Chapter 3. Existing Condition Assessment and Landscape Analysis

Introduction

The evaluation of the existing condition of Pea Ridge NMP's cultural landscape is presented in this chapter, accompanied by the analysis of its integrity. The existing condition assessment provides an overview of the current physical condition of the cultural landscape. The analysis evaluates the significance and integrity of the cultural landscape by assessing each characteristic within the context of the landscape as a whole. This is accomplished by evaluating the 2013 physical conditions against the condition of the 1862 to 1865 landscape.

The assessment and analysis were undertaken to understand the cultural landscape, to document individual features that contribute to its significance, and to determine those qualities that contribute to its historic character. These were conducted in June 2013 using GIS data and base files provided by the park. Field investigations were used to document the physical condition of the cultural landscape. GPS points taken during field investigations assisted in locating some features.

The existing condition assessment and landscape analysis for the study area is presented first, followed by documentation for each of the landscape character areas—Leetown Hamlet, the Federal Trenches, and Elkhorn Tavern / Williams Hollow.

Narrative text, diagrams and photographs describe and graphically illustrate both existing conditions and analysis. Existing Condition plans for the study area and each landscape character area are included. A separate database has been provided to the park in GIS format that includes the condition assessment.

The existing condition of features are recorded as good, fair or poor, based on the following criteria.

Good – Those features of the landscape that do not require intervention. Only minor or routine maintenance is needed at this time.

Fair – Some deterioration, decline, or damage is noticeable. The feature may require immediate intervention. If intervention is deferred, the feature will require extensive attention in a few years.

Poor – Deterioration, decline, or damage is serious. The feature is seriously deteriorated or damaged or presents a hazardous condition. Due to the level of deterioration, damage or danger, the feature requires extensive and immediate attention.

Landscape Characteristics

Existing features are organized according to landscape characteristics. The description of the park's existing condition evaluates individual landscape systems and features according to these characteristics.

For the study area, the applicable landscape characteristics include natural systems and features, archeological sites, land use, spatial organization, topography and landform, views and vistas, circulation, buildings and structures, small scale features, vegetation, and constructed water features.

The landscape analysis compares the historic condition to the current, and identifies landscape characteristics that retain integrity and contribute to the significance of the landscape.

Natural Systems and Features are the natural aspects that have influenced the development and physical form of Pea Ridge NMP.

Archeological Sites are the ruins, traces or deposited artifacts in the landscape, evidenced by the presence of either surface or subsurface features. The identification of archeological sites is provided by the NPS through documented investigations and excavations, studies, and monitoring reports.

Land Use is the organization, form and shape of the landscape in response to land use.

Spatial Organization is the arrangement of elements creating the ground, vertical and overhead planes that define and create space. These include the arrangement of topography, circulation, buildings, small scale features (i.e. as fences, and vegetation).

Topography and Landform is the threedimensional configuration of the landscape surface characterized by features and orientation. These include natural formations, rock outcroppings, cut and fill slopes and other man-made topographic features.

Views and Vistas are features that create or allow a range of vision. These elements can be natural or those that are designed and controlled.

Circulation is comprised of the features that constitute systems of movement. These include vehicular routes such as roads and highways, equestrian routes such as the horse trail, and pedestrian routes such as trails and walkways.

Buildings and Structures are habitable features that exist or were in existence historically. Smaller non-habitable, present-day or historic buildings and smaller structures are described as structures. These include shelters, remnant foundations, and the monuments and spring box at Elkhorn Tayern.

Small scale Features are the human-scaled elements that provide detail combined with function and aesthetics such as fences and walls.

Vegetation is indigenous or introduced trees, shrubs, vines, ground covers, and herbaceous materials.

Constructed Water Features are man-made features that move, store or otherwise control potable and non-potable water. These include the pond at the quarry and the stock pond.

Contributing and Non-Contributing Features

Contributing features are individual elements and other characteristics that remain from the period of significance. Individual features that contribute to the significance of the Pea Ridge NMP include buildings and structures, remnants of former structures, small scale features, and vegetation.

Non-Contributing features are those that have been added to the cultural landscape since the end of the period of significance. They do not assist in maintaining the historic character. Some non-contributing features are compatible with the historic character of the cultural landscape.

Table 3-1: Study Area
Contributing and Non-Contributing Roads and Trails

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	Alvin Seamster Road		Х	

Table 3-2: Study Area
Contributing and Non-Contributing Buildings, and Structures

Buildings and Structures	Contributing	Non-Contributing	Undetermined
Visitor Center		Х	
Administrative Facilities		Χ	
Maintenance Facilities		Χ	
east overlook shelter		Х	
Winton Springs House foundation	Χ		
Log Cabin (Morgan's Woods)			Χ
House foundation (tour stop 2)		Х	
G.W. Ford House and Barn and outbuildings - (archeological site)			
Wallace Scott House		Χ	
Radium Rice House		Χ	
Pratt's House / Store			Χ
J. Ruddick - one structure (archeological site)			Χ
Patton House		Χ	
Wiley Foster - two structures (possible remnants)	Χ		
Amos J. Patterson - three structures (possible remnants)	Χ		
Sturdy Cabin - one structure (archeological site)	Χ		
Unidentified - four structures			Χ
Matthews House / Ray-Galen House	_	Χ	
Ray- Gaylen House	_	Х	

Table 3-3: Landscape Character Areas Contributing and Non-Contributing Roads, Buildings, and Structures

Leetown Hamlet	Contributing	Non-Contributing	Undetermined
Mayfield House	X		
Masonic Lodge			Χ
Foundation	X		
Leetown Cemetery	Χ		
Federal Trenches	Contributing	Non-Contributing	Undetermined
Trenches	Χ		
Elkhorn Tavern	Contributing	Non-Contributing	Undetermined
Elkhorn Tavern	Χ		
Elkhorn Tavern Barn	Χ		
Clemens' House	Χ		
Clemens Log Barn (Log Barn in NRHP nomination)	Χ		
tanyard house foundation			Χ
Monument to Brave Confederate Dead	Χ		
Soldiers Reunited Memorial	Χ		
Spring Box at Elkhorn Tavern	X		
tanyard Well			Χ

Assessment of Integrity

The cultural landscape of Pea Ridge National Military Park retains integrity in location, design, setting, feeling and association as one of the nation's best preserved Civil War battlefields. The Federal Trenches also retain integrity in materials due to the extant earthwork fortifications built during the battle.

Integrity is the ability of a property to convey its significance, and is grounded in a property's physical features and how they relate to its significance. Integrity is defined by seven aspects as follows.

Location is the place where the cultural landscape was constructed or where an historic event occurred.

Design is the combination of elements that create the form, plan, space, structure, and style of a cultural landscape.

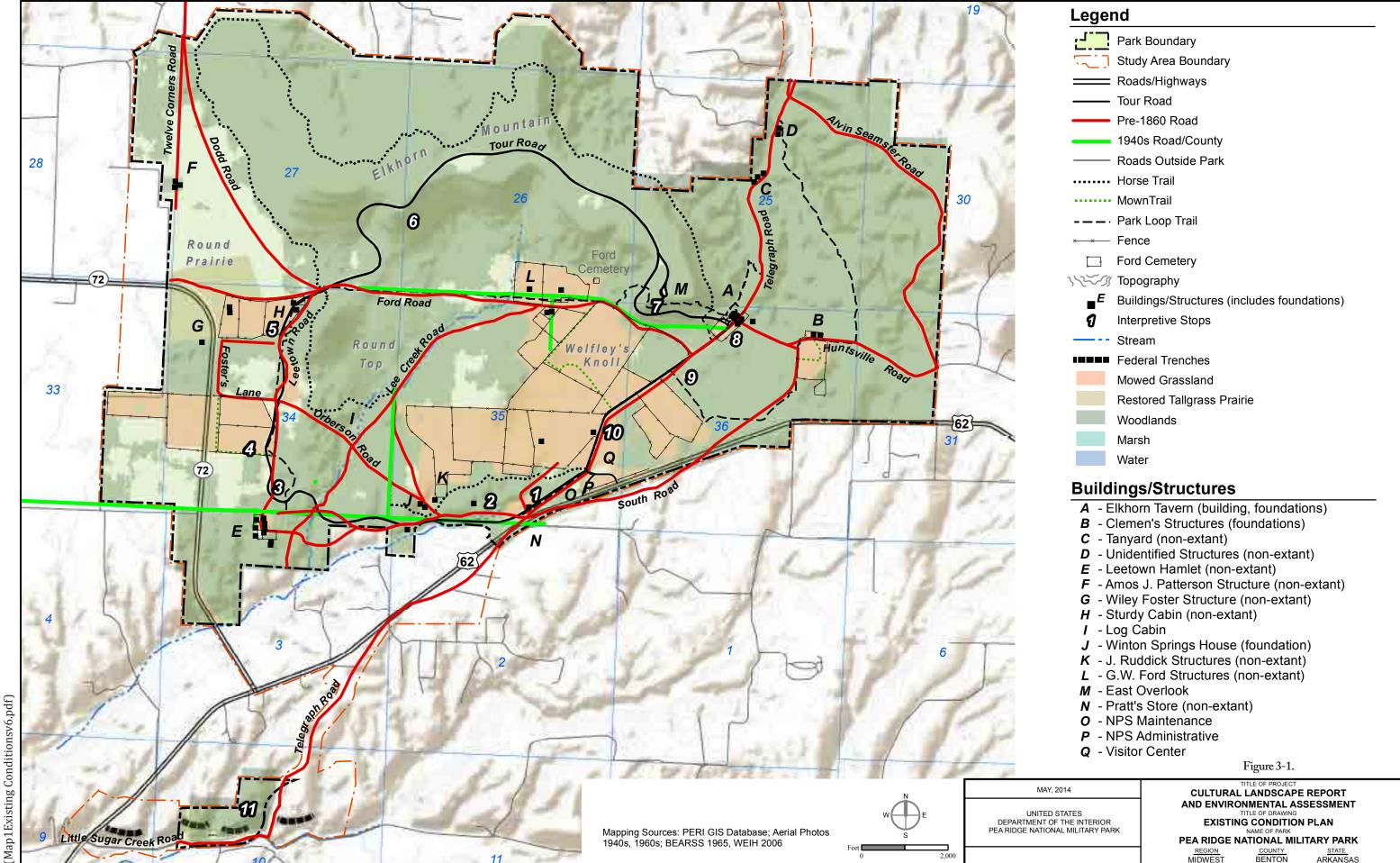
Setting is the physical environment of the cultural landscape.

Materials are the physical elements that were combined or deposited during the particular period(s) of time and in a particular pattern or configuration to form the cultural landscape.

Workmanship includes the physical evidence of the crafts of a particular culture or people during any given period in history or prehistory.

Feeling is the cultural landscape's expression of the aesthetic or historic sense of a particular period of time.

Association is the direct link between the important historic event or person and a cultural landscape.



2 7

Study Area

This section describes the existing condition of the study area. The landscape characteristics for the study area are: natural systems and features, archeological sites, land use, spatial organization, topography and landform, views and vistas, circulation, buildings and structures, small scale features, vegetation and constructed water features. The Existing Condition Plan (Figure 3-1) illustrates the current condition.

Natural Systems and Features Existing Condition

The natural systems and features of the Pea Ridge NMP include mountains and cliffs, streams and drainages, climate and local ecology. The park is situated on the Springfield Plateau within the Ozark Highlands. It is characterized by rolling hills in the park's northern-half that are part of the foothills of the Ozarks. An elevated high plateau comprises the southern (and lower) portion of the park. Elkhorn Mountain is the highest point within the park at 1,610-feet above sea level. Two other landforms, Round Top and Welfley's Knoll are localized high points.

The sandstone and limestone rock that comprises the area and Pea Ridge NMP was laid down as inland seas that existed more than two million years ago.^{3.1} Tectonic activity uplifted the sedimentary layers creating the Ozark Highlands. This uplift and its subsequent erosion and weathering produced the present-day topography.^{3.2} The soils within the park vary with the terrain. In general, Tonti soils are found on ridges, terraces and stream terraces; Nixa soils occur on ridge tops; and Noark and Clarksville soils are located on steep hill slopes. Secesh and Elsah soils occur on floodplains.^{3.3}

Pea Ridge NMP's terrain is crossed by numerous streams and drainages. These include the intermittent streams of Winton Spring Branch, Pratt Creek, Little Sugar Creek, Williams Hollow and Lee Creek. Winton Spring feeds Winton Spring Branch, a drainage that extends through the south end of the park. Little Sugar Creek, just below and parallel to the Federal Trenches, is the only perennial stream. The 100-year flood level of Little Sugar Creek extends into the park facilities (parking, trail and interpretive information) associated with the Federal Trenches.^{3,4} All bodies of water originate within the park boundaries with the exception of Little Sugar Creek and Winton Spring.

