowledge concerning bison behavior. Heiser referred to bison as his *brothers and sisters* lamenting on the effects of climate change and predator depopulation and its overall role in bison health.

LOCATION WITHIN THE PARK: Today, bison herds roam the north and south units of the park and are contained by fencing. In the past, escaped bison could often time be found rolling in the wheat fields of nearby ranches and farms (John Heiser personal communication 2015).

SIGNIFICANCE: Thedore Roosevelt came to the Badlands to hunt bison in 1879. Today however, the premise of the park is focused on having bison herds for the viewing pleasure of local residents and visitors. Park ranger, wildlife biologist, and local rancher John Heiser spoke at length concerning the reintroduction of bison to the park—an experience he knows well having been a back country ranger since 1973. Heiser described the *sense of place* the Badlands carries for him and his ancestors, who began homesteading in Dickinson, North Dakota in 1891. Bison are an integral part of Heiser's sense of place. Part of Heiser's job is maintaining the fences to keep the bison in, he stated*: I know every bison here…I am a buffalo, period…I've chased bison as far as Watford City on my horse Calypso, a buffalo runner…they have a distinctive rocking chair lope* (personal communication 2015).

DEER

White-tailed deer, Photo Credit: Weber's Lodge

FAMILY: Cervidae

GENERAL DESCRIPTION: White-tailed and mule deer were hunted historically by Euroamericans in the region and were first written about during the Lewis and Clark expedition in 1804. They have long been a key species for food and other utilitarian purposes.

LOCATION WITHIN THE PARK: Deer live in all units of the park.

SIGNIFICANCE: Norma Meyers (personal communication 2015) stated her father Page would occasionally hunt deer near their farm and dairy outside of Medora, North Dakota. Today, elk and deer are repopulating in the south unit after being displaced to the east by the encroaching oil patch industries, however, they remain in a state of dysfunction due to the absence of natural predators (John Heiser personal communication 2015).

ELK

Bull elk, Photo Credit: North Dakota Outdoors

SCIENTIFIC NAME: *Cervus elaphus*

FAMILY: Cervidae

GENERAL DESCRIPTION: Elk, like pronghorn antelope and bison, draw visitors to the park who are interested in observing animals in a natural setting.

LOCATION WITHIN THE PARK: Elk are commonly seen in the south unit of the park. They are observed as transients in the Elkhorn Ranch and north units. After introduction in 1985, the elk population in the south unit increased greatly until population controls were initiated in 2011. Today, the population is managed based on a forage allocation model; however, development in the park's vicinity has forced additional elk into the park boundaries each year.

SIGNIFICANCE: Currently, the significance of elk in the park is tied to viewing pleasure by visitors, however, Theodore Roosevelt also commented on the presence of elk during his time spent in the Badlands (Cutright 1985).

BLACK-FOOTED FERRET

Black footed ferret, Photo Credit: Nature.org

COMMON NAME: *Mustela nigripes*

FAMILY: Mustelidae

GENERAL DESCRIPTION: The black footed ferret has been introduced to the south unit but this animal has not thrived there.

LOCATION WITHIN THE PARK: The ferret is rarely seen in the park.

SIGNIFICANCE: The addition of this species has been an attempt to auggment the park's ecology. They have also een introduced in order to preserve and showcase species characteristic of the Little Missouri Badlands environment for visitors.

BURROWING OWL

Burrowing owl, Photo Credit: North Dakota Game and Fish

SCIENTIFIC NAME: *Athene cunicularia*

FAMILY: Strigidae

GENERAL DESCRIPTION: The burrowing owl is native to the Badlands region and the park.

LOCATION WITHIN THE PARK: Burrowing owls are associated with prairie dog towns, which are largely located in the south unit and are limited in the north unit. They are less common in the north.

SIGNIFICANCE: The repopulation of this species is also an attempt to showcase an iconic Little Missouri Badlands species. Lyle Glass (personal communication 2015) also lamented the rarity of the burrowing owl: "There used to be some burrowing owls in the prairie dog towns but they are no more…"

Fox

Swift fox, Photo Credit: North Dakota Game and Fish

Species Name: Vulpes

Family: Canidae

General Description: Both the red and swift foxes are native to the Badlands region.

Location Within the Park: This animal is rarely seen in the park.

Significance: Red and swift foxes occupy a niche in the Badlands food web that has a number of redundant species, which means there are many animals that consume the same food as foxes. This ecologial pressure has caused fox populations to decline throughout its range in North Dakota. This is the case within THRO, which is the reason why this animal is rarely seen.

GOLDEN EAGLE

Golden eagle, Photo Credit: Audubon Society

SCIENTIFIC NAME: *Aquila chrysaetos*

FAMILY: Accipitridae

GENERAL DESCRIPTION: Golden eagels, native to the region, are a large draw for visitors and avid photographers.

LOCATION WITHIN THE PARK: Eagles can be seen in all units of Theodore Roosevelt National Park.

SIGNIFICANCE: Eagles are culturally significant for many users of the park as they are national symbols and their presence contributes to the Badlands *sense of place*. John Heiser (personal communication 2015) spoke of the spiritual connection between the eagle and bison after University of Arizona researchers shared a story of witnessing this interaction. Researchers saw a lone bison on the edge of a cliff in the north unit that was encircled several times by a golden eagle. The eagle then perched on the cliff a few feet from the bison and the two animals shared the space for quite some time.

GRAY WOLF

Gray wolf, Photo Credit: Nature.org

SCIENTIFIC NAME: *Canis lupus*

FAMILY: Canidae

GENERAL DESCRIPTION: The gray wolf was at one time a predatory and prevalent animal in the Badlands of Theodore Roosevelt National Park.

LOCATION WITHIN THE PARK: Wolves are rarely seen in the park boundary; however, they are mostly sighted near the north unit when individual animals stray away from established populations located to the north and west of THRO.

SIGNIFICANCE: The gray wolf is among several natural predators that once virulently inhabited the park area. Wolves, preying not only on bison, but on cattle following the advent of the grassland ranching in the late 1800s, were ultimately subject to displacement and death at the hands of humans. Most wolves sighted near THRO are lone indivudals looking to establish a new territory or simply passing through.

GRIZZLY BEAR

Grizzly bear, Photo Credit: National Park Service

SCIENTIFIC NAME: *Ursus arctos*

FAMILY: Ursidae

GENERAL DESCRIPTION: The grizzly bear, along with the gray wolf, was one time a common predator in the Badlands area.

LOCATION WITHIN THE PARK: The Badlands were a marginal habitat for grizzly bears. Concerted hunting during the nineteenth century, the last naturally occurring grizzly in North Dakota was seen in 1889. As a result, grizzly bears are rarely, if ever, seen in the park boundary.

SIGNIFICANCE: The first account of Euroamerican hunting along the Little Missouri River comes from the 1848 report of an Irish hunter named John Palliser. At this time, game, particularly grizzly bear, was reported to have been plentiful in the Badlands; however, biologists question this assessment. Palliser reportedly took grizzly and buffalo between the Killdeer Mountains and the Little Missouri in a region that may have included the landscape that is now part of the park (Petty 1968:389–390). Roosevelt also noted grizzly bear sightings during his time in the region (Cutright 1985:151–156).

Grizzly bears in the American West were ultimately subject to displacement and death at the hands of humans. It is likely that they had been removed from the Badlands quicker than in other mountainous areas of the west because, as highly territorial animals, there were few suitable areas for the grizzly in what is now THRO.

HORSE

Free-ranging horses, Photo Credit: Lyle Glass

SCIENTIFIC NAME: *Equus caballus*

FAMILY: Equidae

GENERAL DESCRIPTION: The horse was invaluable to Euroamericans traversing and settling in the Badlands region at the turn of the nineteenth century. As Euroamericans explored, trapped animals, traded, homestead, and ranched, horses became an integral necessity in everyday life and continue to be emblematic in Dakota cowboy and ranching culture today. During the mid-twentieth century, some ranches in the area around Medora embraced tourism and became oriented toward providing horses for Badlands tours—a type of tourism that has antiquity in the park. Theodore Roosevelt's first visit in 1879 may have been one of the earliest instances of an individual coming to this part of the Badlands simply to explore on horseback (Cutright 1985; Nelson 1957). Horseback Badlands tours continued into the twentieth century, increasing after the automobile made the region more accessible; but, after the creation of the park, horseback tours became one of the main attractions (Petty 1968). Ranches around the park may have continued to run a small cattle herd, but erected facilities—corrals, stables, and hay barns—that facilitated trail horses (Glass personal communication 2015).

LOCATION WITHIN THE PARK: The horses that occupy Theodore Roosevelt National Park today are feral and roam all three units and are descended from the draft horses of early ranch days (Glass personal communication 2015). Lyle Glass, aka "Cowboy Lyle", has an intimate familiarity with the horses that reside in the park and he photographs them often. Glass has lived in Medora for 42 years and first visited the park in 1973. He has a degree in equine management and has given horseback guided tours, among other jobs, in the area (personal communication 2015).

SIGNIFICANCE: Viewing and photographing free-ranging horses is a large draw for many modern users of the park. Lyle Glass was hired by the National Park Service to photograph horses due to his knowledge of those living in the park and today he promotes the park to the public through his personal interest and photography. Glass (personal communication 2015) stated that: "*The horses know me. They think I'm one of them*." In April of 2015, Glass witnessed the birth of a foal which he named Glacier and earlier in the spring he named two others, Denali and Yosemite. Feral, free-ranging horses attract wildlife photographers from all over the country.

LONG-BILLED CURLEW AND SPRAGUE'S PIPIT

Long-billed curlew, Photo Credit: The Nature Conservancy, ND

SCIENTIFIC NAME: *Numenius americanus* and *Anthus spragueii*

FAMILY: Scolopacidae

GENERAL DESCRIPTION: The long-billed curlew and sprague's pipit are among the two birds that are rare in the park today. As migratory species, they are declining throughout their habitat and are not typically seen in THRO even in locales with suitable habitat. Seen feeding in the loose soils of prairie dog colonies and in the native grasslands, the curlew and pipit are considered by some a *bellweather* or indicator species.

SIGNIFICANCE: There are fewer curlews and pipits available to travel north and nest in the park because biologists note they are in decline across the Great Plains. Grasslands in THRO are currently maintained through grazing and prescribed fire in order to manage invasive plant species and maintain grassland ecosystems. Combatting the significant, long-term challenge posed by invasive plants has created suitable ecosystems for these birds that have not been able to take advantage because of their declining population.

LONGHORN CATTLE

Longhorn Cattle. Photo Credit: National Park Service

SCIENTIFIC NAME: *Bos bos*

FAMILY: Bovidae

GENERAL DESCRIPTION: Theodore Roosevelt brought longhorn cattle to the Elkhorn ranch in the 1880s during the ranching boom in the Dakota Territory. The ranching and cowboy culture is a character defining trait of many Euroamerican groups that came to the region to homestead. At the turn of the nineteenth century, cattle driven from Texas north, along trails such as the Long X, were a common sight for those inhabitants of Medora and the park area.

LOCATION WITHIN THE PARK: Today, a herd of longhorn cattle reside in the north unit of the park. This population numbers between 10 and 12 individuals and stay relatively close to the Longhorn Flats region of the park.

SIGNIFICANCE: The significance of longhorn cattle in the park lies in their evocation of past lifeways centered on Badlands ranching. The herd that is maintained in the north unit of the park was first reestablished in 1967 and their presence fosters a *sense of place* further tied to the cultural roots of many homesteader descendants. Visitors also prize interactions with the herd. For more information on ranching in the Badlands see the culture history section of this report.

The longhorn cattle are Texas longhorns, like those once driven in the area over 100 years ago. The cattle once came from Fort Niobrara but now the park service acquires cattle from Montana; from the same place as Theodore Roosevelt. Bison and longhorn share a similar habitat and compete for space but, due to the aggressive nature of the bison, the two species rarely share the same locations.

MOUNTAIN LION

Mountain lion, Photo Credit: National Park Service

SCIENTIFIC NAME: *Puma concolor*

FAMILY: Felidae

GENERAL DESCRIPTION: The mountain was at one time a predatory and prevalent animal in the Badlands of Theodore Roosevelt National Park.

LOCATION WITHIN THE PARK: Development outside THRO has influenced what animals do outside the park boundaries. Mountain lions are seen in the park but sightings are infrequent due to the encroaching oil industries and dislocation.

SIGNIFICANCE: The mountain lion is among several natural predators to the bison of Theodore Roosevelt National Park; however, they are not significant predators of these animals. Mountain lion are being killed outside of the park boundaries by sport hunters because this is where they feed. The North Dakota Fish and Game Department is currently studying these animals in hopes of discovering information that will allow for their better management.

PRARIE DOG

Black-tailed prairie dog, Photo Credit: National Park Service

SCIENTIFIC NAME: *Cynomys ludovicianus*

FAMILY: Sciuridae

LOCATION WITHIN THE PARK: Prairie dogs are common in the south unit of the park. Over the last few years, prairie dog acreage in THRO fluctuates between 1,100 and 1,800 acres. The majority of this acreage is in the south unit.

GENERAL DESCRIPTION: Black-tailed prairie dog towns abound in the park and are most often seen while driving the loop road in the south unit. Prairie dog towns occupy the silty flats below canyon bluffs in the valley bottoms and are a large draw for visitors. They prefer open terrain and avoid areas with moderate to high slopes and areas of dense or high woody vegetation.

SIGNIFICANCE: The current significance of the prairie dog is centered on tourism associated with wildlife viewing at the park. Their burrows are hazardous for cattle grazing in the Little Missouri River bottoms and are seen as a nuisance. Within THRO, they are a natural component of the prairie ecosystem and their colonies are effectively regulated by the environment.

NATIVE AMERICAN PLANT RESOURCES

BEARBERRY

Bearberry (Arctostaphylos uva-ursi), © J. S. Peterson

GENERAL DESCRIPTION: An important ingredient in kinnickinnick, bearberry was a plant that had ceremonial value and was a food source. The berries, bark, and leaves of the plant were used by Native people. Bearberry, when mixed with bearroot, tobacco, and other plants, was known as kinnickinnick– a widely traded medicine used in several spiritual ceremonies across the northern Great Plains.

SCIENTIFIC NAME: *Arctostaphylos uva-ursi*

FAMILY: *Ericaceae*

LOCATION WITHIN THE PARK: Crow consultants identified bearberry at the Buffalo Jump site in the south unit (Zedeño et al. 2006:244). Bearberry is commonly located on well-drained sandy hillsides and woods, particularly in pine and spruce forests (Crane 1991; Van Bruggen 1986b:334). This elder explained that the glossy leaves of the bearberry plant were mixed with bearroot and tobacco to create 'crazy bottom', which was used in ceremonial activities. **Sioux** consultants also recalled the creation, use, and significance of this mixture (Zedeño et al. 2006:244, 249).

FOLKLORE: Known as a mountain plant common to **Blackfeet** country, bearberry was widely traded and was well known to all northern Plains people. Bearberry was frequently mixed with sacred tobacco and is associated with various tobacco rituals (see Tobacco). Kinnickinnick is a traditional ceremonial plant mixture that includes parts of the bearberry plant, including the ceremony for the Mother Corn (Wilson 1916:266).

TRADITIONAL USE: Bearberry has utilitarian, medicinal, and ceremonial uses, as explained by Buffalo Bird Woman (Wilson 1916:266):

> *"The kinikinik [sic] bush bears a white berry. These berries are quite bitter before the frost falls; after freezing they are quite sweet. We used to eat them even when bitter, picking them from the tree. After they are frozen, they are quite good for two or three days, when they turn black and fall to the ground. We were fond of the sweet, new frozen berries before they fell off the bush. I would gather one or two gallons of the berries in a bark basket, take it to the river and sink it gently till half under the water; the bark bits of leaves and sticks etc., would rise and could be taken off; the berries sank to bottom of basket. The brief wetting did not hurt the basket. The berries were taken to the lodge to be distributed to all who would. We gathered berries after the frost, or even before, if they were well ripened*."

The inner bark of the bearberry plant and combined with tobacco and other plants to create kinnickinnick, a sacred ceremonial medicine used in ritual activities. Prior to the arrival of Europeans, native tobacco was smoked without being combined with other plants. The practice of mixing various plants with tobacco to make knnickinnick was initiated after European contact, according to Buffalo Bird Woman (Wilson 1916:266).

Bearberry also had its own medicinal properties. The **Crow** used pulverized leaves to treat canker sores (Hart 1992:4). It was also a food source. The plants flowers in June and bears fruit in September in the northern Great Plains. Crow consultants mentioned that the berries were picked when the leaves turn red in the fall and that they are slow to spoil. The berries are also an important food for bears, mule deer, and hummingbirds (Crane 1991).

BEARROOT

Bearroot (Hedysarum boreale), M. Harte, photographer

GENERAL DESCRIPTION: Bearroot was traditionally obtained from tribes in Montana and is one of the three principal ingredients in kinnickinnick. This plant has ceremonial and medicinal properties. Crow and Hidatsa consultants have stated that bearroot was a particularly valuable plant in a number of spiritual ceremonies.

SCIENTIFIC NAME: *Hedysarum alpinum*

FAMILY: *Fabaceae*

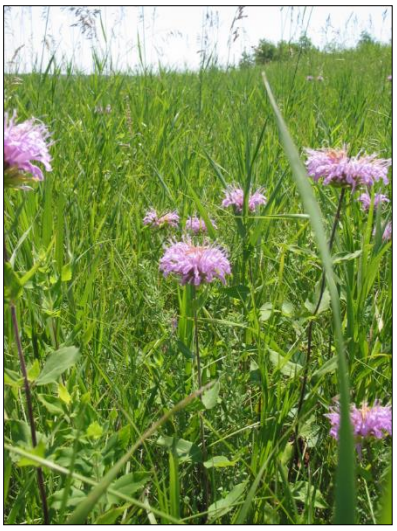
LOCATION WITHIN THE PARK: Bearroot is most commonly found in Montana; however, **Crow** consultants identified it at the Buffalo Jump site in the south unit (Zedeño et al. 2006:244). The plant was largely obtained through trade during the Sun Dance and other seasonal gatherings. It is native to moist forest and meadow soils, and grows along drainages and on rocky slopes. Bearroot has purple flowers that bloom in the summer. The plant grows tall and is harvested for smudging in September (LBJWC 2015; McGregor 1986f:453).

FOLKLORE: A core constituent of kinnickinnick, bearroot plays a role in many ceremonial activities. The **Hidatsa** and Crow believed only individuals with the bear as a spirit patron had the authority to collect bearroot. This person was also required to make certain gestures before collecting and was only allowed to harvest a certain amount (Zedeño et al. 2010:191).

TRADITIONAL USE: Bearroot was an important ceremonial and medicinal plant to the Hidatsa and Crow. Traditionally, these tribes traded blackroot (red baneberry) to Montana tribes for bearroot. As a medicine, bearroot was used to treat fatigue or emotional drain because it was believed to have the power to reverse the spirit or psyche. Conversely, if a person took the plant when they were well it would do the opposite and make them depressed. Bearroot was also used to treat colds. The root could be made into a powder and turned into a tea or it could be chewed and the saliva swallowed (Zedeño et al. 2010:191).

The ceremonial significance of bearroot came through its incorporation into kinnickinnick, which is composed of bearberry and tobacco. This botanical mixture was called ‘crazy bottom’ by the Crow. Kinnickinnick is used by the Crow Sacred Tobacco Society in sweat lodges and naming ceremonies. Bearroot was also made into a smudge for use in tobacco and sweat lodges. It was also used at funerals and for protection (Zedeño et al. 2006:244; Zedeño et al. 2010:191).

BERGAMOT/BEEBALM



Wild bergamot (Monarda fistulosa), U. Schittko, photographer

GENERAL DESCRIPTION: A member of the mint family, wild bergamot had a range of medicinal and ceremonial uses. Its curative properties were harnessed to treat both humans and animals. Bergamot was also used in ceremonies, particularly as a gift to warriors upon their return from victory.

SCIENTIFIC NAME: *Monarda fistulosa* L

FAMILY: *Lamiaceae*

LOCATION WITHIN THE PARK: Wild bergamot is native to the northern Great Plains and is found in tall grass prairies, thickets, pastures, old fields, along roads, drainages, and sometimes in open dry prairies or forests. Bergamot grows in rocky soil close to water (Kindscher 1992:157; Ladd 1995:54). It can be recognized by its compressed, long stalk and purplish color. The plant blooms from June through September and is picked in August (Brooks 1986h:725; Zedeño et al. 2010:208–209).

TRADITIONAL USE: Bergamot was valued for its scent and was used by the **Crow**, **Sioux**, and other tribes. The purple blossom was used like sweetgrass and was attached to mens' eagle fans as a means of spreading its fragrance through the air (Gilman and Schneider 1987:107; Kantrud 1995; Munson 1981:229–240; Wilson 1916:208). Women also used the plant for its scent. Buffalo Bird Woman recalls (Wilson 1916:208):

> *"In winter when we women went for wood, we would find these plants standing. We would crumple up some of the leaves and thrust them under our belts or into our mittens and thus made them smell very good. We also mixed horse mint blossoms with sweet leaf blossoms to put in our pillows, which thus were made to smell sweet all winter*."

Bergamot has a variety of ceremonial, spiritual, and medicinal properties and was used to treat both humans and animals. A member of the Lamiaceae plant family, this plant is closely related to mint and is frequently identified as a form of mint called horsemint. Horsemints, including bergamot, could be preserved for use as a medicine in the winter. A consultant explained how the mint and bergamot were used (Zedeño et al. 2010:210):

> *"My grandfather would use peppermint leaves mixed with other medicines when horses would cut themselves. When you smell the wild mint, in the fall, they are purple. The peppermint with the purple flower is bergamot. To prepare, take the leaves off and boil it, but don't put the leaves on the ground*."

Another consultant recalls its medicinal use in anticipation of the Sun Dance (Zedeño et al. 2010:210):

> *"It is often used to protect people from getting sick before the Sun Dance. Horsemint can also be boiled and made into a paste which has astringent properties to treat the swelling associated with snake bites. It can be used to treat poison ivy and poison oak, and muscle spasms."*

Bergamot was also used by the **Crow** to treat respiratory ailments and to induce sweat. The leaves could be boiled with meat and eaten. The hollow stem could also be used as a whistle (Kantrud 1995; Kindscher 1992:158).

Ceremonially, bergamot was used by the Crow to make a crown for victorious warriors who would go throughout the camp singing victory songs (Zedeño et al. 2006:202, 244). It was also used to make a black pigment that could only be used in victory.

BITTERROOT

Bitterroot (Lewisia rediviva), © M. Skinner

GENERAL DESCRIPTION: Bitterroot was an edible plant with medicinal properties. It could only be obtained by persons with the appropriate rights. Bitterroot was used to treat a variety of internal and external ailments. Some Native groups obtained the plant through trade while others harvested it from river bottoms.

SCIENTIFIC NAME: *Lewisia redviva*

FAMILY: *Portulacaceae*

LOCATION WITHIN THE PARK: Bitterroot thrives in poorly developed soils on exposed valley slopes, forests, river bars, gravelly slopes, and plains. The plant blooms in June with white or pink flowers (Howard 1993; Phillips 2001:86). It can still be found along the banks of drainages.

FOLKLORE: A valued medicinal plant, **TAT** consultants explained that bitterroot could only be obtained by persons with the rights to collect the plant. These rights could be acquired through dreams or purchase; however, purchasing the plant knowledge was more difficult than dreaming it. "The spirits were very specific about how to prepare medicines and ceremonial plants" (Zedeño et al. 2006:220).

TRADITIONAL USE: While bitterroot could be found throughout the northern Plains, it was frequently obtained through trade or by traveling to locations where it grows particularly well. One consultant noted that, in the fall, individuals go to "medicine country" to pick it where it grows...If a person goes to the sloughs of medicine country, the pieces grow to be huge. They are found about one foot underground" (Zedeño et al. 2010:222–223). Bitterroot was also among a variety of medicinal plants chat could be obtained near camps on river bottoms (Zedeño et al. 2006:220).

Bitterroot has a range of medicinal uses and is used to treat both physical and spiritual ailments. It can be used to treat fever and made into a poultice for cuts. It can also be used to treat spirit sickness, for cleansing, and protection. A tea using bitterroot and cedar berries was used for stomach remedies.

Some groups used bitterroot as a food. The **Arikara** cooked bitterroot with corn and turnips. The **Crow** also noted that bitterroot was edible (Zedeño et al. 2006:244).

BOXELDER

Boxelder (Acer negundo), D. E. Herman, photographer

GENERAL DESCRIPTION: Boxelder was a utilitarian plant that was employed in the manufacture of a wide range of material culture. It was particularly significant for basket making, but was also used to make weapons and animal traps. The tree's sap was collected as a source of sugar and an edible fungus that grew around these tap scars was also consumed. In addition to vernacular items, boxelder was used to create ceremonial items like pipe stems and flutes.

SCIENTIFIC NAME: *Acer negundo* L

FAMILY: *Aceracea*

LOCATION WITHIN THE PARK: Boxelder is native to the Missouri River region and is a riparian plant that prefers river bottoms, floodplains, lakes, and streams. It is typically found in groves with other riparian trees including aspen, cottonwood, and willow. Boxelder is a drought-tolerant species that develops green or yellow blooms in April and May. Its fruit ripen in early fall (LBJWC 2015; McGregor 1986a:569–570). Trees like boxelder provide useful habitat for many wildlife species (Rosario 1988). Canyon slopes in the north unit have been identified by Sioux consultants as a habitat suitable for sap trees like boxelder (Zedeño et al. 2006:248)

FOLKLORE: Traditional folklore explain how boxelder came to be such a useful plant. **Arikara** oral traditions convey a story where a coyote makes a knife from a boxelder seed and uses it to slash a badger's throat. Once this task is done, the seed-knife turns back into a seed (Gilmore 1966:125).

TRADITIONAL USE: Boxelder was a utilitarian plant that was used to make a variety of items in addition to hunting tools and weapons. Boxelder bark was widely used to make baskets. Arikara and **Hidatsa** baskets frequently used boxelder and it is considered one of the most readily identified fiber in the basketry traditions of these tribes. Arikara basketry contrasted boxelder and black willow to create light and dark designs. Gilmore (1925a:90) states that the untreated inner bark of the willow turned "a dull reddish-brown after exposure to the air for a short time." If left untreated, the outer bark maintained a white color. Boxelder bark strips buried in black mud for two days provided a black color. All of these colors were woven into a variety of patterns and designs (Gilmore 1925a:91).

Hidatsa traditions also contain explanations of how boxelder bark was employed to make baskets. The bark was prepared for basketry in the following manner:

> *"The bark of the Boxelder was used for making carrying baskets. Gathered in Juneberry season, it was peeled upward on the trunk with the brown rind falling off by itself. It was then dried with the inner side up for five days. The bark was kept from the rain or it spoiled. After five days, it was soaked in the river in a long bundle. When well-soaked, it was cut into narrow strips and rolled into 14 inch rings which would keep up to two years. This was the light-colored bark of the willow carrying baskets* (Anonymous n.d.)."

Boxelder bark was preferred by Hidatsa basket makers because it was soft and pliable, making it easier to work and use to weave the sides of baskets (Wilson 1916:253).

In addition to being used for basketry, boxelder sap was also collected and made into sugar (Gilmore 1966:6). Buffalo Bird Woman describes the collection process (Wilson 1916:237):

> *"In the spring when the snow was melting but the leaves had not sprouted yet, we children would go out to a box elder tree, break a branch and tie a cup under the broken end. Sap would drop into the cup. Sometimes we cut a cavity in the tree and drank from it. Cutting a tiny channel to which we put our mouths. This we did only when a south wind was blowing and then only at mid-day. The flow stopped in the evening. We children did this. We drank the sap and it smelled like box elder wood. We called this drink "mida–adáxi". It tasted sweet."*

Gilmore (1919:61–62) noted that **Sioux** women collected elm cap, an edible fungus that grows on decayed parts of box elder or on elms. The fungi were collected from old tap wounds associated with boxelder sap harvesting. Boxelder wood was also used to make a variety of items. Young boys used boxelder shoots in a throwing stick game or "úwakixeke" (Wilson 1916:269). The wood is also used by the Hidatsa to make rabbit snares because the soft pith of the trees could be so easily obtained (Gilman and Schneider 1987:73). The **Assiniboine** and **Crow** used boxelder wood for plates and bowls (Long 1942:140; Voget 2001:698). Boxelder wood is also used for shade and firewood. Consultants noted that it makes a good fuel for burning because it creates a long-lasting warm fire.

Boxelder also plays a role in a number of ceremonies. In the Hidatsa Wolf ceremony, a blade of reddish grass is swirled in a boxelder bowl before blessing the warriors. This ceremony is meant to bring success for men on the warpath (Beckwith 1938:250). The Arikara used boxelder to make the handles for buffalo shoulder-blade hoes that have been found in bundles (Gilmore 1931:36). Hollowed out saplings were used by the Crow and Hidatsa to make flutes and ornaments, while the Mandan and Hidatsa fashioned boxelder into pipe stems (Beckwith 1938:10, 129). It continues to be used to make flutes and switches used during sweats (Zedeño et al. 2010:31).

BUCKBRUSH/WOLFBERRY

Buckbrush (Symphoricarpos occidentalis), U. Schittko, photographer

GENERAL DESCRIPTION: Primarily a medicinal and utilitarian plant, buckbrush is native to the northern Great Plains and has been identified in THRO. This plant was used to make a number of utilitarian objects including snares, brooms, and arrow shafts. It also had a range of medicinal uses, specifically to treat eye ailments. Buckbrush was also opportunistically eaten.

SCIENTIFIC NAME: *Symphoricarpos occidentalis*

FAMILY: *Caprifoliaceae*

LOCATION WITHIN THE PARK: Common to mixed-grass prairies, buckbrush, also known as snowberry, wolfberry, and other names, frequently grows in dense colonies. It can adapt to a variety of soil types. In addition to prairies, buckbrush is also found in riparian areas, floodplains, ravines, and in the open woods (Brooks 1986b:828; Hauser 2007; USNPS 2007). The plant blooms in June and July with white flowers. **Blackfeet** consultants identified buckbrush within THRO (Zedeño et al. 2006:263).

