1. NAME OF PROPERTY

Historic Name: Travellers Rest (Revised Documentation)

Other Name/Site Number: Travelers Rest / 24MO0176

2. LOCATION

Street & Number: 6550 Mormon Creek Road Not for publication:

City/Town: Lolo Vicinity:

State: MT County: Missoula Code: 063 Zip Code: 59847

3. CLASSIFICATION

Ownership of Property		Category of Property	
Private:	X	Building(s):	___
Public-Local:	___	District:	___
Public-State:	X	Site:	X
Public-Federal:	___	Structure:	___
		Object:	___

Number of Resources within Property

Contributing	Noncontributing	
___	11	buildings
1	___	sites
___	2	structures
___	___	objects
1	13	Total

Number of Contributing Resources Previously Listed in the National Register: 1

Name of Related Multiple Property Listing: N/A

4. STATE/FEDERAL AGENCY CERTIFICATION

As the designated authority under the National Historic Preservation Act of 1966, 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.

Signature of Certifying Official Date

State or Federal Agency and Bureau

In my opinion, the property ____ meets ____ does not meet the National Register criteria.

Signature of Commenting or Other Official Date

State or Federal Agency and Bureau

5. 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):

Signature of Keeper Date of Action

6. FUNCTION OR USE

Historic: Domestic Sub: Camp

Current: Landscape Sub: park

7. DESCRIPTION

ARCHITECTURAL CLASSIFICATION: N/A

MATERIALS: N/A
Foundation:
Walls:
Roof:
Other:

Describe Present and Historic Physical Appearance.

INTRODUCTION

Travelers Rest played a significant role in the journey of the Corps of Discovery. The camp is part of a slow, continuous process that eventually repudiated the existence of the fabled Northwest Passage, a myth that had been the source of dreams for three centuries. The very name Travelers Rest[1] attached to the site by the captains, foretold the coming hardships encountered crossing the rugged Bitterroot Mountains. The camp served as the focal point of western geography as understood by the captains, knowledge acquired thousands of years earlier by the Native Americans. With the banks of Lolo Creek as a backdrop, Meriwether Lewis wrote a letter to Hugh Heney, an agent of the British Northwest Company, addressing Thomas Jefferson's grandiose plan of American empire. Travelers Rest also served as the point of separation for the Corps of Discovery as they parted paths to expand the knowledge of the North American continent while trying to impede British expansion into the West. There are few places along the entire trail from Saint Louis to the Pacific Ocean that envelope such a diverse convergence of momentous historical events, peoples, and ideas.

Travelers Rest National Historic Landmark has yielded historical archeological information of major scientific importance by shedding light upon several aspects of the Corps of Discovery; Travelers Rest has the ability to provide additional significant historical archeological information; and the information uncovered at Travelers Rest provides research potential for the entire Lewis and Clark Trail. Recent investigations at Travelers Rest offer new and consequential information about the Corps of Discovery not revealed during previous Lewis and Clark site studies. As a result, the application of these methods and theories to other Lewis and Clark sites could greatly enhance and define theories regarding the expedition.

DESCRIPTION OF PROPERTY

Travelers Rest is located on the south bank of Lolo Creek, within the eastern terminus of the Lolo Trail National Historic Landmark. The site encompasses a former ranch, which includes a main residence, several barns, and associated outbuildings. There are two basic landforms contained in the site, an upper terrace where the main residence still sits and most of the agricultural activities at the site took place, and the lower terrace, which for the most part, was too wet for agricultural activity. The site is bounded by a riparian zone to the north that has changed little since the encampment by the Corps of Discovery on September 9–11, 1805 and June 30–July 3, 1806. Lolo Peak and the entrance to the Lolo Creek canyon dominate the landscape to the south and west, presenting natural features that have not significantly changed in the intervening two hundred years. The exception is the disappearance of a

[1] The spelling of the historic name reflects the most common way it was written in the Lewis and Clark expedition journals. Lewis spelled it either Travellers Rest or Traveller's Rest; Clark used both Travellers and Travelers and referred to the creek as Travelers-rest Creek, Travellers-rest Creek and Travillers rest Creek. The spelling traveller was preferred over traveler in the late 1700s and early 1800s. In addition, the use of the apostrophe to indicate singular possession had become accepted only in the middle of the 1700s; rules for using the apostrophe to show plural possession were not well established for decades after the expedition. See Elizabeth S. Sklar, October 1976, The Possessive Apostrophe: The Development and Decline of a Crooked Mark, *College English* 38(2): 175-183.

Travelers' Rest is the spelling of the state park at the site and the nonprofit organization that operates the park. However, the spelling Travelers Rest reflects the modern designation used by most residents and scholars; it is the spelling utilized by Lewis and Clark scholars such as Gary Moulton, Stephen Ambrose, and John Logan Allen. The National Park Service National Historic Landmark program has spelled the name of the site variously as Travellers Rest, Travelers Rest and Traveler's Rest. The text in this document will use Travelers Rest.

channel of Lolo Creek which appeared on an 1806 expedition map. In latter years, subdivisions and agricultural practices impacted the area to a minor degree.

The exact location of Travelers Rest National Historic Landmark has not been previously verified. Based on imprecise published data of the 1970s and no field investigation, the late Dr. Merle Wells drew the National Historic Landmark boundaries in a manner large enough to, "hopefully capture the site (See Figure 1)." This current National Historic Landmark nomination is proposing a new boundary for Travelers Rest and deleting the existing National Historic Landmark boundary. Verification of the location of the Lewis and Clark campsite is now supported by multiple lines of evidence. These include the journals of the captains and members of the Corps of Discovery, with astronomical observations, and descriptions of courses, distances, and landmarks pointing to this location; the known presence of a Native American campsite; the discovery of the von Steuben pattern of encampment; evidence of fire hearths that date from the proper time period and that follow von Steuben's directives as to spacing distances; the presence of a latrine laced with mercury that is also located according to von Steuben's pattern of encampment; and, artifacts including a blue trade bead, melted lead, and a tombac button. The fire hearths and artifacts were all located within 20 centimeters of the surface, with one hearth including the melted lead and the blue trade bead. The artifacts, soil samples, and charcoal samples are currently housed at the Travelers Rest State Park, Lolo, Montana. The tombac button, recovered on private property, has been returned to the landowner.

The investigation into the location of Travelers Rest is not intended to glorify the celebration of the Corps of Discovery nor is it intended to disparage the Native American experience with the Corps of Discovery. It is merely intended to locate Travelers Rest National Historic Landmark more precisely.

EVALUATION OF INTEGRITY

Travelers Rest National Historic Landmark retains a high degree of integrity of location, design, setting, feeling, and association. The combined aspects of location, setting, feeling, and association greatly enhance the historical sense of the Lewis and Clark Expedition. The location, along with the complementary setting, strongly evokes the historical sense of the Corps of Discovery's encampment along the banks of Lolo Creek. The setting, within the eastern terminus of the Lolo Trail and along the periphery of the Bitterroot Valley retains its historic character. The aspects of feeling and association are retained through the combined presence of the physical features that dominate the area. A visit to the banks of Lolo Creek powerfully conveys the historical setting, allowing the visitor to vividly share the experience of the Corps of Discovery's encampment.

The property has a high degree of archeological integrity. The aspect of design is present through the physical layout of the campsite. The basis of the military aspect that shaped the Corps of Discovery is found in *Regulations and the Order and Discipline of the Troops of the United States*, written by Baron Frederick William von Steuben. This manual, commonly referred to as the "Blue Book," was the military's standard guide from the Revolutionary War until the War of 1812 and was known and adhered to by Lewis and Clark and members of the expedition. The layout or plan of the campsite, near a source of water with equally spaced fire hearths and a latrine 300 feet from the rear of the camp, is still intact and has the potential to address nationally significant research questions about the daily activities of the Corps of Discovery that do not appear in the historical record. These potential research questions could be applied to sites along the entire length of the Lewis and Clark Trail.

DESCRIPTION OF CONTRIBUTING AND NONCONTRIBUTING RESOURCES

The Travelers Rest site is the one contributing resource within the property and is described thoroughly within the text of this document.

There are thirteen noncontributing resources within the property. Six resources are located on private property to the west of the lower terrace of the investigation area. These six noncontributing resources include four mobile homes, one rental house, and a storage shed. The remaining noncontributing resources are located on the upper terrace of the project area. These seven noncontributing resources consist of the main house, one garage, two storage sheds, one small barn, one large barn, and the driveway with circular turn that serves as the center of the original ranch property (See Figure 2).

Dan Rice constructed the original portion of the main house, the east end of the existing building, in 1896 to 1898. The existing building has been remodeled several times and is currently being used for the Travelers Rest State Park office. The storage shed, located west of the main house between the house and the garage was originally a milk house constructed before the 1920s. Both the garage, west of the storage shed, and equipment barn, south of the garage, were already on the property when purchased by Pat and Ernie Deschamps in 1967. The garage is currently used as the visitor information center. The one access road structure to this area runs north from Mormon Creek Road towards the main house ending with an "L" shaped curve to the west toward the equipment barn and garage, which encircles a grassy area containing a large deciduous cottonwood tree. This road is still used as the main access to the State Park. The historic barn was constructed in 1924 or 1925 by Peter Thompson and Guy Newhouse.

West of the access road and the cluster of buildings, and within the upper terrace, is an open field area used for agricultural purposes during the majority of the property's Euro-American history. Vegetation in this area has been highly impacted by non-native elements. A single coniferous Ponderosa pine is centrally located on the slope between the bottomland and the benchland west of the building cluster. The open aspect of the bottomland area, whose native vegetation has been slightly less impacted by historic use of the area for grazing, is broken by riparian vegetation beginning along the 1806 creek channel and increasing in association with the current Lolo Creek corridor to the north (See Figures 3 - 6).

VALIDATION AND VERIFICATION OF TRAVELERS REST

The following information presenting the data and conclusions used to verify the location of Travelers Rest is condensed from the recent interdisciplinary investigation (Hall et al. 2003). Travelers Rest's location is verified through multiple lines of evidence, including two previous investigations, the journals of the captains and members of the Corps of Discovery, the military nature of the expedition, the von Steuben pattern of encampment, fire hearths that date from the proper time period, a latrine laced with mercury, and melted lead, a blue trade bead, and a tombac button. The locations of the fire hearths and the latrine follow the distances prescribed by von Steuben. The combination of each of the multiple lines of evidence provides the necessary preponderance of evidence to locate Travelers Rest.

PREVIOUS INVESTIGATIONS

Three previous investigations served as the impetus for the most recent multidisciplinary investigation into the location of Travelers Rest. Two simultaneous and independent studies pointed to a location

upstream from the current recordation of Travelers Rest. Mr. Robert Bergantino, Montana Tech, Butte, Montana, produced an exhaustive analysis of the journals in an effort to locate Travelers Rest, "An Evaluation of Original Lewis and Clark Information to Determine the Location of Travelers Rest Camp (Bergantino 1998)." Bergantino concluded that the journals kept by the captains and members of the Corps of Discovery provide evidence of the location of Travelers Rest that disproves the current recordation of the resource. Bergantino utilized the expedition's original journals, survey data and maps together with U.S. Government Land Office plats surveyed in 1870, 1872, and 1879, U.S. Geological Survey maps prepared in 1907, 1964, and U.S. Geological Survey aerial photographs taken in 1966 and 1972.

According to Bergantino, Clark's survey data for September 9, 1805, reveals the expedition arrived at Lolo Creek while following an Indian Road (Bergantino 1998:2). Fixing the location of the Indian Road provides information on the location of Travelers Rest while refuting the current recorded location of Travelers Rest. Clark's map of the Bitterroot Valley depicts the Indian road west of the Bitterroot River and upstream from the confluence of the river and Lolo Creek (See Figure 7). A map produced by Isaac Steven's Pacific Railroad Survey in 1855 places the Indian Road in the same location. In addition, Gustav Sohon, an artist with the Stevens Survey, produced a painting of the Lolo Creek area in which the Indian Road is depicted at that same location (Hall et al. 2003:75; See Figure 8). Upon leaving Travelers Rest on July 3, 1806, Lewis recorded courses and distances that indicate that he proceeded down the creek approximately one half mile in order to ford the creek, a fact that Bergantino notes "should permanently refute the notion that the camp was at or very near the mouth of Lolo Creek" (Bergantino 1998:6). Bergantino also notes that Clarks map of Lewis's return to White Bear Island depicts Lewis crossing Lolo Creek in the location of the Indian Road (Bergantino 1998:7). Bergantino asserts with a claim of 95% accuracy that the location of Travelers Rest is west and upstream of the Indian Road (See Figure 9).

It is important to note that Bergantino does not directly address the 1970s recordation of Travelers Rest National Historic Landmark by Dr. Merle Wells. He does, however, state that "the mistaken notion that Travelers Rest campsite was at the mouth of Lolo Creek probably comes from someone's reading the Biddle or Biddle-Coues edition of the journals or Gass's journal without taking into account the other expedition-derived information" (Bergantino 1998:5). It should be noted that the "other expedition-derived information" that Bergantino discusses were not available to Dr. Merle Wells during his initial recording of Travelers Rest. This type of information has only recently been widely disseminated through authors such as John Logan Allen, Stephen Ambrose, and Gary Moulton.

Bergantino's work was one of two concurrent investigations that served as the basis for the most recent interdisciplinary investigation into the location of Travelers Rest. The second investigation featured an analysis of aerial infrared photographs taken on a flight line above Lolo Creek from its confluence with the Bitterroot River to a point three miles upstream. The resulting analysis argued that the Corps of Discovery, following a Native American guide on a Native American trail, would have likely encamped at or adjacent to a Native American campsite. The aerial infrared photographs revealed the presence of anomalies suggestive of a Native American campsite in the same location identified by Bergantino (Hall 1997:12; See Figure 9).

The third investigation, a limited-scope data recovery project conducted immediately prior to private property subdivision, produced a tombac button. The presence of the tombac button could be explained in a number of ways, including the possibility of a Native American association, association with the Corps of Discovery, or association with the historical development of the property. Due to the

extremely limited nature and time constraints of that investigation, the research design for the most recent investigation noted that the area where the button was recovered was considered a high priority for remote sensing and historical archeological testing.

The most recent interdisciplinary study into the location of Travelers Rest included geoarcheological investigations, which featured observations and descriptions of site geomorphology, stratigraphy, vegetation-landform relationships, and soil development. The resulting analysis identified three landforms that comprise the Travelers Rest area. The first and oldest at several thousand years of age, is a large terrace on the south side of the site designated QS-1 which is comprised of alluvial fill formed during an earlier aggradational phase of Lolo Creek. The age of the QS-1 landform is supported by, among other observations, the stratigraphy and soil development. The lower terrace is comprised of two landforms, the T-0 and T-1 landforms. The T-0 landform comprises the lower terrace area that is the location of Travelers Rest. This landform gradually grades into the older T-1 landform to the west of the T-0 landform. The stratigraphy, soil development, and sediments indicate that the T-0 landform is recent in origin, forming within the last 200-300 years (Hall et al. 2003:75). The geoarcheological analysis at Travelers Rest serves to remove most of Montana's considerable prehistory as a possible source for any features or artifacts recovered from the lower terrace.

HISTORICAL EXPLORATIONS AND EARLY SETTLEMENT

To this day the only specific historical references to the location of the Travelers Rest campsite are found in the journals of Lewis and Clark, John Ordway, and Joseph Whitehouse, which Robert Bergantino used as sources in his 1998 study. Bergantino noted that Meriwether Lewis traversed one half mile down Lolo Creek to the Native American trail and forded Lolo Creek before turning north (Bergantino 1998:5). Lewis wrote in his journals that the expedition… "forded travelers rest C. 1/2 a mile below our camp,… (Moulton 1993:8, 85)." This information, unavailable to Dr. Wells and earlier investigations at Travelers Rest, indicates the campsite could not be located at the confluence of Lolo Creek and the Bitterroot River as currently recorded.

Records of subsequent explorers and travelers through the area, including those of David Thompson, John Work, Robert Owen, John Mullan, John Strachan, and the U.S. Department of the Interior surveys of 1899 and 1904 either fail to mention Travelers Rest or mention it only generally in passing. In spite of intense competition between the Hudson's Bay Company and American fur traders, it appears that neither used the Lolo Trail as a major travel route, preferring instead to use the river routes along the Clark Fork and Bitterroot Valleys. The one exception was John Work's Hudson's Bay Company Snake River Brigade, which passed through the Lolo Creek drainage in 1831 enroute to the Snake River. Work did not, however, comment on the Corps of Discovery or Travelers Rest.

Two decades later, Isaac Stevens, governor of Washington Territory, led a survey of possible routes for a transcontinental railroad across the Rockies. The Stevens Expedition traversed the Lolo Creek drainage in the fall of 1854 and later provided indirect proof of the campsite location through Gustav Sohon's landscape painting of the Lolo Creek area "Entrance to the Bitter Root Mountains, By the Lou Lou Fork." Looking west, the painting depicts the Native American road described by Meriwether Lewis, Sohon's placement of the alignment of the road matches the location mapped by Clark. Lewis' description of traveling down Lolo Creek to the Native American trail - the very trail mapped by Clark and painted by Sohon - indicates that that camp is not at the confluence of Lolo Creek and the Bitterroot River as currently recorded (See Figure 1).

