

Indian Forts and Religious Icons: The Buffalo Road (*Qoq'aalx 'Iskit*) Trail Before and After the Lewis and Clark Expedition

Sara A. Scott

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Abstract The Buffalo Road Trail was used for centuries by Columbia Plateau Indians to access buffalo hunting grounds east of the Continental Divide. Peeled trees, rock cairns, and unique stone features represent archaeological signatures of the trail's antiquity and demonstrate its extensive use. Ancient trails linked pre-contact camps and settlements and allowed for the diffusion of a variety of cultural items. From a landscape perspective, trails provide information relative to pre-contact travel, subsistence, trade, and warfare. Although significant to the indigenous people in the region, this and other trails were also used by European and American groups colonizing the American West over the past several centuries. Captain Meriwether Lewis, Jesuit missionary, Nicolas Point, and General John Gibbon were among those who traveled this well worn Indian road. Archaeological studies, oral histories and ethnographic and historical information underscore the importance of the trail to pre-contact, protohistoric, and historic people.

Keywords Trails · Landscape · Trade · Meriwether lewis · Jesuit missionaries

Introduction

In 1805 and 1806, the Lewis and Clark expedition traveled west, then east through what is now Montana as the Corps of Discovery journeyed from St. Louis to the Pacific Ocean and back again. The corps, which was comprised of 33 men, traveled over 7,000mi (11,265 km) on foot and on horses, and in dugout canoes and pirogues in just over 28 months. The expedition collected and documented more than 200 plant and animal species. They informed President Thomas Jefferson that a Northwest Passage of exclusive river travel was an unfounded dream. The expedition's trials, tribulations, and interactions with native peoples are the subject of hundreds of books and articles. The

S. A. Scott (✉)
Montana State Parks, P.O. Box 995, Lolo, MT 59847, USA
e-mail: sarascott@mt.gov

Lewis and Clark Trail is now a National Historic Landmark that winds its way across the United States from Missouri to the Oregon Coast.

Remnants of the Indian trails the explorers used to find their way still exist today. In what is now western Montana, the explorers followed a portion of what is known as the Buffalo Road Trail. The following study describes: (1) use of the Buffalo Road before and after Meriwether Lewis' epic journey; (2) archaeological and historical sites and features found along the trail; (3) Indian groups that used the trail and tribal place names associated with it; and (4) theoretical approaches to interpreting trails and their associated features. Through the lens of landscape archaeology, the dynamic use of the trail—as a travel route, a trade route, and a war and raiding path—is examined from pre-contact (i.e., before ca. 1800 CE for this area) to historic times using archeological, historic, and ethnographic evidence. Changes in social interaction, economics, and warfare are discussed along with their subsequent effect on indigenous people and their use of the Buffalo Road. Trail features are well suited to studying long-term changes that transcend a separation between prehistory and history providing a baseline for comparing the recent to the deep past (Lightfoot 1995, p. 200).

The 2005 to 2006 Lewis and Clark Bicentennial commemoration offered an opportunity to document the Corps of Discovery's journey across relatively pristine landscapes where portions of the original trail are still intact and untrammled (e.g., Thompson 2005). During the Bicentennial, federal agencies investigated archaeological and historical sites within the trail corridor. These efforts also allowed agencies to incorporate tribal voices into the commemoration (Hoxie 2006). The Circle of Tribal Advisors, which included representatives of 41 modern-day tribal governments, worked to ensure that meaningful tribal involvement, histories and perspectives were included in national, state, and local Bicentennial events. The inclusion of tribal people shifted the focus of research during the commemoration from strictly what happened during the expedition to who used the trail before the expedition and for what purpose and who used it afterwards. In essence, a layered cultural landscape approach was taken so that all facets of trail use over time were explored and so that the pre-Lewis and Clark place names for and meanings of this trail system would be included in the analysis and decision-making related to the trail. Many realize (the author among them) that Lewis and Clark spent but a few days traversing trail segments that now hold their name; yet indigenous people spent centuries, if not millennia, carving the well worn "roads" the explorers so deeply relied upon during their journey (Moulton 1987, p. 401, 1993, p. 96).

While they traveled through what is now Montana, the expedition did not break new trail unless they were forced to. Instead, they used "existing roads" created by indigenous North Americans. The area of study in this paper focuses on a 74.5-mi (120-km) section of the Buffalo Road Trail that Meriwether Lewis followed east from the banks of the Clark Fork River in western Montana over the Continental Divide to the Great Falls of the Missouri in central Montana (Fig. 1). Meriwether Lewis, accompanied by Nez Perce guides, mistakenly interpreted the word his guides called the Blackfoot River and the trail along it as "Cokahlarishkit" (Moulton 1993, pp. 88–89; Salish-Pend d'Orielle Culture Committee 2003). The actual Nez Perce words for the Blackfoot River trail are *Qoq'aalx 'Iskit* or "buffalo road," or *k'uysey'ne'iskit*, which translated means "bison hunt trail." The term Buffalo Road Trail, the name by which this American Indian trail is now commonly referred, is used in this paper.

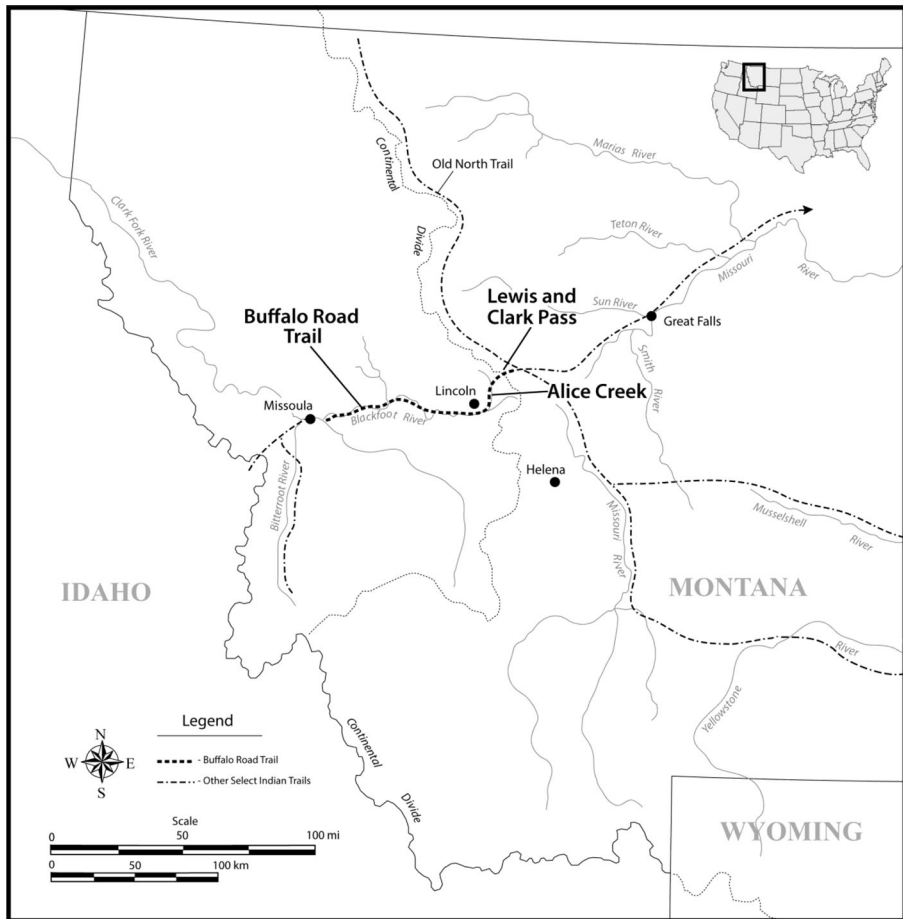


Fig. 1 Location of Buffalo Road Trail in western Montana (information on other Indian trails provided by Tim Ryan and Dave Schwab, EthnoTech, Inc., Polson, MT)

The author conducted an archeological field study of the Buffalo Road Trail near the base and at the top of the Continental Divide on USDA Forest Service (Forest Service hereafter) land over a five-year period, which culminated in 2007, with the listing of this trail segment and its associated archaeological sites and stone features in the National Register of Historic Places. The extensive history of trail use is presented here along with an examination of associated archaeological sites, including scarred trees, pre-contact campsites, rock cairns, and other unusual stone features.

Methods

To document the history of the ancient Buffalo Road Trail, the author undertook an extensive literature review that included examining the following: editions of the Lewis and Clark journals (Moulton 1987, 1993; Thwaites 1905); Government Land Office (GLO) plat maps (1877–1925) and notes; historical journals of early Euroamerican

explorers, missionaries and military officers; Nez Perce, Salish, Blackfeet, and Crow ethnographies (Ewers 1958, 1968; Fahey 1974; Haines 1955; Johnson 1969; Lowie 1956; Secoy 1992; Turney-High 1937); and reports of previous heritage resource studies of the area (Brumley 1998; Deaver 1996; Ferguson 2002; Knight 1989; Lahren 1997; Light et al. 1994; Scott 1979a, 1979b, 1979c).