The regional climate is primarily continental, but has a maritime influence from the Gulf of Mexico. Summers are warm, accompanied by high humidity, and winters are mild, but freezing temperatures occur in mid-winter. Precipitation averages nearly forty-five inches per year. Winters average eight to nine inches of snow per year. Spring is the wet season and May is the wettest month.^{3.5}

Animal species within the park and region are typical of northwest Arkansas. Species surveys identified ninety-two bird, fortysix mammal, eighty-six fish, twenty-seven amphibian and fifty reptile species in 2009. Common park wildlife includes white-tailed deer (Odocoileus virginianus), coyote (Canis latrans), red fox (Vulpes vulpes), several small mammals—gray squirrel (Sciurus carolinensis), fox squirrel (Sciurus niger), and eastern chipmunk (Tamias striatus)—as well as numerous migratory songbirds. Scarlet tanagers (*Piranga olivacea*), summer tanagers (*Piranga rubra*), rosebreasted grosbeaks (Pheucticus ludovicianus), ovenbirds (Seiurus aurocapillus), and various woodland warblers

^{3.1} Pea Ridge NMP, Resources Management Plan, 5.

^{3.2} Ibid, 6.

^{3.3} Soil Conservation Service, 1977.

^{3.4} FEMA; Pea Ridge NMP, Resources Management Plan, 6.

^{3.5} Pea Ridge NMP, Resources Management Plan, 4.



Figure 3-2. Several intermittent drainages cross the cultural landscape including Lee Creek (MB: DSC_0276.jpg).



Figure 3-3. The natural systems of Pea Ridge NMP include the landform of the Ozark Plateau, a series of dramatic rocky hillsides contrasting with deep narrow hollows (MB: DSC_0039.jpg).

(*Phylloscopus* spp.) are among the bird species that visit the park in the spring and summer to nest and breed. The endangered gray bat (*Myotis grisescens*) is the only federally listed animal species that has been observed within the boundaries of Pea Ridge, though there are no resident populations within the park.^{3.6}

Pea Ridge NMP contains diverse ecosystems and habitats that support a variety of plant species including several rare plants such as field pussytoes (Antennaria neglecta), lobed spleenwort (Asplenium pinnatifidum), and Ozark chinquapin (Castanea pumila ozarkensis). Invasive non-native plant species include Sericea lespedeza and Japanese honeysuckle, which are a threat to native habitats due to their ability to colonize and overrun ecosystems.

Analysis

The natural setting and features of the Pea Ridge region attracted Euro-American settlement and development in the early 1800s. The natural setting influenced the Battle of Pea Ridge in 1862, and remains remarkably similar to the historic condition that existed during the battle. The natural barriers and obstructions, such as the rolling hills and drainages that the armies had to negotiate during the two-day battle, remain very similar to their 1862 condition. The natural systems and features of the Ozark Highlands, Elkhorn Mountain, woodland forests, Little Sugar Creek, Williams Hollow, Winton Spring and Lee Creek contribute to the historic character of the Pea Ridge cultural landscape.

The greatest change to the natural systems and features of Pea Ridge are those associated with the natural flora and the streams and drainages. The forests of the Ozark Highlands

are denser and have less diversity than those that existed in 1862, due to fire suppression.

Streams and drainages remain in relatively the same location as those that existed in 1862, however development surrounding the park has influenced water flows and channel configurations.

Local fauna in 1862, were likely very similar to those species that exist today. White-tail deer are prevalent within the park, and may pose a threat to natural resources.

Study Area – Contributing Natural Systems and Features

Natural systems and features that contribute to the historic character of the landscape:

- Ozark Highlands
- Woodland Forests
- Little Sugar Creek
- Lee Creek
- South Branch Winton Spring
- Elkhorn Mountain
- Williams Hollow
- Cross Timber Hollow

^{3.6} NPS, State of the Parks, June 2009, 50.



Figure 3-4. Wilson's excavations at Leetown in 1965 (PICT0007.jpg).

Archeological Sites Existing Condition and Analysis

Pea Ridge NMP is located within the archeologically rich Ozark Plateau. Archeological sites in the region date human use and occupation to more than 10,000 years ago. Some of the park's archeological sites pre-date European contact including three recorded prehistoric sites. American Indian use and settlement continued in the Pea Ridge area through the early 19th century.

Numerous archeological investigations have been undertaken within the park since its establishment as a national park in 1956. Most have focused on uncovering physical evidence of the Battle of Pea Ridge to enhance interpretation and understanding. Evidence of the battle has been found to be abundant in the Elkhorn Tavern area and around Clemens' Field. Patterned deposition of small arms and larger ordnance is particularly abundant. Broken bits of firearms, accoutrements, and camp and personal items are also present.^{3,7}

Field investigations began as early as the 1950s and again in 1965, with work undertaken by Edward Bearss and archeologist Rex Wilson. Investigations have continued through present-day. Archeological studies have included testing for cultural artifacts and investigation of areas that have the potential to reveal additional information about the history and prehistory of the park. Investigations have been conducted for areas where new facilities were installed.

Research historian Edwin C. Bearss completed a study of Pea Ridge NMP and its relationship to the Civil War in 1964. This study served as a basis for future archeological investigations. In addition to archeological information, Bearss' report included recollections of local residents of Leetown Hamlet and the tanyard.^{3.8}

In 1965, NPS archeologist Rex Wilson conducted the first formal archeological investigations within the park, focusing on identifying Leetown Hamlet in the fields south of where the Confederate and Union troops engaged on March 7, 1862. Wilson focused on locating extant remains of buildings or other features within the former village. Excavations consisted of a number of parallel trenches that explored the assumed location of the Masonic Lodge building. The investigations did not locate remains of structures, but did indicate evidence for buildings. The second part of Wilson's investigation focused on Leetown Cemetery in which he found evidence of seventeen graves.^{3.9} Thirteen had depressions that Wilson attributed to bodies being removed for reburial (i.e., soldier graves) and two may have been burial sites for children. One of the undisturbed grave sites may be a freedman named Ike. Wilson's excavations at Elkhorn Tavern yielded post-Civil War materials but no mass burial trench. At the tanyard, Wilson identified three clay-lined vats.

In 1987, Roger Coleman conducted an archeological inventory of the proposed paved trail between Elkhorn Tavern and the two Civil War monuments. Artifacts associated with Elkhorn Tavern and two prehistoric sites were discovered and documented.

In 1993, James P. Harcourt of the Arkansas Archeological Survey completed a Phase 1 cultural resource survey in an area designated for a proposed equipment shed near the visitor center. A sparse lithic scatter was discovered but there was no evidence of 19th or 20th century occupations.

A prehistoric site survey was completed around 1999, by Dr. Marvin Kay and Jason Herrmann from the University of Arkansas.

^{3.7} GMP/EIS, 67.

^{3.8} Wilson, 1965.



Figure 3-5.The NPS Midwest Archeological Center (NPS-MWAC) conducted surveys at Pea Ridge from 2001 to 2003 (Inventory area map.jpg).

They recorded three prehistoric sites that appeared to be temporary occupation sites, related to Early to Late Archaic and Woodland to Mississippian occupations. Two of the three prehistoric sites appeared to be highly disturbed and were determined to be non-eligible to the NRHP.

Beginning in 2000, a five-year Systemwide Archeological Inventory Program (SAIP) was undertaken by the NPS Midwest Archeological Center (NPS-MWAC) and the University of Arkansas' Department of Anthropology that yielded abundant evidence of prehistoric and historic occupation of the site.^{3.10} The prehistoric inventory was conducted under the direction of Dr. Marvin Kay of the University of Arkansas, and a Civil War battlefield inventory was completed under the direction of Dr. Douglas Scott of the NPS Midwest Archaeological Center. Between 2001 and 2004, Dr. Kay's inventory combined traditional techniques, a review of archival records, geographic information system (GIS) sampling and predictive modeling. Dr. Scott's archeological surveys focused on the distributions of artillery and other munitions left from the battles fought at Pea Ridge. The investigations involved metal detector surveys over the battle areas and skirmish lines to test the historic accounts of troop positions.

A park-wide archeological inventory was initiated in 2000, that recommended identifying, recording and evaluating each NRHP site found. A prehistoric archeological inventory and a non-Civil War-related site inventory was included as a separate research framework.

In late March of 2003, William Volf directed an electric resistance survey of an 80×20 meter area of Leetown in an attempt to relocate some of the structures. Two possible

building footprints were identified from the results but were not conclusive.^{3.11}

In 2004, investigations at Leetown Hamlet included geophysical and aerial remote sensing to identify the general extents of the village and to verify locations of buildings that may have been part of the settlement at the time of the battle. The survey located the footprint of the Lee/Mayfield house, two possible locations of the road central to the layout of Leetown Hamlet, a rectilinear pattern of ditches and depressions, and six unidentified rectangular features—three of which may be building footprints from structures that were depicted in various historic maps of the town.^{3.12}

In 2013, a geophysical archeological inventory and evaluation of four proposed alternatives for the U.S. Highway 62 realignment project within Pea Ridge NMP was undertaken by staff archeologists and NPS-MWAC archeological technicians. Support was provided from volunteers under the Volunteer-In-Park (VIP) program, University of Nebraska-Lincoln faculty appointee, and the PERI staff in Spring 2013.

^{3.10} GMP/EIS, 67.

^{3.11} Herrmann, 7-8.

^{3.12} Herrmann, 63.



Figure 3-6. The primary land use is the setting of the Battle of Pea Ridge that includes fields, woodlands, and former homesteads and hamlets (MB: DSC_0163.jpg).



Figure 3-7. Land uses associated with the national park include visitor facilities—visitor center, tour road, interpretive elements, museum functions and picnic areas. (MB: DSC_0638.jpg).

the hillside and Ford Road, just to the east

Land Use

Existing Condition

The land use of Pea Ridge NMP is a national park with a mission to interpret the Battle of Pea Ridge. The primary land use is the setting of the Battle of Pea Ridge that includes agricultural fields, homesteads, hamlets, and woodlands associated with the battle. Two cemeteries exist within the park boundaries, Leetown Cemetery and Ford Cemetery. Leetown Cemetery is described and evaluated as part of the Leetown Hamlet landscape character area. Ford Cemetery is included in this section.

Other land uses are those associated with the national park. Visitor facilities include the visitor center, Tour Road, interpretive elements, museum functions and picnic areas. Administrative and maintenance uses are present as well. Recreational use includes hiking, equestrian related activities, and biking. The heaviest visitation occurs in June, July and August with a substantial number of visitors during October to view the fall colors. ^{3.13} Visitors arrive by private automobile with a few exploring the park via horseback or bicycle.

Land use adjacent to the park is primarily agricultural, generally small privately-owned farms. Grain crops and livestock production are principal uses. The recent population growth in Benton County has resulted in residential and commercial developments being built adjacent to the park.^{3.14}

Land use includes the Ford Cemetery, located next to Ford's Farm. The cemetery predates the establishment of the national park. The cemetery is open to visitors and accessible by a mown path. Ford Cemetery is located at the base of Elkhorn Mountain between of the Ford fields. It is a gently sloping space covered with mown grass, enclosed by a worm fence. A few large trees are within the cemetery—three cedars, a large catalpa tree, and a dead walnut tree. Grave markers vary in size but most are tablet style. A few are slant markers of either marble or stone. The earliest legible markers notes a grave date from 1879. The majority of the markers were added in the early 20th century; the most recent is 2004. Family members have maintained rights to inter family members within Ford Cemetery until the last known family member is buried. Ford Cemetery is in fair condition. A few tombstones need to be reset, and some graves have sunken, and the full extent of the cemetery is unknown. No current management plan exists for the cemetery. Maintenance is minimal.

Analysis

Today, the study area retains the historic look and feeling of the agricultural land uses that were present on-site just prior to the Battle of Pea Ridge. The present-day fields surrounded by woodlands and forests evoke the setting that would have been present at the time of the battle. Although land uses directly associated with the battle (camps, artillery placement etc.) are not present, the setting and feeling remain. The land use contributes to the historic character of the cultural landscape.