HISTORICAL DEVELOPMENT OF THE SITE PROPERTY

The property where the Travelers Rest site is located has historically been used for farming, stock-raising, and residences, and is now partially owned by the State of Montana for preservation as a historic site and development as a state historic site park. Two parcels of private land within the proposed National Historic Landmark boundary to the west are not currently included in the historic state park. Documented land use started with Christopher Rennix, who began residing on the property in 1881, proved up his homestead entry by 1888, and filed the first water right on the property in 1885. By 1886 he had constructed a one-story wood dwelling, two granaries with a wagon shed between them, a log stable, a chicken house, a root cellar, corrals, an irrigation ditch, rail fence, and had planted 12 fruit trees, all of which no longer exist. Dan Rice probably constructed the present residence between 1896 and 1898, and the buildings immediately west of the residence were constructed after 1920. All of these buildings and features constructed by Rennix and Rice are located on the upper terrace and outside the survey grid zones. The historic barn located on the upper terrace as constructed between 1924 and 1925. Most of the bench and those parts of the lower terrace, which were not marshy after draining, were historically plowed and used to grow hay. For example, Grid #57, where the central fire hearth is located, has not been plowed, but Grid #61, where the second fire hearth is located, has been plowed. Interviews with Roy Van Ostrand, a long time former property owner, revealed that Mr. Van Ostrand did not plow the lower terrace area due to the wet soils fearing that his tractor would get stuck in the mud (Van Ostrand, personal communication, April 11, 2001).

The area around the project site began experiencing a transition from residential and farming to strictly residential use in the 1950s. Roy Van Ostrand subdivided the land in the S½ SE ¼, section 34, T 12N, R 20W as the Van Ostrand Addition in August 1957; the project area constitutes lots 1, 2, and 14 at the east end of the subdivision. Farming and stock-raising ceased in 1963, when John and Shirley Shively purchased the property, and were not resumed.

Since the 1970s, the Lolo area has developed rapidly as a bedroom community to the city of Missoula. The Lolo Land Use Plan of 1978 called for the area from the project area west to be zoned R2, two units per acre residential, and did not mention the Travelers Rest site. Recently, trailer park development to the west of the site and residential development on a hill overlooking the site to the south have encroached upon the site integrity. However, the Lolo Regional Plan of 2002 recommended that the area in which the Travelers Rest site is located be zoned residential with one dwelling unit per acre. This triggered a renewed planning effort, with the goal of making Travelers Rest an integral part of the Lolo Community Development Plan and to ready the community for the Lewis and Clark Bicentennial. As the result of an anonymous buyer, the state now owns the majority of the property on which the site is located. At present, property located within the proposed National Historic Landmark boundary is zoned Park-OS and Residential -- one dwelling unit per five acres and one dwelling unit per 10 acres. The state and the Lolo community are in the process of developing the property as a state-owned historic park.

NATIVE AMERICAN RESOURCES

Locating a Native American resource on the south banks of Lolo Creek, through the aerial infrared photographs and through interviews with local landowners and tribal elders, in the vicinity of Travelers Rest serves as one of the multiple lines of evidence verifying the location of the campsite. Tribal elders acknowledged the location of a Native American site along the south bank of Lolo Creek. An open dialogue with the Confederated Salish and Kootenai Tribal Historic Preservation Office during the

investigation acknowledged the need to limit intrusion into the Native American resource while searching for evidence of the Corps of Discovery. The historical archeological excavations, the aerial infra red photographs, magnetometer investigation, interviews with the local landowners, and the journals of Lewis and Clark, provide strong evidence of an extensive and ancient Native American occupation site. The excavation efforts located one complete stone tool, a chert drill that was located at a lower level than the central fire hearth and nearly 5 meters to the northwest of the hearth, three partial projectile points from different excavation units at various levels below the hearth feature and three to seven meters in distance, and a scatter of flakes comprised of various material types. The closest flakes to the hearth were located approximately 20 centimeters below the hearth feature. No artifacts were located on the surface of the lower or upper terrace despite an intensive search conducted by archeologists during the pedestrian transects even though searched on hands and knees during the remote sensing investigations. Carbon 14 dates from the hearth located on private property directly west of the state park reveal that the fire is about 1,000 years old. The hearth was located at a greater depth than the other two fire hearths and it is also located in the vicinity of where the landform begins to grade from a younger landform, about 200 to 300 years old, into a more ancient landform. The materials related to the Native American use of the area are all located on the west half of the lower terrace and increase in numbers proceeding west.

The aerial infrared photographs, taken in 1997 and in 2000, revealed a linear array of anomalies suggestive of tipi rings, the great majority of which are located on the Maurer property about 2000 feet west of the Travelers Rest site. Both sets of infrared photographs failed to locate any anomalies suggestive of tipi rings on the lower terrace of the current state park. The magnetometer investigation on Mr. Steiger's property, located about 1000 feet west of the site, found magnetic anomalies in the same position as the anomalies from the aerial infra red photographs.

The Deschamps family had indicated that, while they had never seen or recovered any Native American artifacts from their property, the previous owners had a substantial collection. However, when interviewed, Mr. Roy Van Ostrand, the previous property owner, denied seeing or recovering any artifacts from the property. Mr. Van Ostrand also mentioned that he had never seen Native Americans in or around Lolo Creek. However, he did state that he was aware of several neighbors who had been collecting artifacts from their property (Van Ostrand:2001). During a meeting with Stan Norgard, a property owner at the confluence of Lolo Creek and Mormon Creek west of the site, Mr. Norgard and Dan Hall discussed an impressive collection of artifacts that Mr. Norgard had collected over a forty year period from his property, mainly from his garden and strawberry beds. The artifacts discovered included hammerstones, basalt pestles, triangular side-notched and corner-notched projectile points, and a complete Hanna point. According to Mr. Norgard, fire-cracked rock and flakes are scattered across his property. Mr. Norgard also pointed to locations between his property and Mr. Steiger's property where other individuals have found artifacts over the years.

In conclusion, the presence of an extensive and ancient Native American occupation site to the west of the current state park is confirmed by the abundance of artifacts found by landowners for decades, conversations with tribal elders, the anomalies located in the aerial infra red photographs which coincide with the anomalies located by the magnetometer, and the journals of the Corps of Discovery. The presence of the Native American site is inferred from Joseph Whitehouse's journal entry from September 10, 1805 before leaving Travelers Rest, "So we go the road he knows" (Moulton 1997:11, 309). The presence of the Native American resource provides one of the multiple lines of evidence locating Travelers Rest.

THE MILITARY NATURE OF THE EXPEDITION

This part of the nomination addresses the military nature of the exploration, including the Corps of Discovery's probable possession and use of Frederick William Baron von Steuben's *Regulations and Discipline of the Troops of the United States*, otherwise referred to as the Baron and the Articles of War, and also known as the Blue Book (Ambrose 1996:42; Beckham 2003:29; Jackson 1981:134). The *Regulations*, which included von Steuben's articles for the configuration and measurements of a military campsite, were used in conjunction with the various means of remote sensing and excavation to predict the encampment location, arrangement, and spacing in the project area. Von Steuben's regulations represent one of the multiple lines of evidence that verifies the location of Travelers Rest.

The military nature of the expedition arose from the need to provide structure and discipline to a group of men of disparate backgrounds to help ensure the expedition's chance of success. Lewis and Clark were familiar with the regulations written by von Steuben and each believed it was important to utilize and enforce them on the expedition to maintain a disciplined, efficient, and well-organized camp. Lewis' first posting was as an officer of the regular army to the Second Sub-legion under General Anthony Wayne, and Lewis was present when the tribes of the Ohio agreed to the Terms of the Treaty of Greenville. Later, he transferred to the First U.S. Infantry Regiment and, in 1799, became a lieutenant in the army and served as paymaster, a position that provided him with considerable information about the army and its personnel (Ambrose 1996:38-49).

William Cark joined the Kentucky militia in 1789 and then transferred to the regular army, where he became a lieutenant and spent time spying on the Spanish on the upper reaches of the Mississippi. In 1795, he was placed in charge of a select group of riflemen at Fort Greenville in Ohio, where he met Lewis. During that time, Lewis was under Clark's command, and the two men grew to know and respect one another and began to correspond afterwards. By 1795, Clark had been in the army for six years and had fought in the Battle of Fallen Timbers under Anthony Wayne (Ambrose 1996:46; Lavender 1988:55-57).

Lewis and Clark insisted on military personnel in the Corps of Discovery because of their concern over discipline. Even though Lewis and Clark had wide latitude in recruiting men for the expedition, and trained, and drilled them rigorously, they encountered numerous discipline problems before embarking up the Missouri. Several incidents occurred during the winter of 1803-1804 at Camp Wood which required Lewis and Clark's prompt disciplinary action (Ambrose 1996:127-130). Lewis and Clark were, in short, "army men going by the book," that was "a collection of dicta and proscriptions" commonly referred to as the "Rules and Articles of War." Except for the French "civilian" boatman and some recruits from Kentucky who might not have known army routines, the core of the expedition was familiar with these articles and knew that "military discipline was not suspended when a detachment marched out of a garrison and took to the trail." During the expedition, Lewis and Clark built three forts large and durable enough to house and to protect a company of men during three winters. The forts were military posts that were governed by routines established by regulation and tradition, and the Lewis and Clark men were subject to these regulations which often included a section from the rules and articles of war. Although some rules had to be adapted when the expedition was moving, the men "were soldiers still in the terminology of their daily assignments and in the performance expected by their captains (Jackson 1981:164-165)."

BARON FREDERICK WILLIAM AUGUSTUS VON STEUBEN AND THE VON STEUBEN PATTERN OF ENCAMPMENT

In listing literature taken on the expedition, Lewis and Clark scholar Donald Jackson believes that "no doubt the expedition carried at least one medical treatise and the current edition of the rules and articles of war (Jackson 1981:134)." A more recent work on the literature of the expedition contends "because of its organization as a military expedition, it is…likely that the Corps of Discovery carried the *Regulations of the Order and Discipline of the Troop…the Articles of War [1794]"* (Beckham 2003:29). The British had originally published rules of conduct for navy personnel in the mid 1600s and revised them in 1749 and 1757. Parliament published in 1778 the "Rules and Articles for the better government of Our horse and Foot Guards, and all other Our Forces in Our Kingdoms of Great Britain and Ireland, Dominions beyond the Sea, and Foreign Parts," otherwise known as the "Articles of War." The articles contained 27 sections of rules on a variety of topics, including mutiny, quarters, and the administration of justice (Beckham 2003:29).

Baron Frederick William von Steuben prepared the *Regulations for the Order and Discipline of the Troops of the United States* at Valley Forge in 1778 at George Washington's request to provide military training for a Continental Army low in morale, supplies, equipment, and training. Von Steuben was born in Magdeburg, Prussia, to a military family and served in the Prussian army from 1746 to 1763, having attained the rank of captain. From then to 1775, he served as the court chamberlain to the Prince of Hohenzollern-Hechingen, eventually acquiring the title of Baron. He left that post under clouded circumstances, fell into debt, and was receptive to an offer by Benjamin Franklin in 1777 to come to America to assist the Continental Army - an offer he readily accepted, given his circumstances (Steuben 1985:n.p.).

George Washington, an able leader but not a trained soldier, was in desperate need of the help of a staff officer to assist in molding the Continental Army into an effective fighting unit and fighting war. Von Steuben's "high professional reputation, an impressive Prussian military bearing, and colorful personality" had a profound effect on the disorganized, rag-tag army. By the spring of 1779, Washington promoted him to the rank of major general for quickly transforming the army into an effective fighting force and for writing the regulations for order and discipline in installments in the process. Some have called the transformation of the Continental Army under von Steuben "perhaps the most remarkable achievement in rapid military training in the history of the world (Steuben 1985:n.p.; Whitridge 1976:430)."

After arriving at Valley Forge, von Steuben was initially appalled by the lack of a uniform set of drill instructions and by the lack of a central government to enforce them. At that time, the continental army consisted of detachments from the thirteen colonies, with each detachment following its own model. The troops resisted change and clung to these models, generally adapted from French, English, and Prussian models (Whitridge 1976:432-433). Faced with the need to convert a motley assortment of soldiers using their own familiar systems of drill and maneuver into an effective fighting force in about two months, von Steuben adapted the Prussian system to fit the immediate situation. He did so by confining it to "absolute essentials," such as reducing the commands in the manual of arms to ten and prescribing "an easy, natural step half-way between the old and quick times." The Baron focused most of his efforts on training the troops to quickly load and fire, the use of the bayonet, and on the precise execution of essential foot movements (Bill 1955:39).

Although officers used a variety of manuals before 1815, the "most significant by far" was von Steuben's "Blue Book" (Skelton 1992:38). Congress adopted the manual in March 1779 and printed it for issue to the army (Armstrong 1976:62; Beckham 2003:30). For decades, it continued to serve as the army's standard guide for military tactics and basic military administration until the War of 1812. Seventy editions of the book were published, one of which was taken on the expedition by Lewis and Clark. The "Blue Book" effectively simplified the highly structural movements characteristic of eighteenth century warfare and included rules for conducting marches, organizing camps and maintaining camp sanitation. It also included a section on the fundamental duties of each military rank (Skelton 1992:38). Lewis and Clark had their own copies dating back to their service under General Anthony Wayne in the mid 1790s. Wayne had been a firm believer in the "Blue Book," and "placed it in the hands of every company officer and saw they used it" when he established the Light Corps of the Army in 1779 (Boyd 1929:149; Weigley 1967: 93). Clark had served under Wayne in the Battle of Fallen Timbers in 1794 (McGrane 1914:418), and Lewis had served under him in the Second Sub-Legion in 1795 (Ambrose 1996:45).

The Lewis and Clark journals contain two references to the presence of the Articles of War, one by inference and the other by direct reference. On March 30, 1804 at Camp Dubois on Wood River, Clark initiated a court martial of a man stealing expedition supplies and stated that he (Clark) read the orders on the Parade that evening. It is most likely that he was referring to von Steuben's manual. The most precise reference to the Articles of War occurred on May 17, 1804, when John Ordway, in referring to the court-martial of John Collins, stated:

> The Court are of the opinion that the Prisnair is Guilty of charges alleged against him it being the breach of rules & articles of War and do Sentence him to receive fifty lashes on his naked back (Beckham 2003:30).

Though there is no existing reference about how Lewis and Clark set up encampments, it is highly probable that given their long-time familiarity with the "Blue Book" and the fact that it was universally available, they would have applied the order of encampment prescribed by von Steuben. Although the size of the expedition of 30 persons that embarked westward from the Mandan villages in 1805 was the size of a platoon and von Steuben's manual layout was for a larger contingency of men such as a single regiment or a regiment organized into two battalions, it seems reasonable to assume that Lewis and Clark used a similar but simplified configuration for encampments on the expedition, especially when camping at one spot over a day or two.

Von Steuben's camp layout for a regiment of one battalion consisted of horizontal, symmetrical linear arrangements, with wagons and horses in the first row, the sutler at a single point between the wagons, and the next row consisting of evenly spaced kitchens with the sutler's tents being located between them. The kitchens were to be dug behind their respective companies forty feet from the field officers' tents. The field officers tents were to be in one line, thirty feet in front of the line officers, with the colonel's tent opposite the center, the lieutenant colonel's tent to the right, and the major's tent on the left. The surgeon, quartermaster, and paymaster encamped in one line alternating between the field officers, with the front of their tents in line to the rear of the field officers' tents, with the surgeon on the right, the paymaster on the left, and the quartermaster in the center (Steuben 1985:75-79; See Figure 10).

The captain and junior officers' tents were one line, twenty feet from the rear of the men's tents, with the captains in the right wing opposite the right of their respective companies, the junior officers

opposite the left, and the contrary in the left wing. The tents of the non-commissioned officers were to be pitched in two ranks with an interval of six paces between the ranks and two feet between each tent. The tents of the noncommissioned officers were in the front rank on the right of their companies in the right wing and on the left wing of the battalion. Nine feet distance was allowed for each tent with its interval twenty feet in the core of the battalion for the adjutant (Steuben 1985:75-79).

The camp guards were to be three hundred paces in front of the first line and the same distance in the rear of the second line. The quarter guard was to be forty feet from the wagons, opposite the interval between the two battalions who furnish it. The sinks (latrines) of the first line were to be three hundred feet in the front and those of the second line the same distance to the rear of the camp (Steuben 1985:75-79). Von Steuben's measurements for the location of the latrines, was key to interpreting the evidence found at the study area. While the Blue Book does not specify construction details of latrines, it does address the precise placement of this feature.

The core of the expedition expected to continue the journey west after the Mandan winter in 1805 was composed of two captains (Lewis and Clark), three sergeants, Charles Floyd, (who was replaced by Patrick Gass after Floyd died on August 20, 1804), John Ordway, and Nathaniel Pryor, the privates, York, and the interpreter Drouillard. The main detachment was, in turn, divided into three squads under the command of Floyd-Gass, Ordway, and Pryor (Ambrose 1996:131). At the outset of the trip up the Missouri, each group prepared its own meals (Clarke 1970:32). This procedure likely continued throughout the remainder of the expedition.