Based on these data and topographic maps on file at the Montana Historical Society (prepared by Robert Bergantino), the section of the trail under study was plotted on 7.5 min series topographic maps. Once plotted, a corridor of approximately 0.25mi (0.4 km) was established on either side of the suspected trail route and previously reported archaeological sites were plotted on the map. The 0.5mi-wide (0.8 km) corridor was then intensively surveyed by the author and field assistants to determine where intact trail tread remained and whether additional sites and features existed within the corridor. It was assumed that pre-contact and historic Indian groups traveling along the trail would camp nearby (as indicated by the numerous Indian camps Meriwether Lewis observed along this trail in 1806) and that the 0.5mi- (0.8 km) wide corridor would be a sufficient catchment area for pre-contact and historic sites associated with trail travel. Relatively little comparative literature describing what constitutes a human-made trail is available (Snead et al. 2009a). For those working in the field, it is a challenge to know how to distinguish between trails created by American Indian people versus those made by homesteaders and sheep herders (Scott 2001, p. 4–2). Although Bergantino's map and the GLO maps helped plot the trail location, on-the-ground trail evidence was more difficult to read and decipher. Previous trail study information (Davis 1980a; Loendorf and Brownell 1980; McLeod 1980; Platt 1992; Thompson 2005) and conversations with National Park Service historic trail specialists indicate that there is no reliable scientific way to differentiate between modern, historic, and pre-contact trails, particularly if trail use continued over long periods of time. Nevertheless, several inherent and distinctive features of pre-contact trails set them apart from more recent trail types:

1. Trail ruts featuring foot and travois tracks approximately 8-23in (20–60 cm) wide that run parallel to each other (human tread follows contours, game trails do not), with the number of ruts ranging from two to over a dozen;
2. Trees or bushes growing in a linear fashion because trees are able to establish themselves in the abandoned or exposed trail bed;
3. Archaeological sites located adjacent to the trail;
4. Rock cairns located adjacent to the trail with the bottom rocks embedded in the ground and/or covered with lichen;
5. Scarred trees with their bark removed by American Indian groups who exposed and ate the cambium layer of the trees; and
6. Place name references or references in oral traditions by Indian groups that once occupied the area and used the trail.

Following these guidelines, Forest Service archaeologists (including the author) surveyed and flagged a 4.97-mile (8 km) segment of the trail in 1999 and 2000 (Scott 2001). In many instances, the location of trail segments was speculative because historic use by hikers, Forest Service personnel, hunters, and cattle deepened trail ruts and obliterated features such as travois tracks and small rock cairns that once marked

the ancient trail. Historical accounts indicate that large groups often traveled the trail at the same time and in these instances they usually followed secondary or alternate routes, which converged on Lewis and Clark Pass or on Cadotte Pass to the southeast. Because of this, the Buffalo Road Trail is best seen as more of a corridor of travel within which several alternate routes were possible. Trail segments immediately east of the Continental Divide are privately owned and were not examined as part of this study.

Subsequent to the trail survey, in 2000, the Forest Service enlisted members of the Tribal Historic Preservation Office (THPO) of the Confederated Salish and Kootenai Tribes to map the ancient trail using global positioning satellite (GPS) equipment (Scott 2001). Three years later, a Forest Service consultant provided further descriptive information about trail resources for inclusion in a National Register of Historic Places district nomination (Hall et al. 2006). Forest Service personnel (the author) also worked with the Salish and Pend d'Oreille Culture Committee to document the ways in which their ancestors used the area and to determine whether researchers could access background tribal information on place names and oral histories.

Archaeological and Historical Background

Numerous archeological sites represented by chipped stone tools, projectile points, and debitage dating from the Middle Archaic through the Late Pre-contact period have been identified in the study area of the Upper Blackfoot River Valley (Aaberg 1985; Brumley 1998; Ferguson 2002; Knight 1989; Lahren 1997; Light et al. 1994; Scott 2001). The region's prehistoric inhabitants mined Mississippian Madison Group limestone chert from local quarries located in the Avon and Blackfoot River valleys (Bodily 2014; Knight 1989; Napton 1965). Late Pre-contact period projectile points were recovered during Forest Service and Bureau of Land Management surveys conducted along the Upper Blackfoot River and along the Willow and Alice Creek drainages, both tributaries to the Blackfoot River (Knight 1989). Butchered bison bone excavated along the Blackfoot River some 30mi (50 km) west of the study area (along the Buffalo Road Trail) yielded radiocarbon dates of approximately 1,000 years CE (Aaberg 1985), which suggests that bison did roam west of the Continental Divide. Captain Meriwether Lewis, in fact, noted bison dung as he traveled through this area on July 6, 1806 (Moulton 1993, p. 96), confirming that herds penetrated the Continental Divide. For various Indian groups, buffalo were critical providing not only subsistence but robes, skins, and dried meat for exchange and barter (Ewers 1968; Fahey 1974; Haines 1955).

On June 30, 1806, the Lewis and Clark expedition reached Traveler's Rest in the Bitterroot Valley near present-day Lolo, Montana. They rested there for 3 days and then the corps split into two parties. William Clark's group left to explore the Yellowstone River; Captain Lewis, along with 14 men including five Nez Perce Indian guides, and 17 horses set out to explore the northernmost reaches of the Marias River, hoping to exert further territorial claim to the Louisiana Purchase (Moulton 1993). Lewis and his party set out July 3, 1806, travelling along the Bitterroot and then the Clark Fork River to its confluence with the Blackfoot River. The group traveled on a "road" that was considered by the Nez Perce to be a "well beaten track" (Moulton 1993, p. 85). The Nez Perce only traveled with the explorers as far as present-day Missoula for fear of

reprisal from their enemies the Atsina, Crow, Blackfeet, and Hidatsa Indians (Moulton 1993, p. 90). The guides forewarned Lewis that these tribes would cut his party off, but the men elected to continue. The Nez Perce advised Lewis that, as he neared the ridge of the Continental Divide, the road forked and they should follow the left fork (Landers Creek) but that the right fork would also lead them to the Great Falls of the Missouri (Moulton 1993, p. 85). The right fork crossed Cadotte Pass 4mi (6.4 km) to the southeast (Johnson 1969; Stone 1913).

As Captain Lewis traveled east up the Blackfoot River, he noted five different abandoned Indian encampments containing between 11 and 32 lodges made of brush, bark, and sticks. Today, these rare structures are known as conical timber lodges or wickiups (Davis 2014; Davis and Scott 1987; MacDonald 2012). Lewis also observed the tracks of a returning war party of Minnetares (Hidatsas) accompanied by “a large pasel of horses” (Moulton 1993, p. 93). These horses were likely captured from the Salish, given the proclivity of Plains tribes to carry out raids on this group (Fahey 1974; Farr 2003; Point 1967; Turney-High 1937). On July 6, 1806, Lewis camped along Beaver Creek, just 2mi (3 km) west of present-day Lincoln, Montana. Here he observed an Indian camp with 32 abandoned lodges and signs of buffalo. The frequency and number of Indian camps visible from the trail clearly reflects the number and size of the groups using the Buffalo Road during the Late Pre-contact and Protohistoric periods.

On July 7, 1806, Lewis reached the top of the Continental Divide. From the top of the pass or “the gap,” as Lewis referred to it, he recognized Square Butte in the distance, a landmark he named in 1805 when the expedition was headed west to the Pacific Ocean (Moulton 1993, p. 95). From the pass, the party descended the mountain and camped near its base, traveling a total of 32mi (51 km) on horseback that day. The following day the group continued along the well worn trail and reached the “Medicine” (Sun) River (Moulton 1993, p. 87). On July 13, 1806, they reached the Great Falls of the Missouri and on August 12, 1806, they reunited with William Clark and the remainder of the group.

The next documented visit by Euroamericans on the Buffalo Road came approximately 40 years after the visit by Meriwether Lewis when Jesuit missionaries, Father Nicolas Point and Father DeSmet, arrived in the Rocky Mountain region to establish missions among various Indian tribes (Scott 2001, 2014). Father Point, the official diarist, maintained detailed notes regarding the customs, dress, and interactions among Indian groups (Point 1967). Point converted many Salish (he refers to them as Flathead) Indians to Christian worship, although the Salish continued practicing traditional religious ceremonies as well. Father Point traveled with the Salish on 30-plus-day excursions to and from buffalo hunts east of the Continental Divide, traversing the Buffalo Road Trail (Point 1967). He commented on the importance of the buffalo to Indian groups for food as well as trading stock.

As fur traders set up posts throughout the West, Isaac Stevens the Governor of Washington Territory, sent out several parties in the early 1850s to explore and document a potential route for a transcontinental railroad and a military road. Men who led these expeditions along the ancient Indian road between 1853 and 1855 included James Doty and F.W. Lander along with Governor Stevens and Lieutenants Saxton, Grover, Mullan, and Donald. Lander’s Fork Creek, a drainage that trail travelers followed en route to Lewis and Clark Pass, was named after F.W. Lander. Based on their reconnaissance, Stevens favored the construction of a railroad route over

Lewis and Clark Pass. Another route was chosen some 40 miles (64 km) to the south and the study area remains pristine (Brumley 1998).

In October 1871, General John Gibbon led a party up Alice Creek and over the Continental Divide to ascertain which route Meriwether Lewis had taken. After studying the trail routes over Cadotte and Lewis and Clark Passes, Gibbon determined that Lewis crossed the latter, as descriptions and compass bearings for the area matched Lewis' journal entries for July 7, 1806. Gibbon noted the terrible weather conditions on the October day he crossed the divide, remarking that he was so cold he stopped to build a fire (Gaff and Gaff 1994).

Gold was discovered in Lincoln Gulch in 1865. By 1871, more than 3,000 people lived in what is now the town of Lincoln, Montana. Among the numerous and relatively sudden landscape changes during this time, modern road networks rapidly developed, connecting burgeoning settler communities. Soon the ancient Indian road along the Blackfoot River became a stage road, and wagon ruts replaced the original travois tracks. By the 1890s, homesteading, ranching, and trapping followed on the heels of the mining boom that played out quickly. Homesteads were subsequently established in the Alice Creek Valley near the ancient Indian road. In fact, the barn of the Patterson Ranch, located mid-way up the Alice Creek drainage, straddled the ancient trail. In the early 1900s, the Patterson family reported seeing Indian people (tribal affiliation apparently unknown) still traveling along the Buffalo Road. Alberta Patterson established a homestead near Cadotte Pass, south and east of her father's homestead, and reported that 1 day while she was picking service berries, she observed a band of Indians with horses and travois' traveling along the trail over the pass (Upper Blackfoot Valley Historical Society 1994, pp. 247, 249). In 1920, the Forest Service built a guard station at the head of the Alice Creek drainage just below Lewis and Clark Pass (Scott 2001). The guard station was removed in 1970.