Just prior to the 1862 battle, the land use of the area was primarily agriculture consisting of fields, homesteads with dwellings and outbuildings, and small hamlets connected by a primitive road system. Fields of maintained crops, including corn and wheat, created a pattern of open land contrasted by the surrounding woodlands. At Elkhorn Tavern, land uses included a residence and accommodations for travelers. Other land uses in the study area included the tanyard,

^{3.13} Pea Ridge NMP, Resources Management Plan, 2. 3.14 SOW; Pea Ridge NMP, Resources Management Plan, 3.



Figure 3-8. Even though land use directly associated with the battle (camps, artillery placement etc.) are not present, the setting and feeling remain. (MB: DSC_0680.jpg).



Figure 3-9. Ford Cemetery (MB: DSC_0313.jpg).

a blacksmith, Masonic Lodge, general store, mill, and the Leetown Cemetery.

Before, during and just after the Battle of Pea Ridge, the land use was a battlefield. Specific areas were devoted to camps, headquarters, commissaries, hospitals and stables, and artillery emplacements and areas where the troops engaged on March 7th and 8th, 1862. After the battle these land uses disappeared, leaving few traces of battle-related activities.

Following the Civil War, and until 1956, the land use returned to agriculture use with some areas developed for residential use. These included the addition of buildings, structures and features most of which are non-extant.

Ford Cemetery remains in its original location, setting and form. The cemetery retains the historic look and feel of the agrarian landscape and complements the agricultural fields and farmsteads that would have been present at the time of battle. The cemetery fits in and appears to be part of the historic landscape. Its placement at the base of Elkhorn Mountain and woodland, with a view to the agricultural fields below, evokes a feeling of tranquility and peace at the edge of the historic battleground. It is unknown when the cemetery was established; the earliest legible recorded grave in the cemetery dates from 1879, but other grave markers may be earlier. The cemetery may include family members who were present during the battle.

Further research is needed to determine whether or not Ford Cemetery is contributing to the Battle of Pea Ridge. This research should include review of local cemetery records and county records, and a review of known community members between 1862 and 1865. The SHPO has determined the cemetery to be non-contributing due to lack of information and has requested further documentation.

Study Area Contributing Land Use

The aspects of land use that contribute to the historic character of the cultural landscape are:

- Location, Setting and Feeling
- Agricultural fields and pastures
- Ford Cemetery (may be contributing)



Figure 3-10. Elkhorn Mountain defines the north edge of the park. The park's spatial organizaion is composed of a pattern of open fields contrasted by dense deciduous forests (MB: DSC_0682.jpg).

Spatial Organization

Existing Condition

The spatial organization of Pea Ridge NMP consists of open fields surrounded by woodlands and forests interrupted by streams and hollows that create depressions in the high Ozark plateau. Vegetation, topography, fence lines and non-historic fences, Telegraph, Huntsville and Ford roads are the primary features that create the spatial organization.

At Elkhorn Tavern, the building and orchard assist in creating the spatial organization of this area. Elkhorn Mountain generally defines the northern edge of the cultural landscape with Telegraph Road generally defining the extents to the south. A secondary spatial experience is presented to the visitor as they travel along the Tour Road that loops through the cultural landscape.

At the Federal Trenches, topography, vegetation and Little Sugar Creek are the primary features that create the spatial organization. A secondary spatial experience is presented to the visitor from the parking area and along the trail to the top of the hillside where the extant trenches are located.

Analysis

The original spaces of the battlefield landscape remain similar to those that existed during the battle and the period of significance. This due in large part to the natural and man-made topography remaining very similar to that which existed in 1862. Elkhorn Mountain spatially defines the north edge of the park as it did when it was a barrier during the battle.

Main roads such as Telegraph, Huntsville and Ford remain relatively intact to their 1862 alignments. Fields and fence lines have been arranged to reflect the patterns and character of the battlefield setting, in an approximations of the historic spatial patterns. The introduction of non-historic fences along

historic fence lines is based on research and maps prepared by Bearss in the 1960s. Fences have been built along historic fence lines to indicate the extent of former fields where the majority of the battle was fought.

The greatest changes to the historic spatial organization include the addition of the Tour Road and tour stops, changes in the woodlands and forests, and the loss of original buildings, structures and small farm spaces. The Tour Road disrupts the historic spatial organization as it is a new feature that follows an alignment that did not exist historically. In addition, some portions of the road disrupt historically open fields and battle-related landscapes.

Some areas of woodlands and forest are now denser than they were historically. Small areas now encroach into historically open fields. Some areas that were historically forested are now open fields. Most buildings, structures and small farm spaces that existed in 1862, are no longer extant.

Even though some features that define the historic spatial organization are missing (i.e., buildings, structures and small farm spaces) and others are similar, those that remain generally reflect the patterns and character of the historic setting. In general, the spatial organization contributes to the historic character of the cultural landscape.

Study Area Contributing Spatial Organization

The aspects of spatial organization that contribute to the historic character are:

- The pattern of open fields vs. closed woodlands
- Elkhorn Mountain and Williams Hollow
- Fences that define fields within areas of the battlefield

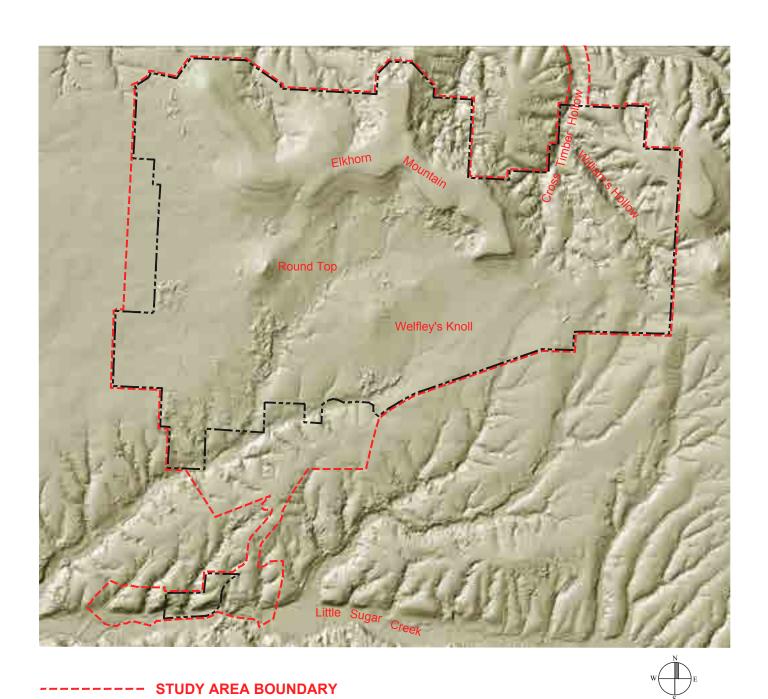


Figure 3-11. The rolling topography is contrasted by hollows that create depressions in the high plateau. Elkhorn Mountain, Round Top and Welfley's Knoll are prominent high points within the landscape. (Hill Shade Graphic. pdf).

-- NPS BOUNDARY

Topography and Landform Existing Condition

The topography and landform of Pea Ridge NMP consists of the Ozark Plateau with high mountains that gently descend to rolling topography. The rolling topography is contrasted by hollows that create depressions in the high plateau.

Elkhorn Mountain, Round Top, and Welfley's Knoll, are the prominent high points within the landscape. Elkhorn Mountain is the largest mountain in the park and generally defines the northern edge of the cultural landscape. Round Top rises noticeably above the adjacent rolling farmland, to the east of Foster's Farm.

The high points are contrasted with Williams Hollow and the Little Sugar Creek Valley, which are the primary features that create the hollows and valleys, but are complemented by several small drainages, such as Lee Creek and Winton Springs Branch, which have created slight depressions in the topography.

The majority of the agricultural fields, such as Oberson's, Pratt's, and Cox's Fields, are relatively level to rolling plateau. At Elkhorn Tavern, Elkhorn Mountain, Williams Hollow, Broad and Narrow Ridges are features that define the topography in this area.

At the Federal Trenches, the valley of Little Sugar Creek and the bluffs above the creek are the prominent landforms, where the constructed Sugar Creek Trenches occur.

Analysis

The original landform and topography of the battlefield landscape remains similar to the time of the battle and the period of significance. The mountains, hollows and valleys remain similar to their 1862 orientation. The level to rolling fields reflect the historic character of the battlefield setting. The greatest changes to the topography have

occurred due to the construction of the Tour Road, which was built across open battlefields and in some cases was raised above the grade level of the adjacent fields and small drainages. The Tour Road also altered the contour of Elkhorn Mountain, where it descends from the east overlook towards Elkhorn Tayern.

Other changes to the topography and landform include the erosion and filling of the Federal Trenches on the bluffs above Little Sugar Creek. Erosion has modified the mountains and hollows through natural processes. Agricultural practices may have caused some erosion of the topography of the fields, but these changes have in all likelihood been minor.

Although there have been some alterations to the topography and landform since the period of significance, the existing topography reflects the character and feeling of the historic setting and contributes to the cultural landscape.

Study Area Contributing Topography and Landform

The aspects of topography and landform that contribute to the historic character are:

- High mountains that descend to rolling topography and deep hollows.
- Elkhorn Mountain
- Round Top
- Welfley's Knoll
- Williams Hollow
- Cross Timber Hollow
- Plateau of agricultural fields



Figure 3-12. The view from Elkhorn Mountain from the east overlook (MB: DSC_0166.jpg).



Figure 3-13. The view towards Elkhorn Mountain from the tour road (MB: DSC_0688.jpg).

Views and Vistas

Existing Condition

The park infrastructure, comprised of the visitor center and Tour Road with interpretive stops and two overlooks, orchestrates a series of views that provide the visitor with a visual understanding of the Battle of Pea Ridge.

This experience begins at the visitor center with an expansive view across agricultural fields to the north with the backdrop of Elkhorn Mountain. From the Tour Road. views on the park's west side include those from tour stop 4 at Leetown Battlefield and from tour stop 5 towards the fields where the armies collided on March 7th. These views also occur along the Tour Road as it travels northward. The view traveling north along the Tour Road from Leetown Hamlet resembles the advance of Union troops on March 7th. Today the vegetation in the fields differs from what existed at the time of the battle, and the forest vegetation is more dense than what would have been present during the battle.

On Elkhorn Mountain, the view from the east overlook affords an expansive overview of the high ground of the battlefield including Welfley's Knoll, Ford's fields and Round Top. On the east, views from the Tour Road include those towards Elkhorn Tavern—interrupted by the parking area, and views from stop 9 at Ruddick's Field, and from stop 10 across the fields to the northwest. All of the views from interpretive stops are focused towards areas associated with the battle in locations easily reached by the Tour Road. The views are predominantly across agricultural fields were the battle was fought. Some are towards the woodlands where troops advanced such as at Leetown Battlefield. These views assist in emphasizing that a clear field of fire was required for the artillery used during the battle.

Analysis

The existing views from the visitor center and Tour Road assist in interpreting the story of the battle as they bring visitors in close proximity to key battlefield sites. While they present the various areas where battle occurred, the existing views do not always present the view from the perspective of the military advance. This is primarily a function of the route of the Tour Road, which rarely follows a historic route taken by Confederate or Union troops.

The one-way direction of the Tour Road diminishes the integrity of views that would have occurred historically along Telegraph Road as troops traveled towards Elkhorn Mountain and Elkhorn Tavern. A view from the south would provide context for the setting of the battle, which primarily took place in the fields below Elkhorn Mountain. The route and associated view illustrates how the topography shaped the course and outcome of the battle. Unfortunately, visitors do not experience this view since the one-way direction of Tour Road focuses the view towards the west.

The battlefield is best viewed from the perspective of the Civil War soldier on foot. Military staff rides are conducted in the fields where visitors walk the route.

In some locations, such as at tour stop 5 and at the visitor center, the Tour Road and/or interpretive stop traverse a historic battlefield. While this affords a 360-degree view and immersion within the battlefield, the presence of the parking area and road diminishes the integrity of the battlefield.

The visitor center is somewhat visible from the east overlook. At certain times of day, the east overlook is visible from the Tour Road and visitor center. This is primarily due to the color of the building against the backdrop of cedars.



Figure 3-14. The view from Welfley's Knoll (MB: DSC_0299.jpg).