One of von Steuben's greatest concerns was about camp cleanliness. In the chapter entitled "Reviews," von Steuben clearly states that for the commandant of the regiment the:

> preservation of the soldiers health should be his first and greatest care; and that depends in the great measure on the cleanliness and manner of living, he must have a watchful eye over the officers of companies, that they pay the necessary attention to their men in those respects (Steuben 1985:125).

In a separate chapter entitled "Necessary Regulations for preserving Order and Cleanliness in the Camp," von Steuben states that:

> When the regiment enters the camp, the field officers must take care that the encampment is pitched regularly; that the sinks [latrines] and kitchens are immediately dug in the proper places; and that no tents are pitched in any part of the camp contrary to the order prescribed (Steuben 1985:81).
>
> Every day, an officer was to see that the tents were kept clean, that no bones or filth were to be in or near them, and that officers were not to eat in them except in bad weather. All dirt was to be "immediately removed, moved, and either burnt or buried" (Steuben 1985:82-83). The quartermaster had to be:
>
> answerable that the parade and environs of the encampment are kept clean; that the sinks [latrines] are filled up, and new ones dug every four days, and oftener in warm weather; and if any horse or animal dies near the regiment, he must cause it to be carried at least half a mile from camp, and buried.
>
> The place where cattle are killed must be at least fifty paces in the rear of the wagons; and the entrails and other filth immediately buried; for which the commissaries are to be answerable.
>
> The quarter-master general must take care that all dead animals, and every other nuisance in the environs of the camp, be removed (Steuben 1985:83-84).

Steven Allie, Director of the Frontier Army Museum at Fort Leavenworth, Kansas, believes that Lewis and Clark would have conformed to the von Steuben camp configuration as much as possible or would have noted significant departures from it. Since there is no known reference in the journals to camp layout, it would seem logical to assume the Lewis and Clark adapted their campsites to the von Steuben layout. Allie believes that the expedition would have carried a "common tent" used by Lewis and Clark and eight linen lean-tos used by the sergeants and privates in a line facing the common tent, which, Allie believes, was the only real tent taken on the expedition. Since the expedition was organized into three squads, it is reasonable to assume that this line may have been arranged into three groups. Although it is not known exactly how the common tent and lean-tos were arranged because the platoon-sized expedition was about one-twentieth the size of the regiment von Steuben used as a model, it probably would have conformed in other ways to the von Steuben pattern, including placement of the latrine, a kitchen area, general work areas (the latter probably located in front of the tent and lean-tos), the location of areas where food animals were slaughtered, and the location of the guards. Allie believes that the common tent would have housed Lewis and Clark and contained some equipment. He believes that the tent was made of sailcloth and that it was 6 feet 10 inches tall, 10 feet 10 inches long at the ridge, and 8 feet 6 inches wide. Allie estimates that the lean-tos were 5 feet wide and 10 feet long and could have been hooked together for a doublewide effect (Allie 2001).

Elements of the von Steuben pattern should be discernable at Travelers Rest through a combination of features that are spatially and systematically organized according to the specifications in the "Blue Book." These features include a central kitchen fire hearth located near a water source, a fire that also would have served as the work place for Shield's gun repair activities, and a second fire located at a distance of forty feet that would have served the "common tent." The second fire hearth would have been flanked by two additional fire hearths arrayed in a linear fashion, consisting of the three groups described above. Unpublished reports from the investigations of the Portage Site at Great Falls indicate that these fires hearths may have been spaced twenty to thirty feet apart. Additional features from the von Steuben pattern would indicate two guards, with the first located three hundred paces from the rear of the camp; a location where food animals were slaughtered at a distance of fifty paces from the rear of the camp; and a latrine three hundred feet from the rear of the camp.

REMOTE SENSING INVESTIGATION

The investigation into the correct location of Travelers Rest utilized a series of remote sensing investigations, including magnetometer, electromagnetic conductivity, and metal detectors. The remote sensing investigations were designed to locate anomalies in the near-surface soils that could be related to the Corps of Discovery's encampment along the banks of Lolo Creek and that would reflect the utilization of the "Blue Book." The entire results of the remote sensing investigations are presented in the report describing the multidisciplinary investigation (Hall et al. 2003).

Magnetometer

The remote sensing investigation for Travelers Rest began with data collection using a dual-sensor magnetometer (i.e., gradiometer). The investigation used a Geometrics G-858 cesium gradiometer with dual cesium sensors vertically aligned to allow the instrument to operate in a gradiometer mode, which allowed for minimizing possible solar and diurnal effects and for providing greater resolution of subsurface features. The magnetometer investigation revealed a large number of anomalies that were identified during the development of the research design and were theorized to have been associated

with the Corps of Discovery. The research design identified about 60 anomalies warranting some sort of investigation, either through excavation units or shovel probes.

Three anomalies are located in Grids #57, 58, and 59, and are in and along the abandoned stream channel that cuts across the lower terrace. The anomaly located in Grid #058 is a trash deposit of recent origin. The deposit includes metal pipes, barbed wire, tin cans, wood, ceramic, and other types of debris. The anomalies are located on surface T-0, a flood plain that is likely Historic Period in age. The research design theorized that the two anomalies located on either side of the recent trash area might represent activities from the Corps of Discovery or from the recent agricultural activities that have occurred in the area for the past 80 years. The anomaly in Grid #57 is of a scale unlike any other anomaly located during the remote sensing investigation (See Figure 11). As noted, it has been theorized that gun repair should have occurred close to water; a fire used to heat metal would have burned longer and hotter than a fire used to cook food or a fire used by Native Americans for a sweat lodge. The remnant thermal magnetization should leave a signal unlike any other anomaly. In addition, the anomaly should be associated with metal if the anomaly is the fire hearth from the gun repair. The metal detector sweeps indicate the area contains barbed wire, tin, aluminum, brass, lead, two rod-like metal objects, and unidentifiable metal objects. The barbed wire, tin, and aluminum are probably related to the trash deposit that is located about eight meters to the northwest. The anomaly located in Grid #059 does not have any metal associated with it. It is possible that this is another remnant thermal magnetization, a fire hearth. Again, food preparation from the Corps of Discovery should have occurred relatively close to a water source.

Electromagnetic Conductivity

The geophysical investigations, using an electromagnetic (EM) induction meter, the Geonics EM 31, started on May 3, 2001. Based on the preliminary results of the magnetometer, a number of the grids were selected for additional probing with the EM 31. The original methodology called for the EM 31 to operate in tandem with the magnetometer, collecting data from selected grids following the magnetometer across mowed pastureland and portions of a subdivision. The presence of overhead power lines, telephone lines, and cable television lines in the subdivision provided too much static interference for the operation of the EM31 on the west end of the project area. As a result, the EM 31 was arbitrarily sent to the east end of the project area to collect data in Grid #037 and to progress to the west until the joint survey could resume at a different location.

The data collected in Grid #037, a serendipitous tale in every sense of the word, indicated the presence of a shallow, subsurface anomaly. The quadrature portion of the signal revealed a significant contrast in the apparent ground conductivity of the soils. Theories for the possible origin of the anomaly included that the soil feature might be associated with an abandoned channel from Lolo Creek, with the trenches dug during the Nez Perce flight through the area in 1877 and the subsequent episode of Fort Fizzle, with some past agricultural activity, or with the presence of the Corps of Discovery's latrine.

Receiving reports that Chief Joseph was headed towards Missoula during his epic flight from reservation confinement, soldiers from Fort Missoula constructed fortified positions in an effort to halt the Nez Perce advance. These fortifications, primarily shallow trenches serving as foxholes, proved ultimately futile as Chief Joseph merely side-stepped the military. The site of the fortifications became known as Fort Fizzle and it is located over 10 miles upstream from the site location. A number of the fortifications have been filled in over the years. It can be concluded therefore, that the anomaly is not

associated with Fort Fizzle and the flight of the Nez Perce since the EM 31 depicts excavation and deposition of a different substrate and also because of the great distances between the two resources.

The trending of the anomaly in a north-south direction instead of the east-west direction of the creek chutes provides additional evidence that it was not associated with Lolo Creek. A material other than Lolo Creek gravels was deposited into the trench resulting in a contrast of soils (Bevan 1998). The remaining theories for the origin of the soil feature, includes the possibility of association with historical ranching, historical mining, or association with the Corps of Discovery. This anomaly was targeted for geochemical analysis to prove the existence of the latrine. The results of the mercury vaporizer analysis are presented below.

Metal Detectors

Metal detectors were used on four separate occasions during the investigation. Members of the Travelers Rest Chapter of the Lewis and Clark Trail Heritage Foundation, assisted and supervised by professional archeologists, conducted the metal detector sweeps. The investigation used three different models of White's metal detectors. They were set in differing modes of discernment to assess the potential source of the signal, such as nails, brass, and copper, which are often discernible by the metal detector's changes in intensity or tone. Traverses were followed on a north-south axis across each grid. Pin flags were used to mark the source of the signal located by passing the sensor north-south and then east-west to fix the location of the metal object; pin flags were then dropped on the signal's location. The first metal detector sweep of the project area occurred in the summer of 2001 to investigate dipolar anomalies located during the magnetometer investigation. The sources of the signals were flagged and compared to the magnetometer results to assist with the pre-excavation analysis of the data presented in the research design (Hall 2002:9). No signals were excavated during the first sweep.

The second metal detector sweep occurred in August 2002 and covered a broad area around the trench-like anomaly located in Grid #037. The purpose of the second sweep by metal detectors was to determine if the soil feature could be associated with the historical development of the property. Every signal from the area was carefully located and then the object was retrieved to determine if the soil-feature and associated mercury concentrations might possibly be related to deposition of household debris. Eight metallic artifacts were located within twenty meters of the latrine; all eight artifacts were recent in origin and included barbed wire fence staples and a portion of a sprinkler head. The lack of metallic artifacts in or around the feature helped to disprove the theory that the feature was associated with household trash disposal. In addition, the historical research revealed that the septic systems and outhouses from the ranch and the barns associated with the ranching were all located on the upper terrace at a considerable distance from the soil feature, a distance approaching 800 feet for the barns. This great distance, combined with a lack of artifacts to support an association with historical ranching denies a possible historical ranching, origin for the soil feature.

The third and fourth sweeps of the metal detectors occurred at the end of the excavation in late August and early September 2002. The third metal detector sweep focused on the excavation units from Grid #057 which had revealed the presence of a fire hearth and a sample of lead shaped like a puddle. The third sweep intended to ensure the location and collection of any other samples of lead or metallic objects in or around the fire hearth. Three additional lead objects were removed from the units, all of which were less than 10 cm of exposure.

The fourth sweep occurred across the possible area of the actual encampment, and within the abandoned stream channel directly to the north. The journal entries from Lewis and Clark indicate that during the return visit to Travelers Rest in 1806, John Shields spent the better part of two days repairing guns. During part of the gunsmithing, Shields shortened the barrels from two of the guns which were then presented to the Nez Perce who lead the Corps across the Lolo Trail. The fourth sweep was conducted to locate any gun parts or gun barrels in or around the creek bed or the adjacent stream terrace. Signals that appeared to indicate a long, metallic object were marked with a pin-flag and then investigated with a trowel, but this method failed to locate any evidence of the gun barrels.

MERCURY VAPORIZER ANALYSIS

Mercury vaporizer analysis attempted to locate the latrine, or sink as referred to by von Steuben, and represents one of the most significant of the multiple lines of evidence utilized to validate and to verify the location of the campsite. The Corps of Discovery used Dr. Benjamin Rush's medicinal pills known as "thunderclapppers" as a medical treatment throughout the journey. These pills contained a high percentage, approximately 60%, of mercury. Therefore, the human waste deposited near Lolo Creek is expected to have high levels of mercury, which should have remained relatively in-situ with lesser amounts of mercury vapors migrating laterally through unconsolidated materials. The mercury would have remained relatively in-situ because of the chalcophillic nature of mercury to form strong chemical bonds with sulfur, which is located in organic soils. Locating the sink would provide strong evidence of the campsite location.

Mercury analysis conducted at Fort Clatsop, the expedition's fare-western camp on the south side of the Columbia River, attempted to locate the latrines as part of the on-going archeological study attempting to determine the site of the original fort (Kiers and Stein 2000:1). Magnetometer surveys located several anomalies that were identified as potential privies. Eighteen soil samples were collected and processed through a series of chemical analyses to search for anomalous mercury values. However, the mercury levels found at Clatsop do not appear to have any correlation with any feature or depth, and appear to be randomly scattered across the landform perhaps as a result of industrial contamination (Kiers and Stein 2000:15). Conversations with one of the principal investigators from this study at Fort Clatsop revealed that past agricultural activities and industrial contamination might be hindering the search for the latrines (Stein 2003).

The report from the investigations at Fort Clatsop remarks that:

> The Corps of Discovery was a military expedition. As such, the members of the expedition were likely following military procedures. Since military protocol at the time dictated that privies be dug 90 paces from the fort, the discovery of a privy could potentially narrow the area of interest to archeologists looking for remains of the fort itself (Kiers and Stein 2000:6).

The report does not cite the source for the 90-pace measurement, which does not compare with the 300-foot measurement dictated by Baron von Steuben. Conversations with other researchers about whether or not mercury analysis has been or is being conducted at any other Lewis and Clark sites were inconclusive.

Mercury contamination of streams from mercury amalgamation and cyanide recovery process mills associated with Montana's hard rock mining history was wide spread across the state, but the hard rock mining that occurred in the Lolo Creek drainage was small-scale prospecting. A review of the

publications of the Montana Bureau of Mines and Geology and of the U.S. Geological Survey revealed one stamp mill in the Lolo Creek drainage. Mercury contamination from mercury amalgamation milling processes is not the source of the mercury located during this investigation.

Placer miners used mercury to separate gold from the encapsulating hard-rock matrix and such mining did occur across scattered claims in several tributaries of Lolo Creek. The electromagnetic investigation revealed an anomaly that demonstrated a marked contrast in soil conductivity, indicating that a different material had been placed into the soil. Placer miners would have simply recovered the mercury and gold leaving the country rock, a process that would not produce the anomaly located by the electromagnetic investigation.

The soil feature is located on a terrace of Lolo Creek, a relatively young landform about 200 to 300 years old with Chamokane (Cb) soils, which developed over moderately stratified sandy loam alluvium parent material, 10 to 30 inches thick above loose sand and gravel of mixed origin, deposited or resorted during recent geological time. The soils are of too recent an origin to demonstrate a high level of distinction between horizons. The Cb soil type occurs in areas of 0 to 2 percent slope and, unless smoothed or leveled, displays a microrelief that is irregularly undulating. The normal range in depth to loose sand and gravel is 20 to 36 inches, although this depth can vary considerably (Bourne 1951:4).

The von Steuben pattern of encampment is the second line of evidence supporting the theory that a latrine is located here. The anomaly located by the remote sensing is 300 feet from where the camp would be as determined by the location of the hearth features in Grid #057 and Grid #061, which is the distance prescribed by Baron von Steuben. Again, the fact that von Steuben's book rigidly lays out the camp with prescribed distances between men of differing rank, and between men and certain activities such as cooking, waste disposal, and latrines, the latter to be 300 feet from the first line of tents, was a consideration in the manner of proceeding during the investigation (Steuben 1985). It is important to also reiterate that von Steuben does not provide specifications for construction of the fires and latrines, only the distances between the features.

Remote sensing investigations at Valley Forge National Historical Park were conducted from 1977 to 1979 in an effort to locate evidence of the Continental Army's encampment of 1777-1778. The investigation revealed modern disturbance of the site as a result of three Boy Scout Jamborees held at the park. In spite of the modern disturbances, the investigation located features associated with several huts and an offal pit associated with the Continental Army. The investigation, unfortunately, did not consider Baron von Steuben and the military style of encampment prescribed by the Blue Book (Parrington 1979:201).

At the Travelers Rest site, mercury vaporizer data collection occurred simultaneously with the excavations. Daniel Hall and Skip Higgins, in consultation with Dr. Nancy Hinman, professor of geochemistry in the Geology Department at the University of Montana, developed the sampling strategy; the excavation units centered on the subsurface soil feature located by the EM 31. The excavations progressed in 10-cm levels, and materials were screened using quarter-inch and eighth-inch screens. The ends and the center of the soil feature were targeted for the three excavation units. Measuring from the nearest survey control point, Excavation Unit (EU) 37-01 was placed over the center of the soil feature, EU 37-02 was placed over the north end of the soil feature, and EU 37-03 was placed over the south end of the soil feature. In order to address concerns raised before beginning excavation, EU 37-02 initially was opened as a 1-meter by ½-meter unit to reduce or minimize any potential impact to Native American resources. After attaining depth and realizing that the soil feature

located in EU 37-01 had been missed, the unit was expanded to a full meter square, and the north end of the feature was located (See Figures 12 and 13).

The feature located during the excavation exhibited various width, thickness, and depth (See Figure 14). The top of the soil feature was located between 22 and 25 centimeters below surface (cmbs); the width varied from 25 to 30 cm, the bottom of the soil feature was located between 35 to 50 cmbs. From end to end, the soil feature measured 15 feet 3 inches long. The subsurface soil feature was comprised of well-sorted, fine-grained, tightly cemented, light-to-dark grey organic matrix surrounded by poorly sorted, loosely consolidated, tan-to-buff-to-brown-colored, sand-to-cobble-sized matrix from the Lolo Creek gravels. Munsell colors for the soil feature were GLEY 1 3/N, very dark grey, and the surrounding soil matrix was 7.5 YR 3/2, dark brown.