Description and Interpretation of Trail Sites and Features

A network of trails marked the Upper Blackfoot River Valley and Continental Divide during pre-contact, protohistoric, and historic times (Salish-Pend d'Orielle Culture Committee 2003). The Buffalo Road Trail and the features and sites along it (collectively recorded as site 24LC1211) are viewed as part of a landscape continuum—the 4.97mi (8 km) section presented here is a sample of a much more extensive landscape feature. Often it is difficult to determine where trails start and end because they were connected to one another over millennia and by their nature often have no beginning or end (Snead et al. 2009a, p. 2). Trail tread is still visible in many locations within the Alice Creek drainage (Fig. 2). Trail ruts follow natural landscape contours in contrast to game trails which generally climb vertically. In many instances, tracks of parallel tread are evident, most likely created by groups traveling together in side-by-side fashion instead of single file. Approximately 3.97mi (6.4 km) of intact trail tread was identified. The remaining portions of the trail are too disturbed or over-grown to positively identify the original trail.

Beside trail tread, other features mark the path of the Buffalo Road including rock cairns, scarred trees, two stone structure sites, and two large buried pre-contact campsites. These are discussed in a broader context below. Figure 2 shows the location of

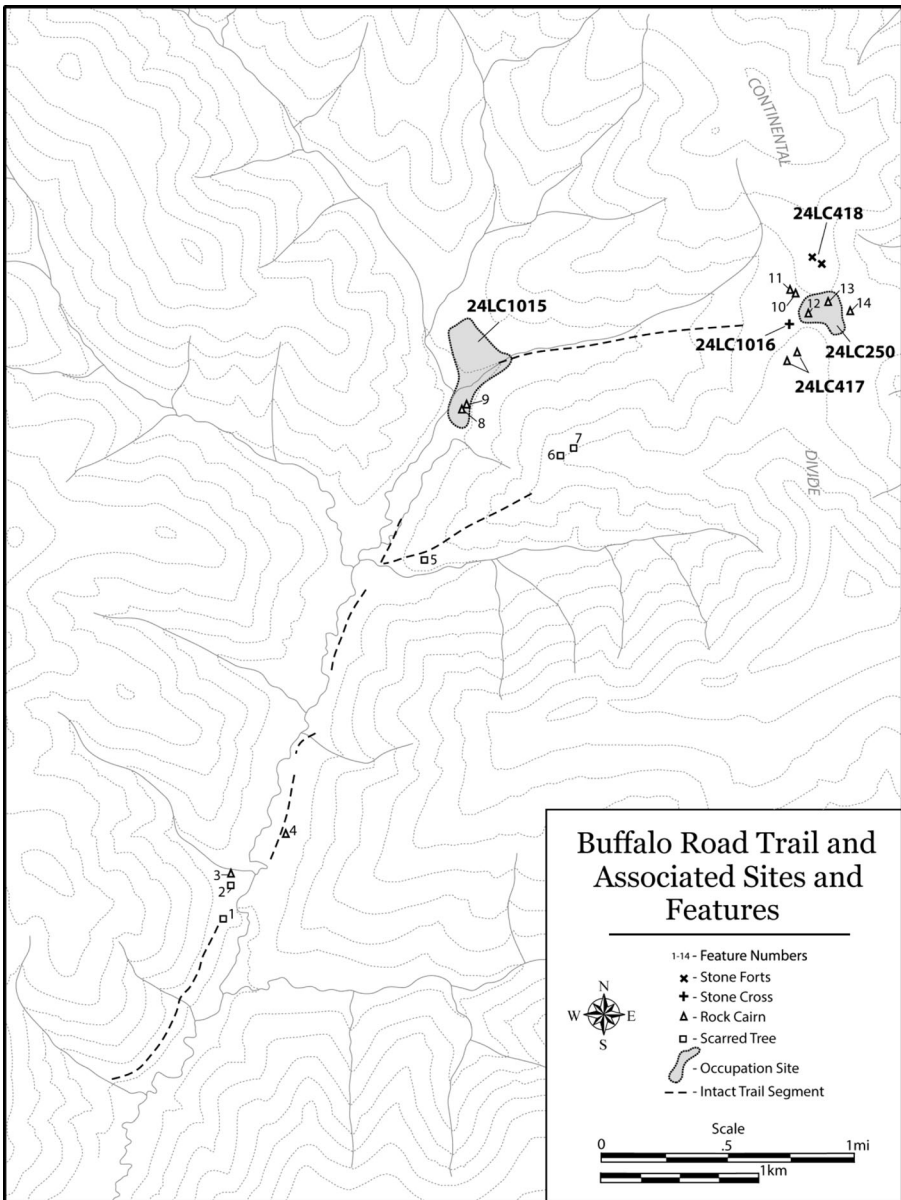


Fig. 2 Location of sites and features along the Buffalo Road Trail, features described in Table 1

features and sites; Table 1 provides data specific to each site and feature. Interpretive possibilities are provided below along with comparative information found elsewhere.

Rock Cairns

Ten rock cairns are associated with the portion of the trail that is located on public lands within the Alice Creek drainage and on top of Lewis and Clark Pass (see Fig. 2,

Table 1 Sites and features along the Buffalo Road Trail in the Alice Creek Drainage (based on Hall et al. 2006; Scott 2001)

Site No./ Feature No.	Site/Feature Type	Size/Feature Dimensions	Time Period (Based on Lichen Dating, Projectile Points, Tree age)
24LC250	Lithic Scatter	8 acres	Late Pre-contact
24LC417	Rock Cairn (No. 1)	46 cm diameter, 30 cm in height	Historic
24LC417	Rock Cairn (No. 2)	1.4 m in diameter, 45 cm in height (est.)	Late Pre-contact
24LC418	Stone Fort (No. 1)	4 m in diameter, 65 stones, 40–80 cm in size	Late Pre-contact
24LC418	Stone Fort (No. 2)	3.5 m in diameter, 55 stones, 40–80 cm in size	Late Pre-contact
24LC1015	Lithic Scatter	15 acres	Late Archaic/Late Pre- contact
24LC1016	Cross	Base 1.6 m in length, entire feature 3.48 m in length, stones 10–25 cm in size	Historic
24LC1211	Trail	8 km in length	Late Archaic/Late Pre- contact
Feature 1	Scarred Tree	30 cm in length, 13 cm wide	Protohistoric/Historic
Feature 2	Scarred Tree	3 m in length, 28 cm wide	Protohistoric/Historic
Feature 3	Rock Cairn	1 m in diameter, 75 cm in height	Historic
Feature 4	Rock Cairn	1.37 m in diameter, 17 stones	Historic
Feature 5	Scarred Tree	2 m in length, 30 cm wide (est.)	Protohistoric/Historic
Feature 6	Scarred Tree	70 cm in length, 40 cm wide	Protohistoric/Historic
Feature 7	Scarred Tree	13–18 cm in length, 40 cm wide (est.)	Protohistoric/Historic
Feature 8	Rock Cairn	1.5 m in diameter, 10 cm in height, 15 stones	Historic
Feature 9	Rock Cairn	1.4 m in diameter, 20 cm in height, 20 stones	Protohistoric/Historic
Feature 10	Rock Cairn	60 cm in diameter, 9 stones, 13–35 cm in size	Historic
Feature 11	Stone Hearth	1.8 m in diameter, 25 stones, 10–40 cm in size	Historic
Feature 12	Rock Cairn	1.5 m in diameter, 65 cm in height, 65 stones	No Data
Feature 13	Rock Cairn	2.2 m in diameter, 10 stone, 10–30 cm in size	No Data
Feature 14	Rock Cairn	1.5 m in diameter (est.), 1.3 m in height, 30 stones, 10–40 cm in size	No Data

features 3, 4, 8, 9, 10, 11, 12, 13, 14 and site 24LC417). One fire hearth (feature 11) was located on top of the pass and is comprised of stones piled in a small circle. A typical rock cairn is shown in Fig. 3. An abundance of cairns are also documented along trail segments approximately 10mi (16 km) to the west of the study area along Lander's Fork (Light et al. 1994).

As described in a handful of trail studies including the Bad Pass Trail in Wyoming (Loendorf and Brownell 1980), the Nez Perce Trail in Idaho (United States Forest Service 1982), and the Lolo Trail (McLeod 1980) in Montana, rock cairns commonly mark the path of pre-contact and historic trails (also see Malouf 1962, 1980). Over 170 rock cairns were found along a 7-mi (11.2-km) segment of the Bad Pass Trail (Loendorf and Brownell 1980). Loendorf and Brownell suggest that rocks were cleared from the path as people traveled it, casting stones of all shapes and sizes onto existing piles.



Fig. 3 Example of typical rock cairn along the Buffalo Road Trail (feature 12)

Rocks may also have been cleared to protect the unshod hooves of horses and to make travois travel smoother and easier (Loendorf and Brownell 1980, p. 73). Ewers (1980, p. 138), suggests that the travois load limit for small Indian horses was 300lbs (136 kg) and a smoother route without innumerable rocks made the “pull” that much easier. Many cairns were likely created to mark the path and direction of the trail.

Excavation of 16 rock cairns along the Bad Pass Trail in Wyoming revealed that 10 of the cairns contained pieces of bison bone, charcoal, juniper wood, pottery, and chipped stone artifacts. Offerings placed inside or on top of the cairns possibly ensured success in a journey or hunting pursuit. Several historical references support the use of cairns as “altars” or offering locations (Loendorf and Brownell 1980, p. 75). Lewis and Clark made note of such a practice as they traveled along the Lolo Trail in the Bitterroot Mountains of Montana with Nez Perce guides. Lewis noted that, on a mountain top, his Nez Perce guides requested a halt and built a stone cairn where they sat and smoked “the pipe” before proceeding on (Moulton 1993, p. 55–56). Fowler (2009, p. 91) notes that the Chemehuevi Indians of the Mohave Desert added rocks and twigs of creosote to rock cairns as offerings to be “refreshed” from the exertion of travel. Artifacts found within a cairn on the Bad Pass Trail—with a radiocarbon date of 350 CE±27 years—indicates that cairns were used late in prehistory as trail markers and/or as offering locations (Loendorf and Brownell 1980, p. 75).