FOLKLORE: Buckbrush was mainly a utilitarian plant, but it did have ceremonial uses. For example, Sand bar willow and buckbrush were traditionally tied to buffalo skulls in **Hidatsa** ceremonies such as the Sundance Ceremony (Weitzner 1979:316). Buckbrush twigs were occasionally used to heat the rocks in sweat lodges. They were frequently incorporated into bundles as well (Wilson 1916:247).

TRADITIONAL USE: Widely used as a food source and medicine, parts of the buckbrush plant were used to create a range of other items. Buckbrush berries ripened in the spring and were opportunistically collected and eaten whenever encountered (Wilson 1916:248).

Buckbrush wood was used to make useful tools such as brooms and snares. Prairie chicken snares were constructed from buckbrush while other consultants recall using the stems to make brooms that were used for sweeping lodges or tipis (Wilson 1916:243, 246–247). These brooms were only used for a short period of time, typically around 20 days or so, before being discarded. Buckbrush broom manufacture was described by Buffalo Bird Woman (Gilman and Schneider 1987:39):

> *"I gathered good, long plants, and laid them side by side to be sure they were of the same length, and bound them together with a piece of thong so that the stems made a handle of about fifteen inches, enough for two hands to grasp. We used no other kind of plant for brooms; but we did make them sometimes of buffalo hair."*

Occasionally, buckbrush was used to make mattresses for sleeping on wet ground or when it was snowy. These mattresses were about six to eight inches thick (Wilson 1916:244). The plant was also used for arrow shafts (Thwaites, ed. 1906:354).

Buckbrush was also used to make tools that taught basic life skills. For example, men made buckbrush arrows for their sons (Wilson 1916:244–245):

> *"Buckbrush stems or sticks were used for arrows, for boys. The boy's father would thrust the stem into the hot ashes of the fireplace; a green stem I mean. When it was hot, the father took a piece of skin in his hand and drew the hot stick thru it holding it quite tightly. This peeled off the outer bark but left the inner yellow. Such labor was al-ways done by men, – by the boy's father, brother, grandfather, etc. It was not women's part to do. The arrows were unfeathered. When the green stick was thrust into the hot ashes it went tsa-tsa-tsa with the heat."*

Medicinally, buckbrush was used to treat a range of ailments. Buckbrush was also sued to treat tonsillitis. The plant was boiled, sieved, and placed into a bottle for use as an eye medication. Four to five drops placed in each eye was used to treat cataracts. Buffalo Bird Woman describes how he Hidatsa and **Sioux** used it was used to treat snow blindness: that buckbrush was often used by the Hidatsa and Sioux to treat snow blindness (Wilson 1916:245–246):

> *"A man would roll up a little ball of the inner bark of the buck brush as big as the end of his little finger. Then he pulled hair out of a buffalo robe and wrapped it around the bark ball. This he dipped in water squeezing out the water lightly. Then if there were two or three in camp that were snow blind, he went around and as they sat he squeezed a drop out of the bark ball into the corner of the eye of each patient. My father used to do this; also I know a Sioux Woman that did."*

The plant could also be used to pierce ears by certain individuals that had the rights to use buckbrush. The process is explained in Wilson (1916:246):

> *"All we Indians had pierced ears. When the ear was pierced with a sharp iron, a little tiny bit of the top of a buck brush branch was taken, of a length equal to the thickness of the ear, and each end touched to a live coal to burn the ends smooth, so that it would not lacerate the flesh as it was pushed through the aperture. The little stick was peeled and scraped smooth with a knife. It was left in the ear, till the latter healed. This was universally done; no other wood or plant would serve the purpose."*

BUFFALO BERRY/BULLBERRY

Native American consultant gathers buffaloberry (Sheperdia argentea), 2009

GENERAL DESCRIPTION:

SCIENTIFIC NAME: *Shepherdia argentea* (Pursh) Nutt. (bullberry)

LOCATION WITHIN THE PARK: This drought-tolerant plant is grows in rocky, sandy, or clayey soils along hillsides and stream banks. Flowers bloom in early summer, May and June, with the first berries appearing later in the summer (Van Bruggen 1986a:492)

FOLKLORE: A traditional Arikara saying explains, "…when buffalo berries are plentiful in the fall, our tribe says that there will be a mild winter, and this always comes true" (Hilger 1951:70). Assiniboine visitors to the Knife River recalled, "…a story of how First Man or Ektomi saw the buffalo berries reflected in the water and fell when attempting to capture them. He looked up and saw the berries hanging from the bush. In punishment for tricking him in to getting wet and embarrassing him, First Man gave thorns to the buffalo or bullberry bush (Zedeño et al. 2006:211).

TRADITIONAL USE: Arikara women harvested buffaloberry along with other ripe plants such as serviceberry and chokecherry (Zedeño et al 2006:106–107).

Denig (2000:1314) notes that the **Assiniboine** did not cultivate plants and instead harvested wild plants including bullberry.

Crow consultants have also noted that warriors on expeditions used buffaloberry along with a host of other plants as food (Zedeño et al. 2006:202).

The red or, sometimes, orange berries were collected by the **Hidatsa** who only ate the berries fresh (Wilson 1916:251). Conversely, buffaloberries were collected and stored by the **Mandan** (Beckwith 1938:96–97, 109). Wilson (1916:251) provides additional information on how this resource was harvested:

> *"Buffaloberries are a delicacy, red with very small seeds, though their thorns make them hard to collect. The berries are picked in late August and September, after they have been sweetened by the frost. The best way to collect the berries is to lay*

down a hide under the plant and beat the bush with sticks. This "harvest hitting" is called baa-li-shii-she.

Buffaloberries are edible when eaten raw. However, buffaloberries are typically made into a pudding. Two kinds of berries, yellow and red, are used to make pudding."

The sticks from the buffaloberry bush were also used to make dice for a Hidatsa women's gambling game where sections of the plant were cut and split. The bark was peeled, the pith removed, and the split side was smoothed. Marks were made on the smooth side and 12 chips were made to go with them (Wilson 1916:251).

Buffaloberry branches were also incorporated into tobacco field fences. Sometimes, afterbirth was placed in the branches of this plant (Gilmore 1930:75; Wilson 1916:251).

BUFFALO GRASS

Buffalograss (Buchloe dactyloides), Lady Bird Johnson Wildflower Center

GENERAL DESCRIPTION: Common to disturbed sites, buffalograss is found in drained pastures and meadows in both upland and short-grass prairies. Flowers bloom from May to the late summer (Howard 1995; Sutherland 1986d:1148).

SCIENTIFIC NAME: *Buchloe dactyloides*

LOCATION WITHIN THE PARK: Assiniboine consultants pointed out the presence of buffalograss along the Petrified Forest Trail (Zedeño et al. 2006:256). **Crow** consultants also identified buffalograss within THRO, noting that it was traditionally used by warriors during expeditions (Zedeño et al. 2006:202).

TRADITIONAL USE: Buffalograss was an important insulation material for earthlogdes because it is drought resistant and grows as a sod. It was also an important forage for livestock and was used to dry meat and other foods (Howard 1995). It was a good drying surface because it grew close to the ground, leaving very little ground surface exposed. Wilson (1916:225) records the recollections of Buffalo Bird Woman:

> *"When I was younger and it was the season to dry squash I used to choose a patch of antelope-hair grass always on which to dry the solid slices of squash which could not be spitted on a stick. If we tried to spit them, the slices broke. Also when dried meat got wetted or was moist and was therefore like to spoil, antelope hair grass was good to dry the meat on. Also when we dried squash blossoms, as I have told you before, we chose antelope hair grass to dry them on."*

Buffalograss roots were also commonly used for embroidery because, when dried, the roots turned black in color. This black thread was used as an accent to each embroidery piece (Wilson 1916:225–226).

PLAINS PRICKLY PEAR

Pricklypear cactus (Opuntia polyacantha), D. Powell, photographer

GENERAL DESCRIPTION: Plains prickly pear are found in sandy and rocky soils along roadsides and are common in the dry grasslands, eroded areas, and the badlands. Flowers bloom in May and June. The plant is characterized by thorny pads that are edible, being consumed by a number of animals including pronghorn and box turtles (Kaul 1986c:159, LBJWC 2015). Prickly pear berries are edible, as are the pads after the spines have been removed.

SCIENTIFIC NAME: *Opuntia polyacantha* Haw.

LOCATION WITHIN THE PARK: Blackfoot consultants noted the presence of cactus berries in THRO (Zedeño et al. 2006:263).

FOLKLORE: Prickly pear played a central role in the **Mandan** Okipa ceremony. In the Okipa ceremony legend, Lone Man ate prickly pear and turned into a jackrabbit in order to trick Hoita to free trapped animals (Bowers 2004:357).

TRADITIONAL USE: Prickly pear was a survival food eaten by the **Hidatsa**. It was also a food source for warriors during times of scarcity. The cactus was dug up and lain on a fire until the spines burned away making the charred pads available for consumption. The singed exterior was removed and the roasted inner pad was eaten (Wilson 1916:197198). A meal of prickly pear was prepared by Wolf Chief for ethnographer Gilbert Wilson in 1916 (2001). Cactus berries were also eaten. The sweet berries were a favorite food for children. Buffalo Bird Woman recalls how children and their mothers would gather cactus berries, carrying them home in parfleches. The prickly pear were plentiful and it was not difficult to collect a sizable number of berries in a short amount of time. The berries were eaten fresh almost as soon as they were collected (Wilson 1916:198–199).

Crow and **Sioux** tribes have stated other uses for prickly pear. The juice of a freshly-peeled stem could be used to fix colors on painted hides. The cactus was also valued as a natural insect repellant (Hart 1992:39).

CHOKE CHERRY

Consultant examines a chokecherry shrub, 2009. MN Zedeño, photographer

GENERAL DESCRIPTION: Chokecherries were among the most widely used plant resources on the northern Great Plains. Chokecherry bushes grow in thickets and prefer rich soils on wooded draws, steep hillsides, and along rivers within the floodplain (Kindscher 1992:170). The bushes are particularly common in the northern Plains and at the edge of timberlands along the Missouri River. Bushes bloom in early summer and bears red fruit that are harvested in the fall, specifically in August and September. Because they are also consumed by other animals, traditionally, chokecherries had to be picked quickly before they were ruined by birds (Johnson 2000; Wilson 1916:218).

SCIENTIFIC NAME: *Prunus virginaina* L.

FOLKLORE: Chokecherries had a ceremonial role for agricultural people of the northern Plains. The plant was associated with sacred tobacco gardens and chokecherry wood was used to craft horticultural tools. Implements from the plant were instrumental in braking ground where sacred tobacco gardens were going to be planted. Chokecherry wood was also frequently used in the construction of sweat lodges (Zedeño et al. 2010:111–112).

For the **Hidatsa**, chokecherry wood played a role in the offering ceremony of the Grandmother's Society. The Hidatsa Bear ceremony also involved a man who carried a chokecherry stick. Four strips of choke cherry wood were also used to symbolize the four nights of the Wolf ceremony (Beckwith 1938:229,249–250,261; see also Bowers 1992:226). The Hidatsa eagle trapping ceremony also involved the placement of a chokecherry branch over the eagle lodge altar because the plant was associated with the specked eagle. Chokecherry branches were also used in other aspects of the trapping ritual. These uses varied depending upon the leader's decision (Bowers 2004:234–235).

Parts of the chokecherry bush were incorporated in bundles. The Wolf Bundle of the **Awaxawi** contained two canes and four dark strips of chokecherry wood in association with other items including a coyote cap decorated with raven feathers, coyote manes with feet attached that were worn as manacles, a wolf hide, red grass, and a buffalo skull (Bowers 1992:411).

Chokecherry is among the few ceremonial plants mentioned in ethnographic literature of the **Mandan** (e.g., Bowers 2004). Mandan "bird sticks" were made of chokecherry branches that had been painted decorated with eagle feathers, rabbit fur, and Knife River Flint fragments (Bowers 1992). The myth surrounding the Mandan Woman Above Bundle mentions the fact that certain

rights had to be obtained in order to use the chokecherry tree for certain uses. The plant was valued by this group as a food and its medicinal properties.

Crow consultants remark that chokecherries and other plants were used for ceremonies and offerings (Zedeño et al. 2006:224).

Gilmore (1919:89) also states that the **Sioux** timed the Sun dance based on the ripening of chokecherries. The dance began on the first full moon when the cherries were ripe.

TRADITIONAL USE: Most Native American groups that frequented THRO used chokecherries for a variety of activities. The cherries were harvested by vigorously beating the bush with a stick. They could be eaten fresh or pounded into a pulp and dried for later consumption (Gilmore 1925d; Wilson 1916:218). Chokecherries could also be ground into a paste using a stone hammer (Wilson 1916:219–220). The resulting paste was traditionally worked by hand into strips that were set aside on racks to dry in the sun. Gilman and Schneider (1987:65) describe how the Hidatsa processed chokecherries:

> *"Two or three cherries were laid on the stone and struck smartly, then two or three more. When enough pulp had accumulated it was taken up in the woman's hand and made into a ball, and then squeezed out in lumps thru the first finger and thumb of the right hand by pushing with the left thumb into the right palm. These lumps we dried on the corn stage on a skin. On warm days they dried in three days' time. But if the weather was damp and chilly, it might take 5 or 6 days. They were ready, when a lump broke dry clear thru. If the lump was put away while still soft inside, it spoiled and smelled bad."*

Each Hidatsa family was able to dry and store one or two bags of chokecherry cakes that were either stored on a platform or hung from the rafters of the earth lodge (Wilson 1916:221). Women among the **Arikara** also gathered and harvested chokecherries for consumption. The harvested chokecherries were pounded and dried in cakes (Parks 2001:369–371; Gilmore 1925d).

Other ways were used to process chokecherries. The cherries were also boiled with bone fat and corn to flavor other foods. During the historical period, they were processed into a pudding by slow-boiling the fruit and mixing it with sugar and flour. Today, chokecherries are made into jellies and jams (Wilson 1916:222–223). The **Assiniboine** and Crow harvested chokecherries, pounded them and mixed the resulting pulp with tallow or bison hooves. Patties were made from this pulp and dried for later use. Pounded or crushed cherries were also mixed with other fats and pounded meat to make pemmican (Denig 2000:13–14; Linderman 1972; Long 1942:122,126; Lowie 1922:210).

Chokecherry wood was used to manufacture a range of material culture, specifically bows and arrows. The Assiniboine and Crow crafted bows of varying lengths and arrow shafts from chokecherry wood. The Assiniboine also used chokecherry wood pins to secure tipi and lodge hides to the ground (Long 1942:148-149; Voget 2001:699). The Hidatsa preferred to make bows from chokecherry wood because it was tougher than willow. Chokecherry juice was also used to make a

purple or red dye (Gilman and Schneider 1987:69). A consultant from the Three Affiliated Tribes stated that he learned to make bows of chokecherry (Zedeño et al. 2006:196).

The medicinal properties of the chokecherry were widely known and the plant remains to be an important natural remedy. The Arikara prepared a medicine from the chokecherry juice or gum as a treatment for bleeding caused by childbirth (Gilmore 1930:74; Weiner 1972:34; Kindscher 1992:171). Specific parts were also used to provoke contractions during childbirth. The boiled bark could be used as an abortificant (Zedeño et al. 2006:113). Crow consultants describe that the plant is still used as a dysentery and diarrhea medicine in the same manner as it has traditionally been used (Kindscher 1992:171). Crow consultants remarked (Zedeño et al. 2006:246): "*We used the chokecherry trees for diarrhea too. Whatever is available. Don't have to use them fresh. I'd rather use the chokecherry first, then the chokecherry stem, not the leaves. We pick it in summer and dry it and use it in winter.*" The Crow are also known to have used chokecherry bark to clean burns and sores (Hart 1992:43).

COMMON/CREEPING JUNIPER

Common juniper (Juniperus communis), G. Wojciech, photographer

GENERAL DESCRIPTION: Juniper is commonly found in rocky or sandy soils along hillsides, mountains, and flat areas. While the term "juniper" and "cedar" are commonly used in ethnographic literature, the common juniper grows upright and can be differentiated from cedar species based on the needle shape. Common juniper blooms in May and June (LBJWC 2015; Brooks 1986c:72). Juniper are found in dense stands on north-facing slopes as this terrain tends to be wetter and burn less frequently. Juniper are thinner on arid landscapes that are more likely to burn.

SCIENTIFIC NAME: *Juniperus communis L.; Juniperus horizontalis*

LOCATION WITHIN THE PARK: Native American consultants identified juniper on the Petrified Forest Trail.

TRADITIONAL USE: Some of the resources involved in annual ceremonies among the M**andan** included branches of creeping juniper, a buffalo robe, hawk or owl claws, sage leaves, a dog medicine bag, and a rattlesnake.

The **Blackfoot** used creeping juniper to make their fasting beds; a consultant said that when one sees a creeping juniper growing inside an old fasting bed it is a sign that the fast was successful.

COTTONWOOD

Consultants examine a giant cottonwood at Cross Ranch State Park, ND, M. N. Zedeño, photographer

GENERAL DESCRIPTION: Ubiquitous to riparian areas, cottonwood trees were an important utilitarian resource for Native people. Cottonwood trees are common to sand bars, river bottoms, and around springs. Flowers bloom from February through April and the plant's wind-dispersed seeds are dispatched during the summer (USNPS 2007). The oldest plants in THRO is more than 370 years old.

SCIENTIFIC NAME: *Populus deltoides*

LOCATION WITHIN THE PARK: Cottonwood is found in river bottoms. The successful regeneration of cottonwood is dependent upon natural floods and channel movement along the Little Missouri River. Today's stands are the results of these weather extremes.

The importance of cottonwoods in THRO was conveyed by two **Crow** consultants who are elders in the Sacred Tobacco Society. Cottonwoods and willow trees played a role in the adoption ceremony of the Sacred Tobacco Society. The ceremony altar was constructed of cottonwood branches and two upright stakes were used to support the altar platform (Zedeño et al. 2006: 202, 244). Sweat lodges were also built from cottonwood or willow saplings (Zedeño et al. 2006:220).

Sioux consultants conveyed the significance of cottonwood trees during a visit to the Wind Canyon loop, explaining that the trees were used to build the Sun Dance lodge (Zedeño et al. 2006:256).

FOLKLORE: The cottonwood is associated with legends, sacred societies, and ceremonies among various groups. Sioux consultants explained that cottonwood trees were a gift to the people at creation time and are connected to the gift of the tipi. Cottonwood was also employed in the Sun Dance (Zedeño et al. 2006:232).

The Arikara Buffalo Society used cottonwood in part of the buffalo-calling ceremony. Dorsey (1904) explains: "The (cottonwood) offering pole struck with an ash stick in their buffalo calling ceremony clearly represents the hollow cottonwood out of which the ancestral Arikara emerged from the underworld". The Arikara believe that they emerged from a subterranean realm through a hollow cottonwood and as they emerged, "the Buffalo people, aided by their ritual, began hunting and killing the humans." This legend is the source of the Buffalo Society Bundle (Dorsey 1904).

The central post of the **Hidatsa** *Naxpike* lodge was made from cottonwood as were the roof poles (Bowers 1992:315). Cottonwood was also incorporated into the Mandan Lone Man shrine (Bowers 1992:113). Parts of the tree continue to be burned in ceremonial fires and used to make drumsticks and lodge poles.

TRADITIONAL USE: Cottonwood had important utilitarian and ceremonial values to northern Great Plains tribes. This resource was widely used in building construction. The **Hidatsa** utilized cottonwood in the four main posts of the earthlodge, fortifications, corrals, tent poles, agricultural structures, and travois (Wilson 1916:249). Fresh cottonwood was used for the main posts while treated branches were employed in the crossbars and other supports. Cottonwood was valued because its structural integrity prevented the posts from warping as was common with other woods (Potter 2003:25). Small conicle lodges were made by young **Assiniboine** girls from large cottonwood leaves. Other toys were fashioned from cottonwood leaves to go along with the little green lodges (Long 1942:69).

Cottonwood was also used to build other tools and game traps. In **Arikara** fish traps, a cottonwood sapling was placed in the center of the trap as a signifier of the earth lodge fireplace and, because the leaves were left on the sapling, it also served as an alarm signaling the presence of fish in the trap (Gilmore 1924:121; Wilson 1924:218). The Hidatsa also fashioned pottery paddles were made from cottonwood (Bowers 1992:374; Gilman and Schneider 1987:119).

Parts of the cottonwood tree were eaten by humans and fed to animals. The Crow and Hidatsa peeled back the bark to find and consume the sweet inner bark and a jelly-like layer below the outer bark (Wilson 1916:250). The branches and bark were stored as fodder for horses. In winter, Crow women actually harvested cottonwood bark and branches to feed horses after being thawed by the fire (Wilson 1924:175). The Lakota also used cottonwood bark to provision horses in the winter (Munson 1981).

CURLYCUP GUMWEED

Curlycup gumweed (Grindelia squarrosa), U. Schittko, photographer

GENERAL DESCRIPTION: This drought-resistant plant is commonly found in dry prairies, road shoulders, disturbed sediments and salt flats. The flowers that grow close to the ground were collected in late summer (Walsh 1993a; Wetter 1986). The bitter resin excreted by the plant is a deterrent to grazing animals. Native people used the gumweed's flower as a medicinal plant.

SCIENTIFIC NAME: *Grindellia squarrosa*

LOCATION WITHIN THE PARK: Crow consultants explain that the curlycup gumweed flower was used as a diarrhea cure. The plant was procured by women in a different manner than men. It was passed on to other people based on gender roles too (Zedeño et al. 2006:244,246).

TRADITIONAL USE: Among the **Mandan**, gumweed was only collected by men with the rights to do so. Gumweed was once a sacred horse medicine that was used to make horses pass water. Its medicinal properties typically required boiling the flowers. It has been used as a treatment for diarrhea and gonorrhea (Wilson 1916:241). The Crow brewed a tea to treat whooping cough, pneumonia, bronchitis, asthma, colds, and postpartum pain. Other respiratory inflammatory diseases were treated with a gumweed poultice (Kindscher 1992:120). Wilson (1916:240–241) recalls a story told by Wolf Chief who purchased gumweed from an Arikara man and describes how he used it:

> "To use this medicine; if one was bleeding from a cut or wound, I chewed up some of the seed balls and put the chewed cud on the wound and the blood stopped flowing. Also, I would take two of the seed balls, after they had gotten ripe, and pounded them up and put them in the bag in which I carried my shells for my gun. Now if I was out hunting and shot a deer or buffalo, if I hit it in the heart or liver, the animal died at once. But if I shot it thru some non-vital part it would run away and die perhaps the next night: but if I had these powdered seed balls of this plant in my shell sack, and then shot an animal in a non-vital place, the blood was checked from flowing so that the wound swelled up at once and the animal died. In laying the cup on a wound, it did not matter whether the seed pod chewed up, was green, ripe, or in blossom. All were

equally good. But only ripe seed balls were used to put in with gun shells."

The resin of the flower continues to be used as a sedative, expectorant, to treat burns, ivy poisoning, and whooping cough (Kantrud 1995).

DANDELION

Common dandelion (Taraxacum officinale), © J. Reveal'

GENERAL DESCRIPTION: Both invasive and native dandelion grow in the northern Great Plains. Dandelions grow in a variety of soils with a range of different soil moisture levels, including in lawns of residential areas. Parts of this edible plant are an important food for a number of animals. Dandelions bloom during the summer from April through June (Esser 1993).

SCIENTIFIC NAME: *Taraxacum officinale*

LOCATION WITHIN THE PARK: Grasslands and roadsides throughout the park.

TRADITIONAL USE: Dandelion greens and flowers are eaten in soups. The flowers can be fermented to make dandelion wine. One Native American informant remarked that, "…her grandmother used to make dandelion beer and wine, but she never drank it (Zedeño et al. 2010:177). A **Sioux** consultant described a vision where he saw that Echinacea mixed with dandelion would make a diabetes medicine (Zedeño et al. 2006:250). The **Blackfoot** use dandelion to heal liver ailments.

GOOSEBERRY

Golden currant (Ribes aureum), © J. Reveal

GENERAL DESCRIPTION: A number of different species of gooseberry plants are native to the northern Great Plains, including berries frequently called currents. They are commonly found in riparian zones along creeks and the Missouri River. The berries ripen in the summer, around the same time as Juneberries, and must be picked before they drop (Wilson 1916:258).

SCIENTIFIC NAME: *Ribes* sp.

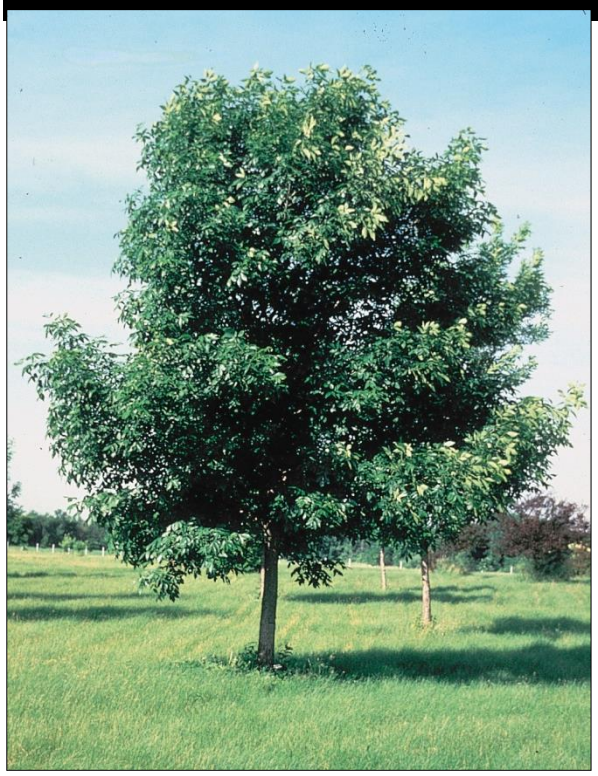
LOCATION WITHIN THE PARK: A Blackfoot consultant identified gooseberries in THRO along with other edible plants and herbs after visiting the Oxbow Lookout in the north unit (Zedeño et al. 2006:263).

TRADITIONAL USE: Gooseberries were eaten by most Native American tribes who could differentiate between Ribes sp. known as currents and gooseberries proper. Currants look nearly black when ripe, which contrasts with gooseberries that have red fruit, thorny stalks, and look like they have frost on them (Wilson 1916:258–260). Native consultants further describe the collection and traditional uses:

> "Young men gathered these currents [sic] when ripe and dried them. The dried berries they pounded with a stone, then put them in a cup with a little water, in which they stirred the pounded berries. The liquor so obtained they poured on some powdered white clay. This was squeezed in the hands and made into a ball which was put away. It was a very good face paint. When wanted for use, the ball was slightly wetted and rubbed on the face. It made a pink color, while grapes made more of a purple color. Both colors were admired." *(Wilson 1916: 258–259)*

Native people considered gooseberries a delicacy because they were difficult to harvest given the sharp thorns on the plant. Gooseberries were a foodstuff gathered by women among the **Arikara** (Parks 2001:369–371). The Sioux also collected gooseberries, consuming them while they were freshly picked.

GREEN ASH



Green ash (Fraxinus pennsylvanica), D. E. Herman, photographer

GENERAL DESCRIPTION: Green ash is native to the northern Plains and is commonly found along with boxelder in woodlands, along stream banks, in low-lying and swampy areas, and in river bottoms. The species common to the region is drought tolerant. In the badlands, ash is found near springs and is an indicator of a water source. Ash flowers in spring and fruits in late summer, August and September (Gucker 2005).

SCIENTIFIC NAME: *Fraxinus pennsylvanica*

TRADITIONAL USE: Ash was a utilitarian wood that was employed in a variety of ceremonies and tools. Buffalo Bird Woman told Wilson (1916:263) that there were two different types of ash: one had blossoms and the other did not. Green ash is as a hard, dense wood good for a variety of uses. The **Mandan** built fortifications and earthlodges with it (Potter 2003:22). The **Hidatsa** used ash or buffalo horn wedges to split cottonwood. Bwos and spears were also made from ash wood. Wolf Chief stated, "The ash wood bow, especially the sinew-backed ones…were our dependence in war and hunting" (Gilman and Schneider 1987:69).

In addition to weapons, ash was used to craft other utilitarian items. Warriors carried a seasoned ash pin to picket his pony in the evening (Wilson 1924:181). It was the preferred material for horse and dog travois tack among the Hidatsa who used to also scrape ash saplings smooth to use as the handle for a gardening rake. The Hidatsa also crafted mortars, pestles, and digging sticks from ash (Gilman and Schneider 1987:16,37). Ash also had medicinal properties; for example, it was used by **Chippewa-Cree** as tonic (Dusenberry 1962:118).

A number of rituals and ceremonies employed ash wood sticks. The Mandan marked the corners of the eagle trapping pit with ash sticks by the expedition leader, for example (Bowers 2004:236). In the Small Hawk Ceremony, the principal bundle contained a small ask digging stick that was carried by women with these particular rights at the end of the Okipa ceremony (Bowers 2004:270–271). The Mandan Shall Robe bundle also contained an ash digging stick (Bowers 2004:308). Hidatsa pipe stems were carved for sacred bundles and the lances of seasoned ash were wrapped in red cloth and were carried by the Raven Society (Gilmore 1926a:573; Mails 1973:173).

JUNEBERRY/SASKATOON/SERVICEBERRY

Juneberry (Amelanchier alnifolia), M. Harte, photographer

GENERAL DESCRIPTION: The juneberry is also known as the Saskatoon serviceberry. It is commonly found in well-drained soils along streams, hillsides, and woodlands (LBJWC 2015). White juneberry flowers bloom during late spring and early summer. Berries ripen at different times based on elevation with high altitude plants ready in June or July while plants at lower elevations ripen in late July (National Park Service n.d.). Juneberries were a valuable food source for all Plains groups. The berries are featured in folklore and ceremonies.