The latrine feature discovered during the excavations compares favorably with other latrines excavated across Montana. Excavations at the Marysville and Garnet mining camps revealed soil features with a lithologic correlation, specifically with regard to moisture content, particle size, soil color, degree of sorting, compaction, and contrast with surrounding country rock (Hall 1994:47; Hall et al. 2003:97). Discussions with National Park Service archeologists from Fort Clatsop indicate a similar lithologic correlation with the exception of moisture content. Latrine features excavated in the Pacific Northwest tend to exhibit banding or alternate bedding of soils with differing moisture levels, a feature probably related to differing environmental moisture conditions (Robert Cromwell, personal communication, September 9, 2004). The lithology and stratigraphic contrast of the soil feature strongly supports the theory that the soil feature is a latrine.

A total of 214 in-situ and ex-situ samples were analyzed for mercury vapor with the MVA during this investigation (See Figure 15). Three different sample types were collected during the investigation: excavation samples, shovel probe samples, and surficial samples (See Figures 16, 17, 18).

A total of 156 samples, including 125 in-situ samples, 19 ex-situ screened soil samples, and 12 ex-situ unscreened soil samples, were analyzed from the three excavation units. Of the 125 in-situ samples analyzed, four samples had detectable mercury vapor at concentrations ranging from 0.003 mg/m^3 to 0.005 mg/m^3. Two of the 19 ex-situ screened soil samples had detectable mercury vapor at concentrations ranging from 0.003 mg/m^3 to 0.014 mg/m^3. Of the 12 ex-situ unscreened soil samples, three contained detectable levels of mercury vapor at concentrations ranging from 0.003 mg/m^3 to 0.004 mg/m^3. In summary, nine samples from the excavation units contained detectable levels of mercury vapor with concentrations ranging from 0.003 mg/m^3 to 0.014 mg/m^3. The mean and standard deviation for the in-situ samples were 0.000 mg/m^3 and 0.001 mg/m^3, respectively. The mean and standard deviation of the ex-situ screened soil samples were 0.001 mg/m^3 and 0.003 mg/m^3, respectively. The mean and standard deviation for the ex-situ unscreened soil samples were 0.001 mg/m^3 and 0.002 mg/m^3, respectively.

A total of 16 surficial samples were collected from the 0 to 10-cm depth interval at 12 sample locations. These samples were collected at a distance from the soil feature from locations across the landform in Grid #037 and beyond. Of the 16 surficial samples, 12 were in-situ samples and 4 were ex-situ samples. No detectable concentrations of mercury vapor were present in any of the samples. The mean and standard deviation for both in-situ and ex-situ samples were all 0.000 mg/m^3.

The MVA was used to analyze 42 samples from 15 shovel probe sample locations. Shovel probe samples were collected in proximity and at a distance and at the same depth and below depth as the soil

feature. Of the 42 samples, 12 were in-situ and 30 were ex-situ. No detectable concentrations of mercury vapor were present in the in-situ samples. Eighteen of the 30 ex-situ samples analyzed had detectable concentrations of mercury vapor, ranging from 0.003 mg/m^3 to 0.012 mg/m^3. The mean and standard deviation of the in-situ samples were both 0.000 mg/m^3, and the mean and standard deviation of the ex-situ samples were both 0.004 mg/m^3.

The two background locations include SP549 and SP510. The background samples include samples SP549-01 (50 cm), SP549-01 (60 cm), SP510-01 (50 cm), and SP510-01 (60 cm), which were collected at a distance greater than 30 meters from the latrine excavation units. No mercury vapor was detected in any of the background samples. Sample SP510-01 (60 cm) also was submitted to Energy Laboratories in Billings, Montana, for total mercury analysis and was found to contain non-detectable [less than 0.1 milligrams per kilogram (mg/kg)] amounts of mercury. Background mercury vapor at the Travelers Rest Historic Site is considered to be 0.000 mg/m^3 and less than 0.1 mg/kg.

HISTORICAL ARCHEOLOGICAL TESTING

Upon completion of the remote sensing investigation and the baseline historical research, a research design was prepared that stated, among other items, research objectives, hypothesis, and test excavation methods. The research design reviewed the results of the remote sensing investigation and the historical research and identified sixty anomalies which merited some level of investigation. The research design (Hall 2002:21-23) developed the standardized historical archeological excavation methodology for this investigation and was reviewed by the Montana State Historic Preservation Office, the National Park Service, the National Trust for Historic Preservation, Missoula County, and the Confederated Salish and Kootenai Tribal Historic Preservation Office.

Excavation efforts centered primarily on the anomalies located during the remote sensing investigations. The excavation units were placed in order to determine the source of the anomaly; placement of units was determined by measuring from the survey stakes placed during the creation of the grid system that covered the entire project area. The mid-point of the magnetic high and magnetic low from the magnetometer investigation served as the location of the excavation units. The focus of the excavation effort was to determine if the pattern of encampment prescribed by Baron von Steuben is discernible in the historical archeological record.

Central Magnetic Anomalies

The results of select excavation units are presented below, full results are presented in the report for the multidisciplinary investigation (Hall et al. 2003).

The excavation in Grid #057 centered on a large anomaly located by the magnetometer investigation. This anomaly could potentially represent remnant thermal magnetization from a large, short-lived fire and could possibly be the location of the expedition's central or kitchen fire. It was theorized that food preparation and gun repair activities would have required an intense fire located near a water source. Concerns were raised that a recent trash deposit about five meters to the east of the possible location of the fire hearth might extend under the surface, possibly interbedding with the hearth. To address this concern, the methodology included opening units from the southwest and progressing to the northeast to locate the source of the anomaly at its southern edge while simultaneously helping to discern any possible stratigraphy. Excavation Unit (EU) 57-01 was located near the southern expression of the large anomaly; EU 57-02 was located one meter north and one meter east of EU 57-01; EU 57-03 was located

one meter north and one meter east of EU 57-02; EU 57-04 was located one meter north and one meter east of EU 57-03. After completing these excavation units and recognizing that the source of the magnetic anomaly had not been located, the excavation approach was altered to open up units directly over the magnetic anomaly to better identify the source. EU 57-05 and EU 57-06 were opened in response to the reassessment of the strategy to investigate the magnetic anomalies.

This approach failed to produce evidence of the source of the strong magnetic anomaly in the near-surface soils. The excavations did, however, reveal that the recent trash deposit was not associated with the source of the anomaly. A short memo describing the approach and results was submitted to Steve DeVore, NPS Midwest Archeological Research Center, and Stan Wilmuth, Montana State Archeologist. Discussions with both archeologists concluded that the hearth may have been relatively small and may be located between the opened excavation units. A small, intact fire hearth was subsequently located in EU 57-07 north extension (See Figures 19 and 20).

Standard excavation methodology was adopted for all units except where noted, with the northwest corner used as datum unless stated otherwise. Arbitrary 10-centimeter levels were used with even levels being screened with quarter-inch screens and odd levels with eighth-inch screens. The majority of the units had no evidence of bioturbation but when evidence was found, it was noted. The units were tagged and backfilled upon completion. No lithics were collected. Any lithics encountered were returned to their appropriate unit before backfilling.

Between August 8, and August 28, 2002, excavation units (EU) were opened in Grid #057 beginning with the primary numbered units and progressing to include extensions in response to the reassessment of the strategy to investigate the magnetic anomaly. These included EU 57-01 through EU 57-07, with units 57-01, 57-03, 57-05, and 57-07 having associated extensions. A small, intact fire hearth was subsequently located in the EU 57-07 north extension.

EU 57-07, north extension, was opened August 23, 2002 and was excavated to Level V with testing to 95 cmbs. No artifacts were recovered in level I or level II. Level I is described as having subrounded, rounded, and angular pebble gravel and fine sand. Level II had moderately to well sorted quartz. Levels I and II were excavated as one unit in order to efficiently investigate the charcoal lens encountered in 57-07. The top of level III revealed the continuation of the charcoal lens of EU 57-07 and produced significant amounts of charcoal and fire cracked rock (FCR). The charcoal lens measures 40 cm in diameter and has a variable thickness, ranging from 3 to 7 cm. The excavation of EU 57-07, north extension, ceased at level III by August 28, 2002, however it was continued on September 3, 2002 after excavating EU 57-07, northwest extension. Level III subsequently produced bone fragments, a microflake, and a maxi ball base. The maxi ball was incomplete with an appearance of having been smashed, possibly the result of hitting something. Level IV produced charcoal, FCR, a bone fragment, and one chert shatter flake. Level V produced more charcoal and a bone fragment.

Outlying Magnetic Anomalies

Excavation Unit 61-01 is located within Grid #061 and centered over a dipolar anomaly located during the magnetometer investigation and identified as one possible location that could provide information on von Steuben's pattern of encampment. The center of the dipolar anomaly was established by measuring from the Grid #061 corner survey stakes and referencing the data printout that incorporated the grid format. This center was marked with a wood stake, and a one-meter by one-meter excavation unit was staked and roped with the wood stake at its center.

EU 61-01 was opened on August 6, 2002, and was excavated to 40 cmbs. The soils consisted of small-to-medium, subangular-to-subround, moderately sorted granites, quartzite, and Belt rock, and the soil colors ranged from a gray-brown silty, sandy soil to dark grayish brown. Lighter sandier soil was noted at 23 cmbs. The Munsell soil colors noted were 10/YR 3/2 at 10 cmbs and 10/YR 4/2 at 30 cmbs. During excavation, FCR was encountered throughout the unit with the greatest concentration between 10 to 30 cmbs. The FCR was not in any apparent hearth arrangement and appeared to have been scattered. Charcoal staining and flakes were also present but not in any significant locality or concentration. Other artifacts included one square and two wire nails and one lithic waste flake between 0 to 10 cmbs. Eight lithic waste flakes were encountered, three of which were micro flakes. One lithic projectile point tip was also noted. All the lithics were chert. One small mammal bone was located between 20 to 30 cmbs.

Because the hearth feature had not been fully delineated, the unit was expanded to the south and east. A significant amount of FCR and charcoal were present, with the majority found in the south extension. The numerous FCR and the increased presence of charcoal in EU 61-01, south, provided further evidence of a plow-zone-disturbed hearth feature in the vicinity of the anomaly. The lack of FCR and charcoal in EU 61-01, east, indicated that the feature did not extend eastward.

Upon completion of these excavation units, it was determined that the extent of the disturbed hearth feature, primarily located in EU 61-01, south extension, had been located. It was then decided to further excavate a quadrant of the south extension to determine if there were parts of the hearth feature present that had not been disturbed. This unit centered on the point where the four other units met. A few FCR and tiny charcoal flakes were present within the plow-zone to 16 cmbs. The presence of FCR continued to decrease, as did the flakes of charcoal to 20 cmbs. It was determined that no further information could be gained from these units at that time and excavation efforts halted.

Tombac Button Location

The remote sensing investigations failed to locate any anomalies within ten meters of the location of the site where the tombac button was recovered. Figure 21 shows generalized locations of the tombac button, the fire hearths, and the latrine. Excavation Unit 49-01 is located within Grid #049 on private property west of the current state park. The excavation unit was placed in the area where the tombac button was recovered and the unit was opened on August 2, 2002.

The soil of EU 49-01 is blocky and granular with a notable absence of gravel or pebbles. Level I, in the root zone, produced a lead fragment in well-sorted, silty soil. Level II produced charcoal, a probable deer tooth, and a portion of bone. The soil of level II is 2.5 YR 4/2 weak red dry or 5 YR 2.5 wet. A soil discoloration was noted in the northeast corner of the unit and described as very light yellow-gray with darker brown and charcoal. Level III was a culturally sterile level; however, two soil samples were taken from this level and worm activity was also noted. The soil is described as 3-mm to 6-mm chunks of soil, with a reduction of charcoal and an increase in clays. The charcoal had disappeared by level II, and there was still an absence of rocks. The soil is described as 10YR 6/2 light brownish gray dry and 7.5 YR 4/2 brown wet. At this point, a shovel probe was executed to investigate the soil composition. At 40 to 50 cmbs a soil change was noted; a dark gray, well-sorted silt with some sand. Munsell soil colors were 10 R 4/1 dark reddish gray dry or 2.5 Y 2/1 very dark gray wet. The shovel probe revealed a continued increase in sand with iron oxide rusting. No charcoal or cultural material was present.

EU 49-02 is adjacent to EU 49-01 and it was excavated to level II, 10 to 20 cmbs. The unit was extended south with the designation EU 49-02, south. EU 49-02 had no charcoal or cultural material present. EU 49-02, south extension, produced only small portions of bone. No charcoal or cultural material was present. The presence of the tombac button discovered here during the metal detector survey indicates a historic presence; however, there is no evidence of prehistoric human activity. The tombac button is identified as of the type manufactured between 1750 and 1812. There was no further evidence of human activity, historic, or prehistoric, discovered within these excavation units.

LABORATORY AND ARTIFACT ANALYSIS

The multidisciplinary investigation conducted a series of laboratory and artifact analysis, and the reader is directed to that study for a complete presentation of the data and results. The analyses included magnetic susceptibility, carbon 14 analysis, lead isotope analysis, and analysis of two artifacts; a blue trade bead and a tombac button. The magnetic susceptibility analysis was conducted to determine if the fire hearth and associated fire cracked rock was the source of the extremely large and intense magnetic anomaly located along the abandoned 1806 Lolo Creek channel. Carbon 14 analysis was utilized on three fire hearths located in the excavation efforts in an attempt to place these features into a temporal framework. The report for this investigation acknowledges the parameters of C14 analysis on historic resources, however, it is worth repeating that while there may be limitations to C14 data from historic resources, the data should not be ignored. The lead isotope analysis was conducted to determine if a link could be established between a lead artifact and lead provided to the Corps of Discovery. Two artifacts, a blue bead and a tombac button, were analyzed to determine if they were from the proper time period to have been associated with the Corps of Discovery.

Magnetic Susceptibility Analysis

The magnetometer investigation revealed the presence of a large, approximately eight meters east-west, anomaly in Grid #057 along the banks of the 1806 Lolo Creek stream channel. The historical archeological excavations exposed a small fire hearth, less than one-meter width, in Grid #057. Magnetic susceptibility analysis was conducted to determine if the small hearth could be the source of the large anomaly. Objects with high metal content (e.g. iron-rich minerals) have high magnetic susceptibility, and as a result, they show up as anomalies in magnetic surveys. A profile of magnetic susceptibility values across the magnetic anomaly might correlate with the shape of the magnetic anomaly. This could explain the cause of the magnetic anomaly, and the composition of the rocks measured would be immaterial. Measuring the magnitude of difference in magnetic susceptibility between fire-cracked rock (FCR) and stones collected from the same depth, but not used in a fire ring (henceforth called "control samples"), can show the degree to which this background susceptibility affects the shape of the profile.

The magnetic susceptibility experiments conducted for the investigation into the location of Travelers Rest reveal a large contrast between FCR samples and control sample susceptibilities (Hall et al., 2003:177). The results of these analyses strongly suggest that the FCR located adjacent to the fire hearth caused the magnetic anomaly. Magnetic susceptibility measurements of the FCR plotted versus relative distance show low values separated by a peak caused by elevated values. This profile strongly resembles the profile of the magnetic anomaly from A-A, which shows the magnetic anomaly plotted in nanoTeslas (nT). The control samples displayed low magnetic susceptibility and do not exhibit large susceptibility values that would contribute much to the overall profile exhibited by the FCR samples.

The correlation of profile shapes suggests a link between the susceptibility and anomaly. There is a marked difference in susceptibility between sample readings and the controlled readings, primarily between those in the region of the peak. It is important to note that the samples represented in the region of the peak are those samples that are nearest the fire hearth. Sample 0 was collected immediately adjacent to the charcoal lens.

The data suggest that susceptibility is a function of the sample's location or proximity to the charcoal lens uncovered during the excavation. The focus in the analysis is the shape of the profile and not the composition of the samples. The shape of the susceptibility profile, although dictated by readings generated relative to composition, ultimately compares the anomaly and susceptibility, making composition immaterial for this analysis.

The high magnetic susceptibility values from the FCR samples provide evidence supporting the theory that fire-cracked rocks and the relatively small fire hearth located during the excavation are the cause of the anomaly. This theory is stronger than evidence supporting the suggestion that the anomaly is caused by another source at the site.

Radiocarbon Dating

Accelerator Mass Spectrometry (AMS) radiocarbon dating techniques were utilized on three charcoal samples recovered from three different hearth features located during excavations to document the association of the located features to the historic context of the site. A complete discussion of radiocarbon dating techniques and the limitations for historic sites can be found in the report describing the complete investigation into Travelers Rest (Hall et al. 2003:179). Due to unforeseen budget constraints, two laboratories were used for AMS analysis. There is evidence that the Lewis and Clark expedition followed military protocol when constructing their campsites, even those that were used for a short period of time. These hearth features were radiocarbon dated to see if they were consistent with the time period of the expedition and to confirm the pattern of encampment prescribed by von Steuben.