Scarred Trees

Five features (Fig. 2; features 1, 2, 5, 6 and 7) along the 4.97-mi (8 km) Buffalo Road Trail segment include culturally modified trees. Two of these appear to be trail blazes left by historic visitors or created by fire. Many others were most likely present but were logged early in the twentieth century or burned in wildfires. Meriwether Lewis

commented on the expedition's practice of marking ("blazing") trees as they crossed the Bitterroot Mountains of Montana (Moulton 1993, p. 56). Some of the larger tree scars are the result of Indian groups peeling back bark to expose the cambium layer. Cambium was eaten by a variety of Indian tribes (Arno et al. 2008; Josefsson et al. 2012; Mobley and Eldridge 1992). The scars are variable in size and are found at the base of the tree (Fig. 4, also see Table 1). Trees species selected for peeling along this trail segment are predominately ponderosa pine (*Pinus ponderosa*).

In timbered mountain landscapes throughout the Pacific Northwest, hundreds of trees bear scars from aboriginal use. According to White (1954) and others (Arno et al. 2008; Josefsson et al. 2012; Mobley and Eldridge 1992), Indian people peeled away the soft inner, cambium layer of trees in the spring when sap was at its height and ate what was extracted. Various tree species were used including spruce (*Picea sp.*), lodgepole pine (*Pinus contorta*), and ponderosa pine (*Pinus ponderosa*). The scars left on peeled trees are unlike those made by fire, lightning strikes, or animals (Arno et al. 2008, p. 57). Numerous scarred trees are located on the Flathead National Forest in northwestern Montana and along the Lolo Trail and on the shores and islands of Flathead Lake (e.g., McLeod 1980). Tree boring information from 13 peeled trees on Wild Horse Island on Flathead Lake indicates that the oldest living tree on the island germinated in 1711 (Scott 2009). Trees were also peeled to feed horses, as was done by Chief Joseph and his Nez Perce band during their escape from the U.S. Army following the Battle of the Big Hole in 1877 (White 1954).

William Gingros, a Kootenai Indian from Pablo, explained how bark peeling was usually done after the first Sunday in May, when the tribes began gathering bitterroot bulbs (White 1954). Salish and Kootenai Indian elders told White in 1954 that trees were selected for stripping near campsites or along trails. A wooden debarking tool, approximately the size of an axe handle, was used to split the outer bark away from the tree. The Salish and Kootenai also used pieces of tin cans to peel trees when available. Other common woodworking tools used to peel trees included the axe, chisel, adze,

Fig. 4 Scarred or peeled tree (feature 2) along the trail



maul, and wedge (Mobley and Eldridge 1992, p. 101). The practice of bark peeling ceased when sugar became available to American Indians, but made a short comeback during World War I, when sugar was unavailable. The Bureau of Indian Affairs stopped the bark-peeling practice because they felt it harmed the trees. However, the fact that peeled trees still thrive today indicate that sufficient bark was purposefully left to ensure their survival (Arno et al. 2008).

Occupation Sites

Few stable land surfaces exist in the Alice Creek drainage because the creek has meandered across the narrow drainage bottom over time. However, two large Native American encampments are preserved along the 4.97-mi (8 km) trail segment. Adjacent to the creek, chipped stone tools and flaking debris are scattered along the sagebrush flats. Two pre-contact sites lie on either side of the base of the Continental Divide (see Fig. 2). One site (24LC1306), situated on the east side of the divide is located on a privately owned ranch. Paleoindian projectile points found at the site during archaeological excavations in advance of the construction of a fiber optic telephone line indicate the site's great antiquity (Lahren 1997). Interestingly, this site lies along the suspected path of the Old North Trail which extended from Canada to Mexico, flanking the eastern Rocky Mountain Front (see Fig. 1, also see McClintock 1910; Reeves 1990; Stark 1997). This trail is believed to hold great antiquity and its proximity to Paleoindian campsites helps support this.

Another large occupation site (24LC1015) lies on Forest Service land on a large bench on the west side of the divide. Archaeological excavations in 2001 revealed some 700 chipped stone flakes, spalls, and core fragments (Ferguson 2002). Temporally diagnostic artifacts recovered in the excavations included Late Archaic corner-notched and Late Pre-contact side-notched projectile points. Over the past 30 years, Forest Service employees have collected chipped stone scraping and cutting tools, projectile points, an incised bone bead, and chipped stone flakes from the site surface. In addition, two roads that bisect the site continually expose pieces of charcoal, burned bone, fire-cracked rock and chipped stone artifacts. When the site was first recorded in 1975, bison skulls and bones were observed eroding from the banks of Alice Creek. The presence of bison bone indicates they were killed or butchered at this location. Most likely, archaeological site 24LC1015 served as a staging station for incoming and outgoing buffalo hunting trips east of the Continental Divide (Scott 2001, p. 5–1). Chipped stone artifacts were also found at archaeological site 24LC250, located on top of Lewis and Clark Pass (see Fig. 2). Test excavations conducted at the site resulted in the recovery of Late Pre-contact projectile points and scraping tools (Lahren 1997). As has happened at most archaeological sites in the vicinity of Lewis and Clark Pass, artifacts have no doubt been collected by hikers, hunters, and visitors to this popular recreation area that offers a stunning view of the central Montana Plains.

Stone Forts

Two collapsed stone features on top of Lewis and Clark Pass (24LC418) are interpreted to be stone forts based on Salish and Pend d'Oreille oral histories and comparisons with similar features in the Pacific Northwest. The structures could also be interpreted as

vision quest features but their shape and associated traditional place name do not support this interpretation. The structures are located approximately 984 ft (300 m) above the pass and are much larger than the rock cairns found along the trail (Hall et al. 2006, p. 11). Structure No.1, which includes 65 stones ranging in size from 15.75 to 31.5in (40–80 cm) is somewhat circular and is formed by two roughly concentric circles (Fig. 5, also see Table 1). The stones are sodded into the earth and heavily covered with lichens. Structure No. 2, located approximately 213 ft (65 m) northwest of No. 1, is comprised of approximately 55 stones and is similar in shape to the structure No. 1, but is slightly smaller and composed of fewer stones (Hall et al. 2006, p. 11). The structure is also heavily sodded in and lichen-covered.

From a landscape perspective, the stone fort features found along the Buffalo Road Trail are uniquely and strategically placed on a ridge above Lewis and Clark Pass where the trail (and people) crossed the Continental Divide (see Fig. 2). The features differ from rock cairns in that the stones used were larger, more numerous and heavier. It also appears as if the structures are collapsed and that they were used long ago because the stones that comprise them are deeply embedded in the ground. When first recorded in 1979, the function of the features was uncertain (Scott 2001). However, their function was immediately apparent after tribal place name information was obtained.

Consultations with the Salish-Pend d’Oreille Culture Committee indicates that the place name for Lewis and Clark Pass is “*Smitu Sx^wcu si*” or “Indian Fort Pass, a place where warriors would sit in small stone structures to watch for approaching Blackfoot raiders” (Salish-Pend d’Orielle Culture Committee 2003; Salish-Pend d’Oreille Culture Committee and Elders Cultural Advisory Council 2005, p. 54). Based on the morphology and configuration of the two circular stone structures, their use as forts is easy to envision. The location of the features provides a bird’s-eye view of people approaching from the Plains and of people crossing over the pass. The usefulness of oral tradition



Fig. 5 Photograph of stone fort (24LC418), Structure No. 1

relative to archaeological interpretation is documented in a number of studies (Aporta 2009; Schaepe 2006; Zedeño et al. 2009, 2010), and the current investigation of the Buffalo Road Trail further supports the importance of oral histories to contemporary archaeological inquiry.

Comparative studies of stone fort structures include Schaepe's (2006) study of Salishan socio-political networks, where he uses the material remains of forts and defensive features to document persistent warfare along the Fraser River in British Columbia. Dates from forts in this study indicate that defensive structures were built over 1,000 years ago, suggesting warfare was prevalent long before colonial influence. Working with contemporary people who speak the traditional language, Schaepe gathered a variety of place names for the fort features. Translations of fort names include "to defend from coastal raiders" and "lookout for enemies." Schaepe identified four defensive structure types with construction dependent upon local resource availability (i.e., boulders), landscape morphology, and the severity or need for defense. On the basis of his study, Schaepe (2006, p. 701) suggests that the fortifications "act as overt signs of power, prestige, and authority ... acting constantly to define territory, ownership, and rights." Oral history and place name information was critical to the conclusions Schaepe made about the function and use of various stone structure sites.

In their work on the Northern Pacific Coast, Moss and Erlandson (1992) identified numerous historical and ethnographic references to forts, refuge rocks, and defensive sites. Generally situated on elevated landforms with panoramic views, the forts as well as an abundance of war clubs, daggers, and human remains found in archaeological contexts led Moss and Erlandson (1992, p. 73) to hypothesize that there was organized and extensive warfare among Pacific Coast peoples. Radiocarbon dates from artifacts found in association with 20 of the forts showed that most were used between 900 and 1400 CE, indicating a long tradition of warfare during the Late Pre-contact period that continued into historic times.

Stone Cross

The most unique rock feature on Lewis and Clark Pass is a stone cross (24LC1016) that lies just 10 ft (3 m) south of the Buffalo Road Trail (Figs. 6 and 7, also see Table 1). Originally recorded in 1975 as two stone features, only one stone feature now exists that clearly resembles the shape of a Celtic cross. Hall et al. (2006, p. 14) describe it as follows:

It is comprised of a cross with a circle around the center, and a flat base with a half circle. The center circle encompasses the arms and upper portion of the main trunk. The flat bottom of the structure has six stones that form the base of the structure, 15 larger stones that form the main trunk, approximately 20 smaller stones forming the half circle at the base, 12 stones forming the arm, and 29 small stones forming the center circle.

The base of the cross measures 5.24 ft (1.6 m) in length as shown in Fig. 7, and the stones that comprise the cross range in size from 7.87 to 15.74 in (20–40 cm). The trunk measures 11.41 ft (3.48 m) in length with stones that range in size from 3.93 to 9.84 in (10–25 cm).