Figure 3-15. The view across Leetown Battlefield to the northeast toward the area where General McCullough was killed (MB: DSC_0137.jpg).

As a pedestrian or bicyclist, more views associated with the battle are apparent but are not interpreted. These include those along Ford Road from Huntsville Road towards Elkhorn Tavern, along mown paths within various fields, and along Telegraph Road north of Elkhorn Tavern.

Certain views that were important to the outcome of the battle are not a part of the visitor experience. These include views from the top of Welfley's Knoll that provided a lookout over the battlefield at Cox and Ruddick's fields. Welfley's Knoll was a spot of great tactical importance during the Battle of Pea Ridge. From this viewpoint, the Union army could overlook most of the battlefield and watch the movement of the Confederate position. The Union army deployed their forces from this ridge and were able to send enfilading artillery fire into the Confederate positions.

Another important view for the interpretation of the battle is towards the bluffs above Elkhorn Tavern, near the existing east overlook. These bluffs would have been very visible at the time of the battle. Overgrown vegetation now obscures the rock outcroppings where Confederate troops scrambled on the morning of March 8, 1862. Being able to view these bluffs is an important aspect of understanding the battle.

Views assist in interpreting the story of the Pea Ridge battle and assist in conveying an authentic scene. While many of the existing views assist in conveying the historic setting, others diminish the integrity of contributing features. Some views that were important to the battle are not presented, and others confuse the historic scene. Views could be improved by presenting more of the historic lines of sight associated with the battle.

Study Area

Contributing Views and Viewsheds

The aspects of views and vistas that contribute to the historic character are:

- View to Elkhorn Mountain from Telegraph Road
- View to and from Elkhorn Tavern from Telegraph Road
- View from Huntsville Road to Elkhorn Tavern
- View from Welfley's Knoll
- View across Leetown Battlefield
- View to Little Sugar Creek Valley from Federal Trenches



Figure 3-16. The Tour Road provides a looped route through the park. The southern end is a two-way road, providing access to the horse trail parking trailhead at Winton Springs (MB: DSC_0053.jpg).



Figure 3-17. For a portion of its length south of Elkhorn Tavern, the Tour Road follows the historic alignment of the Telegraph Road (MB: DSC_0673.jpg).

Circulation

Existing Condition and Analysis

The existing circulation system of Pea Ridge NMP consists of vehicular, pedestrian and equestrian routes, and unused road traces. The Circulation Diagram and Roads Matrix provide a summary description of historic and extant roads (Figure 3-20 and Table 3-4). Similar information for trails is provided in the Trails Matrix (Table 3-5).

Vehicular routes consist of two highways, the Tour Road, maintenance and service drives, and road traces. U.S. Highway 62 provides access to the visitor center from Bentonville, Arkansas. Arkansas Highway 72 of the park bisects the west portion with connections between U.S. Highway 62 and Pea Ridge. The Tour Road is the primary vehicular route within the park, providing access for park visitors to all interpretive spots associated with the battlefield landscape. Other vehicular routes include maintenance and service roads used only by park staff, the Winton Springs road and horse trailer parking area, and many road traces that are no longer open to vehicular traffic. Road traces are those present at the time of the battle in 1862, some of which were built between 1830 and 1840 (1830s roads) when the area was first settled by Euro-Americans. Others were built by 1899, and several were built as county roads in the 1940s.

Pedestrian routes consist of the park loop trail—a seven-mile hiking route, and sidewalks associated with the visitor center, interpretive stops along the Tour Road, east overlook, administrative buildings and maintenance areas. Portions of the park loop trail follow road traces. A nine-mile horse trail extends throughout the park providing equestrian use.

Many historic roads remain. In general, most circulation routes present at the time of the

battle in 1862 remain intact today. However, most are now road traces and several have sections where newer routes have covered historic alignments. Most 1830s roads no longer accommodate vehicular traffic. Some are maintained and used as hiking trails including Leetown Road and Foster's Lane. Others have pedestrian access along mown paths such as those at Telegraph Road at Elkhorn Tavern and along Huntsville Road. Ford Road is part of the park loop trail, providing both pedestrian and bicycle use. Other roads are overgrown and difficult to discern, including portions of Telegraph Road and Leetown Road. Others are not passable due to deadfall such as the northern portion of Telegraph Road.

The addition of contemporary routes—two highways and the Tour Road—have disrupted historic circulation patterns. U.S. Highway 62 created a direct vehicular access into the park, but disrupted the historic alignment of Telegraph Road and South Road. The Tour Road was built over portions of the historic alignment of Telegraph Road, and crosses several other 1830s roads.

Tour Road

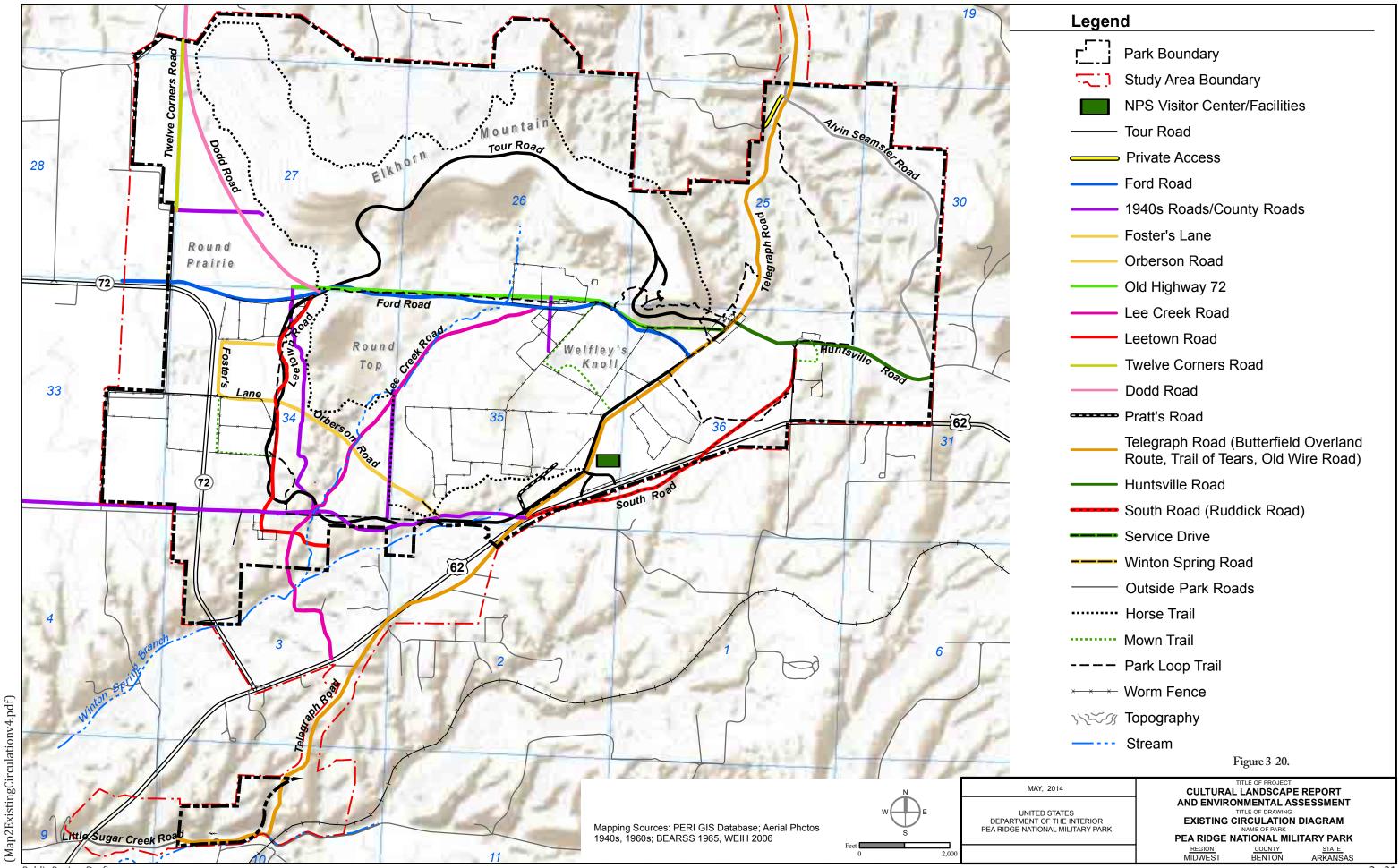
The Tour Road was built in 1963, by the NPS to provide visitor access to, and interpretation of the battlefield landscape. It is an asphalt paved road with a gravel shoulder, sevenmiles in length that begins and ends at the visitor center. The Tour Road is the primary vehicular route within the park, designed as a loop to connect to most areas of the park. It is one-way for most of its length. A two-way section extends from the visitor center to the Winton Springs road where horse trailer parking and access to the horse trail is provided. The one-way sections are approximately eighteen-feet wide. The two way sections are approximately twenty-five feet wide.



Figure 3-18. The tour road and parking area at Leetown Battlefield (MB: DSC_0605.jpg).



Figure 3-19. The tour road includes ten stops. Each stop includes a parking area and interpretation. Stop 4, at Leetown Battlefield, is in an open clearing. This stop is located within the historic battlefield (MB: DSC_0127.jpg).



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Table 3-4: Study Area Roads Matrix