Stafford Research Laboratories provided the following data for Sample No. 342:
Measured, C13 corrected C14 age in radiocarbon years:
Sample Number SR-6371 Traveler's Rest 20-27 cm. No. 342.
130+/-35 RC YR. (CAMS-94876) C13 = -25.7" (PDB)
Calendar Corrected Age Ranges for 130+/-35 RC YR.
1 sigma (68.2% probability) 1670-1950 CAL AD
2 sigma (95.4% probability) 1670-1960 CAL AD
3 sigma (99.7% probability) 1660-1960 CAL AD

Sample 342 came from EU 57-07, north extension, between 20 to 27 centimeters below surface, and weighed 0.048 ounces. The fire hearth is located adjacent to the 1806 Lolo Creek channel mapped by Clark. The C14 results from this sample are excellent, considering the relatively recent age of the site and the difficulties inherent with younger C14 dates. Although the calendar-corrected ages indicate the date falls somewhere within the last 300 years, the results of 130+/-35 deducted from 1950 puts the age of the fire hearth at 1820 with a range of 1785 and 1855, well within the time frame of the Lewis and Clark expedition. The presence of the melted lead, recovered from the same level as the hearth feature, indicates the feature was of Euro-American origin, since Euro American traders during this time period traded lead balls for fur pelts and not the technology to melt lead and mold balls.

The NSF Arizona AMS Laboratory provided the following data for Sample No. 381:
Date no. AA-53820 Sample: 381 EU 61-01 S. ext. 10-20 cmbs
Radiocarbon Age 179+/-38 YR. BP
C13 = -24.0" per mil
Calibrated Age 1663-1948 AD (1 sigma, 68% confidence)
1650-1950 AD (2 sigma, 95% confidence)

Sample 381 came from EU 61-01, south extension, between 10 to 20 centimeters below surface, and weighed 1.168 ounces. The fire hearth is located directly south of the 1806 Lolo Creek channel and in a linear arrangement with the fire hearth described above. The data from this sample indicates an age younger than 300 years. The results of 179+/-38 deducted from 1950 puts the age at 1771 with a range between 1733 and 1809, which places the fire hearth within the time frame of the Lewis and Clark expedition. This hearth feature, along with the hearth feature noted by sample number 342, combined with the latrine feature found at the site, all fit the pattern of encampment prescribed by von Steuben at the time of the Lewis and Clark expedition.

Although this sample came from a plow-zone, the facts that the area had limited exposure to that type of disturbance, that the fire-cracked rock and charcoal were still found in association at a consistent stratigraphy, that the feature fits the pattern of encampment prescribed by von Steuben, and that the radiocarbon date places the feature within the time frame of the expedition, all tend to weigh in favor of associating this hearth feature from EU 61-01, south extension, with that of EU 57-07, north extension, where sample 342 came from, and associating both with the Lewis and Clark expedition. In addition, the age range for this sample of AD 1771+/-38, would indicate the hearth is too old to be associated with any known fur trappers or explorers in the area other than Lewis and Clark, with the possible exception of the Stevens Survey. However, the "Blue Book" was thoroughly rewritten in 1812 and therefore it is highly improbable that the Stevens Survey would produce camp features and measurements that match the features and measurements provided by von Steuben.

The NSF Arizona AMS Laboratory provided the following data for Sample No. 28:
Date no. AA-53819 Sample: 28 EU 53-04 50-60 cmbs
Radiocarbon Age 998+/-39 YR. BP
C13 = -24.9" per mil
Calibrated Age 1001-1145 AD (1 sigma, 68% confidence)
981-1157AD (2 sigma, 95% confidence)

Sample 28 came from EU 53-04, between 50 to 60 centimeters below surface, and weighed 1.094 ounces. These results place the age of this sample at AD 952 with a range between AD 913 and AD 991, indicating that this feature is prehistoric in origin. This excavation unit exhibited an indefinite A – B soil horizon with the hearth feature located just above the indefinite horizon. None of the units excavated to the east of this area of the site displayed any suggestion of an A – B horizon, which confirms the geoarcheological analysis that the lower terrace gradually grades into an older landform from the younger landform located to the east.

Lead Isotope Analysis

Historical archeological excavations produced a hearth feature with an associated lead artifact, Artifact #324 (See Figure 22). Additional excavation units produced six lead artifacts, including a portion of lead ball; a rounded, smoothed and bored piece of lead (Artifact #322); and additional portions of

melted lead. Artifact #324 was chosen for testing due to its clear association with a distinct hearth feature. Artifact #324 was described in the field as a hardened pool of melted lead. It is of a roughly oval shape, measuring 2 3/8 by 1 5/8 by ¼ inch and weighing 1.933 ounces. It was found in level II, 10 to 20 cmbs in EU 57-01, west extension. Other artifacts recovered from this level of EU 57-01, west extension include charcoal, curved glass and artifact #319, the blue bead, identified as being consistent with blue trade beads popular in the Northwest at the turn of the nineteenth century. Artifacts recovered in level III, immediately below level II, include chert reduction flakes and mammal bones. Nearby extensions revealed a hearth feature identified by the presence of an intact lens of charcoal with considerable occurrences, FCR, and burned artifacts. EU 57-07, north extension, located to the east of EU57-01, produced a charcoal sample from 20 cmbs, in association with a hearth feature that was subsequently radiocarbon dated with a result of AD 1820+/-35.

The lead isotope analysis consisted of determining the ratio of lead isotopes present in the sample and plotting the ratios in two and three dimensions. Similarities in position correlate to the ratios derived from the lead isotope data. A correlation of the signature of Artifact #324 to ore samples taken from Olive Hill, Kentucky, is readily apparent. Additional observations of the data indicate that most of the closely related signatures occur in the eastern United States and in England. The only ores with similar signatures west of the Mississippi include a sample from Utah and two from British Columbia. Therefore, it can be stated that the lead artifact sample has a lead isotope signature similar to lead isotope signatures from ore samples retrieved near Olive Hill, Kentucky (See Figure 23).

Investigations at Fort Clatsop recently uncovered a piece of lead. The analyzed lead is described as "a piece of lead, flattened on one side and rounded on the other that is suspected to be a musket ball" (Rasmussen 1997). The lead was sourced to southeast Missouri, specifically the Buick Mine by Ronald Farquhar of the Geophysics Division of the Department of Physics, University of Toronto. Farquhar however is hesitant to "pinpoint" the Buick mine as a source (Farquhar 1997). According to a website featuring the Buick Mine, it was discovered in 1960 and began operations in 1969 (Aber 2002). Further research and analysis of the lead musket ball would be beneficial to understanding the lead isotope data. To date, no formal report of the analysis of the data has been produced.

Conversations were held with National Park Service archeologists involved with the investigation which uncovered the lead musket ball. The National Park Service had lead isotope analysis conducted on the artifact and the results came back indicating a possible source in Missouri. According to Mr. Jim Thompson, "the data is difficult to compare" with other lead artifacts recovered from historic sites and "there are serious questions about the origin of this artifact." The data from the artifact "is completely different" than data collected elsewhere. It does not compare even remotely with data from other artifacts recovered at historic sites (Jim Thompson, personal communication, September 23, 2004).

In order to compare the lead isotope data from the Fort Clatsop musket ball and the Travelers Rest melted lead artifact, the lead isotope ratios are again plotted in two and three dimensions. The comparison is presented in the illustrations attached to this nomination form (See Figure 24).

Historical research was conducted in an attempt to determine the source of the lead which the United States government provided to Meriwether Lewis. Lewis obtained 400 pounds of sheet lead from the Office of Public Stores, the precursor to the Quartermaster General. Lewis took the lead to George Ludlum, a Philadelphia plumber, who fashioned the sheet lead into 52 casks which were filled with black powder. A search of the National Archives in Washington, DC, in Record Group 92, Records of the Office of the Quartermaster General (COQMG) for possible letters, journals, bank books, reports,

invoices, notes, receipts, or any other information concerning the purchase of the lead did not reveal further documentation regarding the source of the lead provided to Meriwether Lewis by the Office of Public Stores in Philadelphia.

Because of an apparent gap in records discovered in the search, the archivist at the National Archives surmised that it is likely the records being sought were destroyed by the British in the War of 1812. It is possible that records no longer exist in the National Archives concerning the origin and purchase of the lead by the Office of Public Stores to supply the expedition.

The lead isotope analysis and associated research failed to provide a link between the Corps of Discovery and the lead located at Travelers Rest. This does not, however, render the analysis irrelevant. The lead isotope analysis clearly demonstrates that the lead is of North American origin and not of European or British origin. This refutes the possibility that the artifact and the associated fire hearth is associated with John Work's Hudson's Bay Company Snake River Brigade which passed through Lolo Creek in 1831. If the artifact were associated with the Hudson's Bay Company it should be of European or British origin. It should be repeated that the Hudson's Bay Company and American fur traders as well as the local traders in the Montana Territory traded lead balls for fur pelts and not the tools to melt lead and mould balls.

Blue Trade Bead, Artifact #319

A single small blue bead was recovered from EU 57-01, west extension, level II, 10 to 20 centimeters below surface (cmbs). A fire hearth feature was identified in this unit by the presence and provenience of FCR and charcoal. The bead was cataloged, given artifact #319, and photographed. The opaque bead has a diameter of 7 millimeters (mm) and is 6 mm long with a bore of about 1 mm. The dull surface shows some wear and possible charring (See Figure 25).

Artifact #319 is a simple bead, easily described, using the modified Kidd and Kidd system employed by Lester Ross for the Fort Vancouver bead assemblage (Ross 1990:33). The classification system recognizes material and manufacturing technology, style, and type, style variations, and size (Ross 1990:33). The bead is most likely classified as "WIb-stp/tl/ops/1-2," or a simple wire-wound, monochrome, undecorated, spherical, opaque, blue bead. It falls within the range of short to long, with short being 3.1-6.3 mm x 2.6-6.4 mm, and long being 8.5-10.4 mm x 7.3 x 9.5 mm (Ross 1990:47).

It was difficult to identify the bead as wound. Bubbles are significant in determining whether the bead was drawn or wound during the manufacturing process. Drawn beads have elongated bubbles produced during manufacture, while wound beads have elongated bubbles that "spin" around the axis or hole of the bead (Sprague 1985:90, 93). The bead was examined under a Bausch and Lomb microscope at 7 power with the assistance of Dr. Thomas A. Foor, Anthropology Department, at the University of Montana. No bubbles were visible to determine their characteristics. The bead is classified as wound because it shows a "projection" at the hole of the bead consistent with wound beads (Sprague 1985:89).

The microscope helped to determine an absence of color disintegration, while at the same time showing evidence of wear and charring. Striations were present at the bores consistent with the bead having been strung on a small cord or string. Lewis noted that beads were strung together on strands and were traded by lengths of strands (Moulton 1998:5, 187). This method of handling and storage would be consistent with the striations found at the bores of the blue bead. Further investigation of the bead might provide a more precise determination of material, manufacture, and wear processes.

According to Ross, this classification represents one of the most common beads used by the Pacific Fur Company, the Northwest Fur Company, and the Hudson's Bay Company. Ross also states that this classification might represent the blue beads that Meriwether Lewis purchased for the exploration of the Louisiana Purchase (Ross 1990:48). Some believe the beads of this classification might have been imported from the Canton region of China (Ross 1990:48). Regardless, the bead is consistent with those beads described by the Lewis and Clark expedition and those procured and traded in the early nineteenth century fur trade era.

The journals of the Lewis and Clark expedition document the importance of the small blue bead in the Northwest. Lewis, when encountering suspicious Shoshone women, held out strings of beads to soothe their fears (Moulton 1998:5, 69-70). After recovering from the harrowing trip crossing the Bitterroot Mountains to the Weippe Prairie, the hungry Corps members traded beads for fish and roots despite their intolerance for both (Moulton 1998:5, 246). As the journey progressed, the members of the expedition learned the value that the natives placed on the small, round beads and came to realize that blue beads purchased more food than other colored beads, which were rejected altogether (Moulton 1998:5, 120-23).

The blue bead artifact is consistent with the beads brought by Euro-Americans exploring the Northwest and by those who established fur trade relations with Native Americans on the Missouri and Columbia Rivers and their drainages in the late eighteenth and early nineteenth century. The bead was found at the same level and in close proximity to melted lead Artifact #329, adjacent to a fire hearth feature. C14 dating of this hearth feature provided a date of AD 1820 $\pm$ 35 years. The two associated artifacts and fire hearth strongly support the theory that the campfire has a Euro-American origin. The bead is consistent with journal descriptions of blue beads that Lewis and Clark brought on their journey and found to be a valuable asset facilitating trade and friendly relations with Native Americans. The blue bead represents one of the multiple lines of evidence verifying the location of Travelers Rest.

Tombac Button

In October 1998, a tombac button was recovered during a cursory examination of an adjacent property, before property subdivision and construction of a trailer park and septic system. The property owner agreed to delay construction for two weeks to allow for a crude data recovery project. A grid system was established across the property to assist with mapping. Metal detector sweeps of the project area followed standard methodology. The metal detector operator and an assistant, located signal sources, marked the signal location with pin flags which traversed the entire property, the entire collection of pin flags was mapped, and the source of the signal was verified. The button was recovered from a depth of five inches and the location of the artifact was staked and mapped. The artifact has been returned to the property owner (See Figure 26 for an image of the artifact and Figure 21 for generalized location of the button and other features).

The literature on buttons is comprehensive and allows for a few observations about the artifact. The metal button is stylistically referred to as a "tombac" button. The backside of the button has a conical shank, a feature that is unmistakable and seldom found on any other type of button. Tombac buttons were manufactured from 1760 to 1812 in either New Jersey or Virginia (Luscomb 1967:72; Olson 1963: 4). Moulds that could produce six or eight buttons in a single pour easily produced these buttons. This ease of manufacture made these buttons a popular choice for individuals and the U.S. military.

Identification of the tombac style is relatively easy. The difficulty, however, is determining how the button arrived on the banks of Lolo Creek.

There are several theories as to the origin of the button. The aerial infrared photographs taken on two occasions revealed the presence of anomalies that suggest tipi rings. Buttons were popular trade goods with Native Americans, and recovering trade goods from a Native American site should be expected. The area has a relatively early historic occupation however, the time period for historic settlement may be too far removed from the time the button was manufactured. The button also dates from the proper time period associated with the Corps of Discovery. In addition, the use of this style of button by the U.S. military and the fact that the Corps of Discovery was a military expedition, also lends support to the theory that it is related to Lewis and Clark. Unfortunately, there are no known examples of clothing or buttons from the Lewis and Clark expedition that have been verified. The final theory for the presence of the button is that someone may have lost this artifact shortly before it was recovered.

The historical research indicates that the button is too old to have been associated with the 1880s historical settlement of Lolo Creek, a time well after the button's manufacture period. The magnetic survey and the historical archeological excavation specifically targeted the area where the tombac button was recovered in Grid #049. No anomalies were located by the magnetic survey around the button's location or within Grid #049. The excavation effort placed three excavation units in and around the area of the button's original location, EU 49-01, EU 49-02 and EU 49-02, south extension, with EU 49-02 centered over the button's original location. These three excavation units failed to locate any information that could suggest a connection with prehistoric or protohistoric occupation of the area. The absence of any association with Native Americans indicates that the button was not likely a Native American trade good. If the button is not associated with the historical settlement of Lolo Creek or with the Native Americans, it is likely an artifact associated with the Corps of Discovery. The tombac button represents one of the multiple lines of evidence verifying the location of Travelers Rest.

8. STATEMENT OF SIGNIFICANCE

Certifying official has considered the significance of this property in relation to other properties:
Nationally: X Statewide:__ Locally:

Applicable National Register Criteria:	A X B__ C__ D X
Criteria Considerations (Exceptions):	A__ B__ C__ D__ E__ F__ G
NHL Criteria:	Criterion 1 and 6
NHL Theme(s):	I. Peopling Places 3. migration from outside and within VI. Expanding Science and Technology 3. scientific thought and theory
Areas of Significance:	Exploration/Settlement Archeology Historic-Aboriginal Historic-Non-Aboriginal
Period(s) of Significance:	1805-1806
Significant Dates:	September 9-11, 1805 and June 30–July 3, 1806
Significant Person(s):	N/A
Cultural Affiliation:	European American, Native American
Architect/Builder:	N/A
Historic Contexts:	*The Advance of the Frontier: 1763 – 1830* The Lewis and Clark Expedition X. Westward Expansion of the British Colonies and the United States, 1763-1898 A. British and Unites States Exploration of the West 2. Lewis and Clark Expedition, 1804-1806

State Significance of Property, and Justify Criteria, Criteria Considerations, and Areas and Periods of Significance Noted Above.

The statement of significance presented here is drawn from three sources and is intended to serve two purposes. The first purpose is to prove that the site has national significance under Criterion 1, and the second purpose is to prove national significance under Criterion 6. The text will also validate and verify the proper location of Travelers Rest. The first source is from the USDI National Park Service thematic study edited by Roy E. Appleman (Appleman 1958), "The Advance of the Frontier: 1763 – 1830, The Lewis and Clark Expedition." The second source is from the Travelers Rest National Historic Landmark nomination form prepared by Blanche H. Schroer and Ray M. Mattison (Schroer and Mattison 1976). The third source is from the recently completed multi-disciplinary report *Travelers Rest National Historic Landmark: Validation and Verification of a Lewis and Clark Campsite* (Hall et al., 2003).