SCIENTIFIC NAME: *Amelanchier alnifolia*

LOCATION WITHIN THE PARK: An **Assiniboine** consultant identified the juneberry (serviceberry) along the Petrified Forest Trail in THRO. The consultant explained the Assiniboine name for the plant is "*washna*", which means "spirit food." (Zedeño et al. 2006:256).

FOLKLORE: The juneberry has been featured in a number of oral history stories. In the **Hidatsa** oral tradition, Eagle Man chose to be birthed by a Hidatsa (**Awatixa**) woman. He decided to return to the eagle world after living in the Knife River villages and left the Water Buster bundle to help the people. The eagle friend that came to take Eagle Man, but a battle ensued. When Eagle Man was struggling to decapitate his friend, he learned that the friend's spinal cord was made of juneberry wood (Bowers 1992:470).

TRADITIONAL USE: Juneberries have a long history of use among the tribes of THRO. **Arikara** women gathered and harvested serviceberries and used serviceberry wood in fish traps (Gilmore 1924b, 1925d). Serviceberry was also a popular utilitarian wood among the Hidatsa (Thwaites, ed. 1906:356). The Assiniboine fashioned bows from serviceberry wood (Long 1942:148–149). Ethnographic literature also indicates serviceberry wood was popular for a number of uses among the Hidatsa (Thwaites, ed. 1906:354).

Serviceberries were an important foodstuff for northern Plains people. Gilman and Schneider (1987:65) describe how berry picking was a woman's job but the juneberry harvest was a time for courtship. Buffalo Bird Woman remarks (Gilman and Schneider 1987:65):

> *"We gathered Juneberries, either picking them off the tree by hand, or we broke off a laden branch and beat it with a stick, thus knocking the berries off upon a skin… It was a common thing for a young man to help his sweetheart pick Juneberries. A*

> *young man might send word to his sweetheart by some female relative of his own saying, 'That young man says that when you want to go for Juneberries, he wants to go along with you!' Or else he watched when she came out of the lodge to start berrying; for it was not our custom for a young man to talk openly with a young woman."*

Lowie (1922:210) notes the fact that the **Crow** consumed serviceberries along with a range of other wild fruits. Hidatsa women carried the berries back to their villages on hides and in calfskin bags where they would subsequently be dried in the sun. The dry berries were ground into a powder so they could be stored for the winter (Estes 1990:8; Gilman and Schneider 1987:65). Dried juneberries could be used in a variety of ways. Fresh berries were traded while the berry flour could be mixed with other vegetables or made into puddings for ceremonial meals (Estes 1990:8; Wilson 1916:216–217).

Serviceberry wood also had ceremonial uses. Serviceberry branches were frequently used to pierce the skin of men during ceremonial rituals (Beckwith 1938:136). A serviceberry branch was also used to cover the opening to the eagle trapping lodge during the eagle trapping ceremony. Associated with the black-tipped eagle, serviceberry shrubs are associated with the moon (Bowers 2004:234). Serviceberry canes are also associated with the Hidatsa Grandmother's Society (Beckwith 1938:228).

MOUNTAIN BIRCH

Paper birch (Betula papyrifera), R. Toupal, photographer

GENERAL DESCRIPTION: Adapted to cool, damp environments, birch trees are commonly found in depressions, moist woods, stream banks, and lakeshores. The trees are commonly identified in groves of cottonwood, box elder, and alder. Flowers in May and June are an important foodsource for songbirds. These trees are frequenly incorporated in beaver dams (Uchytil 1989; Kaul 1986a:143).

SCIENTIFIC NAME: *Betula fontinalis*

FOLKLORE: Birch figures prominently in **Blackfoot** creation stories regarding Old Man Napi.

TRADITIONAL USE: Today, birch is an important utilitarian resource for Native Americans but it may not have been used as extensively by certain Plains people. Birch was employed in boatbuilding whenever willow was not available (Wilson 1916:320). The **Crow** consultants who visited Wind Canyon noted that they used mountain birch wood to make arrowshafts and sweat lodge poles (Zedeño et al. 2006:244).

Birch wood is highly steemed for its flexibility and strength; a **Blackfoot** consultant indicated that birch is used to make the buttoning sticks of tipis and other important things such as arrow shafts.

OAK

Oak (Quercus sp.), J. O'Brien, photographer

GENERAL DESCRIPTION: Durable oak wood was a utilitarian resource that was used to construct a variety of different tools and weapons. Acorns were also used as a foodstuff. On the Great Plains, oak trees thrive in a variety of ecological zones including moist woodlands, bottom forests, and sand hills.

SCIENTIFIC NAME: *Quercus macrocarpa*

LOCATION WITHIN THE PARK: The bur oak is the only species noted in THRO, but other species may have historically been present. Oak trees were identified by consultants in both the north and south units. A **Sioux** elder explained that oak was traditionally used to make wooden pipes while the acorns were eaten by people with emphysema. Oak wood was also valued because it burned without leaving ashes, even when green (Zedeño et al. 2006:250).

FOLKLORE: Bowers (2004:359) conveys the story that describes how Lone Man used oak wood to fashion the legs of a drum. While living among the **Mandan**, Lone Man traveled to a location along the ocean where large oaks were growing on the water. He parted the water using a staff and saw that the trees were supported by a giant turtle. Initially, Lone Man asked the turtle to be his drum but the turtle refused so Lone Man built a drum in the turtle's likeness out of the giant oak trees. A **Hidatsa** consultant mentioned that oaks may be inhabited by witches.

According to Long (1942:148–149), the **Assiniboine** built bows from a variety of woods including burr oak and scrub oak. Wood employed in bow making was selected through a long and involved process that included curing the wood (Dusenberry 1960). The Sioux ate acorns from the read and burr oak (Gilmore 1919:75).

PRAIRIE SAGE/SILVER SAGE

A field of sage, K. G. Beck and J. Sebastian, photographers

GENERAL DESCRIPTION: A number of different sage varieties were used by northern Plains Native Americans; however, prairie and silver sage (*Artemisia ludoviciana*) have been identified in THRO. The plant is native to the northern plains and is found in open areas and grasslands. Sage can also be found at higher elevations.

SCIENTIFIC NAME: *Artemisia cana, Artemisia ludoviciana*

LOCATION WITHIN THE PARK: Silver and prairie sage were identified in the north unit by Crow consultants. *Prairie sage* was used as a medicine while *Silver sage* was used for a number of spiritual and medicinal purposes. Silver sage was used to ward off spirits and avoid harm. It was also ceremonially burned at certain times. A purification tea was used to clear THROat and respiratory system. Fasting men kept it in their mouth and swallowed the saliva (Zedeño et al. 2006:244).

TRADITIONAL USE: Sage was identified based on appearance, aroma, and variations in the growing habitat. Consultants noted that, "…small sages are used for smudges, sage can be harvested even when it is dry" (Zedeño et al. 2010:136). Eagle sage, also known as white sage, has long skinny leaves and is synonymous with *Artemisia ludoviciana*. This is likely to the "sage-of-the-kind-that-is-straight" noted in Weitzner (1979:268–69). Mandan consultants identified silver sage as *Artemisa cana*.

Sage was an important medicinal and ceremonial plant used by a number of northern Plains Native American groups. Sage appears in bison hunting archaeological contexts as early as A.D. 1050 (Zedeño et al. 2014). Sage also played an important role in oral traditions. In Mandan oral tradition, sunrise takes on the forma of a great pipe carrying man whose nostrils grew with sage (Beckwith 1938:69). In the Mandan story of the Sun and the Gambler the Sun's son—a fine warrior— wore ornaments that were covered with sage. When the son died, Sun used black sage for hair and tried to bring him to life. This did not succeed (Beckwith 1938:184–185). Sage played a role in the Hidatsa Grandmother's society (Beckwith 1938:231).

Sage was also considered important in balancing male-female relationships among the Hidatsa and counteracted the power of menstruating women who come in contact with sagred men's objects or ceremonial lodges (Beckwith 1938:128; Wilson 1928:168). In the Arikara medicine fraternity ceremonies (Howard 1974:259 in Zedeño et al. 2010:138–139):

> "After dark began the colorful Sage dance rite. All members of the Medicine fraternity participated. They were naked except for the breechcloth and their bodies were painted with white clay. Each held in his hand a bunch of sage. They seated themselves in a large circle near the altar, around an outstretched, unworked rawhide, and began to beat upon it with long rods. To the rhythm of this simple drum they sang songs of supplication for power to drive away illness. Now willow brush was thrown on the fire, and the dancers formed a circle close about it, holding the sage before their faces to avoid inhaling the flames. They continued to sing and dance around the fire, repeating the performance several more times.
>
> Curtis was told that that formerly this portion of the rites of the Medicine lodge was observed once each on three successive nights. "Fire is sacred," a priest told him, "so our medicine men dance around it to drive away disease. It purifies our bodies and gives us strength, and our shouting frightens illness."

In general, sage is frequently mentioned in ethnographic literature as an incense, smudge, medicinal herb, or tea. It was also used in meat processing, hide preparation, and as a culinary ingredient. Sage was also used as bedding during vision quests (Beckwith 1938:222; Hiller 1948:8; Weitzner 1979:268; Bowers 1992, 2004).

INDIAN BREADROOT

Indian breadroot (Pediomelum esculentum), M. N. Zedeño, photographer

GENERAL DESCRIPTION: Also known as prairie turnip, Indian breadroot grows best in sandy soils in plains and prairies and are frequently found on hillsides above the Missouri River (Wilson 1916:184). The plant blooms from May through July.

SCIENTIFIC NAME: *Psoralea esculenta*

TRADITIONAL USE: Prairie turnip was an important foodstuff for northern Plains people. The plant has many synonyms and is frequently confused with wild turnip (Gilmore 1926a:573). Prairie turnip played a central reole in the Hidatsa origin story, which is summarized in a story told to Beckwith (1938:119) by Bear's Arm:

> *"In course of time the Moon's wife gave birth to a boy. Moon said, "You may do anything you like up here except one thing. I forbid you to dig the male turnips, you may dig only the female." ... [when the boy discovered the truth about his earthly origin] The boy said "I wish you would dig just one and see what would happen." The mother answered, "O son! I am forbidden by your father." The boy insisted and said, "I take the responsibility. Tell my father if he says anything, that I commanded you.*
>
> *When she dug the turnip, it seemed as if the thickness of the sky was cut right through and she could see the Missouri River down below and the buffalo and other creatures roaming around, and it was beautiful…"*

The characters in the story used a hole in the sky to dig turnips and, upon learning of his wife's disobedience, Moon sent a huge rock to strike the wife (Zedeño et al 2010:195–196).

The Hidatsa harvested wild breadroot during the early summer bison hunt. The root was collected by both women and men within a few miles of their villages. Villagers would camp at the digging grounds for the night (Reid 1977:322; Wilson 1916:184). A narrow iron hoe made purposefully for the breadroot harvest were used to collect the roots; however, a digging stick was used in rocky soil (Wilson 1916:184).

The plants were carried back to the villages on horseback and families got together to redistribute a small portion of the harvest before the roots were processed (Wilson 1916:185). Women did the processing work. The peeled roots could be eaten fresh or stored. Roots with the yellowest rind were supposed to be the sweetest and were the most prized (Wilson 1916:184). In order to be stored,

the roots were cut into slices and dried for three to four days. These dried slices were placed in sacks and stored in food caches. Dried breadroot slices could be added to stews for flavoring; breadroot flour could be added to thicken pudding. Whole turnips could be boiled whole and left in water for two to three days before eaten (Gilman and Schneider 1987:63; Wilson 1916:186).

Breadroot was also traded. Dried breadroot was the commodity most obtained by the Sioux because the sedentary plains groups (e.g. Mandan, Hidatsa, and Arikara) felt it was too dangerous to leave the villages and obtain it. The Sioux carred dried breadroot slices on strings. Four strings of breadroot and a measure of split breadroot was worth one basket of corn (Gilmore 1926c:14–15).

Ceremonially, breadroot is associated with the grizzly bear because these animals were commonly seen digging and eating the roots (Wilson 1916:187). Howard (1974:253) describes how a bear shaman used an act to imply the spontaneous growth of a prairie turnip during a dance. After passing slowly over the entire lodge floor, the dancers suddenly stopped and pointed to a sprouting breadroot plant. Then, a musician pulled it up for the entire audience to see—demonstrating the strength of the shaman's magic.

PUFFBALL MUSHROOM

Puffball mushroom (Lycoperdon pyriforme), J. O'Brien, photographer

GENERAL DESCRIPTION: Puffballs are found growing on decaying wood in forested areas. The mushroom looks like a small brown ball and was traditionally collected by men when they were ripe (Wilson 1916:313).

SCIENTIFIC NAME: *Lycoperdun gemmatum*

LOCATION WITHIN THE PARK: Assiniboine consultants identified puffball mushrooms along the Petrified Forest Trail and noted that they were known as ghost chasers (Zedeño et al. 2006:256).

TRADITIONAL USE: Puffball mushrooms were valued for their medicinal properties. The **Blackfoot** and **Chippewa-Cree** included puffballs in their natural plant pharmacopoeia. Puffball mushrooms that grew beneath the buffaloberry bush were used to reverse love medicines (Zedeño et al 2006:206–207). Puffballs were considered a medicine for pregnant women and newborn infants. Mastitis in new, breastfeeding mothers was treated with a mixture of puffball mushroom spore mass and red baneberry (Gilmore 1930:76). A ripe puffball was also used to help the umbilical cord fall off newborn babies (Gilmore 1930:74).

Puffballs also had utilitarian uses as well. Men used slices of puffballs to make fire with a flint and steel. The mushroom slices were covered with gunpowder and ignited by the flint (Wilson 1916:312).

FOLKLORE: Puffball mushrooms represent stars among the **Blackfoot** and they are depicted at the bottom oftheir painted tipis.

PURPLE CONEFLOWER/ ECHINACEA

Echinacea sp., J. Viola, photographer

GENERAL DESCRIPTION: Echinacea is native to the northern Plains and is commonly found in open rocky plains. It can also be found in low-lying drainages (Groen 2005b; Kindscher 1992:86). Flowers bloom in summer from June and July.

SCIENTIFIC NAME: *Echinacea angustifolia*

TRADITIONAL USE: Echinacea has been used extensively by Native Americans on the northern Plains. Traditionally the plant was harvested with care because overharvesting quickly depleted this resource. Today, the plant is scarce because tribal members are paid to harvest it for commercial manufacturers with little regard to the delicate nature of the plant (Zedeño et al. 2010:156). An **Arikara** consultant told us that:

> "Echinacea or purple cone flower has medicinal value although knowledge is dying. It is women's medicine for menstrual cramps and hard labor. One woman was buried with it. My grandmother, Weasel Woman, had plant medicine."

Echinacea was chewed to relieve toothaches and other oral maladies by the **Sioux** and other tribes (Munson 1981:229–240). On using Echinacea to soothe tooth pain, consultants from the Fort Berthold Reservation noted:

> *"It's good for the teeth and will numb them. The downside to its use is that teeth treated with it will eventually fall out. There is one kind of echinacea for ulcers and throats, which singers use. Its leaves are thin and the bottom of the plant is red. The coneflower's root is like Novocain. Echinacea is more potent when dry; just a little bit will make your mouth numb. It is a treatment for THROat and laziness. Echinacea root, when pulverized and sniffed, makes a person sneeze"* (Zedeño et al. 2010:156-157).

Echinacea was chewed for colds and used as a colic treatment by the Crow. The root was used as a stimulant by Hidatsa warriors while traveling through the night (Kindscher 1992:88).

PRAIRIE ROSE

Prairie rose (Rosa arkansana), D. Anderson, photographer

GENERAL DESCRIPTION: A number of different rose species can be found in the western United States. The prairie rose is native to eastern and central North Dakota. This species grows well along the margins of ecotones and landforms, specifically along roadways, ditches, and the edges of woods. It can also be found in cool, sandy soils in prairies, meadows, and bluffs (Kantrud 1995; McGregor 1986h:398). The hips, petals, and roots were collected by Native people in the late summer or after the first snow. Periodic burning was used to encourage rose plants to grow.

SCIENTIFIC NAME: *Rosa arkansana Porter*

LOCATION WITHIN THE PARK: In grassland areas.

TRADITIONAL USE: During the protohistoric and historical period, the prairie rose had a number of different utilitarian, medicinal, and ceremonial uses. The beauty of this plant was frequently noted. Ethnographic interviews contain a story of how the prairie rose offered to brighten up the dull, gray robe of Mother Earth. Gilmore (1966:202) notes, "Wind threatened to blow the prairie rose off the earth, but refrained when he saw her beauty. "Sometimes the Wind forgets his gentle songs and becomes loud and boisterous, but he does not harm a person whose robe is ornamented with the color of the prairie rose."

The **Crow** dried rose pods for the winter and mixed the inner scrapings of a dry hide with the pods. The hide scrapings were mixed and pounded with rose pods and the resulting mixture was dried. Later, during winter, the mixture was boiled and used as a food source (Wilson 1916:235). The **Assiniboine** also mixed wild rosehips with tallow to provide food after the main berry season ended (Long 1942:122, 126). **Hidatsa** informants state they did not store rose pods for winter (Wilson 1916:235).

As a food source, rose petals, hips, stems, and leaves were eaten. The plant was particularly valuable because of the high levels of vitamins A and C. Rose hips were mixed with other ingredients to sweeten other dishes. They were also used in preserved, sauces, teas, wines, and candies. Sometimes the berries were eaten (Kantrud 1995). A tea was brewed by the Crow from rose stems or root bark (Hart 1992:62). The Hidatsa also made tea from strips of the inner bark that were bound into a bundle. The bundle was seeped in boiling water and removed before drinking.

The essential oil from the prairie rose also had curative properties. Rose bush roots were crushed and boiled into a hot compress by the **Crow** as a remedy for swelling. The vapor from this brew was also inhaled to stop nosebleeds. The brew was drank to treat sore throats and tonsillitis. Leaves were useful treatments for poison ivy and other rashes (Kindscher 1992:191).

The sweet fragrance from roses were used as perfume or a breath freshener. Men presented the flowers to women they were courting. Rose wood was also used to build rabbit snares in the woods (Wilson 1916:236–237).

Rose bushes were leaned against lodges because, during the winter, dogs often climbed on top of the lodges and dug holes in the roof in an attempt to escape the cold. The thorny rose bushes prevented dogs from climbing on the roof. Bullberry bushes were also used, but rose bushes were preferred. Both plants were intermixed around the lodges except for around the entrance (Wilson 1916:237).

Wilson (1916:236) describes how rose bushes were used in ceremonies. When kinickkinick was scarce, dry rose leaves were mixed with tobacco and smoked:

> "*A man held a bush over the fire, and then holding the bush over a skin or something, crumpled the ends with his hand and the dried leaves crumbled and fell off. This was often done by members of a war party who were out of tobacco. I don't think it was a very good substitute however*" (Wilson 1916:236).

Pipestems were sometimes made from rose bush stems because they were hollow. Larger stalks were shaped, cleaned out, and trimmed of horns before being put back together with sinew (Wilson 1916:236).

The placement of an afterbirth bundle in the branches of a rosebush was recorded by Gilmore (1930:75). This activity was undertaken in order to prevent disease from striking the newborn child.

RABBITBRUSH

Rabbitbrush (Ericameria nauseosa), © J. Reveal

GENERAL DESCRIPTION: Native to the northern Plains, rabbitbrush is common to dry habitats, grasslands, or open woodlands and is found alongside sagebrush (LBJWC 2015). The yellow flowers blossom from June through September and are picked late in the season, specifically in August and September (Barkley 1986i:906).

SCIENTIFIC NAME: *Ericameria nauseosa*

LOCATION WITHIN THE PARK: Rabbitbrush was noted by consultants in Wind Canyon in the South Unit. It is found throughout the park.

TRADITIONAL USE: Crow consultants that visited Wind Canyon in THRO noted the presence of rabbitbrush along with sage, yarrow, and yucca, stating that have been traditionally used as medicines (Zedeño et al. 2006:245).

SAGE

A field of sage, K. G. Beck and J. Sebastian, photographers

GENERAL DESCRIPTION: One of the most important ceremonial plants on the northern Plains, sage was used by all Native peoples for a variety of activities. Nearly a dozen types of sage have been known by Plains tribes; however, only four of these can be linked to currently known species—all four of which are native to THRO region.

Sage was a very special resource that was used in a variety of ceremonies by all tribes and has been identified within the boundaries of THRO.

SCIENTIFIC NAME: *Artemisia* L.

Artemisia cana Pursh (dwarf sagebrush, silver sage)

Artemisia frigida Willd. (prairie sagewort, fringed sagewort, fringed sagebrush, pasture sage, women's sage)

Artemisia ludoviciana Nutt. (prairie sage, white sage, mourning sage, eagle sage)

Artemisia tridentata Nutt. (big sagebrush, buffalo sage, contrary sage)

LOCATION WITHIN THE PARK: Ubiquitous throughout north and south units.

FOLKLORE: Sage plays a role in the creation stories of several Native groups and some of the clans within these groups. According to the **Crow** origin story, sage was gifted to Bear at the time when human beings were created:

> *"There was a time when it rained 100 nights. The Creator found two ducks who were equal; he sent them to find mud. The first duck went and found no mud. The second duck went and found no mud. He sent the first duck again; it took a long time, but when the duck came back he had mucus and dirt under the bill. The Creator mixed them and put it in water to make mud. The ducks wanted to leave, but there was no water back home. Coyote came into the picture and danced around the ducks. Coyote wanted company and so the Creator made animals and humans, all male, from mud.*
>
> *There appeared Redwood Woman, who was a root digger. She scratched the ground and created the river system. She gave roots and berries to the people. Afterwards they had water, earth, air, and food. Animals came next: bear, elk, wholly worm, and prairie chicken. Prairie chicken was dull in appearance, so the Creator took red paint and lined the edge of its eyes and gave it the gift of dancing when the sun rises and sets.*

> *Bear got mad and got some sage. Beaver sang and danced and bear got mad again and howled at the Creator. He said to the Creator, 'I wanted the gift of dancing', but the Creator told him, 'do not come around again', and so bear lives in the brush"* (Zedeño et al. 2006:200–201).

Sage is considered by many northern Plains Native people to be a vital component of creation, magical life, health, and rebirth of spiritual beings and culture heroes. In **Mandan** oral tradition, at sunrise the Sun takes on the form of a stout man with sage growing from his nostrils who carried a great pipe (Beckwith 1938:69). In the story of Sun and the Gambler, sage was inserted in the back of the fine warrior's ornaments worn by Sun's son. When the son died, Sun returned for his son's body and attempted to bring him back to life with black sage. He did not succeed (Beckwith 1938:184–185). Likewise, in the origin story for the **Hidatsa** Grandmother's Society, and old woman "plucked sage, placing it upon the skull [of her dead sister], and turned it into hair" (Beckwith 1938:231).

TRADITIONAL USE: A wide range of ceremonial uses have been documented in ethnographic records and oral history. Crow consultants visiting THRO in 2006 stated:

> *"Silver sage* [*Artemisia cana* Pursh] *has many spiritual and practical uses; it wards off evil spirits and averts harm, so it is burned at certain times and with certain rituals. Those who have the right to use silver sage for medicinal purposes make a tea for purification and for clearing throat and respiratory system. Men who are fasting keep it in the mouth and swallow the saliva. Prairie sage is also used as medicine"* (Zedeño et al. 2006:244).

The **Hidatsa** distinguished several types of sage. "No-top sage" was used as incense in the sweatlodge and the fish trap to avert evil. Eagle trappers used it in connection to menstruating women who happened upon their trapping lodges and would make balls of this sage, paint them red, and set them in live coals in four different places inside the lodge. The woman would walk from ball to ball, inhaling the black sage smoke to re-empower the eagle trappers' sacred objects (Wilson 1928:168). "Top sage" was commonly used by the Goose Society. "Lake sage, or top sage, actually grows in old water beds and damp places. Lake sage was frequently mixed with white clay to produce body paint for warriors in a war party. This sacred procedure gave warriors the power and the ability to run fast (Weitzner 1979:268). "Straight sage" was used by the sun singer during a sacrifice to the Sun to make crowns and head plumes. Finally, the charcoal of black sage was used for healing rheumatism. Sages are still collected in the vicinity of Big Hidatsa village. Finally, the Hidatsa Buffalo Neckbone ceremony included elements such as white sage, magpie feathers, rose hips, poles made of ash, and red paint (Bowers 1992:465).

Other tribes used sage in a similar fashion. The **Crow** burned sage for prayer and as an aromatic (Lowie 1956:267). Sweet grass, tobacco, and sage are important smudging incenses for **Sioux** people. Sweetgrass was used for attracting blessings as it is associated with ceremony, ritual and things sacred. Sage was also used to exorcise evil and negative influences (Gilmore 1919:66). The

Sioux also used silver sage (*Artemisia cana* Pursh) to fill tobacco pipes and as a tamper because of the pleasant aroma it generates (Zedeño et al. 2006:250).

Sage was also an important component of ceremonial bundles. Although Mandan ethnographies rarely mention ceremonial plants, sage is among the few that consistently appear in the literature (e.g. Bowers 2004). According to Bowers (2004:184), the Mandan Sacred Robe bundle contained a bundle of white sage along with a number of other items. The Hidatsa incorporated sage bundles and golden eagle feathers in the rituals associated with fish traps (Weitzner 1979:210).

Among the **Arikara**, sage bundles were attached to the four posts and to one side of the door of fish traps. The plant that was used in the eagle trapping process. Gilmore (1926f) states that when the seeker captured the eagle by its feet, the seeker had to thrust a bundle of sage towards the eagle's beak in order to prevent the seeker from being attached by its beak. The Arikara also used wild sage (*Artemisia ludoviciana* Nutt.) for other sacred and ritual uses, including annual medicine fraternal ceremonies (Gilmore 1924b, 1929f; Howard 1974:259).

Coyote burns sage and incenses four bows in the Hidatsa marriage ceremony (Beckwith 1938:128). It also counteracts the power of menstruating women who come into contact with men's sacred objects and ceremonial lodges, particularly during eagle trapping (Wilson 1928:168). Offerings of sage and feathers of the speckled eagle were made by the Mandan to buffalo skull shrines or skulls opportunistically found near the herd (Bowers 2004:90). White sage (*Artemisia ludoviciana* Nutt.) is included in the Hidatsa Woman Who Never Dies Bundle, the Robe Bundle, the Thunder Bundle, the Creek Bundle, the Buffalo Calling and Red Stick bundles (Bowers 1992:358). Sage was also included in Hidatsa landscape bundles such as the buffalo spirit buttes bundle (Bowers 1992).

Unspecified kinds of sage, in general, are often mentioned in the ethnographic literature as having utilitarian and medicinal uses including as an incense, a smudge, a poultice, a tea or concoction, an ingredient in meat processing and hide tanning, a cooking spice, and bedding material during vision quests and other camping occasions (Beckwith 1938:222; Hiller 1948:8; Weitzner 1979:268; Bowers 1992, 2004). Uses in animal husbandry included as a remedy following the castration of colts (Wilson 1924:148). Sage smoke was used to prevent worms and increase the appetite of young dogs (Wilson 1924:200). Consultants from the Three Affiliated Tribes noted that big sage was used to treat diabetes (Zedeño et al. 2006:207).

Various species of sage are also used by the **Blackfoot** for healing and ceremonies.

Skunkbush/Fragrant Sumac

Sumac berries

General Description: Little ethnographic information has been recorded about the traditional use of this plant. It thrives on the dry slopes of plains and foothills zones.

Scientific Name: *Rhus aromatica Ait.*

Traditional Use: **Hidatsa** elders did not recognize sumac as a useful plant because the roots of the plant are believed to be poisonous. Upper Missouri river tribes used the smooth-leaved sumac to thicken the blood (Zedeño et al. 2006:257). Along with snakebrush, skunbrush or fragrant sumac was used as an insect repellant by the Crow (Zedeño et al. 2006:244–245).

SUNFLOWER

Sunflower (Helianthus anuus), W. F. Murray, photographer

GENERAL DESCRIPTION: A native plant that was cultivated by the Mandan, Hidatsa, and Arikara, sunflowers were a useful food source for northern Plains tribes. They grow well in disturbed areas with heavy sands and moist soils and flourish on hills, valleys, and open areas (LBJWC 2015; Knoke 2006a). Sunflowers bloom in late summer, July through September, and have blossoms that follow the movement of the sun throughout the day (Barkley 1986g:954).

SCIENTIFIC NAME: *Helianthus annuus L.*

LOCATION WITHIN THE PARK: **Assiniboine** consultants identified sunflowers along the Petrified Forest trail in the South Unit (Zedeño et al. 2006:256).

FOLKLORE: Sunflower cakes were consumed in Mandan ceremonial feasts, a custom with origins in tribal stories such as that of Corn Silk and Split Wing-Feather (Beckwith 1938:63). Sunflowers were incorporated into ceremonial objects. The Mandan Sacred Robe bundle, an important element of the Corn ceremonies, contained the head of a sunflower among other things (Bowers 2004:184).

TRADITIONAL USE: Archaeologists believe the sunflower is one of the first native North American plants to have been domesticated in prehistoric times (Adair 2003). Wild and cultivated sunflower varieties appear in archaeological contexts in the Missouri River Valley beginning in the late Woodland/early Plains Village transition and they have been recovered from ancestral sites such as Menoken, beginning around A.D. 1150 (Ahler 2003:3–5; Nickel 2008:135). The migrating **Arikara** brought about a fully developed farming system to the Northern Plains around 900 A.D. that included corn, beans, squash, sunflower, and marsh elder (Lehmer 1971). They continued to grow sunflowers along with other cultigens into the historical period (Berry 1978:55–56). Arikara warriors consumed sunflower cakes in the war path to combat fatigue (Blankenship 1905:12–13).

Sunflowers were also ubiquitous in **Mandan** gardens where they were planted along the perimeter of the garden to keep bugs away and prevent the crosspollination of different corn varieties (Potter 2003:27). According to Buffalo Bird Woman, the Hidatsa planted several varieties of sunflower, distinguishable only by their color (Wilson 1987:16). Seeds, seed oil, and flower heads were harvested and used in various ways. The seeds were an important food source. All tribes ate the seeds raw and ground dried seeds, the flower from which would be boiled and mixed with vegetables or with grease to make sunflower cakes (Wilson 1987:19–21). The Arikara and Mandan used sunflower oil in face and body paint (Blankenship 1905:12–13).