Asset bol Code	Road	Section	Date	Length / Width	Material	Condition	Use	Contributing	Non-contributing	LCS#	Notes
Code	nodu	Section		Length / Wiath	iviateriai	Condition	Use	Contributing	Non-contributing	LC3#	
			1961 to 1963 and 1964, repaired								includes park entrances, visitor center parking, culverts, small bridges, parking areas, stop interpretive, parallels Telegraph Road in places, follows 1940s Telegraph Road -
408444	Tour Road		1992	1.89 miles	asphalt	good	vehicular		X		county road
100111		one-way	2772	18' wide	a a primi	8000					from maintenance area to Elkhorn Tavern,
		two-way		25' wide							at visitor center, from Elkhorn to visitor center
					dirt, remnants of asphalt and road base in						
	Old Highway 72		demolished 1963	xx miles	places	non-extant	closed		X		non-extant east / west route, followed Ford Road in places, followed 1940s county ro
					asphalt, two lanes in both directions with						
	Highway 72		pre-1963	xx miles	shoulders	good	vehicular		X		north / south route turning west at north, connecting to Hwy 62 on south
					asphalt, two lanes in both directions with	8					
	U.S. Highway 62		pre-1963	xx miles	shoulders	good	vehicular		x		will be removed from park in 2014, portions follow 1940s county road
			· ·	8' feet wide +/- by		8000					some erosion, steep slopes, unclear alignment in sections, was the route of Union troc
408545	Ford Road		pre-1830	xx miles	places	poor to good	trail	Х		12503, HB-08	advance from Leetown to Elkhorn Tavern
				6 to 8' feet wide	^	T S S S S S S S S S S S S S S S S S S S					
	Foster's Lane		pre-1830	+/- by xx miles	dirt	poor to good	trail	Х			wells and foundations, serves as trail
				6 to 8' feet wide		poor to good	0.4				road does not have an official name, name is from 1963 master plan, crosses branch o
	Oberson Road	from Foster's Lane to south road	pre-1830	+/- by xx miles	dirt, road trace, rutted	poor to good	closed	Х			Winton Springs, on Weih's map
440400		17 17 6 1 1 1	1000	6 to 8' feet wide		. ,	1 100				11
413102	Winton Springs Road	north / south, Lee Creek to tour road	pre-1830	+/- by xx miles	dirt	poor to good	trail or closed??	Х			road does not have an official name, noted on 1963 master plan, on Weih's map
				18' wide by xx							
		from tour road to Winton Springs House site	unknown	miles	asphalt, gravel	good	vehicular		X		bridge, stone wall, gravel parking area
			_				_				
		from horse parking area to Lee Creek	unknown		unknown	unknown	unknown	Х			on 1963 master plan
	Leetown Road			Clauda baran							
		north / south from Tour Road to Ford Road	pre-1830	6' wide by xx miles	earthen surface, two track, rutted in places	fair to good	trail	X			
		nordry South from Your Road to Ford Road	pre 1030	innes	piaces	ian to good	cran	Α			
		north / south through Leetown Hamlet	pre-1830	location unknown	1	unknown		X			
				10' wide by xx	earthen surface, two-rut trace,						
		east from Leetown Hamlet follows Lee Creek from Leetown Hamlet to Ford	pre-1830	miles	embankments, lined with vegetation	poor to good	trail, closed	Х			
		Road known as Leetown Road in 1963 master									
	Lee Creek Road	plan	pre-1830	unknown	asphalt, gravel	good	vehicular	Х			on Weihs map, known as Leetown Road in 1963 master plan
							trail from Leetown				
		west along Mayfield fields; extends from Hwy 72		15' feet wide +/-		1	Hamlet east to U.S.				included on Weihs map as a 1940s county road, proposed to be obliterated in 1963
	Old Leetown Road / Co Road	east to Hwy 62	pre-1830	by xx miles	dirt	poor to good	Hwy 62	Х			master plan
	County Roads		1940s								
		1 - west PL to Visitor Center	1940s	15' +/- by xx miles	dirt, hardened gravel		closed		X		road does not have an official name
		2 - north / south, parallels Leetown Road	1940s	xx miles	unknown		closed		X		road does not have an official name
		tour road to Winton Springs	1940s	xx miles	unknown		closed		X		road does not have an official name
		3 - Mayfield Drive	15100	, and minico	umaiowii		croscu				Toda does not have an orient hance
		4 - short south spur off Ford Road	1940s	xx miles	unknown		closed		x		road does not have an official name
		5 - east / west at Ford Road (service road)	1940s	xx miles	unknown		trail		X		road does not have an official name, often confused with Ford Road
	Pratt's Road	near interp stop	pre-1830		unknown			X			if extant, location not confirmed in field
	- Full Stroug		pre 1000								
409068	Telegraph Road	from Federal Trenches through Tanyard	pre-1830		dirt, vegetated, areas not reviewed		portions are trails	X		12508, HB-21	Tour Road follows orig alignment at Elkhorn Tavern
	Butterfield Overland Stage	entire length	1830s					X			
	Trail of Tears	entire length	1838 to 1839					X			
	Williams Hollow	north PL to Elkhorn	pre-1830		narrow, rocky two-rut road trace			X			
	Tour Road	Elkhorn Tavern to Ford Road	rebuilt 1963		asphalt	good	vehicular		X		is section under Tour Road non-contributing???
	Road Trace	west of Ford Road			grass / vegetation covered road trace			X			
		along Little Sugar Creek	pre-1830		asphalt			X			
					mown grass covered trace with road bed						determined to be eligible by SHPO (per LCS), Huntsville Road is the route of the
409073	Huntsville Road	Elkhorn to south PL	pre-1830	8' +/- by xx miles	visible	good	trail	X		12500, HB-01	Confederate retreat from Pea Ridge on March 8, 1862
	Courth Board	form I antonio to Classica	pre-1830				closed, portion of	X			
	South Road	from Leetown to Clemens	pre-1830		unknown		trail??	Х			portions are outside park, on Weih's map
		'No Name Road 3'	n== 1020	6 to 8' feet wide	dirt hardened ground two-line-line-line	noort-	داه	v			road does not have an official name, on Weih's map
		Leetown Road to Visitor Center	pre-1830	+/- by XX miles	dirt, hardened gravel, tree-lined in places	poor to good	closed	Х			
		Visitor Center / Pratt's Store to Hwy 62	pre-1830		unknown		outside park				outside of the park, on Weih's map
		Ruddick's Road	1020	-1	,			.,			road does not have an official name, on Weih's map, known as Ruddick's Road on 196
		Hwy 62 to Huntsville Road	pre-1830	xx miles	unknown			X			master plan
		m 1									field investigations did not review road, known as County By-Pass Route in 1963 mas
	Alvin Seamster Road	Telegraph Road to Huntsville Road	pre-1830	-	unknown		closed	Х			plan
	L						,				
	Little Sugar Road	Old Wire Road at Federal Trenches	alignment pre-1830	1	unknown		vehicular	Х			County Road
							closed within the				
	D. J.D J	west property line	pre-1830		hardened gravel surface		park	Χ			part of Van Dorn's route from Bentonville Detour
	Dodd Road		F				1				
	Twelve Corners Road	Ford Road to Bentonville Detour	pre-1830		gravel surface		closed				part of Van Dorn's route from Bentonville Detour

Table 3-5: Study Area Trails Matrix

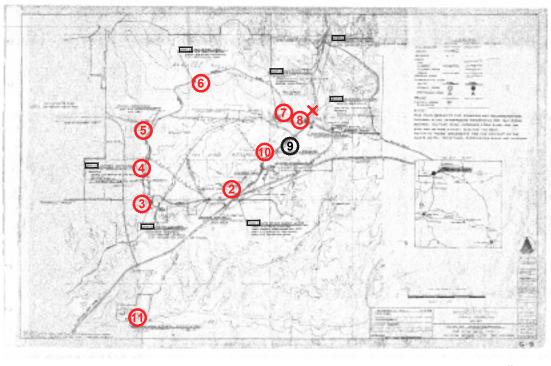
Asset Code Trail	Section	Date	Length / Width	Material	Condition	Use	Contributing	Non-contributing	Notes
1253022 Horse Trail			9 miles						
	north of Ford Road		xx miles	dirt	fair to poor	equestrian, hiking		Х	follows ridges and valleys, is not on historic roads
	north of Ford Road		xx miles	dirt	fair to poor	equestrian, hiking		X	follows ridges and valleys, is not on historic roads
	follows Old Hwy 72		xx miles	dirt	fair to poor	equestrian, hiking		X	labeled Ford Road on Park Map
	Ford Road to Horse trailhead		xx miles	dirt	fair to poor	equestrian, hiking		X	along base of Round Top, crosses Winton Springs, follows Ruddicks fenceline
	Horse trailhead to visitor center		xx miles	dirt	fair to poor	equestrian, hiking		X	south edge of fields, does not follow fields
	Telegraph Road - visitor center to Ford Road		xx miles	dirt	fair to poor	equestrian, hiking		X	north side of Tour Road
Broad Ridge Trail	tanyard to Huntsville Road		xx miles	dirt	fair to poor	hiking		X	follows ridge line
Park Loop Trail			7 miles						
	Ford Road to Clemens Field		xx miles	dirt	good	hiking		X	goes up to East Overlook, onto Elkhorn Tavern, along Huntsville Road to Clemen
1253023	Elkhorn Tavern to Williams Hollow hospital site along Telegraph Road		xx miles	dirt	poor to good	hiking	Х		connects to Broad Ridge trail
	Clemens to Tour Road		xx miles	dirt	good	hiking		X	from Clemens, along fields, parallels South Road at times
1028653	Telegraph Road	pre-1830	xx miles	dirt	good	hiking	Х		south side of Tour Road, follows Telegraph Road orig alignment
	Telegraph Road to Leetown Road (Co road 1)	1940s	15' +/- by xx miles	dirt	good	hiking		X	
	north south, parallels Leetown Road	1940s	xx miles	unknown				X	
	Leetown Road	1940s	xx miles	dirt	good	poor to good		X	
	around fields / woods (Obersons)		xx miles	unknown	mown???	hiking		×	

The Tour Road includes culverts, small bridges, parking areas, and pedestrian crossings. From the visitor center, it extends westward along a one-way route with opportunities to stop at ten locations.

Each of the ten interpretive stops convey an important aspect of the park's history or the role of the specific location in the battle. Each stop includes a parking area with spaces for recreational vehicles or buses and passenger cars. The size of each varies, depending on the role of the location in the interpretive story. Each parking area is located either just off Tour Road or is immediately adjacent.

- Tour stop 1 (HQ Picnic Area Parking Rt 904) is a parking area of eight spaces with two RV/bus spaces, located immediately north of the Tour Road. It includes a picnic area, interpretive sign and a narrow path that extends north. To the north, and parallel to the parking area, is the original route of Telegraph Road that was also the route of the Trail of Tears. This route is now a rutted road trace that extends east / west. This tour stop interprets the Trail of Tears, Butterfield Overland Stage and Telegraph Road that was used by both armies during the battle.
- Tour stop 2 (EH Curtis Headquarters) is located north of the Tour Road in a cleared area. It interprets the location of the Union commander General Samuel Curtis' headquarters. This is one of the larger tour stops with ten spaces and two RV/bus spaces, a sandstone wall that surrounds the west edge, and an interpretive sign. Just northwest of the parking area is a remnant foundation built by NPS personnel from HPTC and park staff as an interpretive element.
- The third tour stop (LB Leetown Hamlet) is on the south side of the Tour Road, just before it turns to the north. This stop consists of a small parking area

- of four spaces, an interpretive sign and a path leading to the south. After a few feet, the path connects to the alignment of Old Leetown Road, originally built in the 1830s and improved as a county road in the 1940s. This stop interprets Leetown Hamlet that served as a Union field hospital.
- Leetown Battlefield is the fourth stop. Both the Tour Road and parking area are within the battlefield where, on March 7th, the Confederate attack through the woods failed to defeat the Union army deployed along Oberson's south fence line. This is the location where two Confederate generals, Ben McCullock and James McIntosh, were killed. The parking area consists of twelve spaces and two RV/bus spaces, interpretive signs, artillery that depicts the battle, and mown paths into the field to access the artillery pieces.
- Tour stop 5 is where the two armies collided. It is in an open clearing on the edge of the forest. This stop does not have parking, but has a pull-off for two cars and an interpretive sign. There are mown paths that lead to the artillery pieces in the fields.
- The west overlook is the sixth tour stop, and is located on the plateau of Elkhorn Mountain. This stop consists of a large parking area with spaces for fifteen cars and two RV/buses. A large terrace, enclosed on the south by sandstone stacked walls, is the primary element of the overlook. In the center of the terrace is an interpretive display that includes a sundial and markers that identify the nearby Boston Mountains, fourteen miles to the south, from which the Confederates advanced to Pea Ridge. This area is completely enclosed by forest vegetation.
- Tour stop 7 is the east overlook that consists of a large parking area with spaces for twelve cars and two spaces for RV/



- Existing Tour Stop at 1963
- × 1963 Stop (non-extant)
- 9 Existing Tour Stop (after 1963)



Figure 3-21. The 1963 construction of the tour road included tour stops to provide interpretation. Most remain (MB: Interpretive stops analysis 1963 vs 2013.pdf).



Figure 3-22. Tour stop 6 is the west overlook (MB: DSC_0605.jpg).

buses. An ADA-compliant concrete path extends downhill from the southwest edge of the parking area for 460 feet into the forest, arriving at a small shelter and round terrace. The shelter, built as part of the Mission 66 program, affords a broad open view of the battlefield landscape. Along its exterior wall are interpretive signs that describe the battle that was fought below.

- Elkhorn Tavern is the eighth tour stop, and is located at the base of Elkhorn Mountain on the east side of the park. This parking area has thirteen spaces for cars and two RV/bus spaces, a sandstone path that leads to the building and an interpretive sign. This stop commemorates the important role of Elkhorn Tavern as a battlefield, headquarters and field hospital.
- Tour stop 9 is a pull-off, south of and immediately adjacent to the Tour Road at Ruddick's Field. The pull-off accommodates four vehicles. An interpretive sign describes the Confederate charge of March 7, 1862, and the role that Telegraph Road and Ruddick's Field had in the Trail of Tears. A remnant of Telegraph Road is to the south of the Tour Road.
- The tenth (and final) tour stop within the main portion of the park is where the Union artillery deployed on the morning of March 8th. The stop is a pull-out set immediately adjacent to the Tour Road on its north edge with space for four cars. A mown path extends into the adjacent field where cannon denote the line of artillery and an interpretive sign describes the battle.
- An eleventh tour stop is at the Federal Trenches in the discontiguous southern section of the park. This is where the Union army built several trenches just prior to the Pea Ridge battle. This stop is not along the Tour Road.^{3.15}



Figure 3-23. An asphalt path leads from the parking area to the east overlook (MB: DSC_0610.jpg).

The Tour Road is in fair condition, although it has been prone to sinking since its construction in 1963. Repairs were made to the asphalt surface, gravel shoulder, culverts and bridges in the late 1980s and again in 1992.

The Tour Road remains very similar to its 1963 construction, particularly in alignment and width.^{3.16} Unfortunately, portions of the Tour Road were built over the historic alignment of Telegraph Road, and several segments cross over or along other 1830s roads. This diminishes the integrity of Telegraph Road and the 1830s roads. The Tour Road creates a false sense of movement through the battlefield landscape as it has a circulation pattern that did not exist historically, and that does not convey the historic movement through the site. The Tour Road is a non-contributing feature to the cultural landscape. The Tour Road was designed and built as part of the NPS Mission 66 program and retains integrity as it remains in the same alignment, is of similar materials and width, and is characteristic of its original construction.