This documentation is not intended to glorify the celebration of the Corps of Discovery nor is it intended to disparage the Native American experience with the Corps of Discovery. It is merely intended to present the arguments for Travelers Rest National Historic Landmark's new boundary, historical significance, integrity, and eligibility under National Historic Landmark Criterion 1 and 6.

The statement of significance provided by Schroer and Mattison is evocative and places Travelers Rest within the setting provided by Appleman. A portion of the statement is provided here to place Travelers Rest within the context built by Appleman:

> Travellers Rest is one of the pivotal sites on the Lewis and Clark Trail. It was at this point that the explorers, after being unable to find a water route from the Shoshone village to the Pacific, paused on September 9, 1805, before beginning the most arduous part of their journey over the Lolo Trail to Canoe Camp, on the Clearwater to the Pacific. It was at Travellers Rest also that the party camped on their return trip from June 30 to July 3, 1806 and Lewis and Clark began their separate journeys of exploration in Montana after which they reunited and continued down the river to St. Louis (Schroer and Mattison 1961:2).

The historic context provided by Appleman easily and evocatively conveys the significance of the Lewis and Clark Expedition. A portion of the context is provided here to illustrate the nationally historic trends that are reflected at Travelers Rest.

> It is not easy to set forth briefly all the significant aspects of the Lewis and Clark Expedition. Some things are obvious. Others fade into the realm of the intangible. They slip from grasp and elude sharp definition. Yet they are real. The effects of the expedition touch upon geographical knowledge, scientific knowledge of the continent in the fields of botany, wildlife, geology, and suitability of the land for human use. It disclosed much about the distribution of the native Indian tribes beyond the Mississippi in the northern plains and on to the coast. In the realm of politics, national and international, much can be said with certainty about the direct as well as the indirect effects of the expedition.
>
> But much more can only be conjectured and surmised, and believed, if one has the zeal and industry to immerse himself in the history of the North American continent of that time and to take the long range, geopolitical view. If one were able to do this he would have reached a condition in which he might be able to feel the impulses, approximately, that motivated Thomas Jefferson in sending it forth. This view almost certainly contemplated the establishment eventually of an ocean to ocean

> nation including the most direct and easiest line of communication to the western sea and the portals of the then rich China trade (Appleman 1958:4).

Travelers Rest was formally designated as a National Historic Landmark on October 9, 1960, and the boundaries were formalized on December 12, 1983. Several investigations over the last decade have indicated that technical error contributed to the improper identification of the location of Travelers Rest. Travelers Rest National Historic Landmark is eligible under Criterion 1 and 6 for its association with the Lewis and Clark Expedition and to the historical archeological record that assisted with the proper location of the campsite. The 1958 theme study *The Advance of the Frontier: 1763 – 1830, The Lewis and Clark Expedition* provides the historical context for Travelers Rest. The Lewis and Clark Expedition is an event that made a significant contribution to our nation's history. A major portion of the current evaluation of Travelers Rest is based upon the historical archeological resources present at the site. These resources have yielded significant information regarding our understanding of the Corps of Discovery and these resources have the potential to yield data and concepts affecting sites along the entire length of the Lewis and Clark Trail.

PEOPLING PLACES

Criterion 1

Travelers Rest played a significant role in the journey of the Corps of Discovery. The camp is part of a slow, continuous process that eventually repudiated the existence of the fabled Northwest Passage, a myth that had been the source of dreams for three centuries. The very name Travelers Rest attached to the site by the captains foretold the coming hardships encountered crossing the rugged Bitterroot Mountains. The camp served as the focal point of western geography as understood by the captains, knowledge acquired thousands of years earlier by the Native Americans. With the banks of Lolo Creek as a backdrop, Meriwether Lewis wrote a letter to Hugh Heney, an agent of the British Northwest Company, addressing Thomas Jefferson's grandiose plan of American empire. Travelers Rest also served as the point of separation for the Corps of Discovery as they parted paths to expand the knowledge of the North American continent while trying to impede any possible British expansion into the West. There are few places along the entire trail from Saint Louis to the Pacific Ocean that envelope such a diverse convergence of momentous historical events, peoples, and ideas.

The recent investigation into the correct location of Travelers Rest expands upon the foundation provided by the previous passages. The following presents the events, characteristics, and activities that relate Travelers Rest to its national historic context.

September 9, 1805 found the Corps of Discovery traveling down the Bitterroot Valley following the lead of Old Toby, a Shoshone guide. After stopping for lunch and taking an observation on their position, they encountered a large road, a Native American trail, through the valley. Lewis describes the Bitterroot River as:

> a handsome stream of very clear water, 100 yards wide, with low banks, and a bed formed entirely of gravel. It has every appearance of being navigable; but as it contains no salmon, we presume there must be some fall below which obstructs their passage (Coues 1893:589).

Later that afternoon, the expedition arrived at the banks of Lolo Creek and established camp along the banks of the stream that the captains named "Travellers rest." The Corps encamped there from September 9-11, 1805 and later, on their eastward journey, on Tuesday, June 30, July 1-3, 1806.

The story of the Corps of Discovery's arrival at Travelers Rest, however, began much earlier than September 9 and is related to several factors that are based upon a gross misunderstanding of western geography. These factors included the captains' growing suspicion of the reality of western geography arising from celestial observations and measurements taken at Three Forks National Historic Landmark, from crossing the continental divide at Lemhi Pass National Historic Landmark, from geographical information provided by the Shoshone along the banks of the Salmon River, from the harsh realization that the Salmon River failed to serve as the fabled Northwest Passage, and from the familiar knowledge that the Lolo Trail that was shared with and shown to the Corps by Old Toby.

However, once the Corps of Discovery arrived at Travelers Rest, they not only realized they had traveled out of their way to reach the site, but that even the shortest route joining water ways to the east and west coasts was considerably longer than the hoped for Northwest Passage. In addition, they now understood that no easy portage existed between the Missouri and Columbia River systems. With this realization, the captains came to appreciate the strategic importance of the location of Travelers Rest as a point from which to contest the British control of the Pacific Northwest, given that an intensive network of Native American trails converged on the creek. In a more immediate sense, Travelers Rest provided the captains with a key staging area for the Corps of Discovery's final push to the Pacific Ocean in the fall of 1805 and a more informed and comprehensive appreciation of the Pacific Northwest on the expedition's return trek to St. Louis in the spring and summer of 1806.

On the eve of the Corps of Discovery's departure from St. Louis, President Thomas Jefferson and others involved with nurturing the ideas of the Corps had only a limited knowledge of the area west of the Upper Missouri River, so inaccurate that it can best be described as a gross misunderstanding. Perhaps the most comprehensive description of the history of geographical knowledge of the West is provided by John Logan Allen in his influential work, *Passage Through the Garden: Lewis and Clark and the Image of the American Northwest* (Allen 1975). The geography of the Northwest included knowledge of the positions of the Columbia River and the lower Missouri River and of theories of the terrain between the two water systems. The position of the Columbia River had been determined in 1792 by Lieutenant Broughton who, under the command of Captain George Vancouver, traveled upstream for more than one hundred miles (Allen 1975:36). Because the latitude of the Columbia River closely coincided with the latitude of the Upper Missouri River, it seemed reasonable to assume that the Columbia could be reached via the Missouri River with a short portage, which included considerable wishful thinking about the terrain between the Missouri and Columbia Rivers, including the possibility of a single range of mountains, a high plateau, an extensive plain, or a single height-of-land. The concept of a continental divide or the idea that the Rocky Mountains would serve as a barrier to the fabled Northwest Passage was clearly not understood. This misunderstanding of western geography played a role in bringing the Corps of Discovery to the banks of Lolo Creek.

The arrival of the Corps at the Three Forks of the Missouri in July 1805 offered the opportunity for a much-needed rest after the arduous travels from the Great Falls of the Missouri (See Figure 27 for the Corps of Discovery's route from Great Falls to the Lolo Trail). At Three Forks in addition to resting the men, observations of the sun, moon, and North Star were taken on July 28 and 29. Since the longitudinal position of the mouth of the Columbia River and Mandan villages were both known, the captains combined the celestial observations with the courses and distances traveled and utilized the

longitude of the Columbia River and Mandan to calculate their longitude position as approximately the 111th meridian. However, during the Mandan winter, Clark had calculated the supposed location of Three Forks as near the 117th meridian, which meant that since leaving the Great Bend of the Missouri, the Corps of Discovery had actually traveled more southerly than southwesterly and that Three Forks was 300 miles east from its assumed position (Allen 1975:288).

Fixing the position of the Three Forks into the great void of unknown Western geography confirmed the captains' suspicions about the inadequacy of their geographical knowledge and about their preconceived notions about the size and extent of the Missouri River Basin. Being 300 miles farther from their goal of the mouth of the Columbia River weighed heavily on Lewis and Clark's minds. "By the time they arrived at the Three Forks, the captains were becoming aware of this fact; the calculations confirmed their worst suspicions and, realizing the inadequacy of their previous geographical knowledge, they felt the pinch of distances yet to traverse and rugged terrain yet to overcome (Allen 1975:288)." The captains' gross misunderstanding of western geography would become even more apparent over the next several days.

Meriwether Lewis' ascent of the Continental Divide at Lemhi Pass on Monday August 12, 1805, further underscored that realization. Stephen Ambrose eloquently described Lewis' ascent of the pass:

> With Lewis's last step to the top of the Divide went decades of theory about the nature of the Rocky Mountains, shattered by a single glance from a single man. Equally shattered were Lewis's hopes for an easy portage to a major branch of the Columbia (Ambrose 1996:266).

John Logan Allen is equally eloquent, speculating that:

> The presence of the peaks of the Lemhi range on the western horizon must have come as a great shock, for no geographical lore extant provided for them. At the top of Lemhi Pass, in the Beaverhead range of western Montana, the cumulative effect of all the small erosions in the quality of geographical lore became complete (Allen 1975:291).

Lewis's journal entry from that day describes his feelings and those of Corps member Hugh McNeal on reaching the end of the Missouri and the view from the pass, yet little else:

> at the distance of 4 miles further the road took us to the most distant fountain of the waters of the mighty Missouri in surch of which we have spent so many toilsome days and wristless nights. thus far I had accomplished one of those great objects on which my mind has been unalterably fixed for many years, judge then of the pleasure I felt in allying my thirst with this pure and ice cold water which issues from the base of a low mountain or hill of a gentle ascent for ½ a mile. the mountains are high on either hand leave this gap at the head of this rivulet through which the road passes. here I halted for a few minutes and rested myself. two miles below McNeal had exultingly stood with a foot on each side of this little rivulet and thanked his god that he had lived to bestride the might & heretofore deemed endless Missouri. after refreshing ourselves we proceeded on to the top of the dividing ridge from which I discovered immence ranges of high mountains still to the West of us with their tops partially covered in snow (Moulton 1988:5, 74).

Lewis and Clark's journal entries simply do not capture the significance of what they viewed from the Continental Divide. What the captains thought about the realities of western geography cannot be established from the journal entries of August 12, 1805. The crossing of the Continental Divide and the

view of the Lemhi Range serve as a stunning reminder of the harsh realities of western geography, a reality graphically illustrated by the presence of Travelers Rest.

The events of August 13 and 14 provided additional evidence of the limits of the captains' geographical knowledge and would finally introduce the Corps of Discovery to Travelers Rest. Upon contacting the Shoshone, Lewis and his men - George Droulliard, John Shields, and Hugh McNeal - were invited to the camp of Cameahwait. There Lewis consulted with Cameahwait about the terrain ahead, learned that the Lemhi River which flowed to the Salmon River, which in turn was impassable, made that path to the coast unrealistic. Later that evening Lewis was given a small morsel of roasted salmon which served to confirm his earlier belief that he was indeed on a tributary of the Columbia.

Lewis pressed Cameahwait for more geographical lore on August 14:

> I now prevailed on the Chief to instruct me with rispect to the geography of his country. this he undertook very cheerfully, by delienating the rivers on the ground. but I soon found that his information fell fall short of my expectation or wishes. he drew the river on which we now are to which he placed two branches just above us, which he shewed me from the openings of the mountains were in view; he next made it discharge itself into a large river which flowed from the S. W. about ten miles below us, then continued this joint stream in the same direction of this valley or N. W. for one days march and then enclined it to the West for 2 more days march, here he placed a number of heeps of sand on each side which he informed me represented the vast mountains of rock eternally covered with snow through which the river passed. that the perpendicular and even juting rocks so closely hemned in the river that there was no possibilyte of passing along the shore; that the bed of the river was obstructed by sharp pointed rocks and the rapidity of the stream such that the whole surface of the river was beat into perfect foam as far as the eye could reach. that the mountains were also inaccessible to man or horse. he said that this being the state of the country in that direction that himself nor none of his nation had ever been further down the river than these mountains. I then enquired the state of the country on either side of the river but he could not inform me (Moulton 1988:5, 88).

Lewis continued his questioning, especially the route people used to travel to the west. Cameahwait described the route the Nez Perce used:

> the road was a very bad one as he had been informed by them and that they had suffered excessively with hunger on the rout being obliged to subsist for many days on berries alone as there was no game in that part of the mountains which were broken rockey and so thickly covered with timber that they could scarcely pass (Moulton 1988:5, 88).

Cameahwait shared much knowledge with Lewis. He informed Lewis of the existence of the Nez Perce, the presence of the Lolo Trail, the route to the ocean, and, most importantly, of an old Shoshone man in his tribe who knew the way. The man, known only as Old Toby, would guide the Corps of Discovery to Travelers Rest.

Lewis and his men, accompanied by Cameahwait and the Shoshone, returned to Montana to await the arrival of Clark, who was struggling up the Jefferson River with the rest of the men and the bulk of the expedition's supplies. On the morning of Saturday, August 17, Clark appeared and later that afternoon the captains held another conference with Cameahwait and his people, which required a large contingent of translators; Sacagawea translated the Shoshone into Hidatsa to her husband Toussaint Charbonneau, Charbonneau translated the Hidatsa into French to Private Francis Labiche, and Labiche translated the

French into English to the captains. Historians have written much about the family reunion between Sacagawea and her brother Cameahwait that occurred at the start of the conference. Ambrose succinctly describes the reunion. "What a piece of luck that was. No novelist would dare invent such a scene (Ambrose 1996:277)."

Lewis and Clark conferred later to discuss what they had learned from Cameahwait and to formulate a plan for the next part of the journey. Despite Cameahwait's information which refuted the idea of a water route to the Pacific, the seductive siren of the Northwest Passage proved difficult to deny. Clark, accompanied by Sacagawea, Charbonneau, Toby, and eleven of the men would return to the camp on the Lemhi River. From there Clark would "proceede himself with the eleven men down the Salmon in order to examine the river and if he found it navigable and could obtain timber to set about making canoes immediately (Moulton 1988:5, 113)." Clark's sojourn down the Salmon River is particularly illustrative; either the captains did not believe or trust Cameahwait's knowledge or the lure of the fabled Northwest Passage proved too strong to ignore. Despite the lessons learned from fixing the latitude and longitude of Three Forks, the view of the Lemhi Range from the Continental Divide, the geographical lore provided by Cameahwait, the ideas about a short portage over the Divide with a return to the canoes and down to the ocean, would continue to affect the captains' decisions. All of the preceding factors should have convinced the captains of their misunderstanding of western geography, yet they continued to pursue the Northwest Passage. Clark's futile exploration of the Salmon River would cost the Corps nearly a week of precious time as winter arrived early in the Bitterroot Range and along the Lolo Trail.

Arrival At Travelers Rest

Old Toby led the Corps of Discovery to the banks of Lolo Creek on Monday, September 9, 1805. While traveling through the Bitterroot Valley, Toby had admitted to Lewis and Clark that he did not know where the Bitterroot River joined the Columbia River. He did, however, describe the Blackfoot River and the trail to the Missouri River, a description that would have huge implications for the return trip home and the events that occurred at Travelers Rest in 1806.

Lewis's journal for September 9 describes the arrival on the banks of Lolo Creek:

> we continued our rout down the W. side of the river about 5 miles further and encamped on a large creek which falls in on the West. As our guide informs us that we should leave the river at this place and the weather appearing settled and fair I determined to halt the next day rest our horses and take some scelestial Observations. we called this Creek Travellers rest. it is about 20 yards wide a fine bould clear running stream the land through which we passed is but indifferent a could white gravely soil (Moulton 1998:5, 192).

The very name that the captains applied, "Travellers rest," is illustrative of the place and acknowledges what the two captains and the men were thinking when they arrived. The captains applied names to the myriad streams, creeks, rivers, mountains, flora, fauna, and even the people they encountered during the exploration. Lewis and Clark scholar Donald Jackson, enlarging upon an earlier theme, noted that Lewis and Clark applied different place names and that there are seven types of place names: descriptive, associative, incident, possessive, commemorative, manufactured, and shift names (Jackson 1987:82). Applying Jackson's classification, Travelers Rest is a descriptive name - a description that succinctly, eloquently, and evocatively captures the essence of place.