SWEETGRASS

Sweetgrass (Hierochloe odorata), © L-M. Landry

GENERAL DESCRIPTION: One of the most important ceremonial plants, sweetgrass commonly grows in wet lowlands, such as swales, meadows, marshes, and prairies. It can also be found along coulees and small draws (Kindscher 1992:254; Sutherland 1986e:1184). Sweetgrass could be harvested throughout the summer whenever it smelled good. The plant blossoms from May through July (Sutherland 1986e:1184). Sweetgrass is identified by the blue or red streak at the base of the plant.

SCIENTIFIC NAME: *Hierochloe odorata*

LOCATION WITHIN THE PARK: Ubiquitous along drainages and in moist lowlands in both units.

FOLKLORE: Sweetgrass is associated with First Creator in the **Hidatsa** Grizzly Bear ceremony and with the Wolf bundle, among other myths and rituals. For example, "if [Hidatsa men] wore a 'ring' of sweetgrass, it was for ceremonial purposes—specifically the Wolf Ceremony (Bowers 1992:394; Wilson 1916:192). It was also a significant component in the women's attire during the Woman Above ceremonies. According to **Awatixa** and **Mandan** oral tradition, "Woman Above came down from the sky, carrying her ashwood stick in her right hand and wearing her robe with a coil of sweetgrass…" (Bowers 1992:329).

The Hidatsa believe the mysterious powers of Woman Above are also associated with the Beardache, who rejected their sex and dressed like women after repeated visions sent by her or after finding coils of sweetgrass on their path. It is believed these coils were placed there by Woman Above or the Holy Women (Bowers 1992:33).

TRADITIONAL USE: In the past and present, sweetgrass plays an important role in ceremonial practices and as a medicine in Native cultures. It is commonly stored in braided lengths. Sweetgrass was primarily used in ceremonies as a smudge, as an offering, and in bundles; however, it was consumed during times of famine. Nineteenth century trader Tabeau observed the **Arikara** were sustaining themselves with starvation foraging of summer pear blossom, willow stem, sweetgrass, and other plant matter (Abel 1939:74). In Mandan, Hidatsa, and Arikara ceremonies, sweetgrass smoke was an important component and was valued specifically for its cleansing and purifying properties. This ceremonial significance is evident based on the inclusion of sweetgrass in numerous sacred objects, sacred spaces, and medicine bundles (Howard 1974:263).

The **Crow** used sweetgrass as an aromatic, smudge, and incense during prayer and blessing cermonies (Linderman 1972:32). Wildschut (1975) also noted the Crow used sweetgrass, sage, and

other herbs along with tobacco and willow in ritual bundles. A Crow consultant remarked that he used sage, juniper, and sweetgrass as his personal smudge mix (Zedeño et al. 2006:224).

Sweetgrass and sage are important smudging incenses for the **Sioux** people. Sweetgrass, in particular, was used for attracting blessings as it is associated with ceremony, ritual and things sacred (Gilmore 1919:66).

Assiniboine consultants noted that sweetgrass still played an important role in annual buffalo killing ceremony. Describing the annual buffalo killing at Fort Belknap, the consultants said:

> *"The gun that will be used to kill the buffalo is smudged, and an offering is wrapped in red cloth and placed on a sandstone ledge. The color red means the western direction, which is powerful as it is connected to the thunderbird. The buffalo life parallels human life, so we sing a buffalo song to the Creator. The offering will have tobacco, sweetgrass, and stick matches for the spirits. After the pipe is smoked the hunter and the warden will jump in and chase the herd. One young buffalo will stand alone and it will be shot"* (Zedeño et al. 2006:257).

Its sweet fragrance made sweetgrass a popular perfume (Wilson 1916:188). Older women wore sweetgrass tied to the collar on the left side of their dresses and young men kept it in their beds as they slept (Wilson 1916:188, 192). Buffalo Bird Woman said that braided sweetgrass was often placed on the undersides of young men's fans. They would tie about four small braids of sweetgrass to the fan so that it smelled good every time the fan was waved (Gilman and Schneider 1987:107; Wilson 1916:188).

Among the **Arikara,** Gilmore (1925b) describes a sacred household bundle to Mother Corn that was used for private prayer, veneration, and blessing. The bundle consisted of a perfect ear of red flour corn and a braid of sweetgrass contained in a bag made of buffalo hide. Sweetgrass is yet another sacred plant. This grass was collected and usually braided while fresh and pliable. This grass when burned releases a pleasing scent that is used for ritual purposes as incense (Gilmore 1926f).

WILD ONION

Wild onion (Allium textile), M. N. Zedeño, photographer

GENERAL DESCRIPTION: Wild onions are known by a variety of different names and can be harvested from open prairies and meadows. They were used as a foodstuff for most northern Plains tribes. The fragrant white flowers bloom from May through July (Churchill 1986b:1246; LBJWC 2015; Wilson 1916: 227). These plants taste similar to the larger, modern onions and have a low toxicity even when consumed in large quantities (LBJWC 2015).

SCIENTIFIC NAME: *Allium textile*

TRADITIONAL USE: While tribes differentiated between more than one variety of wild onion, they all used them in a similar manner. **Crow** elders distinguished between two types of wild onion; the edible variety is a staple in native diet. **Hidatsa** children were those who mostly ate wild onions. The children would make digging sticks harvest the plant from the prairies. Wild onions were one of the first plants to grow in the spring and when they blossomed in May, Hidatsa women would begin planting beans and squash in their gardens. Wild onions were also known to have been gathered by the **Arikara** (Zedeño et al. 2006:104).

Wild onions were also used as medicine. Buffalo Bird Woman noted that these plants "are a good medicine for one who has diseased bones" (Wilson 1916:227). The Hidatsa believed individuals who had problems with their bones gathered the roots and ate the onions too frequently. The roots were thought to diffuse into the blood, flesh, bones, and marrow because animals that had eaten wild onions tasted and smelled like them, which was not a taste preferred in meat: "Even the marrow of the animal tasted of the wild onions. Hence we thought wild onions a good medicine for diseased bones, because we were sure the onion flavor went clear thru the flesh and bones" (Wilson 1916:228).

WHORLED MILKWEED

Whorled milkweed (Asclepias verticillata), C. Evans, photographer

GENERAL DESCRIPTION: Several different varieties of milkweed are native to the northern Plains. Milkweed was primarily used for its medicinal properties. This flowering plant is commonly found along gravel roads and can be picked any time of the year. Their flowers turn pink in August. The milky sap and roots were the portions used by Native Americans in the upper Missouri trench.

SCIENTIFIC NAME: *Asclepias L.*

LOCATION WITHIN THE PARK: Along roadsides and gravel banks throughout the park.

TRADITIONAL USE: Milkweed was used by a number of different tribes, but it is rarely mentioned in ethnographic literature. Residents of the Fort Berthold Reservation use milkweed to cure sores and as a shampoo or soap (Zedeño et al. 2010:129). Munson (1981:229–240) noted that the modern Lakota used the narrow-leaved milkweed as an appetite stimulant. The pulverized toots and green stalks of milkweed was used by the Lakota to cure diarrhea and mildewed tea was used to stimulate breast milk production. They specifically used whorled and slender milkweed for these purposes.

WILD CARROT

Wild carrot (Daucus carota), © L-M. Landry

GENERAL DESCRIPTION: Wild carrot is commonly found in disturbed sediments, such as those along roadsides, and in marshy areas. The flowers bloom from April to June and the roots can be dug in late April through June (Wilson 1916:228). Native people recognize two different varieties of wild carrot which are categorized based on comparative size (Wilson 1916:232). Both kinds were edible.

SCIENTIFIC NAME: *Daucus carota L.*

LOCATION WITHIN THE PARK: Along roadsides in both units.

FOLKLORE: While wild carrots were typically eaten fresh, Buffalo Bird Woman told a tale about a soup made using mashed and dried carrots (Wilson 1916:230):

> *"My mother Rod Blossom once told me that she knew a man's wife who gathered a lot of wild carrot roots and peeled off the rinds and mashed the roots with a stone and dried the mashed roots in the sun. When well dried they were put away. Later this man made a ceremony, and the feast given by him at the time had for the guests a kind of soup made of the mashed and dried wild carrots. She said that the soup tasted and smelled something like wild turnips – ahí as we call them…I never made such a dish as this, or ever put away wild carrot roots in this manner."* (in Zedeño et al. 2010:125).

TRADITIONAL USE: Traditionally, northern Plains people dug wild carrots on the prairies in the spring soon after the snow had melted. The carrots were harvested the plants when they were about a quarter of an inch high using a sharp pin or digging stick. When collected early in the season, the roots were sweet and firm, but, later in the year, the carrots turned bitter and were no longer sweet (Wilson 1916:227–228). While living with the **Crow**, a group of **Hidatsa** foraged for some wild carrots, mashed them and dried them after peeling off the outer skin. Although the Hidatsa were agricultural people and unaccustomed to processing carrots, they used this carrot meal in a manner similar to maize (Wilson 1916:230). The Crow are also noted to have used wild carrot as an incense (Lowie 1956:267).

WILD PLUM

Wild plum (Prunus americana), © L. Allain

GENERAL DESCRIPTION: Wild plums are a common plant found growing along the Missouri River and timbered hillsides (Wilson 1916:261). The plant flowers in May and the ripe plums are harvested in August and September. The wild plum was widely used by Native people throughout North America and mature plum trees currently grow near northern Plains sites such as the Big Hidatsa village in the Knife River Indian Villages National Historical Site (Zedeño et al. 2010:105).

SCIENTIFIC NAME: *Prunus L.*

Prunus americana Marsh.

LOCATION WITHIN THE PARK: Assiniboine consultants identified wild plum along the Wind Canyon loop in the south unit and Petrified Forest Trail in the north unit.

FOLKLORE: Bowers (2004:177) recorded a **Mandan** tale of the medical purposes of wild plum. According to the tale, Poor Bear had been shot in the chest by Sioux warriors. The Bear spirit instructed him to eat wild plums as protection, but only wild plum leaves were available. He chewed them while singing the sacred songs he had been given by this spirit and was walking within four days.

TRADITIONAL USE: Wild plums were a widely used food source that was collected soon after the fruit ripened. It was also an apothecary's staple valued for its medicinal properties. Several different harvesting strategies have been recorded in ethnographic literature. The **Hidatsa** gathered unripe plums in August by excavating a hole near the plum bush and shaking the light colored fruit into the hole, which was lined with sage. The hole was then covered with dirt and marked with a stick. In about a four days, the ripened plums were dug up again. If left on the bush, the fruit did not ripen until late in autumn (Wilson 1916: 261). Wild plum were among a number of different edible plants Lowie (1922:210) reported were consumed by the **Crow**. Assiniboine consultants noted that their people ate wild plums after the first frost, allowing them to ripen on the bush (Zedeño et al. 2001:256). Gilmore states that the Sioux ate the wild plum fruit and used its branches in prayer offerings (Gilmore 1919:74–75).

While the fruit was the part of the plant Native people found most useful, other portions of the wild plum were valued for medicinal purposes. A tea made from the bark has been reported as a remedy for diarrhea and is used to control fever (Zedeño et al. 2010:106–107).

WILLOW

Willows on the Missouri River, M. N. Zedeño, photographer

GENERAL DESCRIPTION: Willow was a utilitarian plant found widely in riparian zones throughout North America that was used by all northern Plains tribes. Over a dozen varieties of willow can be found in the Little Missouri River area. The different varieties named by Native people do not always correspond with scientifically classified varieties, but, in general, willow was always valued for its association with water and riparian areas (Gilmore 1966:180). Willow had both utilitarian and ceremonial uses among Native groups living near the park.

SCIENTIFIC NAME: *Salix* spp.

LOCATION WITHIN THE PARK: Native American consultants have identified willow at the Buffalo Jump site in the south unit.

TRADITIONAL USE: Native people recognized a number of different willow species and utilized some of them for specific uses. Some of this knowledge has been passed down to current generations. Consultants from the **Three Affiliated Tribes** explained:

> *"There are at least four kinds of willow still used ceremonially: two of them are the rabbit willow that has really narrow leaves and the "good sweats willow" which has a broader leaf. The rabbit willow has a soft center that can be burned off with a hot iron to make a pipe stem—it is a hardwood."*

It is among the few plants consistently mentioned in **Mandan** ethnographies (Bowers 1992, 2004). According to Mandan consultants interviewed by Bowers:

> *"There are five kinds of willows. They can all be found by lost springs. There is the family willow, used in crafts and construction; purification willow, used for sweats before or after a ceremony, vision, or vow; medicine willow, for doctoring and other sweats; and two kinds of red willow [redosier dogwood] for smoking, blessing the pipe and household, and making kinnickinnick. The purification willow is also known as sandbar willow."*

The flexibility of willow made it functional for building houses and smaller material culture. Willow branches were bunched together to cover the poles in Mandan earthlodges (Potter 2003:25). The branches were also used as the frame for sweatlodges. Traditional **Crow** sweat lodges are made with a dome shape of willow branches covered in hide in the old days and sometimes covered in

canvas, rugs, and other materials today. Sioux sweatlodges were also framed using willow (Gilmore 1919:73–74).

Animal tack was also fashioned from willow. Willows was used by the Sioux to make the support frame for a dog travois. Decorated horse stirrups also were fashioned by the Sioux and other tribes out of bent willow branches wrapped in rawhide (Long 1942:33, 93, 140).

Both willow wood and bark were used for crafts, specifically basket making. The **Assiniboine** stretched bison hides over a circular willow frame. Small boats were also made from woven willow branches (Long 1942). Long (1942:142) also notes that willow sticks were preferred for the slide stick game. Flattened pieces of willow wood were used as plates (Long 1942:140). (Lowie 1909:12). Native consultants explained that a certain kind of willow can be used to make grooves on stone axes and hammers. The willow is wrapped around the stone and, as it decays, produces an acid that softens the stone enough to carve the groove (Zedeño et al. 2001:256). Decaying willow was also used by the **Crow** to smoke deer and elk skin (Lowie 1922:217). **Arikara** women made baskets from black willow bark. The inner bark was useful for basket makers because it turned a reddish-brown color after exposure to the air (Gilmore 1925a:90–91).

Willow also had ceremonial uses. Among the **Crow**, pipe stems for the Medicine Pipe Society were made of red willow (Wildschut 1975:121). The Sioux used small willow twigs to clean pipes (Long 1942). Gilmore (1919:114) notes that the Sioux also included the inner bark of the red willow into the tobacco smoking mixture. As practiced by the Crow, eagle trapping was traditionally involved hiding the trapper beneath a layer of willows where a skinned hare had been placed on top of the willows, and outside the blind. A pit similar to that found on the bluff above the river was dug and covered with willows. The trapper would be hiding under the willows and placed a skinned hare on top of the willows, outside the blind, to attract the eagle (Zedeño et al. 2001:202). In the Arikara Buffalo Society medicine bundle ceremony, willow boughs were carried from a nearby river to the ceremony site (Beckwith 1938:180). Consultants noted that willow boughs were also used in a variety of Crow ceremonies including the adoption ceremony, tobacco planting, and the Sundance ceremony (Zedeño et al. 2010:55).

The medicinal properties of willow bark made it an excellent remedy for a number of ailments. The medicine could be created by simply scraping willow bark. The Crow were known to chew the tips of willow stems to induce vomiting, particularly in sweat baths (Hart 1992:67). Willow is a main ingredient in sweat baths. The bark was also chewed as a headache remedy, and to prevent cavities (Hart 1992:67).

The **Blackfoot** note that willow figures prominently in various ceremonies. All sweatlodge frames are made of willow branches. One particular sweat ceremony, called “The Hundred Willows” is completed at the beginning of the Okan, or Blackfoot Sun Dance.

YARROW

Common yarrow (Achillea millefolium), M. N. Zedeño, photographer

GENERAL DESCRIPTION: Native to the northern Plains, yarrow is found in a variety of different areas including grasslands, woodlands, roadsides, and dry creek beds. Yarrow thrives in thin, gravelly soils (Aleksoff 1999; Barkley 1986a:854). Yarrow blooms from May through October and the plant had a range of medicinal uses among Plains tribes (Kindscher 1992:17).

SCIENTIFIC NAME: *Achillea millefolium L.*

LOCATION WITHIN THE PARK: Crow consultants noted yarrow at Wind Canyon in the south unit.

TRADITIONAL USE: All parts of the yarrow plant were used as medicine. Yarrow leaves were used to treat sore throats and headaches. Yarrow root was mixed with red willow as an artery cleanser. In general, yarrow was used to treat sores, toothaches, as a local anesthetic, and as a nerve tonic. It was also used to treat bladder and kidney disease (Kantrud 1995). Yarrow was specifically mentioned as a medicinal herb used among the Crow and **Sioux** (Zedeño et al. 2001).

Yarrow was also used in certain ceremonies. It can be found growing in arbors after the Sundance and was picked at this time because it was believed to be more powerful. Yarrow was also included in several different ceremonial bundles (Kantrud 1995).

YUCCA

Blooming yucca (Yucca glauca), C. Rechenthin, photographer

GENERAL DESCRIPTION: In North Dakota, yucca is found south and west of the Missouri River on dry sandy hills, prairie slopes, and in the Badlands. Its greenish white flowers bloom from May through July (Kantrud 1995; LBJWC 2015). Yucca was a widely used utilitarian resource for Native people.

SCIENTIFIC NAME: *Yucca glauca* Nutt.

LOCATION WITHIN THE PARK: **Assiniboine** consultants identified yucca along the Petrified Forest Trail in the south unit. **Crow** consultants also identified the plant at Wind Canyon.

TRADITIONAL USE: Missouri River tribes used the roots, seed pods, leaves, and flowers of the plant. The tips of the leaves were used as needles while the stalk, flowers, and seed pods were consumed (Kantrud 1995). According to the Sioux, the sharp blades of the yucca could be used as a fire drill. The fibers could be twined together to make thread with the point used as the needle (Gilmore 1919:71).

The plant was most valued for its medicinal purposes. The Sioux used the plant as soap. Assiniboine consultants noted yucca root was traditionally used to promote hair growth. Males were supposed to collect the yucca root in order for women to be able to use it (Zedeño et al. 2001:256). The Crow also noted the traditional use of yucca as a medicinal plant (Zedeño et al. 2001:245).

Table 6 Significant Plants (Native American)

Common Name	Scientific Name	Group	Food Uses	Utilitarian Uses	Medicinal Uses	Sacred/ Ceremonial Uses	Other Uses	Comments
Bearberry	*Arctostaphylos uva-ursi*	Arikara				x		Smoked with tobacco
Bearberry	*Arctostaphylos uva-ursi*	Crow				x		Smoked with tobacco
Bearroot	*Hedysarum alpinum*	Crow				x		Smoked with tobacco
Bearroot	*Hedysarum alpinum*	Sioux				x		Smoked with tobacco
Bergamot/Beebalm	*Monarda fistulosa*	Crow				x		
Bergamot/Beebalm	*Monarda fistulosa*	Sioux			x			
Bitterroot	*Lewisia redviva*	Crow	x					
Bitterroot	*Lewisia redviva*	Hidatsa			x			
Blackroot	*Calix eliocharis*	Assiniboine			x			
Blackroot	*Calix eliocharis*	Awaxawi				x		
Blackroot	*Calix eliocharis*	Hidatsa			x			
Blackroot	*Calix eliocharis*	Mandan			x	x		
Box elder	*Acer negundo*	Arikara		x				
Box elder	*Acer negundo*	Assiniboine		x				
Box elder	*Acer negundo*	Crow		x				

Box elder	*Acer negundo*	Sioux	x				x	The edible fungus Elm cap grows on decayed box elder
Buckbrush/Wolfberry	*Symphoricarpos occidentalis*	Hidatsa		x		x		
Buffalo berry/Bullberry	*Shepherdia argentea*	Assiniboine	x					
Buffalo berry/Bullberry	*Shepherdia argentea*	Arikara	x					
Buffalo berry/Bullberry	*Shepherdia argentea*	Crow	x	x				
Buffalo berry/Bullberry	*Shepherdia argentea*	Mandan				x		
Buffalo grass	*Buchloe dactyloides*	Assiniboine						
Buffalo grass	*Buchloe dactyloides*	Crow		x				
Cactus berry								
Choke cherry	*Prunus virginiana*	Arikara		x				Widely used medicinal food
Choke cherry	*Prunus virginiana*	Assiniboine	x	x				
Choke cherry	*Prunus virginiana*	Crow	x	x	x			
Choke cherry	*Prunus virginiana*	Hidatsa		x				
Choke cherry	*Prunus virginiana*	Mandan				x		
Choke cherry	*Prunus virginiana*	Sioux	x					
Common juniper	*Juniperous communis*	Crow				x		
Common juniper	*Juniperous communis*	Mandan				x		
Cottonwood	*Populus deltoides*	Arikara		x				

Cottonwood	*Populus deltoides*	Assiniboine		x		
Cottonwood	*Populus deltoides*	Crow		x		x
Cottonwood	*Populus deltoides*	Hidatsa		x		
Cottonwood	*Populus deltoides*	Mandan				x
Cottonwood	*Populus deltoides*	Sioux		x		x
Creeping juniper	*Juniperus horizontalis*	Assiniboine				
Creeping juniper	*Juniperus horizontalis*	Crow				x
Curlycup gumweed	*Grindellia squarrosa*	Crow			x	
Dandelion	*Taraxacum officinale*	Sioux			x	
Gooseberry	*Ribes sp.*	Arikara	x			
Gooseberry	*Ribes sp.*	Sioux	x			
Green ash	*Fraxinus pennsylvanica*	Assiniboine				
Green ash	*Fraxinus pennsylvanica*	Sioux				
Juneberry/Saskatoon/ Service berry	*Amelanchier alnifolia*	Arikara		x		
Juneberry/Saskatoon/ Service berry	*Amelanchier alnifolia*	Assiniboine	x	x		
Juneberry/Saskatoon/ Service berry	*Amelanchier alnifolia*	Crow	x			

Juneberry/Saskatoon/ Service berry	*Amelanchier alnifolia*	Hidatsa	x	x		
Juneberry/Saskatoon/ Service berry	*Amelanchier alnifolia*	Sioux	x	x		
Lichen		Crow			x	
Mountain birch	*Betula fontinalis*	Crow		x		
Oak	*Quercus sp.*	Assiniboine		x		
Oak	*Quercus sp.*	Sioux	x	x		
Prairie sage	*Artemisia ludoviciana*	Crow			x	
Prarie turnip	*Psoralea esculenta*	Assiniboine				
Prarie turnip	*Psoralea esculenta*	Crow				
Prarie turnip	*Psoralea esculenta*	Sioux				
Puffball mushroom	*Lycoperdun gemmatum*	Assiniboine				
Puffball mushroom	*Lycoperdun gemmatum*	Sioux			x	
Purple coneflower	*Echinacea angustifolia*	Assiniboine				
Purple coneflower	*Echinacea angustifolia*	Sioux			x	
Rabbitbrush	*Chrysothamnus nauseosus*	Crow			x	
Rosehip	*Rosa arkansana*	Assiniboine	x			

Rosehip	*Rosa arkansana*	Crow					
Rosehip	*Rosa arkansana*	Sioux					
Sacred tobacco	*Nicotiana sp.*	Arikara			x		
Sacred tobacco	*Nicotiana sp.*	Assiniboine			x		
Sacred tobacco	*Nicotiana sp.*	Crow			x		
Sacred tobacco	*Nicotiana sp.*	Hidatsa			x		
Sacred tobacco	*Nicotiana sp.*	Sioux			x		
Sage	*Artemisia sp.*	Arikara			x		
Sage	*Artemisia sp.*	Assiniboine					
Sage	*Artemisia sp.*	Crow			x		
Sage	*Artemisia sp.*	Hidatsa			x		
Sage	*Artemisia sp.*	Mandan			x		
Sage	*Artemisia sp.*	Sioux			x		
Silver sage	*Artemisia cana*	Crow			x		
Silver sage	*Artemisia cana*	Sioux			x		
Skunkbush/Fragant sumac	*Rhus aromatica*	Assiniboine		x			
Skunkbush/Fragant sumac	*Rhus aromatica*	Crow		x			Mosquito repellant
Spiny saltbush	*Atriplex confertiflora*	Assiniboine					
Spiny saltbush	*Atriplex confertiflora*	Crow					
Stiff sunflower	*Helianthus ridigus*	Arikara	x				

Stiff sunflower	*Helianthus ridigus*	Assiniboine	x		
Stiff sunflower	*Helianthus ridigus*	Mandan	x		x
Subalpine fir/Sweet pine	*Abies lasiocarpa*	Mandan		x	x
Sweetgrass	*Savastana odorata*	Arikara	x		x
Sweetgrass	*Savastana odorata*	Assiniboine			x
Sweetgrass	*Savastana odorata*	Awaxawi			x
Sweetgrass	*Savastana odorata*	Crow			x
Sweetgrass	*Savastana odorata*	Mandan		x	x
Sweetgrass	*Savastana odorata*	Sioux			x
White sage	*Salvia apiana*	Assiniboine			x
White sage	*Salvia apiana*	Hidatsa			x
White sage	*Salvia apiana*	Mandan			x
White wild onion/Prairie onion	*Allium textile*	Arikara	x		
White wild onion/Prairie onion	*Allium textile*	Crow			
Whorled milkweed	*Asclepias verticillata*	Crow			
Whorled milkweed	*Asclepias verticillata*	Sioux		x	
Wild carrot	*Daucus carota*	Crow	x		x
Wild mint	*Mentha arvensis*				
Wild plum	*Prunus americana*	Assiniboine	x		
Wild plum	*Prunus americana*	Crow	x		

Wild plum	*Prunus americana*	Hidatsa		x		
Wild plum	*Prunus americana*	Sioux	x			x
Wild prairie rose (ND State Flower)	*Rosa arkansana*	TAT				
Willow	*Salix sp.*	Arikara	x	x		
Willow	*Salix sp.*	Assiniboine		x		
Willow	*Salix sp.*	Crow		x	x	x
Willow	*Salix sp.*	Hidatsa		x		
Willow	*Salix sp.*	Mandan		x		x
Willow	*Salix sp.*	Sioux		x		x
Yarrow	*Achillea millefolium*	Crow			x	
Yarrow	*Achillea millefolium*	Sioux			x	
Yellow coneflower	*Ratibida sp.*	Assiniboine				
Yellow coneflower	*Ratibida sp.*	Crow	x		x	
Yucca	*Yucca glauca*	Assiniboine			x	
Yucca	*Yucca glauca*	Crow			x	
Yucca	*Yucca glauca*	Sioux	x	x	x	

EUROAMERICAN PLANT RESOURCES

COTTONWOOD

GENERAL DESCRIPTION: Generally used for construction. Important historic structures, such as the Elkhorn Ranch, were constructed with cottonwood cladding. It was also valued as a shade tree and as protection for housing from sun and rain.

LOCATION WITHIN THE PARK: Cottonwood in THRO are found in river bottoms. Historically, cottonwood was harvested from the Little Missouri River valley by neighbors who needed construction timber and firewood.

CHOKECHERRY

GENERAL DESCRIPTION: Berry picking is a traditional seasonal activity among euroamericans living in the west. Berries were picked for consumption and trade. Medora resident Norma Meyers noted in 2015 that she always went to pick berries with her mother.

LOCATION WITHIN THE PARK: Slope sides near the valley bottom. Past local residents generally picked berries in the park.

NATIVE AMERICAN LANDFORM RESOURCES

SPRINGS/SEEPS

GENERAL DESCRIPTION: In addition to being valuable freshwater sources, springs and seeps played a role in tribal folklore and had spiritual value. Traditional accounts indicate the water from certain springs had medicinal and ritual power. They were also places were certain clays and plants could be found. The resources found associated with springs remain important today. On other public lands near THRO, consultants from the **Three Affiliated Tribes** (TAT) are concerned that the places where important medicinal plants grow near springs should be kept alive by the flow of nearby springs (Zedeño et al. 2006:197). While consultants worry that the capping of these springs threatens these resources, park employees note seeps and springs are water sources too large to be capped and will continue supporting associated plants and animals. Nevertheless, consultants urge government officials to inventory these plants in case they are lost (Zedeño et al. 2006:197).

FOLKLORE: According to consultants from the Three Affiliated Tribes, certain coulees contained springs that provided pure water for ritual purification and medicine (Zedeño et al. 2006:218). Wildschut (1975:136–138) described the origins of the snake medicine bundle that is associated with healing. To the **Crow**, the snake's home was a sacred spring. Visionaries who received medicine from the snake was led by this animal to the spring, which transformed to a medicine lodge with other snakes that turned into human form. The snakes had gathered to doctor and heal the human that was brought into the lodge. The visionary that interacted with the snake was given medicine and taught how to use this medicine to heal real people.

TRADITIONAL USE: The **Arikara** used mineral dyes found near springs in household industries. For example, an informant told Gilmore (1925a:91) that the black mud found near an alkali spring was used to dye willow strips for her basketry and the mud from a lignite spring was also used to dye willow bark black for basketry. The Arikara also used this dark brown/black viscous substance found near a single spring on the Fort Berthold Reservation as a form of ink. The liquid was dried and stored for later use (Gilmore 1925e:283–284). The Arikara also used alkali water from springs or ponds to season meat. The alkali water was collected and, when the water evaporated, the remaining residue was used for salting (Gilmore 1925e; Zedeño et al. 2006:109).

Water from springs along the coulees in the KNRI were used by the **Assiniboine** for purifying and cleaning festering wounds (Zedeño et al. 211).

The **Blackfeet** noted that yellow paint came mostly from warm springs along the Yellowstone River (McClintock 1999:415).

Certain archaeological sites attributed to the Crow people commonly occur near springs in foothills and other landforms (Zedeño et al. 2006:111). Springs played a central role in the origin story surrounding the snake medicine bundle, which is primarily used for healing (Wildschutt 1975:136–138).