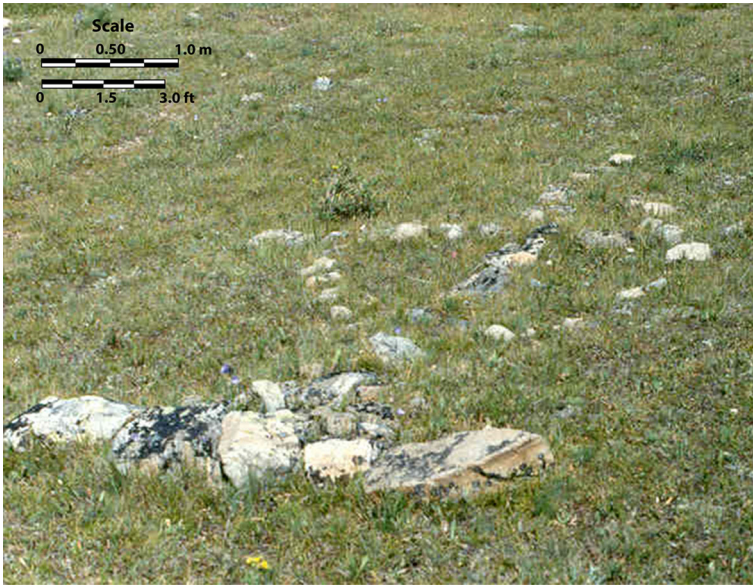


Fig. 6 Photograph of stone cross (24LC1016) along Buffalo Road Trail taken in 1980s

The origin of the stone cross located on top of Lewis and Clark Pass is debatable. One plausible explanation is that it was constructed by Father Nicholas Point, the Jesuit

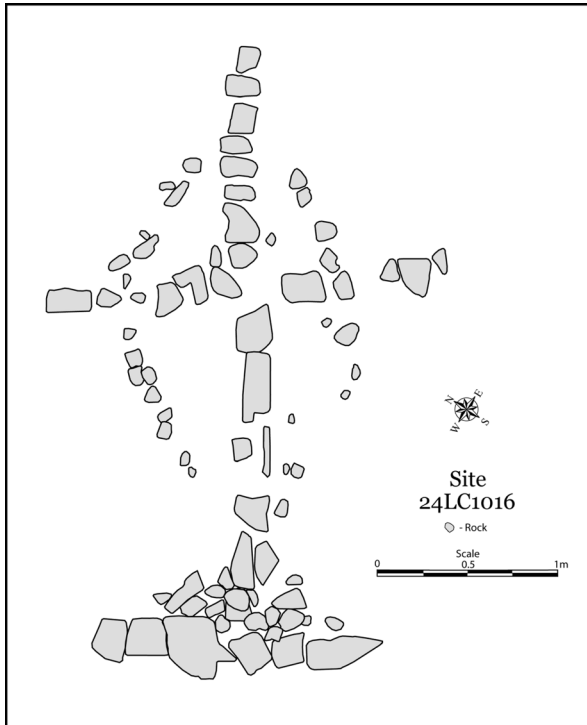


Fig. 7 Plan map of stone cross (24LC1016) feature

priest from St. Mary's Mission in the Bitterroot Valley. On September 28, 1842, during a buffalo hunting venture with the Salish, Point wrote, that they reached “the summit of a mountain from which one could see a horizon more than a hundred leagues [one league is the equivalent of 4.83 km or 3mi] in circumference, after reciting the first Vespers of St. Michael, I made and planted a cross ... for we were in the middle of Blackfoot Country” (Point 1967, p. 174). Point is very likely referring here to Lewis and Clark Pass and its sweeping view of the Plains from the pass. His statement that a cross “was planted” may indicate the cross was constructed of wood, rather than from a series of stones. However, trees are scarce on top of the pass—consisting of extremely stunted and twisted whitebark pine—and stones are plentiful, making stones the easiest and most accessible building material. The reference reflects that early missionaries left Christian icons as they traveled through new territory, both as a form of prayer and as a way of introducing their preferred method of worship (Scott 2001, p. 5–8). Lichenometric data collected by Hall (2005) and discussed in the following section provides an additional line of evidence supporting that the stone cross was constructed in the 1840s.

During his trips with the Salish, it is worth noting that Point observed how the Crow and Blackfeet taunted the Salish and continually “stole” their horses. He described the Salish as a gentle people who practiced ethical judgment. While traveling with the Salish in 1842, Point witnessed the Salish extend kindness towards their enemies, the Blackfeet. In meeting up with a Blackfeet group during the hunt, the Salish invited them to smoke a pipe as an offer of friendship. Point states that the Salish “thought of only receiving them in friendship, those who had raided so mercilessly. Hands were shaken in sign of reconciliation, a dance was held, the calumet [pipe] was smoked . . . just as if relations had always been friendly” (Point 1967, p. 158).

Age of the Buffalo Road Trail

Based on current archaeological evidence, the Buffalo Road Trail was used for at least 1,000 years and probably longer (e.g., Aaberg 1985; Bodily 2014; Ferguson 2002; Knight 1989). Thus, it provides an opportunity to study the region's Late Pre-contact period and is key to understanding the complex transition to protohistoric and historic times (e.g., Lightfoot 1995). Large pre-contact camps (24LC250, 24LC1015, and 24LC1306—on private land) at the base and on the top of the Continental Divide reflect the antiquity of the Buffalo Road. Projectile points from the Late Archaic and Late Pre-contact periods found at these sites indicate the long use of the trail, including during “dog days” before horses were acquired on the Plains and dogs served as beasts of burden (Ewers 1958, 1968).

As part of the trail study and its associated stone features, an effort was made to use lichen analysis to date features found in earlier studies (Hall 2005; Scott 2001). Lichenometry assumes that colonization of lichens occurs over predictable periods of time, thus providing a growth rate for specific species. Lichenometric analysis is used to date human-made monuments as well as natural features. Geologists use lichenometric analysis to establish glacial chronologies, rock fall frequencies, fault ages, and earthquake recurrence intervals (Benedict 2009). Lichenometric analysis was successfully used as a dating method in archaeological studies in the White Mountains

of California (Bettinger 1991; Bettinger and Oglesby 1985) and in the Colorado Front Range (Benedict 2009). Clearly, archaeological features made of stone, such as house features and rock alignments, are most suitable to this type of dating and provide the most reliable dates.

More than 3,600 lichen species grow in North America, and approximately 90 % of published studies use the genus *Rhizocarpon*, as employed by Hall (2005). One of the major concerns about lichen growth and survival is that they can be killed by heavy and perpetual snow but *Rhizocarpon geographicum* is one of the most snow-tolerant species (Benedict 2009, p. 151). *Rhizocarpon* grow faster in moist environments and show a clear preference for polar, alpine, and other cool temperature environments (Benedict 2009, p. 148). Fire, however, threatens lichen longevity and after intense fires, where an abundance of fuel is burned, the lichenometric clock is reset to zero.

In this study, the lichenometric analysis focused on various stone features within the Alice Creek drainage and followed standardized methods (Benedict 2009; Purvis 2000). In order to establish a growth rate, the lichens on headstones in the nearby Lincoln Gulch Cemetery (associated with the Gold Rush-era old Lincoln townsite) were examined. Two lichen species were found on the oldest headstone—that of Minnie Neal who died in 1869—*Rhizocarpon geographicum* and *Lecanora rupicola*, and were used to define growth rates for the general area (Hall 2005, p. 19). Hall's method of using an 1869 headstone to establish a calibration rate is considered reliable and in fact preferable by experts working in the field (Benedict 2009). For the various stone features, lichen species were identified using standard identification keys and spot testing. When specific chemicals are applied to certain lichen, they change color, which can correctly identify the lichen's genus and species. For each stone feature included in the analysis, five measurements were taken for each lichen species. The measurements were taken from different stones comprising each feature and then compared with measurements taken from the 1869 headstone at the Lincoln Gulch Cemetery (Hall 2005, p. 18).

Lichenometric analyses were conducted on four rock cairns (features 4, 8, 9, 10) and the fire hearth (feature 11) found along the trail and on two stone feature sites (24LC418 and 24LC1016). The location of these features is shown in Fig. 2 and results are described below.

Rock Cairns/Hearth

According to the lichenometric analyses of rock cairns and the hearth adjacent to the trail, these features were constructed between 1767 and 1941, or during the Protohistoric and Historic periods (Table 2). Trail travelers most likely added stones to cairns as they passed by, so the stones at the top are the most recently deposited and those at the bottom are the oldest (Hall 2005). Other studies also support this interpretation of cairn formation (Fowler 2009; Loendorf and Brownell 1980). The very early dates in Table 2 of 1767, 1785, 1811, 1812, 1819 and 1826, most likely reflect tribal use of the trail. It is possible that the two post-1900 dates (shown in Table 2) for features 4 and 8 may indicate adaptive reuse of the stone cairns by historic shepherders or by the Forest Service (Hall 2005, p. 27).

The lichenometric dates for the fire hearth (see Fig. 2, feature 11) cluster around 1870. This date is of interest given the documented visit by General John Gibbon, who

crossed Lewis and Clark Pass in October of 1871 and built a fire because of inclement weather (Gaff and Gaff 1994). The clustered dates support the possibility that this was the fire hearth that Gibbon constructed. Tree ring dating was also conducted on the whitebark pine that grew inside the hearth. The tree boring samples indicate that the maximum age for the trees in this location is approximately 130 years (Hall 2005), which supports the lichenometric date.

Growth ring counts collected by Forest Service botanists from whitebark pine trees on the pass suggest that a stand-replacing fire event occurred approximately 140 years ago. The hearth and the adjacent stone cairn (feature 10) are located in a stand of even-age whitebark pine. Fire events such as the stand-replacing fire that occurred 130 to 140 years ago can also kill lichens if they are extremely hot (Benedict 2009, p. 150). The combined tree ring analyses and lichen data indicate that fire affected both the whitebark pine and the lichens at this location. Therefore, any temporal assignments should be viewed with caution as the features may have been constructed immediately before or after the fire (Hall 2005, p. 29). Although the lichen in the immediate area may have been killed by fire, the earlier dates for other cairns and features suggest the surrounding areas where these features were found were either unaffected by fire or that the fire was not hot enough to destroy the lichen.