On the morning of Tuesday, September 10, the captains sent the hunting parties out, with two men down the Bitterroot River "as far as it's junction with the Eastern fork [the Clark Fork of the Columbia] which heads near the Missouri, and return this evening (Moulton 1988:5, 196)." Clark noted in his journal that their guide had informed them that no game would be found on the Lolo Trail and that part of the delay at Travelers Rest was for gathering food for the crossing of the Bitterroot Mountains.

The road along the Bitterroot Valley served notice of the tough trip ahead. Snow covered the sheer granite cliffs towering over Hell Roaring, Kootenai and Bass Creeks. Joseph Whitehouse foreshadowed the trip ahead in his journal entries for September 5 and 6, beginning each day's entry with the descriptive phrase "a clear cold morning" and included descriptions of water freezing and of the snow on the mountains to the west (Moulton 1988:11, 300-303). John Ordway used the same, frigid phrase in his journal entries and also included descriptive observations about the snow visible over the left shoulder, noting on Saturday, September 7 "high mountains a little to the Lard. Side which is covered thick with Snow (Moulton 1998:9, 220)."

The hunters returned to camp Tuesday afternoon with four deer, a beaver, and a grouse. Later that evening John Colter arrived accompanied by three Native Americans whom he had met while hunting up Lolo Creek. Clark referred to these men as Flathead, but Moulton observes that, given the description provided of their homelands, they probably were Nez Perce (Moulton 1998:5, 198). Lewis noted the fine horses that the Indians possessed and the abundance of them. He wrote "each man in the nation possess from 20 to a hundred head (Moulton 1998:5, 196)." Lewis' description of the horses and the wealth of horses, confirms Moulton's belief that these men were Nez Perce. The Nez Perce informed the Corps that they were pursuing stolen horses and the two men who had taken them. After a dinner of boiled venison, two of the Nez Perce left to search for the stolen horses while the third member stayed and agreed to help guide the Corps across the Lolo Trail. Neither of the captains named the Nez Perce who stayed, but Lewis noted that he claimed that he had relatives on the Columbia River, that his relatives had been to the ocean and had seen an old white man who resided there. He also informed the captains that it would take six days of travel to reach those relatives on the Columbia. The Corps of Discovery, with their two Native American guides, the Shoshone Old Toby and the unnamed Nez Perce, struck camp on Wednesday, September 11, 1805. After searching for horses that had escaped during the night, the main party departed camp at 3 o'clock that afternoon. The arduous crossing of the rugged Bitterroot Mountains had begun.

The Lolo Trail and the Fort Clatsop Winter

Crossing the Bitterroot Mountains proved to be the worst experience the Corps encountered. It also served final, emphatic repudiation of the mythological Northwest Passage. Misfortune plagued the Corps as Old Toby made mistakes following the Lolo Trail, deep snows hampered progress, and men and horses lost their footing and fell on the steep slippery slopes. A lack of game reduced the men to eating their horses, and the harsh geography disheartened everyone. On September 16, Clark wrote "I have been wet and as cold in every part as I ever was in my life (Moulton 1998:5, 209)." Ambrose argues that the deep snows, cold, and hunger the Corps experienced would make September 16 "the worst day the expedition had experienced to date (Ambrose 1996:288)." Clark wrote on September 18 that: "The want of provisions together with the dificuely of passing those emence mountains dampened the Spirits of the party which induced us to resort to Some plan of reviving ther Sperits (Moulton 1998:5, 213)." The names that Lewis and Clark attached to the landscape, names like "Colt Killed Creek" and "Hungery Creek," serve as modern reminders of the harsh reality of crossing the Bitterroot Mountains.

The Corps of Discovery entered Weippe Prairie on September 20, having completed the difficult passage of the Lolo Trail. The expedition recuperated at Weippe Prairie then continued the westward push, eventually reaching the shores of the Pacific Ocean. William Clark perfectly captured the mood of that momentous event in a single sentence, writing "Ocian in view! O! the joy (Ambrose 1996:305)."

The Corps of Discovery encamped on the Pacific Coast for the winter of 1805-1806 at a site they named Fort Clatsop. The Fort Clatsop winter provided Lewis and Clark with the opportunity to prepare for the return trip, and, more importantly, the opportunity to assimilate the geographical knowledge they had experienced themselves and had gathered from the Native Americans they encountered on the trail. This accumulated knowledge, along with the geopolitical concerns of President Jefferson and Treasury Secretary Albert Gallatin, had great implications for the return visit to Travelers Rest and beyond.

During the Clatsop winter, William Clark spent considerable energy preparing a map that covered the geography from Fort Mandan to Fort Clatsop. Ambrose argues that this map represents "an invaluable contribution to the world's knowledge. Together with his previous map of the lower Missouri, it brought the American West together for the first time (Ambrose 1996:326)." On February 14, 1806, Clark noted, "We now discover that we have found the most practicable and navigable passage across the Continent of North America (Moulton 1998:6, 70). Allen believes this conclusion "was the most important product of their winter on the Pacific (Allen 1975:324)." The most practicable and navigable passage was the stretch of terrain between the Great Falls of the Missouri River and the Clearwater River of Idaho via Travelers Rest, and not the Northwest Passage, the much dreamed of short portage between the waters of the Atlantic and the Pacific Oceans.

John Logan Allen convincingly argues that Travelers Rest served as the focal point in western geography as understood by the captains (Allen 1975:347); Allen's argument can be expanded to include the Native Americans' understanding of western geography. Travelers Rest represented a highly unusual convergence of Native American trails traversing an immense portion of the North American continent, a focal point in western geography that Native Americans had realized long before the arrival of the Euro Americans to the New World (See Figure 28). The convergence of trails includes the Lolo Trail connecting the Columbia River and Plateau and the Pacific Ocean; the Nez Perce Cokahlarishkit Trail following the Black Foot River, also known as the river on the road to the buffalo; a network of trails to the north connecting with the Kootenai country in northwest Montana and southwestern Alberta; a network of trails connecting to the Yellowstone River country; and a network of trails, including the Nemepoo, or the People's Trail, connecting to the basin and range country of Southern Idaho and Northern Utah. Allen presents a sketch map prepared by Clark showing portions of these trails converging on Travelers Rest (Allen 1975:348), but unfortunately, the map does not adequately depict the vast portions of the North American continent linked by the Native American trails converging on Travelers Rest.

While preparing his instructions to Meriwether Lewis, Thomas Jefferson had sent a draft version to Treasury Secretary Albert Gallatin, a personal friend of Jefferson's and a serious scholar of geography who had amassed an impressive collection of maps. Gallatin responded to Jefferson that "The future destinies of the Missouri country are of vast importance to the U.S." and that the expedition should gather as much information as possible on the Missouri drainage (Ambrose 1996:94). Jefferson's instructions to Lewis included orders to learn about the branches and tributaries of the Missouri, especially on the southern side, thus Clark's return via the Yellowstone River. The instructions also noted that the northern tributaries were still of importance even though they had been generally located

and mapped by the British. Jefferson fully understood the implications of the British presence and expansion of the fur trade and the threat this posed to his agrarian ideals. James Ronda argues that Alexander Mackenzie's accounts of his exploration in the early 1790s, which suggested opening a route between the Atlantic and the Pacific Oceans with regular establishments along the route to control the fur trade of the North American continent, had a profound effect on Jefferson:

> who immediately understood that Mackenzie had proposed a working plan not just for territorial expansion and the fur trade but for permanent agricultural settlement as well. And considering how far Canadian traders had already penetrated into the West, the prospect of an expanded British West seemed both imminent and menacing (Ronda 1998:9).

During the Clatsop Winter, Lewis and Clark plotted an intricate plan for the return trip. The plan, based on the accumulated geographical knowledge acquired during the continental traverse, included the geographical lore provided by Old Toby at Travelers Rest and Jefferson's instructions to Lewis. Upon departing Travelers Rest, Clark would return to the Big Hole Valley via Gibbons Pass. His journey would then take him to Camp Fortunate, and then on to the Jefferson River and to Three Forks. At Three Forks, Clark's party would split, with Ordway and two men returning to the canoes and following the Missouri River to meet Lewis' party and assist with the portage of the Great Falls. Clark and his men were to leave Three Forks, travel overland to the Yellowstone River, and descend to the Missouri where they were to be reunited with Lewis and his party. Lewis would depart Travelers Rest, ascend the Blackfoot River, cross the Continental Divide and arrive at the Great Falls of the Missouri River. Three of Lewis' party met with the three men from Clark's party who paddled downstream from Three Forks, these six men portaged the Great Falls while Lewis and a group of men ascended the Marias River "with a view to explore the country and ascertain whether any branch of that river lies as far north as Latd. 50 (Ambrose 1996:366)." Lewis' exploration of the Marias River basin to determine its northern extent would address Gallatin's and Jefferson's geopolitical concerns about the Pacific Northwest.

While Ambrose describes the decision to part company at Travelers Rest as a "highly ambitious plan, exceedingly complex, full of promise about what could be learned" he further notes that it "was also an excessively dangerous plan (Ambrose 1996:366)." Despite the dangers, the plan proved to be immensely successful. Parting company from the banks of Lolo Creek made perfect sense when viewed in terms of Jefferson's instructions for exploring the branches of the Missouri River as a means of checking British expansion into the West.

The Return to Travelers Rest

On the evening of Monday June 30, 1806, the Corps of Discovery arrived back at Travelers Rest. Clark noted that "a little before Sunset we arrived at our old encampment on the S. side of the Creek a little above its entrance into Clarks river here we Encamped with a view to remain 2 days in order to rest ourselves and horses and make our final arrangements for Seperation" (Moulton 1993:8, 68). Though Clark hoped for relaxation, the next two days were a flurry of activity as the expedition prepared for the impending separation.

The return trip over the Bitterroots had proven to be as challenging as the first crossing, providing further evidence for the prescience of the name Travelers Rest and the undeniable need for rest before resuming the push for home. Clark's notes describing the weather conditions of June 1806 compellingly narrates the Lolo Trail:

> Descended the mountain to Travellers rest leaveing those tremendous mountanes behind us – in passing of which we have experiensed Cold and hunger of which I shall ever remember. in passing over this part of the Rocky mountains from Clarks river, to the quawmash flats from the 14th to the 19th of Septr. 1805 we marched through snow which fell on us on the night of the 14th and nearly all the day of the 15 in addition to the cold rendered the air cool and the way difficuelt. our food was horses of which we eate three.- On our return we Set out from the quawmash flats on the 15th of June and commenes the assent of the rocky mountains; the air became cool and vigitation backward – on the 16th we met with banks of Snow and in the hollers and maney of the hill Sides the Snow was from 3 to 4 feet deep and Scercely any grass vegetation just commencing where the Snow had melted- on the 17th at meridian, the Snow became So deep in every derection from 6 to 8 feet deep we could not prosue the road (or direction,) there being no grass for our horses we were obliged to return to the quawmash flats to precure meat to live on as well as grass for our horses - leaveing oure baggage on the mountains We precured 5 Indians as pilots and on the 24th of June 1806 we again under took those Snowey regn. on the 26th we with our baggage arived at an open plain serounded with Snow where there was grass for horses on the 27th & 28th also passing over Snow 6 or 8 feet deep all the way on 29th passed over but little Snow- but saw great masses of it lying in different directions (Moulton 1998:6, 69).

On the morning of July 1, 1806, the captains sent all of the hunters out; while Shields repaired several guns, the captains reviewed their plans for separation. The hunters returned to camp at noon with 13 deer, which were cleaned and set out to dry in the sun. Lewis noted that "Windsor birst his gun near the muzzle a few days since: this Shields cut off and I then exchanged it with the Chief for the one we had given him for conducting us over the mountains (Moulton 1998:6, 75)." The remaining provisions were divided between the two groups that would separate later in the week. Two of the Nez Perce guides agreed to accompany Lewis for two nights to lead him to the road along the Blackfoot River. The captains gave a small Jefferson peace medal to one of the young men "of the Chopunnish Nation who had been remarkably kind to us in every instance (Moulton 1998:6, 77)."

The following day the hunters set out from camp again, returning this time with only two deer. Shields continued repairing guns, which he completed that evening. During the course of the day, the captains frequently conversed with the Native Americans using sign language. Lewis again prevailed upon the Nez Perce to show them the Cokahlarishkit [Blackfoot] River, or the river on the road to the buffalo, which would return him to the Great Falls. Lewis presented a Jefferson medallion to one of the Chiefs, who responded by giving Lewis the name of "Yo-me-kol-lick which interpreted is *the white bearskin folded*" (Moulton 1998:6, 79). In the evening of July 2, the Nez Perce and the Corps of Discovery amused themselves with horse races and foot races. Lewis' comment that the Corps members met with "various success" in the races invites the reader to suppose just how badly the Nez Perce trounced his men.

During their stay at Travelers Rest, a thick and persistent cloud of mosquitoes forced the Captains into their tents while they wrote their daily journal entries. Journal entries from the captains as well as those of Patrick Gass, Joseph Whitehouse, and John Ordway mentioned the torment of the voracious pests. Lewis noted that "the musquetoes have been excessively troublesome to us since our arrival at this place (Moulton 1998:6, 79)."

The stay at Travelers Rest allowed three members of the expedition time to receive medical attention. John Potts suffered a severe laceration to a leg during the crossing of the Bitterroots. David J. Peck, D.O., writes that Potts' injury, a cut to the inner thigh, probably severed the relatively superficial saphenous vein which serves to return blood to the heart and lungs. If Potts had severed an artery, he

possibly hit the superficial common femoral artery. Peck's description of the injury and Potts' suffering later on the trail is as instructive as it is colorful. "If Potts was still having this much pain from this wound he suffered two weeks before, and Lewis had bothered to mention it at all, we can be sure that Potts certainly must have filleted his leg open in a dramatic fashion (Peck 2002:261)."

In addition to Potts, medical attention was also necessary for Silas Goodrich and Hugh McNeal, both of whom had contracted syphilis. Lewis made the diagnosis, noting that the men "are both very unwell with the pox which they contracted last winter with the Chinook women (Moulton 1998:6, 79). In the epigraph to Chapter 8, "They Should Have Danced All Night," which describes the history and treatment of syphilis, Dr. Peck provides a hilarious and appropriate quote which he attributes to J. Earle Moore, an American physician, "Two minutes with Venus, two years with mercury (Peck 2002:112)." Mercury was the treatment of choice for syphilis during the expedition and Lewis had obtained 50 dozen mercury pills from Dr. Benjamin Rush while preparing for the expedition in Philadelphia. Dr. Rush's pills, commonly referred to as "Rush's Thunderclappers," were comprised of calomel and jalap. Jalap is a drastic cathartic obtained from the Mexican vine *Exogonium jalapa*, calomel is a mercury chloride (Peck 2002:322). Mercury in this form is poorly absorbed by the intestinal walls, with only about 15 percent entering the blood stream (Peck 2002:177). Dr. Rush's pills produced immediate and massive intestinal purging bowel movements (hence the common name "Thunderclappers"). Dr. Peck writes that "intestinal purging was a treatment of choice for nearly everything in 1803 (Peck 2002:68)." It should be noted that, in spite of the prevalence of mercury as a treatment for syphilis, Dr. Peck describes Dr. Rush's pills as "a treatment with out any medical merit that I can determine (Peck 2002:226)."

On the afternoon of July 1, Lewis wrote a 1500 word letter to Hugh Heney, an agent for the British North West Company, whom the captains had met during the Mandan Winter. The letter to Heney was designed to serve several purposes. In the letter, Lewis asked Heney for assistance in securing leaders of the Sioux Nations to join the captains on their return to Washington, DC, and telling him if he did so and left the North West Company, Heney would be considered for the post of U.S. agent to the Sioux Nation. Ambrose argues that the intended recipients of the lengthy letter written on the banks of Lolo Creek were, in reality, the Sioux and the British (Ambrose 1996:367).

Lewis also wrote that the Corps of Discovery had traversed the continent via the Missouri and Columbia Rivers and that he was about to depart for the Marias River country, fully intending that this information be passed along to Heney's superiors in the North West Company. Locating the Blackfoot Nation and convincing them, along with the Sioux Nation, to abandon their allegiance to the British and to forge new economic ties with Americans would position the Americans to assume leadership of the fur trade from the Missouri to the Columbia. Ambrose summarized the letter and discusses the implications:

> Sitting beside Lolo Creek, near the place where it flows into the Bitterroot River, in a wide, beautiful, extensive valley, at least a thousand miles from the nearest white outpost, in command of a platoon-sized force in a country teeming with war parties, utterly destitute of equipment (except for the rifles and kettles and a few remaining knives – exactly the manufactured items the Indians most wanted) Meriwether Lewis got started on making his dream come true, in his letter to Heney (Ambrose 1996:368).

Later, Sergeant Pryor and two men would leave Lewis' party and travel overland by horse to the Mandan village on the Assiniboine River to deliver the letter to Heney. Unfortunately, Native Americans stole their horses and they failed to reach Heney and the North West Company, forcing their return.