Nakota used red and black clays found near springs along the Missouri Breaks for dying materials such as rushes. The items that were to be dyed were buried in the clay for several days until the color transference had been completed (Zedeño et al. 2006:171).

PALEOSOLS

GENERAL DESCRIPTION: Ancient, buried ground surfaces, known geologically as paleosols, are important time markers for archaeologists. Their presence indicates buried surfaces upon which past occupations may have occurred. Paleosols were not known to be of particular importance to Native Americans in THRO, aside from those that also contain significant minerals, but further identification and dating of paleosols might provide important information about the park's past.

LOCATION WITHIN THE PARK: Three buried, Leonard-aged paloesols (11,070–7,200 B.C.), which concomitantly function as a cultural-historical horizon, have been identified in the south unit. A heavily reworked Agate Basin point collected by Sperry in the 1980s was found in a non-primary context at Site 32BI122 near a Leonard paleosol. Site 32BI122 is further located in the Petrified Forest portion of the park (Kuehn 1990:115,118).

LITTLE MISSOURI RIVER/LITTLE MISSOURI VALLEY

GENERAL DESCRIPTION: The Little Missouri River is the most significant water source in the park. It has also played a role in the folklore of resident tribes and has sacred uses. The river and its valley has also been recognized as a cultural boundary and a multi-use area for many tribes. It also played a role during the historical period as a conduit for fur trappers, traders, and explorers.

Little Missouri River North Unit. Photo Credit: M. Nieves Zedeño 2014

LOCATION WITHIN THE PARK: Mandan, **Hidatsa**, and **Crow** oral traditions note using resources along the Little Missouri River and traversing the adjacent badlands for warfare and trade. The **Arikara** also have stories related to scouting activities in this area. Hidatsa elders recall their traditional enemy, the Sioux, using trails to cross the river. The Lakota Sioux have close traditional associations with the headwaters of the Little Missouri River. They called it "Thick Timber Creek" (Josephine Waggoner, cited in Sundstrom 1997 under "Little Missouri" entries, no page number). The Cheyenne are known to have hunted antelope at its headwaters in 1865 and called the area "Antelope Pit River." They believed that the antelope gathered in this area because there grew a kind of weed or forage they preferred (Hyde 1968:242). A Native American trail with unknown affiliation is in the North Unit of THRO, adjacent to a portion of the Little Missouri bottomland and foothills. This trail is evidence of transportation routes associated with the Little Missouri (Kuehn 1990; Zedeño et al. 2006:65, 248).

Consultants from the TAT explained that the Little Missouri River has long been visited by those with rights to collect red, yellow, black, and white paints. Light- and dark- colored "slippery" clays are used as medicine to cure stomach illnesses and heal burns. The body paints were: "*applied to the body to portray different identities. Certain clays were used together with plants in the Sun Dance. Other clays, particularly a light gray clay, was collected for making pottery and for strengthening the lodge walls on the outside*…" The TAT consultants recommended that tribal informants be solicited in order to expand upon the existing culture history of the Little Missouri River (Zedeño et al. 2006:240).

FOLKLORE: The Little Missouri River is the setting of many stories associated with Crow-Flies-High's band and their activities along the river (Zedeño et al. 2006:66). Bundles associated with

water spirits were also prominent in the folklore of several tribes regarding the Little Missouri River. Identical to the Grandfather Snake Bundle of the Mandan, Missouri River Bundles were associated with the six river gods, the power of Packs Antelope. This bundle was also associated with rainmaking, pottery manufacture, building bullboats, and doctoring (Bowers 1992:371–373). The closely related Creek Bundles of the **Awaxawi** are associated with sprits of Missouri River tributaries, specifically the snake said to live in the Little Missouri River. Creek Bundles were used to ensure good hunting (Bowers 1992:380). Hidatsa note that origin stories related to the Grizzly Bear Bundles are associated with vision-questing locales like the Little Missouri River (Bowers 1992:348–358).

The Little Missouri River is associated with several other geographic features that are considered sacred landmarks to the Hidatsa and Crow, especially Rainy Buttes. The buttes are mentioned by Crows Breast in a narrative of a war party that traveled along the Little Missouri (Beckwith 1937).

TRADITIONAL USE: The recent alignment of the Little Missouri was shaped approximately 40,000 years ago by the advance of the Wisconsin glacial ice sheet, which altered the course of the river and established its current process of erosion. The Little Missouri River has long been a boundary between culture areas. During the Woodland Period, the Little Missouri and lower Yellowstone Rivers are believed to mark the culture subarea boundaries between local ancestral Algonquian-speaking populations along and Northern Plains archaeological complexes to the west and northwest (Zedeño et al. 2006:2, 57).

The Little Missouri River has played a prominent role in demarcating the boundaries of traditional peoples in west-central North Dakota. The first wave of Siouan-speaking immigrants, namely the Mandan, arrived to the Little Missouri Trench around A.D. 1200. Traditionally, the Mandan territory centered on the Heart and Cannonball Rivers but extended west to the Little Missouri River (Zedeño et al. 2006:2). Journals penned by Alexander Henry state that the Hidatsa claimed the Little Missouri River for themselves (Coues 1897:334). Maximillian du Weid noted that the Assiniboine territory was located a few miles upstream from the confluence of the Little Missouri (Thwaites, ed. 1906:367). At the height of their territorial claims, the Crow territory extended from present-day eastern Montana to the Little Missouri River and beyond (Voget 2001:696). Denig (1961:16) noted that the Little Missouri was the northern boundary of the Sicangu or Brule Lakota.

The Little Missouri was also place where valued resources could be obtained. A wide variety of resources could be obtained along the river including buffalo, eagles, pigments, berries. The Little Missouri River also contained a number of valuable landscape features (Zedeño et al. 2006:258). Information attained from the Awaxawi state that the best clay for pottery making was obtained along the lower Little Missouri (Weitzner 1979:260). The river was an important feature of the Hidatsa and Mandan hunting ground and was associated with the people living at Nightwalker Village. Hidatsa and Mandan informants explain that the river was a year-round hunting ground that increased in importance after the buffalo disappeared (Zedeño et al. 2006:237). In 1830, the Mandan hunting grounds included the area around their ancestral villages near the Heart River and extended west to the Little Missouri (Abel 1997). The Mandan also claimed eagle trapping rights

along the Little Missouri to its headwaters (Bowers 2004:209). Chippewa consultants mentioned that, during the early historical period, the Plains Chippewa considered the Little Missouri as part of their traditional hunting grounds. The river also provided excellent grounds for travel, trade, hunting, scouting, and warfare (Zedeño et al. 2006:252)

The Little Missouri River also played an important role in buffalo hunting ceremonies. Hunting corrals or jumps were traditionally placed along the breaks and cliffs overlooking the Missouri and Little Missouri Rivers, especially before the arrival of the horse. Rights to construct these corrals was purchased or inherited along with the power to attract the herds. These corrals remained in use by the Crow and Mandan into the nineteenth century (Bowers 1992:447, 465).

Several trails traversing and flanking the Little Missouri River have been mentioned in oral histories and ethnographic records. In 1805, Francois Antoine Larocque noted the historical overland route of the Crow crossed the Little Missouri between the Knife and Powder Rivers (Larocque 1934:12). The Crow also mentioned that they continued to use the Little Missouri and Badlands for cold-weather camping and hunting (Zedeño et al. 2006:241).

RIDGES AND RIDGE TOPS

GENERAL DESCRIPTION: Across the northern Great Plains, ridges were valuable transportation routes. They were important routes across THRO that were used by a variety of different Native groups. Certain settlements were also created on ridge tops. These settlements have provided important archaeological information about prehistoric lifeways. Ridge tops also contained valuable resources that were used prehistorically and historically.

LOCATION WITHIN THE PARK: Mandan and **Hidatsa** consultants remarked that ridges in THRO were part of ceremonial eagle trapping activities. Eagles living along ridges within the park were targeted for trapping. In addition to several important ritual activities, a pit would be constructed below the ridge and covered with branches. A carcass was placed above the pit to attract the eagle (Zedeño et al. 2006:238–239).

TRADITIONAL USE: The ridge system that linked the Missouri and Yellowstone rivers functioned as a pathway and is the site of well-known overland trails (Simon 1982). Archaeologists have found that many of the ridge systems throughout the Badlands contain an abundance of McKean deposits (Beckes and Keyser 1983:177; Simon 1982). Badlands ridge systems, such as Flat Top Butte, Burning Mine Butte, and Lone Butte, contain a number of small Archaic campsites with Knife River Flint, stone-lined hearths, ceramics, stone circles and other features. Additionally, these ridges would have provided useful plants, animals, and water to Archaic travelers. These archaeological remains suggest that ridges were used as oft-used temporary camps in addition to transportation routes (Beckes and Keyser 1983:177; Frison 1979).

FOOTHILLS/BADLANDS

GENERAL DESCRIPTION: The Badlands of the Little Missouri River were, historically, a hinterland and boundary between the northwestern Plains and Middle Missouri archaeological culture areas. The Badlands hosted a number of trails and useful resources that brought Native Americans across this landform prehistorically and historically.

LOCATION WITHIN THE PARK: The highly dissected, rugged terrain of the western North Dakota Badlands was created through a half million years of erosion. The Badlands region of THRO contains nine recognized ecozones that host numerous archaeological components including lithics scatters, bison kill sites, bison processing areas, camp sites, conical lodges, and eagle trapping locations (Beckes and Keyser 1983; Gregg 1985; Kuehn 1990:22).

FOLKLORE: The Badlands played an important role in the folklore of local tribes. **Hidatsa** consultants told Bowers (1992:370) that she: "*once had a vision and I remembered seeing ladies dancing in the badlands; when I woke up I sang a song, a rain song, and the animal was a bug, a "fly type" bug*" (Zedeño et al. 2006:221).

Mandan and Hidatsa consultants have noted that the Badlands are particularly suitable for vision seeking because they are inhabited by spirits. These consultants stated:

> *"There are stories and songs about the badlands. There are certain spirits that they say are in each place [in the badlands]. Individuals would go there to get help from the particular spirit that could help; that spirit's place might be used by a society. There were places for rites of passage; the Hidatsa would stake [young] people out, or tie them to a tree, and pierce them. They'd leave them until they had a vision, then come back for them. It would be sacred ground after that"* (Zedeño et al. 2006:237).

Sioux consultants noted that springs in the Badlands were renowned for their healing properties. These consultants also stated that the spring at the buffalo jump site in the South Unit of THRO gave this place added to the spiritual character of the site (Zedeño et al. 2006:247).

TRADITIONAL USE: Despite the paucity of Paleoindian materials and sites, archaeologists recognize the Little Missouri Badlands as the boundary between two archaeological culture-historical areas: the Northwestern Plains and the Middle Missouri subarea (Beckes and Keyser 1983; Kuehn 1990; Kuehn 1995). Archaeologists believe the lack of early prehistoric sites is likely because the Badlands were little used or that the current sites were the result of post-depositional erosional processes and are not a function of prehistoric behavior (Kuehn 1990:115–118; Loendorf, et al. 1982; Schneider 1982). McKean sites are relatively common in the Badlands, many of which have a middle Archaic component (Kuehn 1990:116, 120–121). Three Woodland Period and 12 Plains Village sites have been identified in the Badlands since 1990 (Beckes and Keyser 1983:190; Kuehn 1990:31). However, Northwestern Plains and Middle Missouri prehistoric people most likely crossed the Badlands traveling to and from Knife River Flint resources, leaving little trace on the

land (Zedeño et al. 2006:60). The Badlands were historically traversed by the **Assiniboine** and **Cheyenne** (Denig 1961; Hoebel 1960 as cited in Kuehn 1990:130).

During the historical period, early explorers left little information about the Badlands because they considered it void of resources and people. The La Vérendrye explored the Dakotas in 1742 and 1743 but left little descriptions of the people or the place (Kuehn 1990:129; Smith 1980).

The Badlands hosted a variety of resources that were valued by a number of Native American groups. The Mandan, Hidatsa, and **Crow** all claim portions of the Badlands as hunting and eagle-trapping territories (Allen 1982; Allen 1983; Bowers 1950; Bowers 1963; Curtis 1976 as cited in Kuehn 1990:130; Wilson 1931). The Hidatsa noted that red ochre and yellow pigments were obtained from the Badlands (Weitzner 1979:256). Mandan people also sought out red paint in the Badlands (Beckwith 1938:303).

TERRACES

GENERAL DESCRIPTION: Located just above river floodplains, terraces were the location of most permanent villages that were occupied most of the year and Euroamerican settlements. Terraces with views of plains and the river valleys provided a defensive advantage for residents. A variety of resources were available along the terraces throughout THRO.

FOLKLORE: A number of stories about the misfortunes caused by women that did not tend gardens were related by TAT consultants. Untended gardens were easily choked with weeds, causing hardships and starvation for these women's families in the winter. Produce stolen from another woman's garden was forcibly repaid by female clan relatives, causing great embarrassment to the whole clan (Zedeño et al. 2006:190).

TRADITIONAL USE: Settlements were positioned on terraces overlooking floodplains because resources were abundant, specifically water. Villages were on the terraces near rivers so that water could be easily transported to gardens. A TAT consultant noted that terraces had a view of the river that allowed villagers to see people approaching at a distance, were also breezy and kept the mosquitoes at bay, and aided cultivated garden plots. **Assiniboine**, **Gros Ventre**, **Mandan**, and **Hidatsa** consultants said that terrace settlements in THRO were primarily occupied during the cool seasons by women, children, and the elderly. These settlements were the site of a variety of tasks including craft making, plant gathering, wood collection, and small game hunting. Proximity to water and other resources defined the range of tasks conducted at each terrace village (Zedeño et al. 2006:189,255). During the historic period, each woman tended a garden on the well-drained soils near fortified villages. These gardens were important to Native American communities and were associates with important religious bundles, including the Corn Bundle. The hills adjacent to these terraces were reserved for burial scaffolds and shrines (Zedeño et al. 2006:190).

BUTTES

GENERAL DESCRIPTION: Buttes are among the most valued landforms for the numerous Native American groups that utilized THRO. This landform was the site of a range of ritual and spiritual activities because various animal spirits are said to reside in buttes throughout the park. Sacred rituals associated with these animal spirits took place on or near bluffs, including fasting and vision questing. Most importantly, certain buttes were associated with the buffalo and the animal itself is said to have resided in buttes before it started living above ground.

LOCATION WITHIN THE PARK: As with ridges, buttes throughout THRO contain prehistoric archaeological remains, specifically Archaic campsites with stone-lined hearths and scatters of Knife River Flint (Beckes and Keyser 1983:177). Notable buttes in the park include Flat Top Butte, Burning Mine Butte, and Lone Butte. Rainy Buttes in the South Unit has been cited as an important sacred landmark to the Crow and Hidatsa. Tribal consultants have remarked that the fossil beds and white paint source were unique resources found at that butte (Zedeño et al. 2006:241).

FOLKLORE: Buttes are one of the most significant landforms for traditional people of THRO. They are prominently featured in folklore. To the **Crow**, buttes in and around the park are the homes of the original animals. These consultants have stated that the animals that taught people how to trap eagles, elk, eagle, and bear, live in buttes. The Rainy Buttes, south of the south unit of THRO, are mentioned by Crows Breast in his narrative of a war party that traveled along the Little Missouri River (Beckwith 1937). Connolly (2000:2–4) notes the wealth of archaeological remains associated with buttes including diagnostic materials associated with the **Mandan** and **Hidatsa**. Bowers (1992, 2004) also recapped several origin myths associated with buttes. In 2006, **TAT** consultants stated that many buttes along the Little Missouri in THRO are the houses of different animals and beings (Zedeño et al. 2006:237).

Buttes also played an important role in **Hidatsa** folklore, specifically tales associated with the buffalo. The Earth Naming Bundle had an origin myth that explained that animals and other spirits actually lived and came from specific buttes. Each sacred butte had a spirit, sacred myth, ritual, and songs. These buttes were symbolically represented by buffalo skulls. The Bear Arm's map of the Hidatsa territory provides the locations of several important buttes as identified by the appropriate bundle holder. The grizzly bear, who is associated with characters in the Woman Who Never Dies myth, is associated with Rainy Buttes and other butte-related vision-questing locations like Sentinel Butte. The spirit of a large owl lived in Singer Butte in the Killdeer Mountains. The other spirits occasionally met in the big cave where Owl lived. Other buttes that housed spirit animals that are featured in Hidatsa folklore include Ghost Singing Butte where swallow and hawk are buried, Crow Butte, Heart Singing Butte, Little Heart Singing Butte, Fox Singing Butte, Rosebud Butte, White Butte, Opposite Butte, Buffalo Home Buttes, and Dog Den Butte (Bowers 1992:433–438). The Mandan believed that the spirit of the buffalo resided in buttes before they came to the surface. Buffalo offerings were also left by the Mandan at buttes associated with this animal (Bowers

1992:180). Both the Mandan and Hidatsa practiced buffalo-related rituals and made offerings to the buffalo at buttes (Bowers 2004:90).

TRADITIONAL USE: Frison (1979) noted that Crow-related archaeological sites dating to the fifteenth to the seventeenth centuries with ceramics and stone circles are frequently identified on buttes. Using the distribution of archaeological remains, he concluded that the Crow are likely composed of various ancestral groups with a unique history but similar lifeway (Frison 1979:12). Annual pilgrimages to Rainy Buttes brought the Crow across the Little Missouri River and the Badlands. For the Hidatsa, buffalo spirit buttes were visited during summer months. Eagle feather offerings were made to increase buffalo herds (Zedeño et al. 2006:95, 241). A Plains Chippewa consultant that visited THRO explained that hunting task camps would have been located on the plateau overlooking the deeper bluffs of the Missouri River. Larger camps would have been on lower elevations near the river (see Terraces). Bluffs and Buttes would have been valued vision questing and fasting sites (Zedeño et al. 2006:252).

Buttes were also important landmarks in overland travel. Consultants explained that the Mandan, Hidatsa, and **Arikara** traveled from butte to butte, holding ceremonies at some of these landforms. These trails were also used by the **Crow** and **Sioux**, and were frequently traveled during the Indian Wars of the 1860s (Zedeño et al. 2006:237).

Hollenback (2015) remarks about the significance of ridge tops and butte tops for the **Hidatsa** as areas of refuge during times of disease or war.

CANYONS

GENERAL DESCRIPTION: With high, steep walls, canyons were valued for the many topographic features that could be used for traditional spiritual exercises. Consultants from various tribes explained that THRO's canyons were excellent locations for fasting and vision-questing. In addition to spiritual uses, canyons were also important resource procurement locations. The Wind River Canyon in particular was noted for the resources it contained and its suitability for various traditional activities.

LOCATION WITHIN THE PARK: Canyons were important landforms for hunting. Native American consultants visiting the Petrified Forest Trail stated that hunting would have likely taken place on the canyon rim while other activities took place on the terraces below. **Blackfeet** consultants that visited the Wind Canyon Loop in the south unit explained that this location contained several valuable landforms that provided resources and locations for spiritual activities. This was also noted by **Crow** and **Sioux** consultants that visited the canyons of THRO (Zedeño et al. 2006:242, 247–248, 253, 261).

FOLKLORE: Landforms like the canyons of THRO were believed to be the homes of spirits. A consultant from the Standing Rock Sioux Tribe visited the Buffalo Jump Site and the Oxbow Overlook, noting that these locations are very spiritual. They contain spirit homes visible on the slopes of the canyons throughout the north and south units. He explained: "*All the high places around here are connected to Thunder and this is a very powerful connection. All the places have songs associated with them; when you sing the Creator hear your prayers faster*". Dog ceremonies, eagle trapping, and vision question would have connected this place to the canyon rims. The Sioux consultant also noted that the forest located at the Oxbow Lookout is notable because of the various tree species, the shape of the canyon, and the river (Zedeño et al. 2006:247–248).

TRADITIONAL USE: Crow consultants stated that canyons, Wind Canyon in particular, were important locations for spiritual activities. They said: "Several characteristics of the Wind Canyon loop drew the attention of the Crow consultants. The silent and secluded feeling of the canyon, with its narrow walls that produce echoes, made the place attractive for vision quests and fasts." Additionally, the river valley below the canyon was traditionally used as a campsite and resource procurement locale. Canyons in the north unit would have been used in a similar manner (Zedeño et al. 2006:242–243). Blackfeet consultants mirrored the sentiments of other consultants, also noting that the physiographic features of the Wind River Canyon was were particularly well-suited to spiritual exercises. For example, the high points could be used for fasting, ledges for burials and offerings, and the river banks for collecting and camping (Zedeño et al. 2006:261).

Sioux consultants that visited the Buffalo Jump and Oxbow Overlook also noted the value of this location for traditional lifeways. Before the arrival of the horse, Sioux people would have used the horseshoe-shaped canyon as a camping site. A Sioux consultant believed that buffalo were most likely spooked by a natural phenomenon into the canyon (Zedeño et al. 2006:247).

Table 7 Significant Landforms (Native American)

Landform	Group	Folklore	Origin Stories	Important Figures	Utilitarian uses	Sacred Uses	Other Uses*
Springs or Seeps		x	x		x		
Paleosols							Archaeological dating
Little Missouri River		x			x	x	Cultural boundary; multi-use area
Little Missouri River Valley		x			x	x	
Little Missouri Escarpment							
Ridges and Ridgetops					x	x	
Foothills/Badlands		x			x	x	Hinterland between cultural areas
Terraces		x			x		Village landform
Plateaus					x	x	Bison hunting; hunting camps
Buttes		x			x	x	
Saddles		x					Part of Crow boundary
Canyons		x			x	x	

EUROAMERICAN LANDFORM RESOURCES

LITTLE MISSOURI BADLANDS AND GRASSLAND

GENERAL DESCRIPTION: Following the demise of the bison on the North Dakota plains in the 1870s, the expansive grasslands in the area that would become THRO became an important resource for cattle ranchers. The hard winter of 1886–1887 ended the short era of big herds on the grasslands but ranching continues to be an important economic pursuit on the Badlands. Theodore Roosevelt was among the many ranchers who swarmed onto the Dakota grasslands during the 1880s hoping to make a fortune despite the wildness of the region. While the eastern financiers of the cattlemen were making a gamble, they shirked the danger of the roughness of ranching on the plains. The grasslands near the Badlands appeared tame but were respected by the Euroamerican ranchers who made their livelihoods there. Roosevelt wrote (1893:430):

> "*Death by storm or in a flood, death in striving to master a wild and vicious horse, or in handling maddened cattle, and all too often death in brutal conflict with one of his own fellows—any one of these is not the unnatural end of the life of the dweller on the plains…*"

Thousands of homesteaders attempted to turn the grasslands into family farms during the late nineteenth and early twentieth centuries. Many of these were emigrants seeking cheap land on the distant grasslands. These homesteaders sought to cultivate the grasslands, but were also at the same mercies as the cattlemen who came before them. The capricious weather, which included droughts and blizzards, caused most homesteaders to fail (Billings County Historical Society 2015; Carlson 1976; Norma Meyer, personal communication 2015). Those who created economically viable farms also ran small cattle herds on the grasslands to supplement the crops they were cultivating. Norma Meyer (personal communication, 2015) recalls that her family was among the Medora farm families who harvested and stockpiled grass from the Badlands to feed their animals during the winter. She also recalls other families hunting various grasslands animals including deer and elk. The grasslands continued to be a resource base for these families.

Euroamericans have viewed the grasslands as the foundation for agricultural pursuits for over a century; however, many have also valued this landscape for aesthetic reasons. Roosevelt was among the first to write of the pleasant solitude of life on the grasslands of the Little Missouri. He was fond of the time he spent among the undulating grassy hills dissected by streams and washes, frequently venturing alone onto the grasslands above the Elkhorn Ranch in order to observe the animal activities there (Jack 2011).

Roosevelt also believed the unfettered life lived on the North Dakota grasslands was indicative of the American spirit and important for our national identity. He frequently wrote of the character-building qualities of spending time in open spaces. Roosevelt once wrote of his experiences hunting and ranching in North Dakota, describing the indelible mark it made on his life: "To be sure, after a little experience roughing it, the hardships seem a good deal less

formidable that the formerly did, and a man becomes able to roll up in a wet blanket and sleep all night in a pelting rain without hurting himself…" (Jack 2011:278). Scholars believe the time Roosevelt spent ranching on the grasslands of the Little Missouri strongly influenced his views on conservationism as president.

Partially inspired by the writings of Roosevelt, conservationists worked to preserve this portion of the Badlands including some of the adjacent grasslands. Advocates who proposed the creation of Theodore Roosevelt National Park during the early twentieth century brought United States congressmen to the Badlands so they could experience the place as Roosevelt had described it (Petty 1968). From 1917 to 1934, the North Dakota Historical Society and several prominent business interests worked to build the park from state lands, private property, and federally administered lands. Throughout this campaign, boosters emphasized the aesthetic qualities of the Badlands and nearby grasslands and characterized them as an expanse of what the landscape had looked like when Roosevelt ranched there (Petty 1968). They wanted to create the park as a tribute to Roosevelt's tenure in North Dakota as well as a vehicle for conserving one of the last remaining grasslands in the state. From its inception, THRO was intended to be a place where Americans could enjoy and learn about the same grassland landscape experienced by Roosevelt. This remains the park's central objective.

LOCATION WITHIN THE PARK: During the 1970s, a portion of THRO was set aside as a wilderness area. Much of this area is grassland and river bottoms, which local ranchers and farmers had hitherto utilized for their cattle and crops. The roadless portion of the park was established to create an additional layer of remoteness and authenticity. Today, the openness of the grasslands throughout the park are appreciated for their aesthetic value and as an important refuge for the endemic plants and animals that have called the North Dakota plains home for millions of years.

NATIVE AMERICAN MINERAL RESOURCES

BLACK STONE (SOAPSTONE/STEATITE)

Calumet pipe, 1804-1805 (probably Mandan). Photo Credit: Hillel Burger

PREPARATION/USE: Soapstones were choice materials for the sacred pipes of Native Americans in the badlands region. The **Crow** were known to use steatite and catlinite, like many indigenous groups. Catlinite, though highly sought for pipe making, is not available in Theodore Roosevelt National Park; however it may have been traded from Minnesota. Wildschut (1975:114), who examined Crow pipe bundles, stated that "there were two principle types of medicine pipe bundles among the Crows: (1), the ceremonial pipes of the Medicine Pipe Society, and (2), the pipe-holders' (i.e. war leaders') pipes, which were carried on the warpath as powerful war medicines." The traditional medicine pipe of the **Blackfoot** was carved from black soapstone (Reeves and Peacock 2001) and is associated with grizzly or black bear. One consultant indicated that pipe making is a sacred right that is given by Thunder. Red stone pipes would be blackened at times. Similarly, Catlin observed that the **Hidatsa** and **Mandan** would use black soapstone or blackened red stone for pipes in ceremonial contexts (Ewers 1967). A local museum in Medora (now closed) had numerous black pipes in their exhibit.

OTHER NAMES: Steatite is in the soapstone family and may be used interchangeably when referencing black soapstone resources.

LIGNITE (COAL)

LOCATION OR USE NOTED IN THE PARK: Lignite coal is prevalent throughout the park. University of Arizona archaeologists noted visible lignite veins along the **Caprock Coulee Trail** in the north unit of Theodore Roosevelt Park during a 2014 site visit. It is found in all three park units.

Lignite seam. Photo Credit: Lin and Maryke Hines

PREPARATION/USE: Native American utilitarian use of lignite is recorded in ethnohistorical documents. For example the **Hidatsa** procured lava-like stones, such as scoria or clinker from burned lignite coal beds to polish their bows. These stones were used along with suet in bow construction (Weitzner 1979:234–237). The **Arikara** took mud from a lignite spring to dye willow bark black. They then incorporated the dyed bark into woven basket designs.

OTHER NAMES: Coal

BENTONITIC CLAY

Bentonitic Clay (Blue-gray Horizon), North Unit. Photo Credit: M. Nieves Zedeño 2014

LOCATION OR USE NOTED IN THE PARK: Many pigments used to prepare body paints and feather dyes, as well as those used as potting material, were procured by Native American groups digging the exposed clays along the Little Missouri Badlands[7]. For example, **Painted Canyon** in the south unit of the park contains numerous pigments that were identified by consultants in 2004 and University of Arizona archaeologists in 2014 during their respective visits to the park. Minerals and rocks observed by consultants visiting the **Petrified Forest Trail** in 2004 included *fossils*, *crystals*, *sandstone*, *various clays*, and *scoria*. While there, consultants mentioned that clay was baked, powdered, and mixed with water and grease to make paint. Further, in a previous publication (Zedeño et al. 2006:240) detailing these visits, members of the **Three Affiliated Tribes (Mandan, Hidatsa,** and **Arikara)** suggested a programmatic agreement be written in which permits to access certain park areas (particularly in the north unit) should be awarded for collecting medicinal plants and minerals (e.g., crystals, clays).

Bentonitic clay strata specifically, are observable in the north unit of the park and are resultant of deposited volcanic ash from aeolian and alluvial events or a lacustrine environment, epochs ago. Murphy (1995:10–11) reports the *blue bed* of bentonite in western North Dakota, located along the Little Missouri River, is associated with the Sentinel Butte Formation tuff and is up to 23 feet thick. This bentonite deposit is the most extensive known and when mined, served a variety of purposes for indigenous peoples and Euroamericans alike (Murphy 1995).

PREPARATION/USE: Clays are significant resources for all Native American groups known to have used the badlands. Pigments for ritual painting are present in the origin myths associated with many sacred bundles of indigenous groups who occupied Theodore Roosevelt National Park.

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[7] The significance and use of clay as described in this page not only refers to bentonitic clay, but clays in general. This page should serve as an abridged overview for clay use among Native American and Euroamerican groups.