Figure 3-24. Old Highway 72 (PICT_0216.jpg).



Figure 3-25. Highway 72 transects the park, dividing Leetown Battlefield into two parts of which the westernmost section is not accessible (MB: DSC_5806.jpg).



Figure 3-26.U.S. Highway 62 provides vehicular access to the park. The route of the highway is being reconsidered with plans for its relocation south of the park boundary (MB: DSC_0573.jpg).

The tour stops are in fair condition. They are non-contributing features as they were not present during the period of significance. Five of the ten extant tour stops were built in 1963, as part of the original seven primary tour stops proposed by the master plan.^{3.17} Two other extant stops were proposed as intermediate stops in the master plan. Today these tour stops are 2, 4, 5, 6, 7 and 8. Tour stops 5 and 10 were those proposed to be intermediate stops. Tour stop 3 may also be original to the 1963 construction as it is in the planned location but is of a smaller, simpler configuration than noted on the original drawings. One proposed tour stop, northeast of Elkhorn Tavern, was never built. Several additional intermediate stops were proposed for Clemens', Huntsville Road and Winton Springs, but were never built.

All seven tour stops built in 1963, as part of the NPS Mission 66 program remain in their original locations and resemble the original 1963 construction. Five tour stops were built after 1965: 1, 3, 7, 9 and 10. Tour stop 7, the east overlook, retains integrity as it is very similar to its original construction and retains original materials. The parking area is in the same alignment and material as it was originally. Minor modifications to the shelter have been accomplished in a manner that preserves its original character.

Other 1963 tour stops have been modified (2, 5, 6); or are in locations and arrangements that diminish the integrity of the historic battlefield (4, 5, 8). Modifications include removal of original material such as sandstone walls and addition of concrete walkways.

Old Highway 72

Old Highway 72 was built in the 1920s. It followed an east / west alignment along the section line until it neared Elkhorn Tavern at which point it veered slightly to the southeast. In places, the highway was built over and obscured Ford Road as it traversed along the base of Elkhorn Mountain.

Old Highway 72 was demolished after the park was established in 1956 and before it opened in 1963. Traces of the highway, including road base, exist in places. Remnants of asphalt pavement exist in areas on the west end of Ford Road, and on the service road between Telegraph Road and Ford Road. Old Highway 72 was not present during the period of significance and is a non-contributing feature.

Highway 72

Highway 72 is an Arkansas state highway. This two-lane asphalt paved road extends along a north / south route for most of the west side of the park. The highway turns west towards the town of Pea Ridge on the park's north edge. Within the park, Highway 72 connects with U.S. Highway 62 near the park's south boundary. Highway 72 is in good condition.

Highway 72 crosses several historic agricultural fields that were part of the Battle of Pea Ridge on March 7, 1862. The highway divides Foster's Farm and Mayfield's Cornfield, and separates Lee's Cornfield from the remainder of the park. Highway 72 diminishes the integrity of the park and is a non-contributing feature.

U.S. Highway 62

U.S. Highway 62 is a two-lane asphalt paved road that extends across northern Arkansas and connects the towns of Bentonville and Eureka Springs. The road was built in the 1930s. This road currently extends through the park at the south edge. It is the primary vehicular access into the park and to the visitor center. The portions of U.S. Highway 62 within

^{3.17 1963} master plan.



Figure 3-27. Ford Road along with portions of the demolished Highway 72 are used by park staff and by pedestrians, cyclists, and equestrians (MB: DSC_0346.jpg).



Figure 3-28. Portions of Ford Road were converted into Highway 72 in the 1920s, which followed the base of Elkhorn Mountain. The highway was removed after the establishment of Pea Ridge NMP in the 1960s (Ford Road old 72.jpg).

the park are under consideration for rerouting. The road is scheduled to be removed from the park in 2014. A portion of the road will become the new entrance road into the park. The future alignment of the highway is expected to be along the park's southern boundary. Most of the existing road within the park will be demolished.

Ford Road

Ford Road is a two-rut road trace extending east/west at the base of Elkhorn Mountain. It connects to Telegraph Road on the east. The road is approximately eight-feet wide, and is worn and rocky. The alignment is obscured in some sections, and in others it is eroded. Today, Ford Road serves as part of the park's loop trail and for bicycle use. Ford Road is in fair condition.

Ford Road was built with the early Euro-American settlement of Pea Ridge in the 1830s prior to the Civil War. It was an important feature during the Battle of Pea Ridge. During the morning of March 8, 1862, Union troops advanced from Leetown Hamlet to clash with the Confederates along Ford Road. After the battle, the road continued to be used by the local community. Highway 72 was built along or adjacent to Ford Road. It is possible that portions of Ford Road were covered by and became part of Highway 72. Today, Ford Road generally follows its original alignment, although portions were disrupted by Highway 72. Ford Road is a contributing feature.

Foster's Lane

Foster's Lane lines two fields on the west side of the park. The east/west route follows the south edge of the field, and north/south route follows the field's west edge. Foster's Lane is a worn road trace, approximately eight-feet in width. The road travels along the north edge of Oberson's Field before turning north at Mayfield's Corn Field. The



Figure 3-29. Ford Road is a worn, two-rut track road trace. (MB: DSC_0331.jpg)



Figure 3-30. Foster's Lane is a narrow route that is part of the park loop trail. (MB: DSC_0335.jpg)



Figure 3-31. Winton Springs Road is paved, and the bridge has been rebuilt. It provides access to the horse trailhead (MB: IMG_5835.jpg).



Figure 3-32. Winton Springs Road accessed the Winton Springs House, which was used as park headquarters before the 1960s. The route was a gravel and dirt lane that crossed a small drainage and ascended the hill (June 9, 1974 Winton Springs house.jpg).

north/south portion of the road is narrower, at approximately six- feet, and travels through dense forest. Foster's Lane is currently a pedestrian trail, and part of the park loop trail. It is in poor to good condition.

Foster's Lane was likely established in the mid-1800s, and was in place during the Battle of Pea Ridge. Foster's Farm was the initial point where the battle began on March 7, 1862. The road likely assisted the Confederacy in their advance and confrontation with the Union army. After the battle the road was likely used by the local community, but by the time the park was established in 1956, the road was not readily discernible.

Foster's Lane is a contributing feature as it was present during the period of significance and played a role in the battle.

Oberson Road

This road extends from Foster's Lane, where it intersects Leetown Road, to the Ruddicks house site where it intersects with South Road. The road is generally a rutted dirt track, approximately six to eight-feet wide, and passable on foot and all-terrain vehicles. The road is not in current use and is in poor to fair condition.

This road is noted as being Oberson Road in the 1963 master plan, following the same alignment as it does today but extending further to the east to connect to Highway 72. The 1963 master plan proposed to preserve the road as a historic road trace.^{3.18} The road is noted on Bearss 1965 map and as a historic road on Weih's map. This road was likely established in the mid-1800s, and was in place during the Battle of Pea Ridge.

Oberson Road is a contributing feature as it was present during the period of significance and played a role in the battle.

3.18 1963 Master Plan, sheet G-9

Winton Springs Road

This route extends from the Tour Road to the Winton Springs house site, through the horse parking area (where the road is not discernible), and then north to Lee Creek Road where it intersects Lee Creek. The segment between the Tour Road and house site is asphalt paved and approximately fourteen-feet wide. Just after the intersection with the Tour Road, the road crosses Winton Springs Branch via a bridge. Portions of the bridge are of masonry construction. To the east is a low water crossing set at the elevation of the stream. The road ends in a wide gravel parking area. The road and gravel parking area are in good condition.

The road segment north of the horse parking area was not reviewed during the June 2013 field investigations. According to park staff, this segment is generally a rutted dirt track in a poor to fair condition, passable on foot and all-terrain vehicles, and is not in current use.

This road was identified as Winton Springs Road in the 1963 master plan, where it appeared to follow the same alignment from the Tour Road to the house site as it does today. The road segment to the Winton Springs House was either established to access the house site when it was built or was improved at that time following an earlier alignment from the 1830s. The road is evident in 1940 aerial photographs. The Winton Springs Road was likely improved by the NPS in the 1950s, when they used the house as headquarters, administrative facilities and as staff housing. The low water crossing appears to predate the existing road and bridge. This road is noted on Bearss' 1965 map and as a historic road on Weih's map as being in place during the Battle of Pea Ridge. The original route may have been established as early as the mid-1800s.

Winton Springs Road is a contributing feature as it was present during the period of significance.



Figure 3-33. Leetown Road is a worn road trace covered with unmown grasses. It was an important route used by both armies during the Battle of Pea Ridge. It played an important role in transporting the wounded from Leetown Battlefield to the Union field hospitals in Leetown Hamlet. (MB: DSC_0260.jpg).

Leetown Road

Leetown Road extends north from Leetown Hamlet to Ford Road following a north / south alignment. Refer to Leetown Hamlet landscape character area for the section within Leetown Hamlet. From the Tour Road to the north, Leetown Road is an earthen road, approximately six-feet wide that serves as a park trail. In some areas, the route is rutted with some erosion. Leetown Road is in fair to good condition.

Leetown Road was identified as Round Top Road in the 1963 master plan with a route that appears to follows the same alignment as it does today. The route was proposed to be preserved as a historic road trace. Both Bearss and Weih identified the route as being in place in 1862. The route was barely discernible in 1940s aerial photographs, but appears in the 1899 Fayetteville quadrangle map.

Leetown Road is a contributing feature as it was a critical transportation route and corridor for the 1862 battle. The road was present during the Battle of Pea Ridge, and was the route taken by the Union army as they advanced north from Leetown Hamlet to fight the Confederates. The road also served as transport for wounded soldiers.

Lee Creek Road

This route extends from Leetown Hamlet to Ford Road following Lee Creek. This road was not reviewed during the June 2013 field investigations. From park staff descriptions, this route is an earthen road trace. The majority of this road was washed out by a flood in the mid-1970s.

In the 1963 master plan, this route was identified as Leetown Road and was proposed to be preserved as a historic road trace.^{3,20}

^{3.19 1963} master plan

^{3.20 1963} Master Plan.

Both Bearss and Weih identified the road as being in place in 1862. Segments of the road are visible in the 1940 aerial photographs. Only the northern segment appears in the 1899 Fayetteville quadrangle map.

Lee Creek Road is a contributing feature as it was present during the Battle of Pea Ridge.

Old Leetown Road / County Road

Old Leetown Road is an east / west route that extends from the park's western boundary to Leetown Hamlet, continuing east to U.S. Highway 62. The route varies from a gravel road of an approximate fifteen-foot width to an earthen alignment edged by rows of trees. The abandoned portion of Leetown Road between Highway 72 and Leetown Hamlet is overgrown and the road trace is barely visible. The park loop trail follows this road from Leetown Hamlet to U.S. Highway 62 where the trail turns northeast to follow the Tour Road. The condition of the route varies from poor to fair.

To the west of Highway 72, and outside the park boundaries, Old Leetown Road connects to the town of Pea Ridge and is known as Leetown Road. This road is a two-lane asphalt paved road that follows a portion of the south edge of the park. It serves local traffic, and is in good condition.

In the 1963 master plan, this route was unnamed and was proposed to be obliterated. This was likely due to it not being on Bearss' 1862 plan. Weih identified this route as one of the 1940s county roads.^{3,21} However, this road is evident on the 1899 Fayetteville quadrangle as one of the area's main roads. It was also a primary route in the 1940s aerials. Old Leetown Road / County Road is a contributing feature as it is likely that the alignment was present during the period of significance.



Figure 3-34.0ld Leetown Road where it parallels the tour road (MB: DSC_0113).



Figure 3-35. Portions of Telegraph Road were integrated into the Tour Road construction in the 1960s, between Elkhorn Tavern and the visitor center (MB: DSC_0689.jpg).



Figure 3-36. Telegraph Road at Elkhorn Tavern, looking southwest towards the Tour Road (MB: DSC_0197.jpg).