Stone Forts/Stone Cross

The two stone fort structures are heavily sodded over and covered with lichen. Measurements of *Rhizocarpon geographicum* lichens establish calendar dates ranging from 1344 to 1655 CE (see Table 2). The analyses indicate the structures date to the Late Pre-contact period and presumably reflect the antiquity of warfare along the trail

Table 2 Lichenometric dates for stone features along the Buffalo Road Trail (based on Hall 2005)

Site No./Feature No.	Site/Feature Type	Lichen Species Analyzed for Dating	Lichen Dates (expressed as ± 10 years)/ Other Dates
24LC417	Rock Cairns (2)	Disturbed, no data collected	No Date
24LC418	Stone Forts	<i>Rhizocarpon geographicum</i>	1344, 1345, 1446, 1641, 1655
24LC1016	Stone Cross	<i>Rhizocarpon geographicum</i>	5 dates averaged to 1847
24LC1211	Trail	–	Late Pre-contact
Feature 3	Rock Cairn	Could not identify species, no data collected	No Date
Feature 4	Rock Cairn	<i>Lecanora rupicola</i>	1886, 1910, 1939, 1941, 1941
Feature 8	Rock Cairn	<i>Lecanora rupicola</i> , <i>Rhizocarpon geographicum</i>	1811, 1812, 1819, 1827, 1842, 1858, 1860, 1881, 1902, 1920,
Feature 9	Rock Cairn	<i>Rhizocarpon geographicum</i>	1767, 1785, 1821, 1821, 1856,
Feature 10	Rock Cairn	<i>Rhizocarpon geographicum</i>	1826, 1859, 1868, 1872, 1885
Feature 11	Stone Hearth	<i>Rhizocarpon geographicum</i>	1863, 1865, 1871, 1871, 1872
Feature 12	Rock Cairn	Disturbed, no data collected	No Date
Feature 13	Rock Cairn	Disturbed, no data collected	No Date
Feature 14	Rock Cairn	Disturbed, no data collected	No Date

on the Continental Divide long before the introduction of the horse and colonial influence. The date range also suggests that the features were rebuilt and reused over time.

Five measurements of *Rhizocarpon geographicum* were taken on stones forming the cross, then averaged because it was assumed that the structure was built all at once (Hall 2005). The construction date of 1847 ± 10 years closely matches the time that Nicolas Point documented his journey to hunt buffalo with the Salish, thus supporting the idea that the cross he mentioned constructing in his journals is this stone feature.

Native Groups on the Buffalo Road Trail

The Nez Perce, Salish, Spokane, Kootenai, and other Columbia River groups, including the Okanogan, were the predominant users of the Buffalo Road Trail (Fahey 1974; Haines 1955; Turney-High 1937). Groups traveled over the Continental Divide and onto the Plains of central and eastern Montana as many as three times a year to hunt bison. These excursions were generally made during the summer and fall. As a military tactic, the Salish often banded together with the Nez Perce and Pend d'Oreille to deflect conflicts with the Blackfeet, Crow, and Hidatsa (Binnema 2001; Ewers 1958, 1968; Fahey 1974; Haines 1955). The Salish are thought to be the primary group that occupied the Blackfoot River Valley (Turney-High 1937). A band of Salish Indians remained in this river valley until 1891, when they were relocated to the Flathead Indian Reservation in the Jocko Valley (Brumley 1998). By the nineteenth century, the Blackfeet resided predominately in north-central and northeastern Montana whereas the Shoshone occupied southwestern Montana. According to ethnographic and historic information, the Blackfeet and the Shoshone ventured along the trail systems of the Blackfoot River. European settlers, for example, noted the presence of Blackfeet Indian camps near Lincoln Gulch (just west of the town of Lincoln, Montana) in the 1870s (Brumley 1998; Upper Blackfoot Valley Historical Society 1994).

Indian groups that used the Buffalo Road traveled over bisected and mountainous terrain and along interconnected pathways that were known to families over multiple generations. Large numbers of people participated in this mountains-to-plains trek. The pattern and regularity of this travel was so familiar to western Indian groups that they established their own claims to Plains bison herds (Farr 2003, p. 4). According to the Salish and Pend d'Oreille Culture Committee and the Elders Cultural Advisory Committee, in pre-contact times, these two groups occupied as much land east of the Continental Divide as they did to the west of it (Salish-Pend d'Oreille Culture Committee and Elders Cultural Advisory Council 2005, p. 83). The Salish were organized into bands based in areas around what is now Montana's Helena Valley (*č mlšé*), the Three Forks of the Missouri (*čx tx tpé*) and the Big Hole Valley (*sk umcné*)—all within or near productive bison country. The traditional tribal place names for these areas indicate the longevity of their use and their importance (Salish-Pend d'Oreille Culture Committee and Elders Cultural Advisory Council 2005).

By the 1850s, groups of several thousand people and double the number of horses regularly traveled across the divide to hunt bison and secure robes for trade. Between 1800 and 1875, the number of treks across the divide increased significantly. Salish groups began spending more time on the Plains, often over-wintering there, and

favoring bison hunting locations such as the Musselshell and Yellowstone Rivers (Turney-High 1937, p. 117). Journeys along the Buffalo Road Trail were an essential part of life for the Salish and other Columbia Plateau groups with each journey marked by new experiences and information that were inextricably linked with the places en route (e.g., Zedeño et al. 2009, p. 108). Landmark learning was a cartographic tool for way-finding and was used as a mnemonic device for stories and myths (Zedeño 2000, p. 17). For the Blackfeet, naming features and landmarks was a crucial way to educate children about navigation and to enable them to find their way, especially young hunters (Zedeño et al. 2009, p. 112).

The Buffalo Road Trail, as a linear feature, crosses a diverse array of geographic areas. Based on ethnographic information, trail travel on the Buffalo Road evolved from family groups crossing the Continental Divide to hunt buffalo and to trade to large groups banding together en masse for defensive purposes (Fahey 1974; McGinnis 1990; Turney-High 1937). The fact that the Nez Perce would not travel the Buffalo Road with Meriwether Lewis in 1806 for fear of enemy reprisal illustrates the hostile theater the trail had become by the historic period (Moulton 1993, p. 96).

Horses, Guns, and Warfare

Stone forts located on the Continental Divide along the Buffalo Road Trail are believed to have been used as early as 1344 years CE based on lichen dating and likely represent archaeological evidence of territoriality and warfare. Traditional Salish names for the divide in this area further suggest that conflicts over territory occurred at least beginning 600 years ago and possibly earlier. Other investigations along the northern Pacific Coast and along the Upper Fraser River, suggest that stone fortifications were common as far back as 1,000 years CE and represented conflict over territory and the assertion of power, authority and control over others (Moss and Erlandson 1992; Schaepe 2006). Zedeño et al. (2014, p. 28) suggest that during favorable climatic conditions over the last 2,000 years, bison herds congregated on the eastern foothills of the Rocky Mountains and that for the Blackfeet, control and ownership of these herds was paramount, providing individuals with enormous prestige and access into specialized bundle groups and societies. As a result, disputes over ownership of bison herds ensued, pitting ethnic groups including the Salish and Blackfeet against one another and giving rise to the all out warfare that occurred during the past few centuries (Farr 2003, p. 5).

By the time the Lewis and Clark expedition reached the area that is now Montana, ethnographic and historical documents indicate that Indian groups from the west, who enjoyed relative peace in their home territory, engaged in all out warfare with Plains Indian groups (Fahey 1974; Farr 2003; McGinnis 1990; Turney-High 1937). As Meriwether Lewis followed the Buffalo Road in July of 1806, his journal entry that the group was “on its guard both day and night” as they neared the Continental Divide reflects the hostile environment that the margins of bison territory had become (Moulton 1993, p. 96). Missionary Nicolas Point (1967, p. 174) also expresses a similar tension in 1842, when he recorded in his diary that as his group crossed the divide, he “made and planted a cross...for we were in the middle of Blackfoot Country.”

Ross Cox, a North West Company fur trader wrote in 1818, “the Blackfeet lay claim to all that part of the country immediately at the foot of the mountains and allege that the Flat-heads [Salish] ... are intruders who they are bound to oppose on all occasions” (Stewart and Stewart 1957, pp. 134–135 in Farr 2003, p. 6). With a similar sentiment but an opposing view, the Salish and Nez Perce avowed that their forefathers claimed and hunted on these lands and that even if only one warrior should remain alive, they would fight for their right to hunt in these areas (Farr 2003, p. 6).

The importance of the acquisition of the horse from 1730 to 1750 by Plains Indian groups and the changes that ensued as a result cannot be overstated (Calloway 2003, p. 267; Ewers 1980; Greiser 1994, p. 52; Hämäläinen 2003; McGinnis 1990, p. 9). Once indigenous groups in the region adopted the horse, the territorial boundaries of these groups fluctuated and were much contested (Binnema 2001; Fahey 1974; Farr 2003; Malouf 1973; Turney-High 1937). Horses, along with other forces of change, including European goods, guns, and disease, radically changed tribal life. Tribes such as the Hidatsa, long-time residents of the Middle Missouri River region, took up seasonal residence on the Plains and became a force to reckon with in areas as far away as the Three Forks of the Missouri and along the Buffalo Road Trail (McGinnis 1990, pp. 21–24; Moulton 1993, p. 96). Sacagawea, a Shoshone Indian, was captured by the Hidatsas (Minnetares) and taken to the Mandan/Hidatsa villages, where she later met Lewis and Clark in 1805. In the early 1700s, the Shoshones were one of the strongest tribes on the Plains because they were one of the first tribes to acquire the horse (McGinnis 1990, p. 2). However, the Blackfeet who possessed muskets first and horses soon thereafter, drove the Shoshone, Salish, and Kootenai off the Plains (Ewers 1958, p. 124; McGinnis 1990, p. 33).