Paint, at times made from badlands clays, was a crucial resource in the performance of all ceremonies as well as in the observance of taboos associated with bundle ownership and certain offices. Consultants from the **TAT** revealed that the Little Missouri River was visited by those with rights to collect red, yellow, black, and white paints as well as the light-and dark-colored "slippery" clays that are found there. The narrative entitled "Geography of a War Party," recorded by Beckwith from the **Mandan** warrior Crows Breast, describes how warriors would visit sacred buttes to the southwest of modern Dickinson, North Dakota to collect yellow, blue, and red paint (Beckwith 1938:303). Paint colors used ceremonially included red, yellow, white, black, blue and green. **Siouan** groups used white and blue clays for body painting but they also used them for dyeing objects used in games and races (Zedeño et al. 2006:172). Consultants from the **TAT** agreed that body paints had a different significance in their societies: *they were applied to the body to portray different identities. Certain clays were used together with plants in the Sun Dance.* (Zedeño et al. 2006:240).

Clay was also used in pottery making, household industries and, it was considered a homeopathic remedy by northern Plains groups. The best clays, according to **Hidatsa** tradition, were collected from the lower Little Missouri river; yellow and blue clay were obtained from the Missouri River outcroppings near Like-a-fishhook village and some distance from Theodore Roosevelt National Park (Weitzner 1979:260). Likewise, the **Arikara** used red, yellow, blue, and black clays for a variety of decorative and ornamental purposes (Gilmore 1925c:28). Members of the **TAT** stated that clays are used as medicine and are eaten to alleviate stomach illnesses and applied to heal burns. They also noted that "*other clays, particularly a light gray clay* [bentonitic], *was collected for making pottery and for strengthening the lodge walls on the outside"* (Zedeño et al. 2006:240). Both **Blackfeet** and **Crow** consultants mentioned that blue/gray pigments are used ceremonially; The Blackfeet specifically use green and blue pigments in the Thunder Medicine pipe and Horn Society and considered them sacred.

OTHER NAMES: Some bentonite deposits are referred to as swelling claystones (Murphy 1995).

CLAY-GREEN

LOCATION OR USE NOTED IN THE PARK: The Little Missouri Badlands' geological, sedimentary nature is such that clays are a prominent resource in western North Dakota and the park[8]. Though there are no known green clay quarries in the park specifically, the color was significant for several tribes in the region.

PREPARATION/USE: Paint, often derived from clay sources, was used ceremonially by the **Mandan** and all other Native American groups in the northern Plains. The Mandan in particular used red, yellow, white, black, blue and green paint in their ceremonies although it is not known if this green paint came from Little Missouri badlands clay. All of the aforementioned colors except black were used by boys following their coming of age rites (Bowers 1950:50). Additionally, the **Blackfeet** and **Crow** cite green clay as a sacred resource in their societies. The Blackfeet often acquired green paint from a large lake east of the Sweetgrass Hills in southern Montana, some distance from the park (McClintock 1999:415). The **Blackfoot** told us that green was the paint of the Thunder tipi until it was hit by lightning and burned down. Afterwards, they replaced green with commercial cobalt or indigo blue.

[8] See Bentonitic Clay Resource Page of this report.

CLAY AND PIGMENTS-RED

LOCATION OR USE NOTED IN THE PARK: Beckwith (1938:303) reports that many pigments used ceremonially as body paints were collected from the Little Missouri Badlands and badlands' clay, in particular red paint. Pigments can be found in each unit of the park but are immediately visible along the Petrified Forest trail in the south unit, near Riverbend Overlook in the north unit, and in Painted Canyon in the south portion of the park. Pigments observed in these areas are red and yellow in color. Consultants observed that clay was collected for painting while moving across the valley; **Hidatsa** warriors were known to collect sacred paint while on the war path (Beckwith 1938).

The color red is ubiquitously significant and symbolic for Native American groups and this hue figures in nearly every sacred activity of groups inhabiting the region—for warring, painting individuals in ceremonial rites and for fasts, preparation of the dead, and painting arrowshafts and bundle contents, among others[9]. A **Crow** consultant with rights to paint observed the wealth of paint sources in the park including red and yellow paints. She remarked that (Zedeño et al. 2006:245):

> *"The right to paint often comes in a dream; the person is shown how to use the paints in terms of color, design, and placement in the body; horses also get painted for safety.* [She] *and her husband obtained the right to paint from a man who had it and when he was about to die he transferred the right to them. The female elder also has the right to sing along with men and be the head dancer among the women. She uses yellow and red paint. Her brother transferred the designs to her and taught her how to use these paints. Body paints include* bright red, pink, blue, yellow, *and* white *pigments. Red paint was first used by the Creator to line the eyes of the* prairie chicken*—in turn the totem of one of the original Hidatsa-Crow clans."*

Members of the **Blood** tribe were impressed with the abundance of clays and pigments in the park and spoke of red paint sources in Theodore Roosevelt National Park (Zedeño et al. 2006:262):

> *"Associated with buffalo and with all the religious societies are the pigments for body paint and for staining sacred items. In the opinion of the consultants, this is the most significant resource found in the park.* Red paint *or* red ochre, *which they found in abundance in both park units, is used for healing and for protection. For example, when religious elders are holding bundles in their homes, all of the family members must have their face painted so that the bundle power will not harm the uninitiated. Red paint is used to stain the Iniskim, the pipe stems, and*

[9] See Red Pigments Resource Page of this report.

the forked sticks used to pull charcoal out of the ceremonial fire. The Dove Society is connected with the red paint."

The **Blood** consultants would like to have access to collect paint in the park.

PREPARATION/USE: Red, white, and yellow clays were used to fix hairdos in **Hidatsa** society while red pigments were used for hide and horse painting (Weitzner 1979). Painting horses with red pigment was said to have come from visions and this practice would be accompanied with a song. Dyed and decorated horsehair were used to signal warrior honors while painted horses had numerous taboos attached to them. Other folklore associations connecting red clay to Hidatsa culture are referenced in the stories and ceremonies of the Earth Naming bundle. This bundle cites significant landscape features and explains the origin and homes of animal and other spirits were in specific buttes in proximity to the park. It contained two large rattles made of buffalo hide, the head, two wings, and two claws of the speckled owl, red and black clay, white sage, and a buffalo skull. Feathers in the bundle represented swallows and hawks (Bowers 1992). In 2013 A **Hidatsa** consultant indicated that red pigments are generally collected before the Sun Dance. Red paint is also an honor color, as an **Arikara** consultant noted.

Red clay served as a general decorative element and as an ornamental dye in the basket industries of the **Arikara** (Gilmore 1925e). Yellow paint and red paint, made from mineral pigments, were mixed with water and sometimes fat, and applied to the faces of **Crow** warriors and their horses (Lowie 1922:216). **Siouan** groups notably collected red and black clays from springs in the Little Missouri Breaks area. They would dry and bake red earth until it became the consistency of stone. Then these red bricks were pointed into a fine power and used for dyes and face and body paints (Zedeño et al. 2006:172).

Siouan peoples used red pigments made from various minerals since time immemorial. Red paint was used both prehistorically and historically to decorate faces and bodies ceremonially. Powdered mineral substances of red hue have also been sprinkled on graves. Red pigments were used widely for making pictographs and Sun Dance altars (Mallery 1886:33).

OTHER NAMES: Ocher, vermillion

CLAY AND PIGMENTS-WHITE

LOCATION OR USE NOTED IN THE PARK: Although there are no ethnographic records or systematically identified places defined as white clay sources within the park boundaries, there are reportedly white clay quarries in the Rainy Buttes, White Clay Butte near Fort Union and, according to the oral traditions of the Hidatsa Wolf bundles, white clay came from a hill near the Knife River. Nevertheless, white clay more than likely exists within the Theodore Roosevelt National Park given its sedimentary nature. In 2004 **Crow** consultants that spoke of the Rainy Buttes, located 38 miles southeast of Medora, North Dakota, mentioned the existence of fossil beds as well as white paint sources that could be found there. When visiting the south unit a **Crow** elder with rights to paint stated that: "Body paints [used by the Crow] include *bright red*, *pink*, *blue*, *yellow*, and *white* pigments" (Zedeño et al. 2006:245). The Rainy Buttes are some of the most sacred landmarks for the **Hidatsa** and **Crow** and they are further connected to the Little Missouri River. Lastly, in addition to the Rainy Buttes, White Clay Butte, and the Knife River sources, consultants from the Three Affiliated Tribes (**Mandan, Arikara,** and **Hidatsa**) stated that the confluence of the Yellowstone and Missouri Rivers is known as *Awa hay* or "the place where the white clay/dirt is" (Zedeño et al. 2006:241,147).

PREPARATION/USE: White clay was collected and used medicinally, ceremonially, and in everyday activities by plains people. The **Blackfeet** consider white paint, derived from either clay or crystals, to be very sacred, as it is associated with several significant societies. During a previous visit to the park members of the **Blood** stated that white paint, which is very rare, is used by the elders of the Matoki Society (Zedeño et al. 2006:263). The Blackfeet used white clay for utilitarian purposes as well, to tan and lighten hides, as did other indigenous people in the region. The **Hidatsa** historically used white clay in hair styling, to protect skin against cold weather, for hide painting, and for painting warriors. Weitzner (1979:268) notes that white clay was mixed with sage to paint the bodies of war parties in an effort to gain strength and to detract from individuals' visibility. White clay is also among the contents of the Awaxawi (Hidatsa) Wolf bundles, in particular the Wolf Woman bundle (Bowers 1992).

Other groups that used white clay were the **Manda**n, **Arikara, Assiniboine, Sioux,** and **Crow**. Black and white body paint designs were a central part of impersonations and figured prominently in the Okipa ceremony of the Mandan—the Okipa was the most important ceremony performed at Mandan villages, nine days of dancing which coincided with the Water Buster Ceremony (Bowers 1950). A member of the **Standing Rock Sioux** tribe who has Lakota, Dakota, Nakota, Mandan, Hidatsa, and French ancestry sated that Lone Man brought the paint for the original Okipa Ceremony (Zedeño et al. 2006:203). The Arikara cooked white clay with dog fat, then stirred and kneaded the mixture, and stored it away for future use. This was used as toilet soap (Gilmore 1925e:286). The Assiniboine greased their bows and applied white clay mixed with bison sinew ankle glue to strengthen them. They also painted their bows with white clay. The process of bow wood selection and curing was long and involved but the resulting bows lasted a long time (Dusenberry 1960). Long (1942:137,149) states the Assiniboine further used white clay

by smearing it into their hair to keep it in place. Siouan people used white clay for body paints and for coloring objects in races and games while the Crow believed it was medicine. One Crow consultant whose medicine is the squirrel mentioned the use of white and black face paint in a medicine vision.

CLAY AND PIGMENTS-YELLOW

Yellow Clay, Painted Canyon. Photo Credit: M. Nieves Zedeño 2014

LOCATION OR USE NOTED IN THE PARK: Traditionally, the Little Missouri River was visited by the **Mandan, Hidatsa,** and **Arikara** whose members had rights to collect paints. Yellow was among these paints and when applied to the body, these paints were used to portray different identities. During a visit to the north unit of the park in 2015, yellow pigments were observed along a foot trail near the Riverbend Overlook pullout. Yellow pigments are rather ubiquitous in the Badlands, and were also noted at Painted Canyon in the south unit. They can generally be found in most other areas of the park.

Blood elders observed yellow paint specifically was located in the north unit of Theodore Roosevelt National Park. They stated that *yellow paint* is associated with the Horn and the Matoki Societies (Zedeño et al. 2006:262). In 2015, a **Blackfoot** consultant indicated that yellow paint is also associated with badger medicine.

In 2004 **Crow** consultants visiting a lookout in the north unit of the park witnessed two rutting male bison bucking each other beside the river bank. This incident prompted two consultants to take turns sharing stories about the power of resources. Yellow paint was among the resources mentioned (Zedeño et al. 2006:245):

> *"I guess they [buffaloes] want to find out who's got the strongest medicine. The most powerful medicine. The buffalo got the medicine. A bull buffalo was once drinking water, went in, drunk water, and the snapping turtle grabbed him by the nose. That snapping turtle pulled the buffalo into the deeper water, but he made medicine, they said that he could see yellow paint, made medicine and pulled out, not all the way out but half way, but the snapping turtle also made medicine and dragged him back into the water. He made medicine again and pulled out, but the snapping turtle dragged him back in, so they went back and forth, four times. Until another bull came along and the first one said "help me brother." The second bull went into the water with his horns, made medicine. The first bull got out, sat back and from his place he could see the blood of the snapping turtle. That is why I said they got powerful medicine, they talk to each other and that's one of the true stories. I guess the people who watched them were Crow warriors. These animals,*

they got medicine. Eagles too, eagles the same way. And coyotes. If they adopt you, you're lucky you got medicine. Elk, they got the medicine too. A lot of guys use it to be strong."

PREPARATION/USE: Yellow clay was collected by indigenous groups in the region for use in ceremonies and other commonplace activities. The use of yellow clay is noted in the **Mandan** Buffalo Calling ceremony. Yellow and black painting clays are included in the contents of the bundle associated with this ceremony. A complete bundle contained an arrow-straightener of buffalo rib with perforations; a wooden groover; a rawhide with sand glued to it as polisher; a grapevine; tanned fawn skin; two feet of white owl; two feet of small owl; yellow and black clay for painting; one large white-owl wing feather; gray sage; bow and lance; buffalo robe; magpie tail feathers; and plain black elbow pipe (Bowers 2004). Lowie (1922:216), an ethnographer observing the **Crow**[10], stated that some men would carry small wooden bowls strapped to their belts. These bowls were "medicine" and in the past, men on war parties would carry small bowls or cups with them. Yellow or red paint would be mixed with water or fat in the bowls or cups, the pigments then used to paint their faces and the faces of their horses.

The **Hidatsa** used yellow clays as well as red and white to fix hairdos in males and females but yellow was the preferred hair color in Hidatsa society (Weitzner 1979). These clay colors were also used for hide painting. **Mandan** warriors commonly gathered yellow paints in the Badlands (Beckwith 1938). The **Arikara** used various clays, yellow among them, for decorative and ornamental purposes (Gilmore 1925e). **Assiniboine** consultants from Fort Peck noted the importance of yellow paint gathered from rocks along the river. Although this information was gathered during a previous visit to Fort Union, yellow paint sources exist in Theodore Roosevelt National Park, notably along the Little Missouri River banks.

[10] See Clay-Red Resource page of this report for information on yellow clay provided by a Crow consultant with rights to paint (Zedeño et al. 2006:245).

FOSSILS (AMMONITES, BACULITES, WOOD)

LOCATION OR USE NOTED IN THE PARK: Notable fossilized materials within in the park are large pieces of petrified wood. This wood is located atop buttes along the Petrified Forest trail in the south unit.

PREPARATION/USE: Fossils are among those unmodified materials and ordinary objects that are often included in the contents of sacred bundles. Thought to possess special powers, fossils, pigments, crystals, feathers, animal bones, or snake rattles are used in the widespread religious practices of many Native American groups of the plains and are thus considered significant resources. The **Blackfeet** for example, collect fossils, also called buffalo stones or *iniskim*, for use in ceremonies and medicine bundles like the Beaver bundle. *Iniskim* are cured by polishing them with grease and red paint. They are kept in a pouch inside the beaver bundle and when the bundle is opened ceremonially and they are taken from the pouch they are very hot to the touch. They also grow and reproduce inside the bundle. The story of the *iniskim* is as follows (Zedeño et al. 2006:259):

> *"A woman went to get wood and water. She heard a baby cry and looked in a tree. In a nest was a buffalo stone. They range in size and are still used today. You call upon it to feed us. You feed them too, berries and pemmican. Sometimes they find you but they can be found too. Iniskim are alive and have spirit. In Algonquian, there are very few words that are inanimate."*

Fossils, along with paints, were notably collected by ancestors of the **Three Affiliated Tribes** from buttes in the vicinity of and some distance from the park. Consultants also noted *fossils, crystals, sandstone, various clays,* and *scoria* at Theodore Roosevelt National Park during a 2004 visit to the Petrified Forest Trail (Zedeño et al. 2006:191, 256).

Additionally, an **Arikara** consultant noted in 2015 that fossils are closely associated with the great snake that lived in the Little Missouri River. He added, *People use their clan stories to rationalize what [fossils] are…The Northern Cheyenne kept a petrified horn – very sacred.*

OTHER NAMES: ammonites, baculites

GASTROLITHS

LOCATION OR USE NOTED IN THE PARK: An **Arikara** consultant observed gastroliths in the south unit.

PREPARATION/USE: Gastrolites are more commonly understood as fossilized stomach or gizzard stones from the gastrointestinal tracts of animals. In ethnohistorical accounts Wildschut (1975:94) notes the presence of rock medicine bundles in **Crow** society and speaks specifically about gastrolites. Wildschut (1975:91) observed that there are male medicine rocks and female medicine rocks associated with these bundles. He states "female rocks are egg-shaped pebbles, gastrolites or fossilized ammonites. The male rocks invariably are fossilized baculites, or rocks within which the Indian imagines he sees a human face, or merely a sharply pointed rock of the same kind."

OTHER NAMES: Gastroliths

GRANITE

LOCATION OR USE NOTED IN THE PARK: An **Arikara** consultant noted the presence of granitic rock in the south unit. He recognized it as a material sought after for sweat lodges.

PREPARATION/USE: For Native American groups in the area granites were a multipurpose stone; they used in pottery making and religiously in sweatlodge ceremonies. Typically granite was pulverized and served as temper for the hardening of clay vessels. For example, Gilmore (1925e:286) noted that the **Arikara** and Pawnee people made ceramics from a "fine tenacious clay" with a temper of crushed and pulverized granite. The Arikara women specifically, used roasted and pulverized granite in their pots. This type of granite was usually found in the spent firepits of sweatlodges. Heated granite was first placed within the sacred lodge in a pit. The stones were then drizzled with water and after many uses in rituals, the granite stones become friable and suitable as a tempering agent. They could then be further heated or roasted and pulverized if desired (Gilmore 1925e:286–287). Similarly, the **Hidatsa** would remove degraded granite from sweatlodge firepits for use as an antiplastic (Weitzner 1979:260).

Sweatlodge ceremonies are requisite of all society and bundle rituals in **Blackfeet** culture. Sweatlodges play a central role in the Sun Dance as well. These sweatlodges, only used by men, are associated with the use of granite as noted in Hidatsa and Arikara practices. Blackfeet sweatlodges are made of willow branches; rocks, usually granites, basalts, diorites, or quartzites, are collected from outcrops or riverbeds but not from glacial tills (Reeves and Peacock 2001).

Granite is also noted in the oral traditions and myths of several plains groups as for some, like the **Standing Rock Sioux Tribe**, *granite* is considered a thunderstone. Thunderstones are powerful and further associated with rainmaking (Zedeño et al. 2006:212). A consultant from this tribe believes (Zedeño et al. 2006:250):

> "*All rocks have powerful spirits and need to be fed: stones are medicine and they will ask to make a sacrifice if you pray for it. The red pipe bowl represents the female heart and the stem the male messenger. The joint is where the mystery resides and where prayers bring blessings. The Yuwipi Priests, who are among the most mystical and powerful of men, use these small rocks that are shiny like crystals. Sandstone is a curing rock. Granite is a thunderstone. The park is also a good source of sweat rocks.*"

GYPSUM CRYSTALS (WHITE)

Gypsum, Caprock Coulee Trail. Photo Credit: M. Nieves Zedeño 2014

LOCATION OR USE NOTED IN THE PARK: During a visit to the park in 2004, consultants from the Standing Rock Sioux tribe discussed the presence of significant resources including paints and crystals (Zedeño et al. 2006:250).

When paint sources are located high on the bluffs they are very sacred. There has to be a reason for collecting these paints, and they require preparation and ceremonies before and after collecting the paints. Crystals can be baked and ground, then mixed with water and grease to make white paint. Crystals have many more meanings:

> *"My grandma used to say that crystals could control the dinosaurs. Here are both crystals and dinosaurs. The story goes that a woman started an evil cycle by marrying a dinosaur. She also had relations with her son from the dinosaur and had an evil spirit as a child. But something happened [associated with the crystals] and they all got wiped out."*

PREPARATION/USE: Gypsum crystals were oftentimes used in the hide tanning process by various Native American groups including the **Blackfeet**. Additionally a representative from the **Fort Belknap Tribe** commented that scrapers and pieces of gypsum crystals would have been used to clean and lighten the color of the hide (Zedeño et al. 2006:186,254).

OTHER NAMES: Selenite is a form of several gypsiferous minerals that have crystalline properites.

KNIFE RIVER FLINT

LOCATION OR USE NOTED IN THE PARK: The extraction and exchange of Knife River Flint (KNF) is known in the vicinity of Theodore Roosevelt National Park; some 90 km west of the Knife River Indian Villages (Clark 985; Root 1992; Root 1997; Root 2000; William 2000). This practice was identified as a significant pastime for all Native American groups known to have used or visited the park. Knife River Flint was, and remains an extremely valued exotic material (Zedeño et al. 2006:186).

Knife River Flint. Photo Credit: Rebecca Toupal 2004

PREPARATION/USE: Prehistorically the **Mandan** were heavily involved in the trade of KNF (Ewers 1954). The bird sticks of their eagle trapping bundles were constructed using chockecherry wood and decorated with pieces of KNF among other elements (Bowers 2004:236). Like many tribes in the area, the **Hidatsa** used KNF to make their arrow points (Weitzner 1997). Similarly this material was prized by **Blackfoot** speakers who preferred and continued to use the bow and arrow after the introduction of firearms (Zedeño et al. 2006:213).

LIGNITE (SPRING MUD)

LOCATION OR USE NOTED IN THE PARK: Lignite is observed as black horizons which are visible throughout the Badlands' stratigraphy. Most notably, was the presence of lignite veins along much of the Caprock Coulee trail in the north unit of the park.

PREPARATION/USE: The mud of the lignite spring was used by the Arikara as a dye or paint, specifically to dye willow bark black for use in decorative baskets (Glimore 1925e). Additionally the Hidatsa used clinkers stones or lava rock such as scoria from burned lignite coal beds to polish their bows (Weitzner 1979:234–237). Olden Black earth from the Badlands

PETRIFIED WOOD

LOCATION OR USE NOTED IN THE PARK: An abundance of petrified wood is known in the park, notably in the Petrified Forest portion of the south unit near Medora. Additionally, Kuehn (1990:140–149) noted numerous archaeological lithic procurement and/or reduction locales were located near the Petrified Plateau area due to the presence of target resources like petrified wood. Petrified wood can be found along the eroded edges of this plateau and on adjacent finger ridges and spurs. This mineral has many visible wood structures and is light in color, usually white, gray, or brown.

Consultant Peter Coffey Petrified Forest Trail. Photo Credit: M. N. Zedeño 2015

During an ethnographic assessment of park resources conducted in 2004 and in 2015, consultants were taken along the **Petrified Forest Trail**. Although tribal consultants noted the significance of the wood itself, they also remarked of the topography in the area (Zedeño et al. 2006:253):

> *"The consultants noted that the most salient feature…is its dramatic topography, which allowed for many kinds of traditional activities. For example, hunting would have taken place on the canyon rim whereas camping and collecting occurred on the terraces above the river or on higher ground, depending on the season. The* ***petrified forest*** *area, with its high cliffs and ledges, would have constituted a natural buffalo hunting area; in fact, the park's buffalo herd was roaming all through this area while we were touring it. Uses for the cliffs and ledges ranged from camping, scouting, and hunting to vision questing. Burials, too, would have been placed on ledges. Ceremonial uses of ledges also included the placement of offerings before the beginning of a buffalo hunt.* Burials were placed on a buffalo hide and left there; later on rough [burial] boxes were left on top of a blanket. This is a feel-good place, good fasting place too, has good spirits."

PREPARATION/USE: No utilitarian uses are known from ethnohistorical records but the presence of this resource draws many modern visitors to the park.

PUMICE

LOCATION OR USE NOTED IN THE PARK: Pumice is a vesicular, felsic volcanic silicate, is oftentimes confused with scoria, which exists in great abundance in the park. For example, in 1805 Lewis and Clark referred to immense quantities of pumice stone beds in the region—in reality these beds represent "clinker" stones, or scoria deposits resulting from burning lignite coal seams.

PREPARATION/USE: Parks (1991:391–399) notes the use of pumice in the construction of eagle trapping lodges built by the **Arikara** near the Fort Berthold Reservation circa 1863-1886. The lodges, where the men would live would live during trapping season, were constructed with four posts and layers of grass, pumice, and sod to cover the roof.

OTHER NAMES: Volcanic ash rock

QUARTZ

LOCATION OR USE NOTED IN THE PARK: Consultants from the **Fort Belknap** tribe discussed the significance of quartz crystals during a visit to the north unit of the park in 2004. "Another significant resource noted [in the north unit] was the *ants*; people put tobacco offerings in the *anthills* so that the ants may dig up the small *quartz stones* to use inside rattles. These are special stones that glow in the dark" (Zedeño et al. 2006:257).

PREPARATION/USE: Quartz served many utilitarian purposes for Native American groups in the area but notably, this crystal was used for arrow and dart points. Other preparations include its use as a white paint and for lightening tanned hides as was practiced among the **Lakota** (Winchell 1911).

SANDSTONE

LOCATION OR USE NOTED IN THE PARK: An elder from the **Standing Rock Sioux** tribe spoke of the significance of rocks and their use by Sioux priesthoods during a visit to the north unit of the park. Sandstone in particular is used in curing rituals by these priests. The consultant continued stating (Zedeño et al. 2006:250):

> *"All rocks have powerful spirits and need to be fed:* stones are medicine and they will ask to make a sacrifice if you pray for it. *The* red *pipe bowl represents the female heart and the stem the male messenger. The joint is where the mystery resides and where prayers bring blessings. The Yuwipi Priests, who are among the most mystical and powerful of men, use these small rocks that are* shiny like crystals. Sandstone *is a curing rock.* Granite *is a thunderstone. The park is also a good source of* sweat rocks."

Additionally, consultants from the **Fort Belknap** tribe were impressed with the park's resources and noted the significance of sandstone ledges as they related to stories of the Buffalo Chasers Society and their ceremonies (Zedeño et al. 2006:257):

> *"There is an annual ceremonial buffalo killing at Fort Belknap. The gun that will be used to kill the buffalo is smudged, and an offering is wrapped in red cloth and placed on a sandstone ledge. The color red means the western direction, which is powerful as it is connected to the thunderbird. The buffalo life parallels human life, so we sing a buffalo song to the Creator. The offering will have tobacco, sweetgrass, and stick matches for the spirits. After the pipe is smoked the hunter and the warden will jump in and chase the herd. One young buffalo will stand alone and it will be shot."*

PREPARATION/USE: Sandstone was commonly used by Plains bison hunters for lining roasting pits because it absorbed and maintained heat. It may be found in archaeological features where meat was cooked.

SCORIA

LOCATION OR USE NOTED IN THE PARK: Scoria is baked clay and other sedimentary rock and more accurately referred to as "clinker" in geologic terms. It resists erosion which is why it has played a formative role in hill development in the Badlands. Hilly scoria is one of the nine ecozones recognized within the Little Missouri Badlands (Beckes and Keyser 1983:26–43). In the north unit of the park, an overlook dedicated to viewing red scoria, is a popular attraction for visitors.

Upon observing these scoria beds throughout park, members of the **Fort Belknap** tribe commented on the stones use as paint when ground (Zedeño et al. 2006:256).

PREPARATION/USE: Hidatsa groups used suet along with lava-like stones, such as scoria or clinker from burned lignite coal beds, to polish their bows (Weitzner 1979:234–237).

SELENITE CRYSTALS

PREPARATION/USE: The **Arikara** heated selenite crystals, and then crushed them into a fine white powder. This powder was used "for cleaning, brightening, and giving a gloss to porcupine quillwork, [the crushed crystals were] also used for cleaning and finishing arrows or any other objects in which glue was used" (Gilmore 1925e:284).

OTHER NAMES: Selenite is a type of gypsum; its crystalline structure is composed of calcium sulfate dehydrate.

EUROAMERICAN MINERAL RESOURCES

LIGNITE (COAL)

LOCATION OR USE NOTED IN THE PARK: Lignite coal is prevalent throughout the park. University of Arizona archaeologists noted visible lignite veins along the **Caprock Coulee Trail** in the north unit of Theodore Roosevelt Park during a 2014 site visit. Specifically, western North Dakota contains an estimated 351 billion tons of lignite coal—known to be the lowest grade of coal due to its low heat content and friable texture. Although no coal mining operations are known to exist in the park, historical exploits related to lignite extraction may exist.

OTHER NAMES: Coal

BENTONITIC CLAY

LOCATION OR USE NOTED IN THE PARK: Bentonitic clay strata specifically, are observable in the north unit of the park and are resultant of deposited volcanic ash from aeolian and alluvial events or a lacustrine environment, epochs ago. Murphy (1995:10–11) reports the *blue bed* of bentonite in western North Dakota, located along the Little Missouri River, is associated with the Sentinel Butte Formation tuff and is up to 23 feet thick. This bentonite deposit is the most extensive known and when mined, served a variety of purposes for indigenous peoples and Euroamericans alike (Murphy 1995).

John Heiser briefly spoke of back country ventures to the bentonitic clay strata that can be viewed in the far distance from the the north unit of the park (personal communication 2015).

PREPARATION/USE: Although no historical period clay mining industries are known to exist in the park, bentonitic clay was used during the turn of the twentieth-century in North Dakota as bases for cleansers and soaps and to reclaim fouled motor oils (Budge 1932). Bentonites were also used as acid-activated bleaching clays, as binders of foundry sands, and as fillers. Bentonitic clay may have also been an element in detergents during this time (Clark 1948).

OTHER NAMES: Some bentonite deposits are referred to as swelling claystones (Murphy 1995).

CRUDE OIL

LOCATION OR USE NOTED IN THE PARK: North Dakotans searched for oil deposits across the state for over 50 years. There were no early oil strikes prior to the 1950s because oil exploration in North Dakota was a locally sponsored affair and local investors lacked the expertise, skill, and equipment to successfully explore the state for oil (Herz 2013).

The 1951 discovery of the first productive oil deposit in the Williston Basin ushered in a new era of oil production in the state (Reid 1953). By the 2013, North Dakota was the second largest oil producing state in the country (Herz 2013). While oil production accelerated to the east of the park, exploration within the boundaries of THRO was halted because this area had been established as a historical state park then a nationa park since the 1930s.