County Roads 1, 2, 3, 4, and 5

Several road traces remain from the construction of county roads in the 1940s. Some likely followed earlier road alignments, but these newer roads were improved along straighter and wider alignments to accommodate higher speed vehicles. In some cases, the earlier route was covered by the newer road surfacing, but in others the route was along side the existing road. Included within this construction were shorter routes to individual properties.^{3.22}

The county roads are non-contributing features as they were not present during the period of significance.

Pratt's Road

According to Bearss and Weih, Pratt's Road was an L-shaped route located just to the north of Telegraph Road and the Tour Road, near tour stop 2. Pratt's Road would have historically connected to Telegraph Road and turned to follow Winton Springs Branch. The actual location and alignment of Pratt's Road is unknown. This road was not reviewed during the June 2013 field investigations.

In the 1963 master plan, Pratt's Road was proposed to be preserved as a historic road trace.^{3,23} A slight trace of a linear feature is visible in the 1940s aerial photographs. Further research is needed to identify the location and alignment of Pratt's Road. If extant, this road would be a contributing feature.

Telegraph Road / Old Wire Road

Telegraph Road generally follows a northeast to southwest route through the park. Within the study area, Telegraph Road extends from the park's northern boundary to the Federal Trenches. The road varies in road type, surface materials, width, and condition

depending on its location within the park. In some locations the original route was covered by the construction of the Tour Road in 1963 such as the segment between Elkhorn Tavern and Ruddick's Field.

Near the Federal Trenches, Telegraph Road is located to the east of the park boundary and connects to Sugar Creek Road.

Telegraph Road is a road trace for most of its length within the park. The road trace is typically a rutted route obscured by vegetation. Near tour stop 1, the road trace is to the north of the Tour Road and is interpreted as the Trails of Tears route. West of this area, between the Tour Road and U.S. Highway 62, the route is a road trace. An original segment is thought to be located south of U.S. Highway 62 outside the park and near the potential location of Pratt's Store. East of Ruddick's Field is a road trace on the south side of the Tour Road. North of Elkhorn Tavern, Telegraph Road is generally a narrow, rocky two-rutted road trace.

Telegraph Road varies from poor to fair condition depending on the segment.

Telegraph Road was originally built between 1830 and 1835 as the Springfield to Fayetteville Road.^{3,24} The original twenty-five foot wide track was the primary route between Springfield, Missouri and Fort Smith, Arkansas. As a major route in the state, Telegraph Road served many functions including as one of the northern routes of the Trails of Tears between 1837 and 1839, as the route of the Butterfield Overland Stage, and by 1860, as the route of the first telegraph line in northwest Arkansas.

 $^{3.24\} Arkansas\ Register, Spring field\ to\ Fayette ville\ Road.$

^{3.22} Weih, 2006.

^{3.23 1963} master plan.

Telegraph Road Chronology

1830 to 1835	The Springfield to Fayetteville Road that would later be named Telegraph (Wire) Road was built between 1830 and 1835, as a 25-foot wide track.
	The road was the primary route between Springfield, Missouri and Fort Smith, Arkansas. Within the study area, the original Telegraph Road extended from the Bentonville Detour to the Federal Trenches.
	As Telegraph Road became a major thoroughfare for the area, stage stops were developed at Elkhorn Tavern and Brightwater.
1837 to 1839	Telegraph Road became part of the northern route of the Trail of Tears as thousands of American Indians were evicted from their homes in the east and forced to move to Indian Territory (Oklahoma) in the west.
1858	Telegraph Road became the route of the Butterfield Overland Stage. The effort was short-lived. The Butterfield ran a distance of over 2000 miles starting in Tipton, Missouri and extending through northwest Arkansas, ending in San Francisco.
1860	By 1860, Telegraph Road was the route of the first telegraph line in northwest Arkansas. The wire strung along the road gave Telegraph Road its name (also called Wire Road). The telegraph line ran from Springfield, Missouri to Fort Smith, but was cut less than a year later when Arkansas seceded from the Union in 1861.
March 5, 1862	Telegraph Road was used by Union troops as early as March 5th, 1862, when the army was entrenched above Little Sugar Creek and General Curtis was encamped at Pratt's Store. With the army's supplies at Elkhorn Tavern, the road was used by Union troops for communication and transportation between these points. ^{3,25}
March 7, 1862	The northern segment of Telegraph Road was used by Van Dorn and Price of the Confederate army. They reached Telegraph Road via the Bentonville Detour early on the morning of March 7, 1862, and then fought their way up Cross Timber Hollow along Telegraph Road. 3.26
Late 1862	After the battle, Telegraph Road was used by the Union army until they decamped in late 1862.
1899	The road appears on the 1899 Fayetteville Quadrangle.
1940s	The road appears in 1940 aerial photographs.
1963	The Tour Road was built over portions of original alignment.

^{3.25} Bearss, Leetown, Elkhorn Tavern Grounds, Federal Earthworks, and Tanyard as of March 1862, 43. 3.26 Bond, John W. The History of Elkhorn Tavern, 12.



Figure 3-37. Telegraph Road in the 1960s, just east of Elkhorn Tavern (PICT0029.jpg).



Figure 3-38. Telegraph Road in the 1960s (Early overhead plane view of PERI.tif).



Figure 3-39. Huntsville Road: the view towards Elkhorn Tavern along the current-day alignment (MB: IMG_5752.jpg).

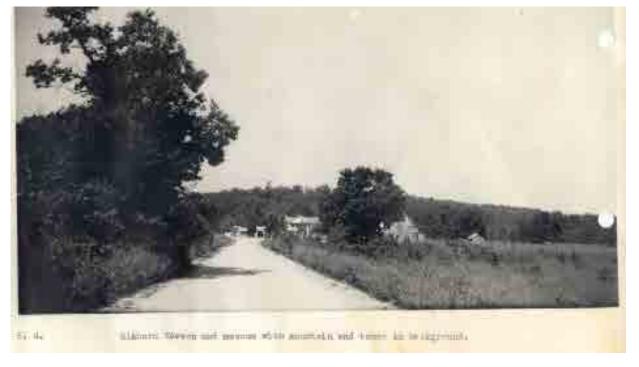


Figure 3-40. The view to Elkhorn Tavern along Huntsville Road in 1940 reveals that the road was a narrow gravel surfaced road (Elkhorn Tavern and Museum with mountain and tower in background-1940.jpg).

During the Battle of Pea Ridge, Telegraph Road was a major transport route. The road was used by Union troops as early as March 5th, 1862, when the army was entrenched above Little Sugar Creek and General Curtis was encamped at Pratt's Store. With the army's supplies at Elkhorn Tavern, the road was used by Union troops for communication and transportation between these points.^{3.27}

The northern segment of Telegraph Road was used by the Confederate army. Van Dorn and Price reached Telegraph Road via the Bentonville Detour early on the morning of March 7, 1862. They then fought their way up Cross Timber Hollow along Telegraph Road.

After the battle, Telegraph Road was used by the Union army until they decamped in late 1862.^{3,28} The road appears on the 1899 Fayetteville Quadrangle and other 1900 era area maps, and on 1940 aerial photographs.

The historic road and road traces of Telegraph Road remain in place in many segments, and the general alignment of the other historic segments are relatively known. Even though segments were covered by the 1963 construction of the Tour Road, most of the road remains intact and its alignment discernible.

Telegraph Road is a contributing feature. It was present during the period of significance and played a major role as a transportation route during the Battle of Pea Ridge. The road is also significant for its association with the Trail of Tears National Historic Trail, the Butterfield Overland Stage, and as the route of the first telegraph line in northwest Arkansas.

Huntsville Road

Huntsville Road extends from Elkhorn Tavern east to the edge of Clemens' Field, at which point it turns to the north to follow the west edge and then the north edge of the field. From Clemens' Field it extends to the east to the park boundary. The road is a mown grass-covered road trace, approximately eight-feet wide. Near Elkhorn Tavern, the road alignment is lined with fences. Beyond this area, to the east, the road trace visible in some locations, particularly along Clemens' Field. The road trace is in fair to good condition.

Huntsville Road was originally built in the 1830s. During the Battle of Pea Ridge, the road was the route of the Confederate retreat on March 8, 1862. The route is visible on the 1899 Fayetteville quadrangle and 1940 aerial photographs. The route was proposed to be preserved as a historic road in the 1963 master plan.

Today the mown route near Elkhorn Tavern, in comparison to historic mapping (1940 aerial photographs), appears to be similar to the original historic route. Further field investigations should be undertaken to identify the physical traces of the road in this area.

Huntsville Road is a contributing feature as it was present during the period of significance and played an important role in the Battle of Pea Ridge.

South Road

This route extends from Old Leetown Road near the intersection of the Tour Road and Telegraph Road to Huntsville Road at Clemens' Field. More than half of the road is south of U.S. Highway 62, outside the study area. The segment within the park, north of U.S. Highway 62, was reviewed during the June 2013 field investigations. This segment, near Ruddick's Field and along the north edge of Clemens' Field, is a maintained grass-covered road trace,

^{3.27} Bearss, Leetown, Elkhorn Tavern Grounds, Federal Earthworks, and tanyard as of March 1862, 43.3.28 Bond, John W. The History of Elkhorn Tavern, 12.



Figure 3-41. South Road near Clemens' Field (MB: img_5803.jpg).

approximately eight-feet wide. From Clemens' Field to Ruddick's Field the road is part of the park's loop trail.

The 1963 master identified the segment of South Road within the park, to the north of U.S. Highway 62, as Ruddick's Road. It proposed that it be preserved as a historic road. Bearss and Weih identify this route as being present in 1862. The route is not on the 1899 Fayetteville quadrangle, and is barely discernible on the 1940 aerial photographs.

As part of the relocation of U.S. Highway 62, the full extent of South Road should be evaluated. The future alignment of the highway is expected to be along the park's southern boundary.

South Road is a contributing feature as it was present during the period of significance.

Alvin Seamster Road

This route extends from Telegraph Road at the northern park property line on a south / east alignment to Huntsville Road. This road was not reviewed during the June 2013 field investigations. According to park staff, the road is a remnant of a narrow gravel paved road.

According to the 1963 master plan, this route was the County Bypass Route, maintained by the county maintained road. It was to remain. The road appears on the 1940s aerial photograph but is less visible on the 1960s aerial photograph.

This road is non-contributing feature as it was not present during the period of significance.

Dodd Road

Dodd Road, on the west side of the park, is a north/south route between Highway 72 and the Bentonville Detour. It is a gravel road, approximately twenty-feet in width, used as a vehicular route. The road extends along the park boundary for the south portion of the route, with the historic Patterson's farm to the east and private land on the west. The north portion is bordered by park land on either side, and extends through forest before ending at a stop sign at Bentonville Detour. The road is in good condition.

Dodd Road was likely established in the mid-1800s, and in place during the battle. The road likely assisted the Confederacy in their advance and confrontation with the Union army. As the confederates advanced, General McCullogh descended south, along the west edge of Elkhorn Mountain. Dodd Road is likely one road that troops took on their route south, before clashing with the Union army at Leetown Battlefield. The 1963 master plan identified this as Prairie Road. Dodd Road is a contributing feature as it was present during the period of significance and played a role in the battle.

Twelve Corners Road

This route extends from Ford Road to the Bentonville Detour, north of the park. It follows the natural topography of Elkhorn Mountain and extends through forest. This road was not reviewed during the June 2013 field investigations.

Twelve Corner's Road was likely established in the mid-1800s, and in place during battle. The road assisted the Confederacy in their advance and confrontation with the Union army, and was a route troops took on their south march to Leetown Battlefield. It is possible that the road continued to be used by the community after the battle. Use of the road must have waned because the route

is not on the 1899 Fayetteville quadrangle. It is not visible on the 1940 or 1960s aerial photographs, and does not appear on the 1963 master plan. Twelve Corners Road is a contributing feature as it was present during the period of significance and played a role in the battle.

Study Area

Contributing Circulation Features

- Ford Road
- Foster's Lane
- Oberson Road
- Winton Springs Road (Lee Creek to Tour Road and gravel parking area to Lee Creek)
- Leetown Road
- Lee Creek Road
- Old Leetown Road (further research)
- Pratt's Road (further research)
- Telegraph Road (also known as Old Wire Road, Trail of Tears, Butterfield Overland Stage, Springfield to Bentonville Road)
- Huntsville Road
- South Road
- Dodd Road
- Twelve Corners Road

Study Area

Non-Contributing Circulation Features

- Tour Road
- Old Highway 72
- Highway 72
- U.S. Highway 62
- County Roads 1, 2, 3, 4 and 5
- Alvin Seamster Road
- Park Loop Trail
- Horse Trail



Figure 3-42. The visitor center was modified in 2000. A peaked roof was added and additional space was built for administrative functions and museum exhibits (MB: DSC_0570.jpg).