The ability to mobilize quickly and over long distances on horseback enhanced opportunities for raiding and increased intertribal warfare. Explorer Alexander MacKenzie observed that English traders often found themselves in the middle of raids and counter-raids that were executed for revenge and to improve status (McGinnis 1990). Francois Larocque, a fur trader with the North West Company observed such a raid in 1804 between the Crow and Assiniboine where he and his men watched the Crow mutilate deceased Assiniboine warriors after a Crow victory. Corpses were skinned, limbs cut off, and bodies repeatedly stabbed. The mutilation, Larocque reported, was the ultimate revenge because the Crow believed the enemies would arrive to the afterlife in grotesque form (McGinnis 1990, p. 28). Despite the widespread system of warfare, however, periodic peace prevailed and alliances shifted (McGinnis 1990, p. 22). The ritual of smoking the calumet pipe often allowed bitter opponents brief respites in which to trade and interact socially in relative peace (Point 1967, p. 158). Once out of each other’s sight, however, the rivalry commenced once again (Wood 1980, p. 104).

For the Salish and Pend d’Oreille, Farr (2003, p. 7) posits that by the nineteenth century, warfare and its status-winning outcome became primary goals related to bison hunting and the economic benefits became secondary. On the Plains, Farr suggests that western tribes who were normally peaceful at home, transformed themselves as they engaged in horse raids, ambushes, and warfare—behaviors and opportunities that were uncommon west of the Continental Divide. Early explorers observed the considerable losses western tribes endured in hostile Plains territory. According to historical documents of Bureau of Indian Affairs agents, groups who endured the journey and spent

time on the Plains enjoyed a much higher status than those who stayed behind west of the Continental Divide (Farr 2003, p. 5).

Certain accounts examined by Farr (2003, P.9) suggest that ventures to the Plains were unnecessary and that tribes had plenty of food in their home territories. However, these accounts need to be scrutinized as they were made by incoming Europeans and therefore, are inherently biased and based partially on the discomfort early settlers, explorers, and missionaries felt as they watched physical assaults between warring tribes.

Trade and Exchange

The archaeological evidence of trail use by indigenous people reflects the extent of pre-contact-historic geographical linkages and the range and magnitude of the goods being transported (Blakeslee and Blasing 1988; Ewers 1968; Trombold 1991a; Wood 1980). The Buffalo Road originated at the confluence of the Blackfoot and Clark Fork Rivers and crossed the Rocky Mountains and then extended north out onto the Plains to trails that followed the Missouri River to the north or to the south, to major trading centers along that river (Farr 2003; Hall et al. 2006; Moulton 1993; Scott 2001, 2014). The Buffalo Road Trail provided access to ancillary trail networks that led to the Musselshell, Yellowstone, and Judith Rivers; all considered favored hunting grounds for the Salish (Fahey 1974, p. 169; Turney-High 1937, p. 117). Francois-Antoine Larocque noted that in 1805 the “Flatheads” (actually Salish) traveled every fall to the Three Forks of the Missouri to hunt bison. Winter hunts provided the best bison robes, which served as a valuable trading commodity. According to Fahey (1974, p. 168), Salish robe sales averaged approximately 26,000 between 1815 and 1830, but rose to an average of 70,000 between 1845 and 1853. The Missouri River, notably Fort Benton, served as a collection point for robe exchange and trade.

Although trail travel was linked to subsistence for many tribes, it also provided important opportunities to socialize, trade, and find mates (Farr 2003; Snead et al. 2009a; Wood 1980). Aboriginal trading patterns on the northern Plains, often referred to as the Middle Missouri system, are well documented (Creel 1991; Ewers 1968; Manson 1998; Spielman 1983; Vehik 1990; Wood 1980). Major trading centers included The Dalles on the Columbia River, the Middle Missouri Mandan/Hidatsa Center in central North Dakota, and the Shoshone Rendezvous Center in the corner of southwest Wyoming (Ewers 1968, p. 16; Wood 1980, p. 101). Trade flowed from all directions from these centers with smaller trading points at confluences of major rivers, such as the Blackfoot and Clark Fork Rivers. For the Middle Missouri system, Ewers (1968) includes three successive time periods for trade and exchange including aboriginal, protohistoric, and historic. Through time, what was traded across these systems varied but the pathways by which they were connected likely remained the same (Wood 1980, p. 103). The Shoshone Rendezvous Center linked major trading centers to the east and west and was an intermediary post between them. Equally as important, the Shoshone center also linked people to a completely different culture area, namely the Great Basin, which allowed for the infusion and trade of distinct items, such as coiled baskets (Scott et al. 2014).

Based on ethnographic information, items from the Plateau were exchanged with items from the Plains. Plains trade items included bison robes, parfleches, skins and furs, eagle feathers, bone beads, and finely tanned and ornamented clothing (Ewers 1968, pp. 20–21; Haines 1955, p. 43). Plateau trade items included dried salmon, fish oil, feathers, roots and seeds, hemp and twine, shells (*Dentalium* and *Olivella*), pemmican, mountain sheep horns, bowls, ladles and spoons, and woven baskets (Haines 1955, p. 43; Wood 1980, p. 102). To get a true picture of what was traded prehistorically, Ewers (1968, p. 21) cautions that most Plains trade items were perishable goods which would not survive in archaeological contexts. However, some traded items that moved across the continent appear in the archaeological record and indicate the antiquity of trade networks accommodated by a vast system of trails. Examples of this include a slate carving of Haida origin that appeared in a Crow medicine bundle (Wood 1980, p. 103), Pacific Coast shells recovered in Ghost Cave (Scott et al. 2014, p. 74), and the presence of Knife River flint from the Dakotas appearing in an 8,000-year-old site in Colorado (Wheat 1972, p. 126). Toolstone, in fact, the most common indicator of archaeological sites in the area, was undoubtedly a traded commodity (MacDonald 2012, p. 98; Rennie 2004, p. 17). Two massive obsidian biface cores found just outside of the town of Lincoln, Montana by a Forest Service employee just north of the Buffalo Road Trail suggests that toolstone was transported along the trail and traded to others.

An Archaeology of Trails and Landscapes

Trail systems were critical to hunter-gatherer survival and subsistence in the American West as this study demonstrates, but comparatively little archaeological attention has been paid to them (Snead et al. 2009a, p. 2). The lack of concerted archaeological inquiry may be due to the fact that trails are often poorly preserved and easily destroyed by changing land use, natural degradation, livestock grazing, and modern development. Furthermore, they do not easily fit in current archaeological research paradigms that focus more on specific sites rather than relationships between them on a broad scale (e.g., Anschuetz et al. 2001; Binford 1983). The relatively few trail studies that do exist tend to be compendiums of diversified investigations (Davis 1980a; Snead et al. 2009b; Trombold 1991b) or topical studies, such as Inuit trails in Alaska (Aporta 2009). The Buffalo Road study conducted by Farr (2003) is excellent, but draws primarily on historical accounts and includes little ethnographic or archaeological evidence.

The Buffalo Road Trail, which was created centuries if not millennia ago by native peoples as shown, is simply described by Meriwether Lewis as a well-worn Indian “road” (Moulton 1993, p. 85). From a cultural landscape perspective, the trail provided the link between the environs of the Columbia Plateau and grass filled prairies of the Plains which supported large populations of bison. Pre-contact roads and trails are unique in that they are tangible evidence of the links between and among groups over large geographic areas. Trail arteries and networks linked past populations—in this case, American Indian bands—and are reflective of the groups who used them as well as the world in which they lived (Earle 1991; Malouf 1980; Oetelaar and Meyer 2006; Snead et al. 2009a; Zedeño et al. 2009). Trails are best viewed as landscapes of movement with their scale, pattern, context, and association

providing information on the structure and practice of the everyday lives of past peoples (Snead et al. 2009a, p. 3).

The Buffalo Road Trail is probably most appropriately examined within the theoretical orientation of landscape archaeology, which provides a frame of reference for understanding human-nature relationships at various levels (Anschuetz et al. 2001; Dalglish 2012; Golledge 2003; Kelly 2003; Kelso and Most 1990; Snead et al. 2009a; Trombold 1991a; Zedeño 2000; Zedeño et al. 2009). A landscape approach examines the outcome of human interaction with the natural world and views it as collaboration between “human and non-human actors” with each contributing to specific outcomes (Dalglish 2012, p. 332).

Landscapes and their “meaning” to people were dynamic constructions that changed over time and reflected peoples’ histories (Zedeño et al. 2009, p. 108). Trail features (as landscapes) provide a type of cultural heritage that is amenable to understanding the nuances of such changes over time (e.g., Lightfoot 1995). Landscapes afforded ways for people to signify themselves with each generation imposing its own cognitive map on the world (Anschuetz et al. 2001, p. 16; Zedeño 2000, p. 106). Basso (1996) has shown that traditional wisdom is tied to places and that landscapes are replete with history, legend, knowledge, and power. The landscape domain involves within-place and between-place patterning making the approach particularly suitable for trail studies, as peoples’ lives encompassed whole landscapes—not simple singular sites—and were the arena for a group’s economic, sociological, and ideological activities (Binford 1983, p. 109). In this sense, features and sites along the trail become landscape or human agency “signatures” that reflect the choices of both aboriginal and historic trail travelers as they encountered obstacles and opportunities (peeling trees, selecting locations to camp and building stone forts, rock cairns, and stone crosses). These signatures, when viewed from a humanities and culture history perspective, allow us to examine trail use and its associated behaviors as a historical process and from a deep-time perspective (e.g., Sassaman and Holly 2011; Prentiss 2011).

In the hierarchy of human movement and travel, trails and paths are the most informal, in contrast to complex and well-constructed road networks that require periodic maintenance (e.g., Chevallier 1976; Hirth 1991; Hyslop 1984; Sever and Wagner 1991). Routes are determined by terrain, economics, and mode of transportation; organization of society; and function in regard to mobilization and group coordination (Fowler 2009). Although trails are the simplest form of travel, there are examples of elaborate organizational road networks elsewhere, such as those found in Chaco Canyon in the Southwest, but these systems also included trails and paths which diverged from main arterial routes (Sever and Wagner 1991). Trails and routes were established not only for mobilization of groups but also for ceremonial reasons such as the sacred trail system used by the Chemehuevi and the Las Vegas Southern Paiute of southern Nevada and California (Fowler 2009, p. 88).