In addition to conversing with the Native Americans, attending to sick men, supervising the procuring and drying of venison, overseeing the repair of guns, and preparing for the separation of the crew, while planning a new American empire, the captains continued their natural history observations by writing in their journals and collecting specimens. Lewis penned a 500-word description of the prairie dog that they had seen in the Missouri River country. He noted a large number of birds found in the Bitterroot Valley, including the:

> dove (Mourning dove), the black woodpecker (Lewis' woodpecker), the lark woodpecker (Common or Northern flicker), the logcock, the prairie lark (probably the horned lark), the sand hill crain, the prairie hen with the short and pointed tail (Sharp-tailed grouse), the robin, a species of brown plover (probably the upland sandpiper), a few curloos, small black birds (either the Rusty blackbird or the Brewer's blackbird), ravens, hawks, and a variety of sparrows as well as the bee martin (either the eastern kingbird or the western kingbird) and the several species of Corvus genus are found in this valley (Moulton 2002:8, 75-78).

Lewis also described and collected plant specimens at Travelers Rest. He compared and contrasted the leaf of the cottonwood found on Lolo Creek to cottonwoods found on the Columbia, Missouri, and Mississippi Rivers, noted two species of clover, that "the wild rose, servise berry, white berryed honeysuckle, seven bark, elder, alder aspin, choke cherry, and the broad and narrow leafed willow are natives of this valley" and the presence and geographical location of the "long leafed pine", firs and larch (Moulton 2002:8, 79). Moulton notes that Lewis preserved specimens of at least four undescribed species at Travelers Rest and a new genus of the bitterroot, *Lewisia rediviva* Pursh. The new species collected by Lewis at Travelers Rest include the thinleaf owl-clover (*Orthocarpus tenuifolius*), the wormleaf stonecrop (*Sedum stenopetalum*), and the small-head clover (*Trifolium microcephalum*) (Moulton 2002:8, 80-81).

Determined to execute their carefully designed plans, Lewis and Clark parted company on Thursday, July 3, 1806. Lewis poignantly captured the feelings of the separation:

> All arrangements being now completed for carrying into effect the several scheemes we had planned for execution on our return, we saddled our horses and set out I took leave of my worthy friend and companion Capt. Clark and the party that accompanyed him. I could not avoid feeling much concern on this occasion although I hoped this separation was only momentary (Moulton 2002:8, 83).

Criterion 6

Travelers Rest National Historic Landmark is also eligible for National Historic Landmark status under Criterion 6 for three reasons. First, Travelers Rest National Historic Landmark has yielded historical archeological information of major scientific importance by shedding light upon several previously little-understood aspects of the Corps of Discovery, including the military and medical aspects of the expedition. Second, Travelers Rest has the ability to provide additional significant historical archeological information at the site. Third, the information at Travelers Rest has research potential along the entire length of the Lewis and Clark Trail. Recent investigations at Travelers Rest have provided information about the Corps of Discovery that has not been successfully located at other Lewis and Clark sites. These previous investigations point out the significant additional information potential at Travelers Rest and that application of these methods and theories to other Lewis and Clark sites can greatly enhance and define theories regarding the expedition.

Travelers Rest has the ability to provide additional information of historical and scientific importance regarding the Corps of Discovery. The historical archeological information at Travelers Rest has the potential to provide additional significant information. The remote sensing portion of the investigation into the location of the site identified approximately 60 anomalies that warranted some sort of exploration in an effort to verify that the expedition followed the Blue Book. The historical archeological excavation portion of the investigation examined 18 anomalies, indicating a serious potential for further avenues of research at Travelers Rest.

The Anthropology and Geology Departments at the University of Montana are proposing additional remote sensing investigations at Travelers Rest. For example, the investigation into the location of Travelers Rest located the latrine used during the encampment of 1806. According to the Blue Book, a latrine is to be used for three days and a new latrine dug. It should be noted that the Blue Book does not prescribe construction methods for latrines, only the placement. There should be a separate latrine from the 1805 encampment. The 1805 latrine, however, would probably not contain traces of mercury since none of the journals indicate any illness or medical problems. Ground penetrating radar will be utilized to acquire a signature, or profile, of the known 1806 latrine. If the 1805 latrine is still present, it should exhibit a radar profile similar to the 1806 latrine radar profile. The information from this additional remote sensing at Travelers Rest could be applied to other Lewis and Clark sites, for example the Portage National Historic Landmark or even Fort Clatsop since they are both encampments that involved extended stays by the expedition.

The recent investigations at Travelers Rest have provided significant information on numerous aspects of the Corps of Discovery, including military protocol, material culture, trade goods, and medical aspects of the expedition. The military aspect of the Lewis and Clark Expedition has received considerable attention from scholars over the years. However, scholars have only recently turned their attention to Baron Frederick William von Steuben's *Regulations for the Order and Discipline of the Troops of the United States*. Two examples are provided by the recently completed *The Literature of the Lewis and Clark Expedition: A Bibliography and Essays*, (Beckham 2003) and *Lewis & Clark: The National Bicentennial Exhibition* prepared by the Missouri Historical Society, both of which include a discussion of von Steuben and the Corps of Discovery. The implications of the military aspect of the expedition in terms of validating and verifying Lewis and Clark sites has the potential to yield significant information which would greatly expand our understanding of the Corps of Discovery.

The precise manner in which the Corps of Discovery established camp cannot be ascertained from von Steuben or from the expedition's journals. There is, however, ample evidence in the Blue Book to allow for the construct of a theoretical encampment pattern. The basic tenets of von Steuben's orders would have been followed, including encampment in a horizontal, symmetrical, linear arrangement, regular spacing between the tents of the captains and sergeants and the privates, regular spacing of the camp and quarter guards, regular spacing of the sinks (latrines), and regular spacing of the central butchering area. Even though von Steuben's orders are for regiments and the Corps of Discovery only comprised a platoon, the absolute need for maintaining military protocol and camp sanitation would have dictated a similar but simplified pattern of encampment.

The first task upon arrival at Travelers Rest would have been to establish the location of the supplies (the sutler for von Steuben) and the evenly spaced kitchen(s). Lewis and Clark would have shared the common tent pitched forty feet from the location of the supplies. The sergeants, Gass, Ordway, and Pryor, would have shared one of the linen lean-tos which would have been pitched two feet from and in

line with the captains' tent. Six paces from this line, the privates and non-military personnel (York, Droulliard, Charbonneau and Sacagawea) would have pitched and shared the remaining seven linen lean-tos, spaced two feet apart in a single line. The quarter guard would have been stationed forty feet from the supplies, and the camp guards would have been stationed three hundred paces from the captains' tent. Because of von Steuben's concerns about camp cleanliness, the central butchering area, the site where the deer shot by the expedition's hunters would have been gutted, cleaned, de-boned, and the meat cut into strips for drying, would have been fifty paces from the location of the supplies. The latrine, or sink as preferred by von Steuben, would have been located three hundred feet from the tents of the privates (See Figure 29 for a scale diagram of men and materials at Travelers Rest and the pattern of encampment following von Steuben).

This pattern of encampment for a platoon would have simplified von Steuben's orders for encampment of a regiment, yet it would have maintained several strategic and important principles that guided von Steuben at Valley Forge. The symmetrical and linear pattern would have been maintained. Equally as important, the primacy of military command would have been preserved by having the captains in the common tent in line with their junior officers. Locating the privates and interpreters in a row six paces away would have maintained the symmetrical and linear pattern while reinforcing the primacy of military command. Locating the central butchering area and sinks at a prescribed distance would have maintained von Steuben's concerns for camp cleanliness. Maintaining von Steuben's distances for the supplies (or sutler) and kitchen(s), the camp guards, the quarter guards, the butchering area, and the sink, simply follows the pattern of encampment regardless of whether or not the troops in the field comprised a regiment, a battalion, or a platoon. The pattern preferred by von Steuben would not have been utilized by the 1854 Stevens party, the only other military expedition in the Lolo Creek drainage, since the Blue Book had been rewritten in 1812.

The camp design and layout readily apparent at Travelers Rest through the location and spatial arrangement of the fires and latrine, raises several nationally significant potential avenues of research. Examination of campsites along the entire Lewis and Clark Trail with regard to von Steuben must be considered as a vast potential. For example, mercury analysis at Fort Clatsop did not note the source of the military protocol in the attempts to locate latrines. Further investigations using von Steuben's measurement for the location of the latrines, rather than the measurements cited, holds great promise. Applying measurements from the Blue Book to other sites along the trail could greatly expand our knowledge of these resources while simplifying and greatly reducing the cost for such efforts. For example, there are currently three possible locations for the encampment known as Canoe Camp National Historic Landmark in Weippe Prairie. Application of von Steuben's pattern of encampment combined with remote sensing and test excavations at Canoe Camp National Historic Landmark could validate and verify one of the possible locations of the camp.

Data from the lead isotope analysis at Travelers Rest is directly applicable to other Lewis and Clark sites as well as other historic sites from across the Pacific Northwest and the Northern Rockies. While the lead isotope analysis of Artifact #324 failed to link the artifact to the Corps of Discovery, this technique has great potential to provide information at other Lewis and Clark sites. For example, the National Park Service is currently pursuing lead isotope analysis at Fort Clatsop by incorporating data from Travelers Rest with lead isotope analysis of the NPS collection of artifacts from across the Pacific Northwest. This additional analysis of lead isotope data from Travelers Rest, Fort Clatsop and other historical sites from across the Pacific Northwest is the topic of a master's thesis currently being conducted by one of the co-authors of the Travelers Rest report, and it is funded by the National Park Service and the University of Montana.

A large number of Lewis and Clark campsites have been inundated with water as a result of a series of great dams such as Fort Peck, Garrison, and Oahe, which seek to control the Missouri River. Attempts at controlling the Columbia River, has produced a similar set of great dams. The identification and preservation of the remaining untouched Lewis and Clark sites is an avenue of research that should be considered nationally important. Utilization of the methods and techniques employed at Travelers Rest can advance the identification and preservation of these resources.

The multidisciplinary investigation into the location of Travelers Rest included methods, theories, and data from investigations at other Lewis and Clark sites, most notably the Portage National Historic Landmark and Fort Clatsop. Unfortunately, after over a decade of investigations at the Portage National Historic Landmark on the Missouri River near Great Falls, Montana, no reports have been produced for the National Park Service or any other agency. In addition, the data available from the Portage National Historic Landmark was limited to personal communications and press releases. However, archeologists from Fort Clatsop provided a wealth of information, freely sharing their theories and data while reviewing theories and data from Travelers Rest. At the request of Fort Clatsop archeologists, co-authors of the Travelers Rest report have presented papers at conferences co-sponsored by the National Park Service. Fort Clatsop archeologists have indicated that additional symposia are planned for the future and that continued exchanges of data and theories between Travelers Rest and Fort Clatsop will be one of the focal points.

Further evidence of the ability of the theories and data from Travelers Rest to expand our knowledge of Lewis and Clark sites originates from the banks of the Yellowstone River downstream from Columbus, Montana. The principal investigators from Travelers Rest are currently working with the Lewis and Clark Trail Heritage Foundation in an effort to validate and verify the location of Clark's Canoe Camp on the Yellowstone River. The basic premise of the investigation into Clark's Canoe Camp centers on von Steuben's military pattern of encampment as determined at Travelers Rest and locating this pattern along the banks of the Yellowstone River.

CONCLUSIONS

The investigation designed to verify and validate the location of the Travelers Rest campsite developed multiple lines of evidence from different and independent disciplines. The multiple lines of evidence include the results of the historical research, the remote sensing, the geochemical analysis, the historical archeological excavations, the laboratory analysis, and the results of previous investigations. It is important to note that no one single source of evidence will suffice to answer the question of the site location. However, a preponderance of information provides sufficient justification for positively establishing the Travelers Rest site.

The National Park Service investigation of the Sand Creek Massacre Site in Colorado noted that it is extremely difficult to define what "incontrovertible evidence" is (USDI National Park Service, 1999). Once that evidence is produced, others might disagree on the nature of the evidence and what it might mean. If incontrovertible evidence is not produced, a preponderance of evidence, in the form of documentary evidence, ethnographic evidence, geophysical data, and other archeological information may be sufficient to satisfy the researchers that they have located the site and that they can make recommendations about its extent. This investigation, therefore, details the historical, geoarcheological, geophysical, and archeological methods, to produce the multiple lines of evidence needed to verify the location of the campsite.

Scientific methods use a two-pronged approach to solving complex types of research problems. In addition to finding corroborative evidence, the researcher also investigates all of the evidence that might disprove a hypothesis and eliminate it from consideration. The combination of negative data rejecting a hypothesis, with positive data supporting an alternative hypothesis, provides the proof that the alternative hypothesis is correct. This method provides a stronger "proof" than the use of only corroborating evidence, and is illustrated in several of the multiple lines of evidence used in this report.

The interdisciplinary investigation conducted to verify the location of the Travelers Rest site has produced multiple lines of evidence. It should be noted that none of the individual lines of evidence, with the notable exception of the latrine, has the ability to stand alone in the interpretation of the site. However, the historical record, combined with the presence of the latrine, the kitchen fire hearth from the proper time period, the artifacts - tombac button, blue bead, melted lead - and von Steuben's prescribed pattern of encampment, provides a forceful concordance of evidence to firmly establish the proper and precise location of the Travelers Rest National Historic Landmark at the site investigated.

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92.3 General Records of the Office of the Quartermaster General, 1774-1962
92.3.1 General Correspondence
92.3.2 Issuances
92.3.3 Reports
92.3.4 Records Maintained by Individual Quartermasters

92.3.5 Other records
92.4.4 Records of the Supply Division and its Predecessors

Previous documentation on file (NPS):
__ Preliminary Determination of Individual Listing (36 CFR 67) has been requested.
_X_ Previously Listed in the National Register.
__ Previously Determined Eligible by the National Register.
X Designated a National Historic Landmark. NR# 66000437
__ Recorded by Historic American Buildings Survey: #
__ Recorded by Historic American Engineering Record: #

Primary Location of Additional Data:

__ State Historic Preservation Office
__ Other State Agency
__ Federal Agency
__ Local Government
__ University
_X_ Other (Specify Repository): Travelers Rest State Park, Lolo, Montana

10. GEOGRAPHICAL DATA

Acreage of Property: 24.1 acres

UTM References:	Zone	Easting	Northing
A	11	722253	5181409
B		722556	5181415
C		722579	5181027
D		722380	5181021
E		722371	5181220
F		722266	5181216

Verbal Boundary Description:
The boundary of the nominated property includes Lots 1, 2A, 2B, 2C, 2D, 13 and 14 of the Van Ostrand Addition of Missoula County, Montana, as well as the E ½, SE ¼, and the E ½, NW ¼ , SE ¼, of Section 34, Township 12 North, Range 20 West. The general shape of the boundary is a polygon described by the following: starting at vertex A in the northwest corner of the property proceeds 994 feet east to vertex B. Turning 90 degrees south proceed for 1,273 feet to vertex C. From vertex C, turn 90 degrees to the west and proceed 653 feet to vertex D. At vertex D, turn 90 degrees to the north and proceed 653 feet to vertex E. Turning 90 degrees west and proceed for 345 feet to vertex F then turn 90 degrees north from vertex F, and the boundary runs for 633 feet to vertex A.

Boundary Justification:
The proposed boundary will delete the existing Travelers Rest National Historic Landmark boundary. The original recordation of Travelers Rest by the late Dr. Merle Wells indicated that he had only drawn the boundaries based on the vague published data available in the 1970s, and that because of the imprecise information on the location he made the boundaries of the National Historic Landmark large enough to hopefully capture the site (See Figure 1). Dr. Wells did not have information on the precise location of Travelers Rest, he only hoped to capture what he felt was a large enough area that would possibly contain the site. His recordation preceded the information presented in the latest editions of the Lewis and Clark journals prepared by Dr. Gary Moulton and information presented by Lewis and Clark scholars Stephen A. Ambrose and John Logan Allen. The proposed new boundary is based upon information provided by three previous investigations. Robert Bergantino's investigation into Travelers Rest utilized the courses and distances, celestial observations and geographical information which the expedition recorded on both legs of the journey (Bergantino 1998). Daniel Hall's investigation into the aerial infrared photographs of Lolo Creek, which was based upon the assumption of locating a Native American site with the Lewis and Clark site in the vicinity, agreed with Bergantino's conclusion. The recent interdisciplinary investigation at Travelers Rest developed multiple lines of evidence pointing towards a more precise site location (Hall et al. 2003).

The new National Historic Landmark boundary encompasses the full extent of the resources and land area making up the property and includes three parcels - one owned by the State of Montana, one owned by the Traveler's Rest Preservation and Heritage Association, and one owned by Mr. Frank Miller, Jr. (See Figure 30). This area can be roughly divided into two landforms, the upper and lower terrace. The lower terrace includes the two fire hearths and latrine feature that fit the encampment layout most likely used by the Lewis and Clark expedition. The latrine feature is directly associated with the expedition's use of the site and the hearths fit the time frame and campsite arrangement described by Baron von Steuben. The lower terrace also contains the

locations where the tombac button, blue trade bead, and melted lead were recovered, all of which are most likely associated with the expedition's use of the site. They fit the time frame and the materials the expedition used, and, in the case of the trade bead and lead, were found in association with the central fire hearth. The upper terrace is included within the boundary since it is the only landform in the vicinity of the campsite that fits the description and location where the foot races were held between the members of the expedition and the Nez Perce (Moulton 6, 79; Bergantino 1998, 3). The proposed new boundary for Travelers Rest National Historic Landmark is based upon the three previous investigations, the historical record, results of the remote sensing, the historical archeological investigations, and the multiple lines of evidence produced by the multidisciplinary investigation.

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