Nevertheless, oil exploration has steadily encroached upon the park for the last few decades. This threatens the scenic qualities of the park. In the 1960s, the U.S. Geological Survey determined that oil and gas producing wells had been removing this resource from within the park without making proper payment to the federal government. As a result, nine tracts of park land whithn the Fryburg-Scoria geologic structure were leased to the Amerada-Hess Corporation in 1975. Directional drilling has allowed gas and oil to be extracted from the southern edge of the south unit since this time (National Park Service 1987:7).

Most of the oil in North Dakota is of the shale-oil type, which requires hydraulic fracking to extract. More recently, the NPS and North Dakota state government have make efforts to prevent additional oil production within the viewshed of the park. These efforts, oftentimes, contradict the wishes of property owners who would like to lease their land for oil production even though it is in close proximity to THRO (Norma Meyers, personal communication, 2015).

PREPARATION/USE: Oil is used to create petroleum and is one of the most valuable natural resources in the world. It is used by modern societies around the world to power mechanized vehicles and produce electrical energy.

CONCLUSIONS

The present Integrated Report has added an abundance of data on ethnographic resources, both Native American and Euroamerican, to the previous study conducted by Zedeño and colleagues (2006). The format of this report is specifically targeted to raise awareness of the cultural significance and sensitivity of different resource types as well as to inspire ideas for the interpretation of specific resources that are key to the mission of Theodore Roosevelt National Park.

RESOURCE SIGNIFICANCE

Currently, Native Americans whom we have consulted in regard to these resources have identified several "keystones" that characterize the cultural identity of THRO: the Badlands landscape, with its unique landforms, fossils, and minerals; the bison herd; the elk herd; golden eagles and eagle trapping features; historic structures from various periods; free-ranging horses; longhorn cattle, and prairie dog towns. Numerous other resources in the park are equally significant to culturally affiliated groups, however, these are resources found elsewhere in Indian reservations or neighboring grasslands. This statement *does not* preclude the possibility that Native Americans will, in the future, make a request for collection of a particular resource that they are in need or can no longer access in their homeland. In the past, tribes traded in plants and animal parts across the plains and thus it is not unusual to hear a distant tribe, say, the Blackfoot, inquire about a resource available in the North Dakota Badlands, or vice versa. Carcasses of naturally dead birds or animal pelts, for example, are of great value to the tribal people who must replenish bundles and ritual paraphernalia on a regular basis. Clays and Pigments are also a resource of high value to these tribes. The Resource Inventory contained in this document will help park managers anticipate and justify such resource requests should they arise.

From the perspective of Euroamericans, resources are significant in that they relate to personal and family heritage and identity. The landscape and wildlife are sources of artistic and literary inspiration (Lyle Glass 2015; Norma Meyers 2015). Local residents as well as habitual visitors use their art—paintings, photographs, writins—to promote the park nationally and internationally.

CONTEMPORARY RESOURCE USE

Among the most challenging projects in contemporary Applied Anthropology, particularly that conducted in national parks, is the documentation and quantification of resource use. Simply put, Native American consultants are uncomfortable talking about gathering resources in parks where this activity is strictly forbidden. Native Americans have a clear and painful memory of being persecuted when going about the country outside early reservation boundaries; they have stories about being accused of poaching by game wardens in areas where they held treaty rights; they do not want to be fined when found gathering a feather or a plant. Therefore, when resources needed for ceremonies or medicines are available within a reservation, they will confine themselves to gathering resources in a safe place. The Little Missouri Badlands stretch north inside the Fort Berthold Indian Reservation; therefore, resources found in the park may also be collected in the reservation.

If resources are not readily available, people may trade for them or purchase that resource. A good example is the use of pelts of certain powerful animals like badger, otter, beaver, and bear for replenishing sacred bundle contents; these pelts often are purchased from trading posts or trapper acquaitances (J. Murray, Blackfoot, 2015). Few people will ever admit that they gather resources at a national park without permission, and fewer will want to apply for resource gathering permits, given that they consider national parks to be their homeland and, why should they need permits anyway? Why should they have to tell the park what they want or need and why? This is a common rationale among consultants we have interviewed over the years. Furthermore, use rights for ceremonies continue to be strictly enforced among the tribes so information about resource rights is exclusive. Thus, it is very difficult to systematically document frequency, abundance, and seasonality of resource gathering in general, let alone inside a park. There is also the broadly shared philosophical position that resources give themselves to the person who needs them, when and if, said person is in the right spiritual frame, so there is an element of serendipity regarding the when, where, and how this interaction between a resource and an individual actually takes place.

There are, however, instances where certain resources are collected in a park by explicit preference. A very good example is sage that grows near an eagle trapping pit. This sage is considered more powerful than sage growing elsewhere because of its association with a sacred site. One of our Hidatsa consultants usually collects his sage as needed near eagle trapping pits with full knowledge and acceptance by park officials. Another example is good quality pigments, which the Blackfoot collect opportunistically when they find them. In contrast, people get to know their plant collection spaces as they learn botany and stick to them throughout their lives if possible. Generally, each individual will have his or her own place to collect plants and they will stick to that place habitually. Feathers are generally considered gifts of the spirits to the person who finds them so they will pick a feather from the ground wherever they are at that moment.

We believe that two major historical processes have prevented Native Americans from keeping their relationships with park lands: reservation confinement and the fear and oppression that comes with it, and the original resource conservation mission of national parks that quickly eroded people's desire (and power and rights) to use park places and resources for their traditional doings. This is the case for most tribes whose reservations are removed from parklands and even for tribes that share boundaries with national parks. Most tribal members visit distant parks maybe once or twice in their lifetime, both because of historical alienation and lack of financial resources to travel for recreation. Yet, an area where national parks can be of help to tribal members is in monitoring natural deaths of animals that are known to have a place in ceremonies and sacred bundles (such as those listed in this inventory) and communicate this information to the tribes. In turn, tribal members could let parks know what they are searching for in terms of bundle contents. This kind of intereaction does not need to be officially brockered by permitting.

In short, we cannot overstress the difficulty of obtaining information about contemporary resource use, season of collection, and quantity of collected resource, particularly in the park. Members of neighboring tribes generally prefer to collect resources near their homes, both because it is convenient and safe. Long ago they learned that venturing outside the boundaries of the reservation and specifically in national parks could be penalized by the law and thus younger generations discontinued resource procurement expeditions outside the reservation. If tribal members currently come to the park to collect resources they will not share that information with the research team, and certainly not with park rangers with few exceptions.

INTERPRETATION

With the exception of historic structures, which are interpreted for their worth, there is little or no interpretation of the cultural significance of the remaining keystones; most signs and exhibits focus on the natural history of the park rather than on its cultural significance. A recommendation that ran across everyone who participated in the study is the addition of signs along the park trails that explain, for example, why the park's buffalo herd is so significant to contemporary Native Americans, or why are paints and pigments so highly prized by them. If parks are to maintain their relevance as icons stewards of Native American resources (in fact many consultants applaud the conservation job of parks in general), interpretation must step up to the task.

Likewise, resources that have a deeply personal meaning to Euroamerican neighbors and visitors alike, such as grasslands, river bottoms, archaeological resources, or the free-ranging horse herd, need to be brought to bear in park interpretation beyond the culture history of these settlers. Further support of this conjecture lies in the general absence of interpretations concerning remnant homesteads or ranches in the park and their inhabitants–with the exception of the Peaceful Valley Ranch and the Elkhorn Ranch. Highlighting the use history of the park following the passage of the Homestead Act (1862) into the period of park development is suggested. In

addition to this history, New Deal era politics and legislation is another historic theme that should be interpreted in the park. For example, signage is not provided at the former East Entrance–the location of an expertly constructed WPA sandstone structure.

COLLABORATION

The development of interpretive topics and materials is brings a great opportunity for park managers to reach out to neighbors and tribes in order to collaborate in making these topics and materials accurate and relevant to them as well as to park visitors. Just as there is information on more than 100 resources in this document, information undoubtedly exists that may come to light only in a collaborative and creative setting such as interpretation.

TRADITIONAL CULTURAL PROPERTIES

The most significant ethnographic resources in the park are associated with eagle trapping and the eagle comples. The North Unit in the park is particularly suited for the preparation of a Traditional Cultural District nomination. Thus far, historic preservation authorities in the nation have been open to speak about eagle trapping and take researchers to visit those sites. We suggest that THRO approach the Mandan, Hidatsa, and Arikara Nation with the question of whether they would like to collaborate on the nomination process for an eagle trapping TCP. As part of this project we asked a group of University of Arizona graduate students to prepare an eagle trapping district nomination. We have added the result of their work to the report (Appendix A). Note, however, that this is an example rather than an official document, but should serve as a template if THRO decides to go forward with that nomination

Outside the boundaries of the park a significant landform that is part of the sacred landscape of the Mandan, Hidatsa, and Arikara Nation would certainly qualify for a TCP nomination is Rainy Butte, to the south of Medora.

Data Gaps

An important area that has not received attention in the past 25 years is archaeology at THRO. The park needs to update and complete its inventory but in a collaborative manner, perhaps with a tribal fieldschool where children and youth may learn the value of the park, its archaeology, its natural resources, and its landscape.

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APPENDIX A

EAGLE TRAPPING TRADITIONAL CULTURAL DISTRICT NOMINATION

[ALPHABETICALLY:]

ELIZABETH MARIE EKLUND, REBECCA RENEE RENTERIA, STACY LYNN RYAN, MICHAEL SPEARS, AND ASHLEIGH THOMPSON

MAY 2016

Theodore Roosevelt National Park Traditional Eagle Trapping District

McKenzie County, North Dakota

Name of Property

County and State

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 instructions in National Register Bulletin, *How to Complete the National Register of Historic Places Registration Form.* If any item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions.

1. Name of Property

Historic name: Theodore Roosevelt National Park Traditional Eagle Trapping District

Other names/site number: _____

Name of related multiple property listing**:**

_____

(Enter "N/A" if property is not part of a multiple property listing

---

2. Location

Street & number: _____

City or town: _____ State: ND_____ County: McKenzie

Not For Publication: ☐ Vicinity: ☐

Theodore Roosevelt National Park
Traditional Eagle Trapping District

Name of Property

McKenzie County,

North Dakota

County and State

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 at the following level(s) of significance:

___national ___statewide ___local

Applicable National Register Criteria:

___A ___B ___C ___D

Signature of certifying official/Title: **Date**

State or Federal agency/bureau or Tribal Government

Theodore Roosevelt National Park
Traditional Eagle Trapping District

Name of Property

McKenzie County,

North Dakota

County and State

In my opinion, the property ___ meets ____ does not meet the National Register criteria.

Signature of commenting official: **Date**

Title : **State or Federal agency/bureau or Tribal Government**

_

4. National Park Service Certification

I hereby certify that this property is:

___ entered in the National Register

___ determined eligible for the National Register

___ determined not eligible for the National Register

___ removed from the National Register

___ other (explain:) _____

Theodore Roosevelt National Park Traditional Eagle Trapping District

Name of Property

McKenzie County, North Dakota

County and State

Signature of the Keeper

Date of Action

---

5. Classification

Ownership of Property

(Check as many boxes as apply.)

Private: ☐

Public – Local ☐

Public – State ☐

Public – Federal ☒

Category of Property

(Check only **one** box.)

Building(s) ☐

District ☒

Theodore Roosevelt National Park Traditional Eagle Trapping District

Name of Property

McKenzie County, North Dakota

County and State

Site ☐

Structure ☐

Object ☐

Number of Resources within Property

(Do not include previously listed resources in the count)

Contributing	Noncontributing	
		buildings
4		sites
	3	structures

Theodore Roosevelt National Park Traditional Eagle Trapping District

McKenzie County, North Dakota

Name of Property

County and State

		objects
4	3	Total

Number of contributing resources previously listed in the National Register

6. Function or Use

Historic **Functions**
(Enter categories from instructions.)

Ceremonial Site

Animal Facility

Processing Site

Camp

Current **Functions**
(Enter categories from instructions.)

Ceremonial Site

Outdoor Recreation

7. Description

Architectural Classification

(Enter categories from instructions.)

Materials: (enter categories from instructions.)

Principal exterior materials of the property: _____

Narrative Description

(Describe the historic and current physical appearance and condition of the property. Describe contributing and noncontributing resources if applicable. Begin with **a summary paragraph** that briefly describes the general characteristics of the property, such as its location, type, style, method of construction, setting, size, and significant features. Indicate whether the property has historic integrity.)

Summary Paragraph

The Theodore Roosevelt National Park Traditional Eagle Trapping District is a prehistoric and historic eagle trapping landscape culturally affiliated with the Hidatsa and Mandan. The period of significance is A.D. 1200 to present. The proposed District is constituted of four archaeological

sites, which have been identified by consultants from the Three Affiliated Tribes (Hidatsa, Mandan, Arikara) as being associated with eagle trapping activities (Murray 2009, 2011; Zedeño et al. 2006). These cultural resources form a relational landscape that is representative of eagle procurement and processing strategies that are documented in Hidatsa and Mandan oral tradition and ethnographic records. This landscape continues to be an important place for Hidatsa and Mandan people to connect with their past (Murray 2011). The District consists of unique architectural structures including eagle trapping pits and conical lodges, but also includes animals, plants, minerals, and landforms traditionally associated with eagle trapping activities. The proposed District is within the North Unit of Theodore Roosevelt National Park (THRO) in McKenzie County, North Dakota (Figure 1). The proposed District is located in the Little Missouri River Valley, an area that is characterized by a rugged badlands environment of buttes, bluffs, hills, and deeply incised valleys that contain tributaries of the Little Missouri River (Figure 2). The District maintains its historic integrity and is in stable condition. It is being nominated for inclusion on the National Register of Historic Places under Criterion A, C, and D.

Narrative Description

Environmental Setting

The Theodore Roosevelt National Park Traditional Eagle Trapping District is located in the North Unit of the Theodore Roosevelt National Park (THRO) in McKenzie County, North Dakota (Figure 1). The North Unit encompasses a west to east running portion of the Little Missouri River, a tributary of the Missouri River that flows into the reservoir of Lake Sakakawea. Other notable water features in the vicinity are creeks Squaw, Corral, Bennett, Sheep, and Appel and springs Hagan, Overlook, Mandal, Achenbach, and Stevens. The Little Missouri River and its associated tributaries have produced incised areas throughout THRO and have created associated butte and bluff formations (Figure 2). These local formations are exemplary of a landscape ideal for Hidatsa and Mandan eagle trapping activities due to their use of buttes, hill slopes, and terraces (Daughtrey et al. 2015; KellerLynn 2007; NPS 2016b; Zedeño et al. 2006).

Present composition of flora and the current geology in THRO is representative of prehistoric and historic environments recorded in the ethnographic and archaeological record (Wilson 1928). Flora includes grasslands composed of varying genera and species of grasses, forbs, shrub coverage with sage and various berries as major components. Higher latitude tree species distribution is made up of juniper, ash, and aspen (Hansen et al. 1984). This range of resources was utilized by the Mandan and Hidatsa in the construction and reuse of conical lodges and pits associated with eagle trapping.

THRO was established as a memorial to Theodore Roosevelt who spent many years on the Badlands and cherished and advocated for the use of outdoor spaces as part of the American identity (Daughtrey et al. 2015; Fietzek-DeVries 2010). The memorial was established in 1947 and included the present day South Unit and Elkhorn Ranch. In 1948 the North Unit was added, and in 1978, as designated by a public law, the memorial officially became recognized as Theodore Roosevelt National Park (Fietzek-DeVries 2010). Since the Park's establishment as a federally recognized nature memorial, this land has been managed through a preservation ethic different from much of the greater Missouri River area, which has been developed as agricultural land. Major bypasses through the North Unit of THRO are United States Highway 85 that runs from north-south and the THRO Scenic Drive that runs east-west the entire extent of the park. Foot trail systems include the Buckhorn, Little Mo, Upper Caprock Coulee, Caprock Coulee, Maah Daah Hey, and the Achenbach.

Cultural History of Theodore Roosevelt National Park

Overview

Oral history indicates the Hidatsa and Mandan have occupied THRO and have been practicing eagle trapping activities since time immemorial (Bowers 1950; Daughtrey et al. 2015; Zedeño et al. 2006). Based on currently known archaeological evidence for eagle trapping activities in the region, the period of significance for the proposed District is recommended as A.D. 1200 to the present. The area surrounding the proposed district within THRO has a rich archaeological record spanning from the Early Archaic to the Historic period (5500 B.C.– A.D. 1966), with over 300 known archaeological sites (Daughtrey et al. 2015:8). Ethnographic and oral historical evidence show that Hidatsa, Mandan, Cheyenne, Assiniboine, and Sioux used THRO for subsistence, travel, and ritual (Allen 1982, 1983; Bowers 1950, 1963; Kuehn 1990). Given the dense amount of cultural resources in and around the proposed District, it is possible that the period of significance and the cultural affiliation may broaden in the future with further archaeological and ethnographic work.

Paleoindian Period (9500-5500 B.C.)

The Paleoindian period is characterized by highly mobile populations and activities such as hunting extinct Pleistocene fauna (Johnson and Wood 1980). Although other areas in present-day North Dakota have Paleoindian cultural components, finding Paleoindian materials is rare within THRO (Zedeño et al. 2006:59). Due to site preservation and post-depositional processes, no artifacts from the Paleoindian period have been found within THRO with the exception of one Agate Basin point found in a secondary context at site 32BI122 (Kuehn 1990:118). Three Leonard-aged paleosols (11,070–7200 B.C.) have been found, which are cultural-historical horizon markers for this period (Kuehn 1990:115).

Archaic Tradition (5500 B.C. - A.D. 500)

The Altithermal Climatic Episode, a warming period, coincides with the beginning of the Plains Archaic Tradition during which peoples gathered plants and hunted intermediate and later modern bison species (Loendorf and Bochert 1991:9). Flake stone technology transitioned from the Late Paleoindian lanceolate and stemmed projectile points to side-notched forms (Frison

1991:79). In addition, drought and unreliable food sources resulted in small and less mobile groups with smaller territories (Beckes and Keyser 1983:96; Loendorf and Borchert 1991:9).

Very little Early Archaic Period (5500–3300 B.C.) archaeological deposits have been found within THRO (Kuehn 1990:115). However, six Middle Archaic (3000–600 B.C.) sites have been discovered, which include seven projectile points characteristic of the Middle Archaic Period (Kuehn 1990). During this period the number of sites increased, people relied more on wild flora, and they also moved into the open plains and basins (Frison 1991:88-89).

Seven Late Archaic (1500 B.C. - A.D. 500) sites have been found within THRO (Kuehn 1990:116). This period is characterized by Pelican Lake and Hopewellian projectile points (Frison 1991; Gregg 1985; Reeves 1983; Zedeño et al. 2006:61). Although there are technological differences, there is little difference in subsistence strategies between the Middle and Late Archaic periods (Zedeño et al 2006:61).

Plains Woodland Tradition (A.D. 1 - 1200)

In the Plains Woodland Tradition, people continued to hunt bison as the primary subsistence and gathered food based on seasonal rounds (Beckes and Keyser 1983:103-108; Chomko and Wood 1972; Johnson 2001; Johnson and Johnson 1998; Kuehn 1990:30; Neuman 1975; Reeves 182; Wood and Johnson 1973). Many technological and cultural innovations define the Woodland period in the Plains including the appearance of burial mounds, mortuary ritualism, bow and arrow technology, and pottery (Gregg 1985:79; Johnson 2001; Johnson and Johnson 1998). Complexes include the Besant/Sonata which are characterized by conoidal vessels forms, cord-marked surfaces, Samantha projectile points, and Knife River Flint as raw material (Zedeño et al 2006: 63).

At THRO, Besant complex sites are most common in which eleven projectile points of the Besant tradition were found as well as nineteen cord-marked sherds (Kuehn 1990:122-123).

Late Prehistoric Period (A.D. 500 - 1750)/Plains Village Tradition (A.D. 100-1865)

The Plains Village Tradition is characterized by semi-sedentary, horticultural, and semi-nomadic hunting and gathering subsistence practices (Lehmer 1971; Lovick and Ahler 1982). Six Plains village sites are within THRO, their identification based on 138 sherds and two projectile points

(Kuehn 1990:124; Zedeño et al 206:64). This period contains the earliest archaeological evidence of Mandan and Hidatsa people in the region found to date. This period overlaps with the ethnohistoric period.

Origins of Mandan and Hidatsa

The Mandan call themselves "the People of the first Man" (Mandan, Hidatsa, & Arikara Nation [MHA Nation] 2016). The Mandan emerged both as the Mandan on the Heart River and from primordial origins east of the Mississippi River, traveling along the Missouri to the Dakotas (Zedeño et al. 2006:67). Archaeology and physical anthropology support this general pattern, with strong evidence connecting the Mandan with the archaeological culture known as Extended Middle Missouri Variant. Delving further back in time is problematic because links to the Initial Middle Missouri Variant sites in South Dakota, north-west Iowa, and southern Minnesota remain contested (Zedeño et al. 2006:67-71). At the confluence of the Heart and Missouri Rivers, the Mandan formed seven to nine fortified villages which have been traced to A.D. 1450–1550 (National Park Service [NPS] 2016a). Building from historical reports by La Verendrye and later by Lewis and Clark, Will and Spinden (1906) estimated that in 1738 there were 15,000 Mandan living in these fortified villages. However, the Mandan were severely impacted by small pox in the late 18th century and made alliances with the other affiliated tribes against the Sioux during the 19th century (MHA Nation 2016; NPS 2016; Will and Spinden 1906:100-101).

The name "Hidatsa" comes from the name of a village that means "willows," and the Hidatsa have also been known as the Minnetaree (Bowers 1950:11; MHA Nation 2016; Zedeño et al. 2006:85). The Hidatsa came from three groups, Awatixa, Awaxwi, and Hidatsa proper (Zedeño et al. 2006:82). The Awatixa hold that they have always been from the Knife River area (NPS 2016a), and Ahler (1993a,b) traces the Awatixa to the Charred Body archaeological complex dating to A.D. 1000–1200. The Awatixa presence is also archaeologically suggested in the Flaming Arrow Site radiocarbon dated to A.D. 920–1230 (Toom 1988). The Awaxwi emerged and joined the Hidatsa proper near Devil's Lake.[11] The oral history is supported by archaeological work by Toom (2004) and Dawson (1987). Archaeological evidence suggests that the Awaxwi and Hidatsa proper migrated from Wisconsin to the Dakotas (NPS 2016). Toom

[11] The Hidatsa name is *mirixubaash* which means "sacred water"

(2004) argues that Hidatsa subgroups were in the Knife River area around A.D. 1400–1500 represented by the Scattered Village Archaeological Complex. It should be noted that Ahler (1993a,b) argues for a later arrival after A.D. 1550. This difference could reflect a gap between when the groups joined at Devil's Lake and when the subgroups joined other Awatixa further west in the Knife River area. Small pox and warfare also hit the Hidatsa in the late 18th and early 19th centuries, negatively impacting villages and traditional homelands (Bowers 1963).

The Arikara call themselves Sahnish, which means "the original people from whom all other tribes sprang" (MHA Nation 2016). Sahnish/Arikara trace migration up the Missouri River from Louisiana and Texas (NPS 2016a). Though each tribe maintains its own history and sacred bundles, after the devastating small pox outbreaks in 1781, 1792, 1836, and 1837, the Mandan, Hidatsa, and Sahnish/Arikara came together (MHA Nation 2016) uniting at Like-a-Fishhook Village in 1845 (Bowers 1950:19, 1964:6). Today, Mandan, Hidatsa, and Sahnish/Arikara are the Three Affiliated Tribes on the Fort Berthold Reservation (NPS 2016a).

Ties to Theodore Roosevelt National Park

Theodore Roosevelt National Park is within Hidatsa, Mandan, and Sahnish/Arikara territory (Zedeño et al. 2006:236). Working with consultants, Zedeño et al. (2006) noted that THRO has a stunning landscape that has been used for generations for vision quests and eagles' nests. So strong and sacred are the ties to eagle trapping sites that Three Affiliated Tribes consultants would not go to the South Unit of THRO, and only a consultant who had rights could approach the canyon in the North Unit without conflict (Zedeño et al 2006:236). The badlands in particular are places for visions and defined by songs and ceremonies (Zedeño et al. 2006:237).

According to the consultants, buttes and landmarks are connected with stories of warfare, including Beckworth's published account "Geography of a War Party" (Zedeño et al 2006:237). In the region "…each butte had a spirit and each spirit had a sacred myth, ritual, and songs" (Zedeño et al. 2006:94). Within Theodore Roosevelt National Park, people would follow the Little Missouri River for water, move along the canyon rim from spring to spring, or move from butte to butte using them as landmarks and performing ceremonies (Zedeño et al 2006:237). The springs remain ceremonial resources and only a few can be used for ceremony or medicine (Zedeño et al. 2006:237). In addition to eagles' nests, THRO along the Little Missouri River, is a

place to collect paint and gather the materials to make arrows, by those who have the rights (Zedeño et al. 2006:240).

Significance the Eagle

The eagle is significant to the Mandan and Hidatsa. The eagle is associated with ancestors and gods, linking the spiritual and corporeal worlds (Murray 2011:149). Bowers (1950:247) simply describes eagles as a sacred creature. Murray (2009:36) notes that "*the eagle's origin story is so sacred*, it could not be repeated." Of only two Mandan animal named clans, one is called Speckled Eagle (Bowers 1950:30). Among the Hidatsa, eagles are part of ceremonies, stories, and lodge names (Bowers 1963). In the Okipa Ceremony documented by Bowers "bundles representing creatures which were to appear in the ceremony met according to the bundles and selected those who were to dance and receive offerings" (1950:131). During the ceremony, Bowers reported "two men representing bald eagles" selected by Big Bird bundle owners participated on day 3 of the ceremony (Bowers 1950:131).

In more recent consultations with the Tribes, Zedeño et al. (2006:95) noted that offerings of speckled eagle feathers were made at buffalo spirit buttes to increase the bison herds. Eagle feathers have been historically used in "war bonnets, ceremonial staffs, calumet pipes, and other conspicuous cultural objects" (Murray 2011: 148). As Murray (2011:149) states: "eagle parts, such as feather and bone… had transformative effects on individuals who handled them." Eagle feathers are used in ceremony and are medicine. Today, feathers come through the federal repository permitting system. However, the circumstances of an eagle's death influence the feather's power (Murray 2011:148). Because of the eagle's position, it is not just the bird nor its body that is significant, but the space and time associated with the eagle, its actions and physical connections.

Eagle trapping, as discussed below, is a very precise ceremony associated with strict rules and rights to allow who (and when) eagles may be trapped.

The Historical Use of the Eagle Trapping Landscape and its Relational Components

In the beginning, black bears taught the Hidatsa and Mandan how to trap eagles. Oral tradition tells of a young man, often referred to as Black Wolf, who became lost in the fog and when it lifted

found his way to a grass lodge adorned with eagle feathers. He was invited into the lodge where a father and son bear were in the midst of eagle trapping ceremonies. After a time, the boy was sent home to his village and instructed to prepare a sweatlodge for the bears' journey to his village. Upon the bears' arrival they taught the boy the sweatlodge ceremonies, and after participating in the sweatlodge, the Old Black Bear bestowed upon the boy instructions for trapping eagles (Bowers 1950:220-222).

Historically, eagle trapping was situated within the Hidatsa and Mandan seasonal rounds, and eagle-trapping parties would set out for their eagle trapping camps when the leaves began to turn colors (Bowers 1950:232). Eagle trapping camps were generally a far distance from summer camps and were in parts of Hidatsa and Mandan territory that were not occupied in other times of the year (Bowers 1950:249). Eagle trapping activities were confined to only thin strips of undulating land surrounding river valleys within the much larger and flatter Hidatsa and Mandan aboriginal territory (Bowers 1950:207).

Eagle trapping had the dual purpose of obtaining eagle feathers and harvesting an ample amount of meat and hides for the coming winter. As such, the suitability of hunting influenced the selection of eagle trapping camps' locations (Bowers 1950:249-250). The badlands of the Little Missouri River and its tributaries, including what is today THRO, was considered favorable habitat for elk, deer, and sheep (Bowers 1950:249). A map drawn by Bear Arms in *Mandan Social and Ceremonial Organization* shows two known eagle-trapping camps in the vicinity of what is now considered THRO, one owned by Iron Eyes, a Mandan of the WaxikEna Clan, and the other owned by Raven Wing, a Hidatsa of the Water-buster clan. This historical record indicates that even in recent history both the Hidatsa and Mandan had eagle trapping ties in THRO (Bowers 1950:213).

Eagle trapping parties normally consisted of the leader, his fellow male trappers, and their wives and children (Bowers 1950:232). Women and children were not involved directly in eagle trapping but processed the meat and hides that the men hunted while at the eagle trapping camps (Bowers 1950:248; 250). The Black Bears had explained when they taught eagle trapping to the Hidatsa and Mandan that touching a woman while hunting will bring harm to the hunter (Wilson 1928: 168). The eagle trapping camps were always placed at sheltered areas along tributaries of the major rivers in close proximity to the eagle trapping pits (Bowers 1950:206). Individual eagle trapping camp locations were owned by the trapping leader, who traditionally owned an eagle trapping bundle and the accompanying eagle knowledge (Bowers 1950:231). Among the Hidatsa the

transfer of eagle trapping bundles and territory was from father to son. However, within the Mandan there were numerous factors that influenced the transfer although it was normally passed along clan lineages (Bowers 1950:227-228).