On the northern Plains, trail selection by hunter-gatherers depended on group size, season of travel, the length of travel, the use of horses or dogs, and which mountain passes most easily facilitated the haul, especially when pack animals were laden with hundreds of pounds of meat, hides, toolstone, and other commodities (Ewers 1980; Farr 2003; Loendorf and Brownell 1980). In this sense, the landscape terrain and the circumstances of the trip dictated the travel “niche” best suited to the journey. Low elevation passes were consistently sought out as the best place to cross a mountain

range (Davis 1980b; Loendorf and Brownell 1980). Along the Rocky Mountain Front in Montana, large archaeological sites (camps) are found at nearly all mountain passes, which attests to repeated crossings by hunter-gatherer groups (Knight 1989). Schaffer (1911), who spent 2 years traveling “old Indian trails” through the Canadian Rockies, mentions the innumerable passes crossed by the ancient trails. Specific to the study area, the people who used the Buffalo Road Trail traveled over either Lewis and Clark Pass or Cadotte Pass to the south depending on their final destination (Stone 1913, p. 99). Lewis and Clark Pass lead to the Sun River and the Great Falls of the Missouri whereas Cadotte Pass led to the Three Forks of the Missouri and areas further east including the Musselshell and Yellowstone Rivers (Johnson 1969).

At a fundamental level, trails facilitated the efficiency of transportation and collapsed social space. Hassig (1991, p. 18) suggests that although pre-contact roads and trails served many functions, their primary purpose was economically based with the maintenance of social and religious ties being secondary. However, other researchers emphasize that trails also profoundly affected the social world of the Indian groups who used them as they brought distant groups together who could then exchange items and information, as well as socialize, and potentially intermarry (Blakeslee and Blasing 1988; Manson 1998; Wood 1980). Tilley (1994), p. 31 suggests that trails “form an essential medium for the routing of social relations.” In the context of the British Neolithic, trails linked settlements and monuments and effected how people approached these places creating a narrative of experience (Snead et al. 2009a, p. 14). In this sense, within the broad context of settlement and exchange lies information relative to practices of travel, migration, and the formation of alliances (Sassaman and Holly 2011, p. 8).

Whose Trail is It?

Over the past millennium and into the early period of European contact, the Buffalo Road Trail was used by a variety of Indian groups as shown by archaeological, ethnographic, and historical data. The validity of oral history information juxtaposed to information derived through scientific methods is debated in the field of archaeology (Colwell-Chanthaphonh et al. 2010; Echo-Hawk 2000; Mason 2000; Watkins 2000; Whiteley 2002). Oral history, however, is a bridge between recent and past cultures and helps provide a more holistic approach that includes examining multiple lines of evidence to interpret a series of windows that span a continuum of pre-contact, protohistoric, and historic times (Lightfoot 1995, p. 202). Some view the investigation of pre-contact sites as a platform for conducting “indigenous archaeology” or archaeology done with, for, and by indigenous people. This form of inquiry is becoming increasingly popular (Aporta 2009; Schaepe 2006; Watkins 2000; Whiteley 2002; Zedeño et al. 2010), thus challenging traditional archaeology and what some feel is the discipline’s long-standing colonialist underpinnings (Colwell-Chanthaphonh et al. 2010, p. 229; Moss 2005, p. 583). It also challenges current archaeological theory which is, for the most part, commonly devoid of the views of indigenous people (Moss 2005; Watkins 2000). An interesting case in point is the current place name of the pass—Lewis and Clark Pass—named for Meriwether Lewis who visited the area for less than an hour and William Clark who never set foot there, yet it was a pass that was

crossed by thousands of indigenous people for at least 1,000 years and who likely had a number of place names for it and associated areas. It is also possible that western tribes felt as the Inuit of Alaska do—as Aporta (2009) describes—that trail travel was part of who they were. Trail travel was so deeply embedded in their lives and the lives of their ancestors, that they continued to go to the Plains, part of their original home territory, in an almost predetermined way—it was a tradition they needed to continue at all costs. The Inuit consider and regard trails with words that translate to and approximate the concept of “home.” Inuit travelers do not view trails as isolated entities but as places infused with collective memory of previous trips, places filled with an array of essential, life sustaining information (Aporta 2009, p. 132).

The portion of the Buffalo Road discussed in this study is located on federal Forest Service land. The documentation of the trail, its listing in the National Register of Historic Places in conjunction with the Lewis and Clark Bicentennial commemoration, brought considerable attention to the trail and the valuable resources along it, including the ancient and historic use of the trail by diverse cultural groups and the significance of the longer-term use of the trail to the region’s indigenous people. The National Register listing spotlights the significance of the resource and the importance of its preservation. These cultural resource values also guide Forest Service land management decisions for the Alice Creek drainage and Lewis and Clark Pass. When fire threatened the area in 2001, Forest Service resource specialists determined that constructing bulldozer lines to avert the fire would cause more damage to the trail’s integrity and site features than the fire itself. Thus, the fire was left to take its natural course. Thankfully, the fire burned in the opposite direction and archaeological and historical resources were spared.

Summary and Conclusions

The Lewis and Clark Bicentennial provided an impetus for federal agencies to identify Lewis and Clark trail segments on public lands and to document associated pre-contact and historic resources. Through consultations with American Indians, agencies gathered tribal perspectives about the trails Lewis and Clark followed. Rather than focusing solely on the expedition’s history, agencies took a more holistic approach, using oral histories, ethnographies, historical accounts and landscape archaeology to document the trail’s overlapping uses and the lifeways of the people who once traveled along it. A landscape-based approach allows us to envision the Buffalo Road Trail as a feature imbued with stories and myths linked to and captured by place names (e.g., “*Smitu Sx^wcu si*” or “Indian Fort Pass”) for a wide variety of geographical landmarks. Place names served as mnemonic devices linked to stories and myths that were (and still are) critical to group identity and social cohesion (Anschuetz et al. 2001; Zedeño 2000; Zedeño et al. 2009).

Through the use of the direct historical approach, a continuum of travel was revealed for the trail beginning with treks by unknown Indian groups and then later by Salish, Pend d’Oreille, and Nez Perce groups, who used the trail to access buffalo hunting grounds on the Northwestern Plains. Buffalo provided not only subsistence but robes, skins, and dried meat for exchange and barter. The trail itself became a home of sorts for many tribes and was deeply embedded in subsistence economies. It also played a

critical role in providing access to and maintaining an array of trading relationships and social networks which were highly dynamic and continually evolving.

After the horse was introduced between 1730 to 1750, (and probably at least a hundred years or more before), the trail was traversed by raiding parties of Blackfeet, Crow, and others who crossed the divide to raid the camps of western Indian groups. During this time, Salish-Pend d'Oreille groups built stone forts (*Smítu Sx^wcu si*) on top of the divide to hide behind and watch for enemy parties (Salish-Pend d'Oreille Culture Committee 2003; Salish-Pend d'Oreille Culture Committee and Elders Cultural Advisory Council 2005, p. 54). Use of the trail and the constant journeys back and forth across the divide portrayed in ethnographies and historical documents breathe life into the pre-contact nomadic world which is most often depicted merely from the perspective of stone tool use.

The presence of Pacific Coast shells in Middle Missouri sites and at sites like Pictograph Cave in south-central Montana, as well as the presence of Knife River flint from the Dakotas in Paleoindian sites in Colorado prove the existence and antiquity of aboriginal trade (Scott et al. 2014, p. 74). Major trading centers existed at The Dalles along the Columbia River, in the Dakotas at the Mandan/Hidatsa Center, and at the Shoshone Rendezvous point in southwestern Wyoming. In order for items to be traded, specific routes were taken that connected these places. Trails provided the link for the transfer of goods across large expanses of space. Ethnographic studies coupled with archaeological data, document the importance of trails as pipelines for the diffusion of a vast array of items and undoubtedly, information exchange, mating, and social interaction.

The investigation of the Buffalo Road Trail included the identification of intact trail tread and the documentation and study of numerous pre-contact and historic sites found along the trail. Sites included chipped stone lithic scatters, stone forts, rock cairns, and a stone cross feature. Pre-contact archaeological sites reflect the long use of the trail and the tradition of buffalo hunting on the Plains whereas the stone forts indicate warfare and conflict over resources and territory. The many rock cairns mark the trail's location and possibly made the trail smoother and easier to travel or perhaps offered travelers a respite to stop and pray or a means to make an offering for a safe journey. The stone cross at Lewis and Clark Pass reflects the arrival of missionaries or "black robes" and their attempt to convert Indian groups to Christianity. It also suggests that missionaries left religious icons to mark their passing as a means to ensure spiritual protection and safe passage for their journey and as a way to spread the word, through a symbolic icon, of their religion.

The sites along the trail not only mark its location but reflect its continued use from pre-contact to historic times. The cultural landscape of the trail and its sites and features comprise an entire window of human use and changing social dynamics. Although the Buffalo Road Trail was long used by indigenous Indian groups, its fame and notoriety come from its association with Captains Meriwether Lewis and William Clark, though the expedition spent less than 4 days traveling its 74.5mi (120 km) length and William Clark never saw it. Ethnographic information, oral histories and historical documents expose the layers of trail use over time. Although tribal people often view the Lewis and Clark expedition as a reconnaissance for the invasion of their land, were it not for Lewis and Clark who meticulously studied the trail they followed and used sextants and compasses to carefully document the path, the documentation and subsequent

protection of sites along it would have been much more difficult. Although some view the commemoration of the Lewis and Clark expedition as a reflection of lingering colonialism, the study undertaken here portrays Lewis and Clark as but one piece in an enormous puzzle of tribal travel, trade, warfare, and social interaction overlain by the spread of European religions and the exploration and development of the American West.

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