At the camps a ceremonial lodge was built or maintained for repeatedly used locations, which functioned as the ceremonial center for the men's activities during eagle trapping. The women and children lived in wooden and hide tipis (Bowers 1950:206). The primary type of ceremonial lodge was constructed with a four post foundation, which other poles were leaned and stacked upon to create a conical structure. Bark, earth, and grass were placed on the exterior of the poles in order to shield the interior of the lodge from the elements and secure the lodge from attacks. A small door made of buffalo hide would be placed on one side of the structure (Bowers 1950:232-233; Bowers 1965: 160-161; Wilson 1928:143-144). Also central to eagle trapping ceremonial activities was the use of the sweatlodge (Wilson 1928). Sweatlodges were traditionally built using June berry saplings and covered to make a tight container for the heat. Stones were heated and water was poured on them to exude steam and heat. An individual trapper's success in obtaining eagles, and indirectly wealth and status, was directly linked to the upkeep of ceremonial obligations related to eagle trapping. These ceremonies include activities in the hunting lodges, sweatlodges, fasting, and ceremonial torture (Bowers 1950).

The act of trapping eagles was conducted by men in covered, baited pits dug on hill tops, hillsides, and benches (Bowers 1950:206-207). The pits were dug into the earth to the depth that a man could sit up inside, but not quite long enough for one to lay down in. Pits were curated features and would be frequently reused. Great care was put into the placement of the pits, as they needed to be facing the correct direction and be an appropriate distance from a rim or bluff to entice eagles to take the bait. The pits were camouflaged by a frame of buckbrush and grasses layered on top of six poles lashed together to form the foundation of the frame (Bowers 1950:239-240; Wilson 1928:121; 123). The most frequently mentioned type of bait was a stuffed rabbit or jackrabbit skin, however various other types of bait were used (Bowers 1950:240-241).

Eagles within Hidatsa and Mandan Society Today

Modern factors including federal protection of eagles, landscape alteration, and changes in land use have significantly modified cultural practices of the Hidatsa and Mandan associated with eagles (Murray 2011:146). However, eagle medicine rights and the significance associated with

the eagle is actively maintained and transferred in Mandan and Hidatsa culture. Indeed, modern Hidatsa and Mandan members associate the access to eagle feathers for maintaining the health of the community (Murray 2011:149). Modern practices associated with eagle trapping, including the inheritance of eagle medicine rights, are informally guided by genealogies of ownership over specific sites or regions, passed down through oral tradition and at times reinforced through reference to Bowers' ethnographic work in the early 20th century on the topic (Murray 2011:147). Those who have this religious authority and knowledge pertaining to eagles acquire eagle feathers and parts through the federal permit system (Murray 2011:148).

While eagle trapping sites are no longer used for the taking of eagles by the Mandan and Hidatsa, they are spiritually active places and continue to be "important places today for conducting fasts, seeking visions, and making offerings" (Murray 2011:147). These sites continue to be steeped with power because of their association with the maintenance of Mandan and Hidatsa relationships with the spiritual world in the past (Murray 2011:147). For Hidatsa and Mandan today, eagle trapping is best viewed as a relational landscape:

> …focusing on the eagle as simply a bird, eagle trapping pits and lodges as simply archaeological sites, and eagle parts as simply artifacts or objects, unnecessarily compartmentalizes and oversimplified key components of MHA (Mandan, Hidatsa, Arikara) ontology. The agency of the eagle is not restricted to its own body, but extends to the things and places its parts inhabit, and the moments and landscapes where its power is given or transferred.
>
> (Murray 2011:149).

Resources Associated with Eagle Trapping

A wide range of resources was necessary for Mandan and Hidatsa eagle-trapping ceremonies and were used for the construction of trapping pits and lodges, conducting ceremonies and rituals, trapping and caring for eagles, and subsistence. Many of these important plants, animals, minerals, and landforms are present in the North Unit of THRO. Ethnographic research and archaeological investigations document the connection between the historical use of these resources to the Mandan and Hidatsa (Bowers 1950, 1965; Daughtrey et al. 2015; Wilson 1928; Zedeño et al. 2006).

Animal Resources

Upon visiting THRO, Native American consultants from various tribes remarked on "the abundance and diversity of large and small game and *buffalo*, in particular; the presence of *eagle* nests" within the park (Zedeño et al. 2006:236). Animals currently residing in THRO were historically hunted for use as bait in the trapping pits and for their meat and hides. Parts of some animals were also used in sacred bundles and altars associated with eagle trapping ceremonies and the transfer of trapping rights (Bowers 1950; Wilson 1928:145; Zedeño et al. 2006:78).

Golden eagles (*Aquila chrysaetos*) and bald eagles (*Haliaeetus leucocephalus*) live within the park, and their migration route along the Little Missouri River is of historical significance to the Mandan and Hidatsa ceremonial and subsistence cycles (Bowers 1950:208; Figure 28; Murray 2011). A member of the Three Affiliated Tribes who currently holds eagle rights remarked on the importance of the landscape in THRO's North Unit as an eagle migratory route and recognized it as a "very good place and probably was along a regular route" (Zedeño et al. 2006:238). Other birds in the park also hold historical significance. Hawks were trapped along with eagles (Zedeño et al. 2006:238) and their feathers were part of bird sticks used in the transfer of Mandan eagle trapping ceremonies (Daughtrey et al. 2015:204). Swans are known to be associated with eagle trapping bundles and are referred to in songs given by Old Black Bear (Daughtrey et al. 2015:231; Zedeño et al. 2006:78).

Porcupines are found in the area and their quills decorate sticks that were used during ceremonies to mark the location of the fireplace in the hunting lodge, which is considered to be a symbol of the trapping pit (Bowers 1950:234). Snakes, too, were associated with eagle medicine and eagle-trapping bundles (Murray 1999:97; Daughtrey et al. 2015:228).

Animals used as bait in the eagle trapping pit included rabbit, fox, duck, prairie dog, and badger (Wilson 1928:161). Herds of bison, elk, and deer that still roam the park were also hunted for bait,

and roasted and dried meat was an important food source for the hunters during trapping season (Bowers 1950:250). Meat from these animals was also offered to the eagles after they had been taken (Wilson 1928:135).

Plant Resources

Plant resources associated with eagle trapping ceremonies are found growing throughout THRO (Daughtrey et al. 2015), and many may be found in the proposed District. Buckbrush (*Symphoricarpos occidentalis)* and grass were used to construct trapping pit covers (Bowers 1950:Figure 33). Sticks from the serviceberry (*Amelanchier alnifolia*), also known as juneberry, were used to pierce bait in the trapping pit, made into arrow shafts to be used as offerings during ceremonies, and covered the entrance of the ceremonial hunting lodge with sage tied to the branches (Bowers 1950:234; Wilson 1928:152, 162). Branches from the ash tree (*Fraximus pennsylvanica*) had several uses; they represented snakes in the hunting lodge altar, were included in the sacred bundle held by the eagle-trapping expedition leader, and used to mark the corners of trapping pits (Bowers 1950:230, 234-235; Murray 2009:4d1). Choke cherry (*Prunus virginaina L.*) branches were hung over the frame of sweat lodges, placed on altars, and used as bird sticks in sacred bundles (Wilson 1928:206, Bowers 1950:235).

Sage played a continuous role in Mandan and Hidatsa trapping ceremonies, and four species of sage have been identified in THRO (*Artemisia ludoviciana, Artemisia cana, Artemisia frigida, and Artemisia tridentate*) (Daughtrey et al. 2015:310 – 312). Ethnographic records indicate it was placed in a hunter's trapping pit and often burned as incense during ceremonies. It was also used while making offerings to the eagles, to sprinkle water on sacred objects during sweatbaths, and sometimes painted red before ceremonial use (Bowers 1950; Wilson 1928).

Mineral Resources

No pigment quarries have been systematically recorded in THRO; however, pigment sources throughout the park have been identified by Native American tribal consultants (Daughtrey et al. 2015:111-112; 359; Zedeño et al. 2006:236). Ethnographic accounts document the use of red paint and white clay during eagle trapping ceremonies—red was painted onto the face to keep evil influences at bay, and plants used in ceremonial offerings were sometimes painted red (Wilson 1928:154, 164). White clay was also used as body paint before fasting (Wilson 1928:184).

Although widely known sources such as Knife River Flint do not occur in the boundaries of THRO, Native American consultants noted that necessary resources for projectile point manufacture and arrow making can be found within the park (Daughtrey et al. 2015:105). A projectile point was found along with a bison skull in one of the conical lodges in the North Unit of THRO (Zedeño et al. 2006:65), suggesting that it may have been used during eagle trapping ceremonies. Pumice is plentiful in the park and has been documented as construction material for eagle trapping lodges built by the Arikara (Daughtrey et al. 2015:372).

Landform Resources

Flowing eastward through the North Unit of THRO, the Little Missouri River and surrounding river valley is possibly one of the most significant landforms in regards to eagle trapping ceremonies (Figure 3). The waterway supports important resources, including eagles, bison, vegetation, and pigment (Daughtrey et al. 2015:339-341). A series of streams throughout the area feed into the Little Missouri (NPS 2016b), forming an ideal landscape for trapping pits and hunting lodges (Bowers 1950:Figure 28). A conical lodge associated with trapping ceremonies (Site 32MZ101) has been recorded in the foothills, and the ridge tops in THRO were identified by consultants as part of eagle trapping activities, noting that trapping pits would be placed below the ridge tops where the eagles live (Daughtrey et al. 2015:100; Zedeño et al. 2006:238-239).

Archaeological Resources

In her analysis of the cultural importance of eagles, Murray (2011) notes the types of sites associated with the eagle landscape. These include trapping pits, lodges, sacrificial sites, trails and storied places. Archaeological resources within the North Unit of THRO are firmly associated with eagle trapping ceremonies, with three sites containing conical timbered lodges and one identified as an eagle trapping procurement site.

Conical lodge sites (Figure 4) and trapping pit sites are considered today to be powerful places and have been identified as traditional cultural properties (Murray 1999:52-53). The earliest of the three conical lodge sites (32MZ101) dates to the Plains Village Tradition and the Historic Native American period (A.D. 1050 – 1880s). This site consists of a conical lodge located along a tributary of Appel Creek stream, amidst a juniper and ash thicket in the foothills of the Little Missouri River (Daughtrey et al. 2016:99-101). Excavations at this site yielded a painted bison skull, a projectile point, ceramics, and non-local lithic raw material (Kuehn 1990, as cited in Daughtrey et al. 2016:99-101). Two other systematically recorded sites date to the Historic Native American period (A.D. 1742 – 1880s). One of these (32MZ955) is located near Sperati Point and consists of four conical lodges, two reported as still standing and the other two as collapsed. Excavations in a conical lodge at a third site (32BI116) produced a tin can, animal bone, and charcoal (Daughtrey et al. 2016:101).

Eagle trapping pits sites are “low depressions in the ground on high bluffs overlooking streams” (Murray 1999:52). One eagle trapping pit was recorded in THRO, located in the Sheep Butte Spring area (Daughtrey et al. 2016:117). No camp trails have been identified, although these may be difficult to identify if overgrown with vegetation (Murray 1999:55).

Contemporary Importance of Resources

A collaborative study conducted by the Three Affiliated Tribes, Bureau of Applied Research in Anthropology at the University of Arizona, and the Midwest Regional Office of the National Park Service documented the significance of the THRO landscape and its role in eagle trapping ceremonies (Murray 2009, 2011; Zedeño et al. 2006). Although the sites within the proposed District are no longer used for trapping, they are still considered "sources of supernatural power and spiritual knowledge" and today are important places for ceremonial activities such as fasting, vision questing, and making offerings (Murray 2011:147). These studies show that the proposed District in THRO maintains integrity and provides intensely meaningful connections to the past for the Mandan and Hidatsa.

Statement of Integrity

The modern use history of the District has brought about temporary and permanent impacts to the area's physical integrity. Impacts to the District include (1) Park Service access roads that increase noise pollution and bring park visitors in close proximity to the District; (2) Vandalism and/or casual visitation by park visitors facilitated by a nearby pedestrian hiking trail with easy access from a NPS maintained roadway; (3) Oil and gas development along the Park's boundaries that has increased traffic and noise pollution, as well as degrading many aspects of the larger physical environment including the water table; (4) Erosional activities that may impact the physical expression of the individual sites, especially since many eagle trapping sites are located on slopes. While these impacts may affect the physical aspect of the District, ethnographic research has documented that eagle trapping sites are spiritually significant and active places for the Hidatsa and Mandan peoples regardless of physical expression (Murray 2011). Overall, the District maintains a high level of integrity, and due to the long term preservation of the area, it has a uniquely intact landscape of archaeological resources associated to eagle trapping activities by the Mandan and Hidatsa. Recently, bears and eagles have had a resurgence in the region, and the presence of these species increases the integrity of the proposed District.

Non-contributing elements to the proposed District are elements of the National Park Service's infrastructure, including but not limited to the Achenbach Trail, a pedestrian hiking trail; the Oxbow Lookout with its associated parking area and trailhead for the the Achenbach Trail; and the vehicular road that provides access to the lookout and trailhead. While these elements are non-contributing, they do not significantly affect the overall historic integrity of the proposed District.

8. Statement of Significance

Applicable National Register Criteria

(Mark "x" in one or more boxes for the criteria qualifying the property for National Register

Theodore Roosevelt National Park Traditional Eagle Trapping District

McKenzie County, North Dakota

Name of Property

County and State

listing.)

[X] A. Property is associated with events that have made a significant contribution to the broad patterns of our history.

[ ] B. Property is associated with the lives of persons significant in our past.

[X] 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.

Criteria Considerations

(Mark "x" in all the boxes that apply.)

[ ] A. Owned by a religious institution or used for religious purposes

[ ] B. Removed from its original location

[ ]

Theodore Roosevelt National Park
Traditional Eagle Trapping District

McKenzie County,

North Dakota

Name of Property

County and State

C. A birthplace or grave

☐ D. A cemetery

☐ E. A reconstructed building, object, or structure

☐ F. A commemorative property

☐ G. Less than 50 years old or achieving significance within the past 50 years

Areas of Significance
(Enter categories from instructions.)

Ethnic Heritage – Native American

Archaeology - Prehistoric

Archaeology – Historic - Aboriginal

Architecture

Period of Significance

A.D. 1200 – Present

Significant Dates

N/A

Theodore Roosevelt National Park Traditional Eagle Trapping District

McKenzie County, North Dakota

Name of Property

County and State

Significant Person
(Complete only if Criterion B is marked above.)

N/A

Cultural Affiliation

Mandan

Hidatsa/Crow

Architect/Builder

N/A

Statement of Significance Summary Paragraph (Provide a summary paragraph that includes level of significance, applicable criteria, justification for the period of significance, and any applicable criteria considerations.)

The proposed Traditional Eagle Trapping District is significant because it can be identified as a space where the process of trapping eagles and production of sacred eagle feathers occurred. It is important for Mandan and Hidatsa cultural values including ceremonially respecting a sacred animal used in ceremony and ritual paraphernalia. It is also historically and archaeologically significant because eagles have been trapped in this location from time immemorial until the recent past and access to the sacred locations is still closely protected cultural knowledge. The proposed district is significant under Criterion A because the act and ceremony of eagle trapping

has made a significant contribution to the broad pattern of Mandan and Hidatsa ethnic heritage. The proposed district is significant under Criterion C because of the unique architectural style of the eagle trapping pits and conical lodges, as well as the unique natural landscape that allowed for eagle procurement to take place within the district. The proposed district is significant under Criterion D because of its ability to continue to contribute important information pertaining to eagle procurement and processing strategies of the Mandan and Hidatsa, as well as continuing to provide Mandan and Hidatsa people with knowledge of their past. Preserved by the National Park Service, the area has the potential to yield important information about both history and prehistory.

Narrative Statement of Significance (Provide at least **one** paragraph for each area of significance.)

In accordance with National Register Federal Programs regulations (36 CFR Part 60), the proposed Eagle Trapping District in Theodore Roosevelt National Park meets the following criteria:

Criterion (a): Associated with events that have made a significant contribution to the broad patterns of the Mandan and Hidatsa.

Eagle trapping along the Little Missouri River was an essential cultural and religious activity for the Mandan and Hidatsa. Imbued with sacredness and ritual, trapping expeditions provided spiritual sustenance and were an important part of the seasonal subsistence cycle (Bowers 1950, Wilson 1928). Eagle feathers and eagle parts were necessary for a variety of ceremonies conducted by both men and women, contributed to the spiritual health of community, and a factor in the attainment of status and wealth (Bowers 1950; Murray 2009, 2011; Wilson 1928). Ethnographic studies show that the significance of the eagle cannot be fully understood by focusing on the eagle alone; rather, its importance is closely tied to associated resources, which include plants, animals, landforms, and historical trapping sites (Murray 2011:150).

Resources needed to construct hunting lodges, eagle trapping pits, and conduct ceremonies are abundant within THRO (Daughtrey et al. 2015; Zedeño et al. 2006). Wooded areas, streams,

and ridges were ideal places for eagle trapping, and the Little Missouri River valley historically provided a suitable environment for eagle-trapping camps (Bowers 1950:206, Figure 28). Conical structures still standing in THRO's North Unit have been identified by tribal members as eagle trapping lodges that were likely situated along eagle migration routes (Zedeño et al. 2006:238). The abundance of large and small game along the Little Missouri River fulfilled another important purpose of the expedition, which was procuring a winter's supply of meat and hide (Bowers 1950:250).

Historical events in the proposed District represent cultural and religious traditions that figure prominently in oral traditions and are considered to be directly tied to the well-being of the Mandan and Hidatsa (Murray 1999:62). The importance of these events is evidenced by eagle medicine and eagle feather rights held by present-day community members (Murray 1999, 2001).

Criterion c: Embodiment of the distinctive characteristics of a type, period, or method of construction; represents a significant and distinguishable entity whose components may lack individual distinction (for district criterion).

This landscape was constructed based on eagle trapping ceremonies of the Mandan and Hidatsa, and the prairie-forest ecotone characteristics of this area made it the ideal locale for these ceremonies to occur. It is the unique amalgam of the conical lodges and pits in the proposed District area, the ecological and geographical characteristics, and the temporality of the Historic Native American Period that qualify for nomination of the proposed District under this criterion.

The proposed District is within the prairie-forest ecotone and in close proximity to many water sources (Zedeno et al. 2016). The ecological and geographical range of the district was utilized by ancestors of the Mandan and Hidatsa in eagle trapping ceremonies, and depending on locations with respect to the bluffs, conical lodges served different purposes (Daughtrey et al. 2015; Zedeño et al. 2006). All of the ecological and geographical resources in this district, when taken as a whole, are representative of eagle trapping ceremonies as practiced by the Mandan and Hidatsa.

In addition, the conical lodges and eagle trapping pits hold distinct and well preserved architectural characteristics of the Historic Native American period. The unique construction style of conical lodges and eagle trapping pits is temporally and culturally specific to Hidatsa and Mandan eagle trapping activities. The lodges and pit within the proposed District are exemplary of that form. The conical lodges usually consist of locally harvested pieces of timber that are leaned inward towards the tops towards each other to form the cone shape (Daughtrey 2015). While the trapping pits were usually dug into a butte or hillside, about the length of a person and deep enough for a man to sit in. The pits were covered with a wooden frame and grasses to conceal them from approaching eagles. The architectural style of both the conical lodges and eagle trapping pits were prescribed based on traditional knowledge held by leaders of eagle trapping expeditions, and their purposeful construction would effect the outcome (Bowers 1950).

Criterion (d): History of yielding, or potential to yield, information important to prehistory or history

The proposed District is a relational landscape of archaeological resources connected with eagle trapping activities of the Hidatsa and Mandan between A.D. 1200 to the present, which has the potential to yield important information about Mandan and Hidatsa architecture, resource procurement, and processing strategies. The architectural components within this proposed district include trapping pits and conical lodges, which are likely to yield significant insights into material choices, construction techniques, and site placement. Additionally, the proposed District has a high level of integrity due to the preservation ethic of THRO that has uniquely preserved the relational components of the eagle trapping landscape. As such, the proposed District is a unique and complete window into prehistoric and historic eagle procurement and processing strategies of the Mandan and Hidatsa. Furthermore, this proposed District is a significant place for Hidatsa and Mandan peoples today to connect with spiritually charged places from their past and continues have the potential to be a place where Hidatsa and Mandan peoples learn about their past (Murray 2011:147).

Criteria considerations

Theodore Roosevelt National Park Traditional Eagle Trapping District

McKenzie County, North Dakota

Name of Property

County and State

In accordance with National Register criteria considerations (36 CFR 604), the following considerations must be discussed.

Criteria A: Owned by a religious institution or used for religious purposes.

The Eagle Trapping District is used for religious purposes, however these activities are subject to Permissible Accommodation (US DOJ 1996:IIA). All religious activities are conducted by Federally Recognized Tribes. Even though it was used for religious purposes, it was not part of an established religion.

Criteria C: Birthplaces and grave

The proposed Eagle Trapping District may contain undisclosed burials. However, in the event of discovery, they are non-contributing elements.

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Previous documentation on file (NPS):

Theodore Roosevelt National Park Traditional Eagle Trapping District

McKenzie County, North Dakota

Name of Property

County and State

____ preliminary determination of individual listing (36 CFR 67) has been requested

____ previously listed in the National Register

____previously determined eligible by the National Register

____designated a National Historic Landmark

____ recorded by Historic American Buildings Survey #_____

____recorded by Historic American Engineering Record # _____

____ recorded by Historic American Landscape Survey # _____

Primary location of additional data:

____ State Historic Preservation Office

____ Other State agency

____ Federal agency

____ Local government

____ University

____ Other

Name of repository: _____

Historic Resources Survey Number (if assigned): _____

Theodore Roosevelt National Park Traditional Eagle Trapping District

Name of Property

McKenzie County, North Dakota

County and State

10. Geographical Data

Acreage of Property _____

Use either the UTM system or latitude/longitude coordinates

Latitude/Longitude Coordinates (decimal degrees)

Datum if other than WGS84:_____

(enter coordinates to 6 decimal places)

1. Latitude: Longitude:

2. Latitude: Longitude:

Theodore Roosevelt National Park Traditional Eagle Trapping District

McKenzie County, North Dakota

Name of Property

County and State

3. Latitude: Longitude:

4. Latitude: Longitude:

Or

UTM References

Datum (indicated on USGS map):

☐ NAD 1927 or ☐ NAD 1983

1. Zone: Easting: Northing:

2. Zone: Easting: Northing:

3. Zone: Easting: Northing:

4. Zone: Easting : Northing:

Verbal Boundary Description (Describe the boundaries of the property.)

Theodore Roosevelt National Park
Traditional Eagle Trapping District

Name of Property

McKenzie County,

North Dakota

County and State

BOUNDARY JUSTIFICATION (EXPLAIN WHY THE BOUNDARIES WERE SELECTED.)

11. Form Prepared By

name/title: _____

organization: _____

street & number: _____

city or town: _____ state: _____ zip code: _____

e-mail_____

telephone: _____

date: _____

Theodore Roosevelt National Park Traditional Eagle Trapping District

Name of Property

McKenzie County, North Dakota

County and State

_

Additional Documentation

Submit the following items with the completed form:

- **Maps:** A **USGS map** or equivalent (7.5 or 15 minute series) indicating the property's location.
- **Sketch map** for historic districts and properties having large acreage or numerous resources. Key all photographs to this map.
- **Additional items:** (Check with the SHPO, TPO, or FPO for any additional items.)

Theodore Roosevelt National Park Traditional Eagle Trapping District

Name of Property

McKenzie County, North Dakota

County and State

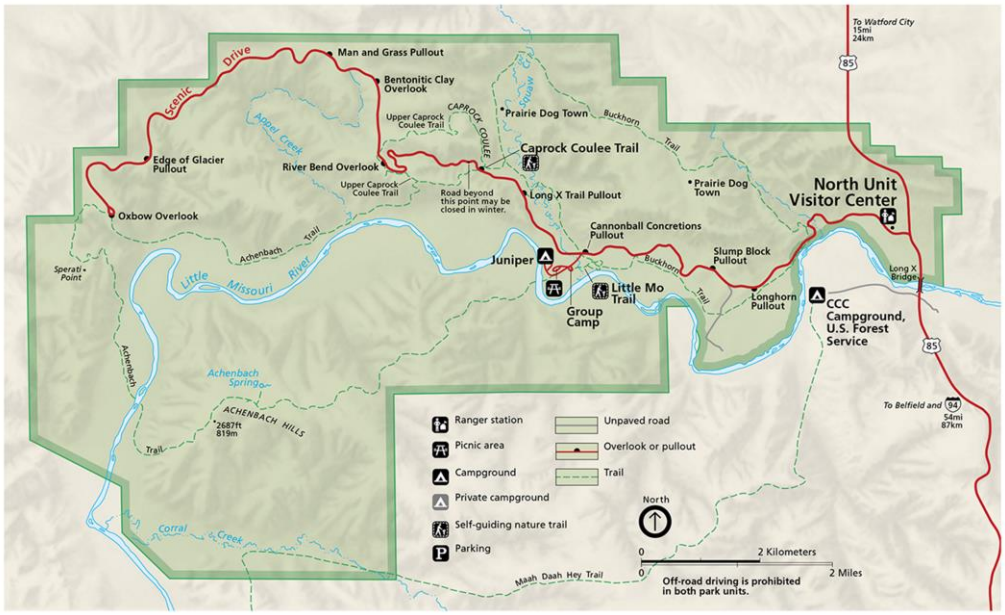

Figure 1. A Map of the North Unit of Theodore Roosevelt National Park with NPS infrastructure

Theodore Roosevelt National Park Traditional Eagle Trapping District

Name of Property

McKenzie County, North Dakota

County and State

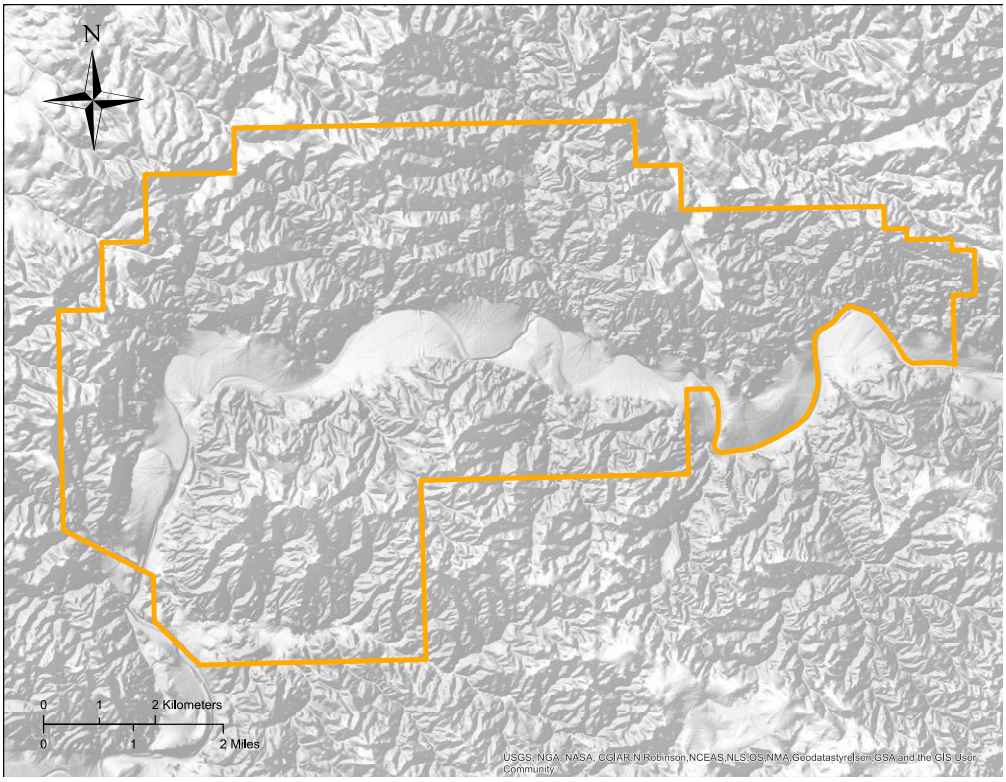

Figure 2. A Gray Scale Map of the North Unit of Theodore Roosevelt National Park demonstrating the topography of the area.

Photographs

Submit clear and descriptive photographs. The size of each image must be 1600x1200 pixels (minimum), 3000x2000 preferred, at 300 ppi (pixels per inch) or larger. Key all photographs to the sketch map. Each photograph must be numbered and that number must correspond to the photograph number on the photo log. For simplicity, the name of the photographer, photo

date, etc. may be listed once on the photograph log and doesn't need to be labeled on every photograph.

Photo Log

Name of Property: Theodore Roosevelt National Park

City or Vicinity: North Unit

County: McKenzie State: North Dakota

Photographer: M. Nieves Zedeño

Date Photographed: 2004

Description of Photograph(s) and number, include description of view indicating direction of camera: Little Missouri River, North Unit, Theodore Roosevelt National Park (from Daughtrey et al. 2015:339).

1 of _3__.

Theodore Roosevelt National Park Traditional Eagle Trapping District

Name of Property

McKenzie County, North Dakota

County and State

Figure 3.

Name of Property: Theodore Roosevelt National Park

City or Vicinity: North Unit

County: McKenzie State: North Dakota

Photographer:

Theodore Roosevelt National Park Traditional Eagle Trapping District

Name of Property

McKenzie County, North Dakota

County and State

Date Photographed: 2004

Description of Photograph(s) and number, include description of view indicating direction of camera: Conical Lodge, Theodore Roosevelt National Park (from Daughtrey et al. 2015:116).

2 of _3_.

Theodore Roosevelt National Park Traditional Eagle Trapping District

Name of Property

McKenzie County, North Dakota

County and State

Figure 4.

Name of Property: Theodore Roosevelt National Park

City or Vicinity: North Unit

County: McKenzie State: North Dakota

Photographer:

Date Photographed: 2004

Theodore Roosevelt National Park Traditional Eagle Trapping District

McKenzie County, North Dakota

Name of Property

County and State

Description of Photograph(s) and number, include description of view indicating direction of camera: Conical lodge disguised in thicket, Theodore Roosevelt National Park (from Daughtrey et al. 2015:99).

3 of _3_.

Figure 5.

Theodore Roosevelt National Park Traditional Eagle Trapping District

Name of Property

McKenzie County, North Dakota

County and State

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 100 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 Office of Planning and Performance Management. U.S. Dept. of the Interior, 1849 C. Street, NW, Washington, DC.