Figure 3-43. The visitor center was originally a single-story museum, office and maintenance space designed and built as part of the NPS Mission 66 program (1960s view of VC only.tif).

Buildings and Structures Existing Condition and Analysis

The buildings and structures of Pea Ridge NMP include those extant at the time of the battle and reconstructed afterwards, others built after the battle, and elements built to commemorate the battle. Remnants and foundations of former buildings exist in several locations, and the locations of others are known but have no above-ground remains. Most of the park's buildings and structures are those built in the 1960s, as part of the development of the national park. These include visitor, administrative and maintenance buildings and structures.

The only extant historic building within the park is Elkhorn Tavern, which was built beginning in 1833, and reconstructed after the battle. Elkhorn Tavern and its associated non-extant outbuildings and structures are described and evaluated in more detail within the Elkhorn Tavern landscape character area.

Other buildings and structures important to the battle were those of Leetown Hamlet, established in c. 1840, that included from ten to fifteen buildings at the time of the battle. This area is described and evaluated in more detail within the Leetown Hamlet landscape character area.

During the Battle of Pea Ridge, the study area included many buildings and structures associated with the area's agricultural heritage. These included private dwellings, barns, stables and other outbuildings. Within certain areas such as Leetown Hamlet and along Telegraph Road, there were public buildings, stores and lodging for travelers. Structures included those for agricultural operations and subsistence including wells and spring boxes. Some of these structures remain.

Visitor Center

The Pea Ridge NMP visitor center was built in 1965 in compliance with the 1963 master plan. The building was designed in the Mission 66 style as a single-story structure that provided park information, museum exhibits, an audio-visual program, a gift shop, and maintenance and office space.

The building has been modified several times since its original construction. Early changes included a new roof in 1970, a boiler room in 1984, and new walls, interior spaces and electric panel in 1989. The most extensive modifications occurred in 2000, with the addition of a new south façade and a pitched roof that extended over the original flat roofs. New interior space was created for the gift shop and exhibit spaces. The visitor center is in good condition.

The visitor center is a non-contributing feature as it was not present during the period of significance. The location of the building and its visibility from some locations along the Tour Road and from the battlefield diminish the integrity of the cultural landscape. At the time of construction, the building was constructed in an area thought to be outside of the battlefield. It was intended to be visible to the arriving visitor and to offer a "panoramic view starting at Round Top, and traversing the full length of Pea Ridge to Elkhorn Tavern." The site was to become "essentially wooded" to screen the building from the battlefield.^{3.30}

The 1984 NRHP noted the building as historic, likely due to its design and construction as part of the Mission 66 program. Since that time, the building has undergone several modifications that have significantly altered its exterior façade, roof line and footprint.

^{3.29 1963} master plan.

^{3.30 1963} master plan, sheet G-4.



Figure 3-44. These twin buildings were originally designed for staff housing as part of the NPS Mission 66 program in the early 1960s. They are now used as administrative space (MB: DSC_0557.jpg).



Figure 3-45. The maintenance structures and yard is gated and screened with vegetation (MB: IMG_5819.jpg).

These modifications obscure the original simple Mission 66 design to the extent that it is no longer recognizable.

The GMP/EIS recommends relocating visitor and administrative functions to a new location on the west side of the park.

Administrative Facilities

Two administrative offices are located to the west of the visitor center, near U.S. Highway 62. The buildings are identical, single-story wood frame structures that provide offices for cultural and natural resources staff and administrative staff. The two buildings were built in 1965, in accordance with the 1963 master plan. They were originally designed as on-site staff housing.^{3,31} The buildings are in good condition.

The buildings were converted to administrative facilities in 1995, at which time the single-car garages were modified to provide additional interior space. Aside from the removal of driveways and modifications to create a parking area, the buildings and site remain similar to their 1963 construction. The 1984 NRHP noted the buildings as historic, likely due to their design and construction as part of the Mission 66 program.

The administrative buildings are noncontributing features as they were not present during the period of significance.

Maintenance Facilities

The park maintenance area is located to the west of the administrative buildings on the south side of the Tour Road. The area consists of six buildings and one structure, and a maintenance yard.

Four buildings are within an enclosed area lined by a chain-link fence and screened with vegetation. Two buildings are outside the fence.

The maintenance facility provides storage for park maintenance equipment and work space for repairs. One is the park cache, providing an area for the fire truck and related fire equipment. Another is the roads, grounds and trails building. This houses the grounds equipment and shop. A lean-to structure houses grounds equipment. Another building houses hazardous materials (HAZMAT). The buildings outside the fence are used for the Black Powder program by the interpretive division. Two buildings were built in 1965, and others were added in 1993, 2004, 2006 and 2010. The maintenance area is in good condition.

The maintenance buildings and structures are non-contributing features as they were not present during the period of significance.

East Overlook Shelter

This structure was built by the NPS as part of the 1963 master plan and was finished in 1965. The shelter is a circular openair structure, built on the edge of Elkhorn Mountain providing a panoramic view of the battlefield below.

The shelter is a wood frame structure with a wood frame roof that overhangs the entire space. A low stone masonry wall surrounds the south half of the shelter. The north half is open and connects to the walkway to the parking area. Interpretive panels mounted on a railing on the stone wall provide descriptions of the battle that occurred below. Seating is provided within the interior on a circular bench attached to the central core of the structure. Openings in the central wood structure include windows and a door.

^{3.31 1963} master plan.



Figure 3-46. Today the east overlook shelter is very similar to its 1960s design. The interior space is occasionally used by interpretive staff. The interior was rehabilitated in 2011. Interpretive panels are mounted on the edges of the original stone wall (MB:DSC_0622.jpg).



Figure 3-47. The shelter at the east overlook was built in 1963 as part of the NPS Mission 66 program, to provide a panoramic view of the battlefield. The interior of the structure has a small room used by park staff for interpretation. (Interpretive shelter east overlook 1960s.tif)



Figure 3-48. The east overlook shelter includes interpretive panels mounted to the original stone wall, above (MB:DSC_0175.jpg). Openings between posts and stonework exceed present-day ABAAS standards (MB:DSC_0629).



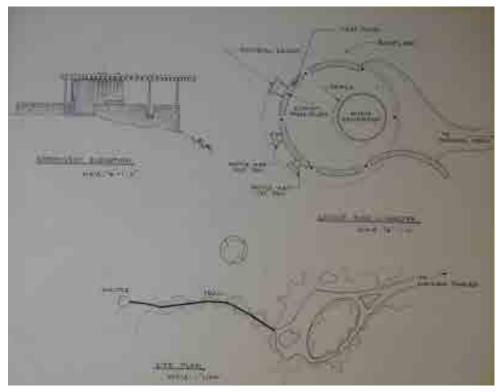


Figure 3-49. The east overlook was designed in the round to afford panoramic views of the battlefield. This floor plan remains (MB: DSC_0542.jpg).



Figure 3-50. In 2013, the Winton Springs House foundation was covered with vegetation, obscuring most of the foundation (MB: IMG_5823).

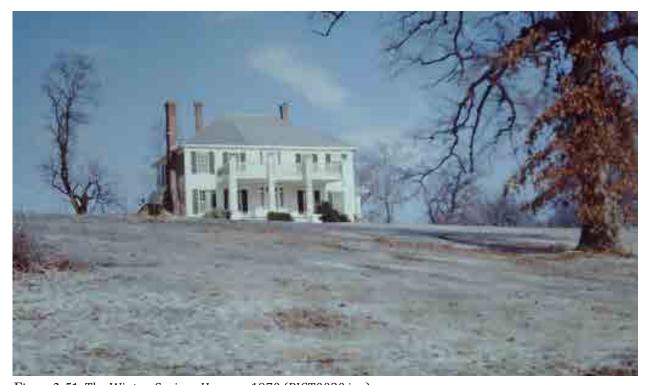


Figure 3-51. The Winton Springs House, c.1970 (PICT0020.jpg).

Enclosing the small shelter and round terrace is a semi-circular stone wall of stacked sandstone, approximately one-foot wide and three-feet high. The wall curves and extends to the northeast beyond the shelter for about fifteen-feet.

The east overlook shelter was designed and built as a part of the Mission 66 program to provide panoramic views of the battlefield to the park visitor. The use of stone and wood, the streamline modern design of the shelter and its expansive overhanging roof are indicative of the Mission 66 style and were compatible with the original visitor center building. The interior of the structure was designed for use by park staff, accessed through the door. The windows open so that park staff can interact with visitors. The door and windows are open when the east overlook is staffed with interpreters.

The east overlook shelter is a noncontributing feature as it was not present during the period of significance. The shelter retains integrity to its original design as part of the Mission 66 program.

Winton Springs House Foundation

The foundation of the Winton Springs House is extant, and consists of a stone base on which ten-inch square timbers are set. A set of concrete steps occur on the east side. The square timbers appear to be hand-hewn with notched ends and rest on top of the stone foundation. In some places they have fallen over. The foundation is generally obscured by unmown grasses and other vegetation. Where most intact, the stone foundation is approximately three-feet above grade, and formed of large rectangular limestone blocks. Other parts of the foundation have fallen, sunken or been filled by the surrounding soil. A worm fence separates the area around the foundation from the adjacent parking area on the north.



Figure 3-52. The Winton Springs House was demolished in the 1990s after recommendations for its removal were made. The foundation remains, including hand-hewn timbers set on a flagstone base (MB: IMG_4237.jpg).



Figure 3-53. Two small identical structures flanked the source of Winton Spring. It is unknown when they were built or removed (Winton Springs spring houses#1.tif).

Winton Springs House Chronology

1860s, Civil War era	The original Winton Springs House was built prior to the Civil War (estimated).
1904 to 1915	Winton Springs House was modified.
1956	The building was used as a residence for the park superintendent when Pea Ridge NMP was established.
1960s	The building was modified into two apartments to provide housing for park staff.
1965	The building was in disrepair. There were problems with the well water that led to recommendations for the building's removal.
1973	The historic structures report indicated that the building, in a different form, was present at the time of the battle; and was important as a style of grandiose rural residential architecture relatively rare in the region.
1984	The NRHP noted the building as historic.
1993	Due to estimates of costly repairs, the building was razed. Demolition was stopped when the foundation revealed materials and construction techniques indicative of the Civil War era.



Figure 3-54. The remnant log cabin in Morgan's Woods to the west of Lee Creek is a brick foundation with hand-hewn, squared log timbers with dove-tail joints. The cabin measures twenty-feet by sixteen-feet (MB: DSC_0273.jpg).

The Winton Springs House foundation is in fair condition as sections of it are still relatively intact and provide a sense of the scale and construction of the building. Other sections have fallen, making it difficult to completely discern the original building footprint. In addition to the remnant foundation, a pair of small stone well houses were originally located adjacent to Winton Springs, downhill from the main house. It is unknown if there are remains of these structures.

The Winton Springs House, or an earlier building on the same site, may date from the Civil War.^{3.32} The extant foundation is that of a building, constructed or modified between 1904 and 1915. The building along with outbuildings, fields, the road, and a pond are visible in the 1940 aerial photograph. Remnants of the outbuildings, possibly a flour mill and carding machine, may exist. In 1956, the Winton Springs House was used as the residence for the park superintendent. It was modified in the 1960s into two apartments for park staff housing. By 1965, the building was in disrepair and problems with the well water led to recommendations for its removal. A 1973 historic structures report identified the building, in a different form, as being present at the time of the battle. It also indicated that the building was of a grandiose rural residential architectural style, relatively rare in the region.

The Winton Springs House foundation is a contributing feature as it may have been present during the period of significance.^{3,33} Further field investigations should be undertaken to determine if other features remain.

Log Cabin (Morgan's Woods)

The extant remnants of a log cabin are located within Morgan's Woods on the west side of Lee Creek along Oberson Road. The road now functions as a park trail.

The cabin is located approximately forty-feet to the north of Oberson Road. It consists of a brick foundation with hand-hewn, squared log timbers with dove-tail joints.

The cabin measures twenty-feet by sixteen-feet. The roof has collapsed and the walls have mostly fallen. Portions of the walls are approximately four-feet tall. In other locations the walls have fallen completely. The foundation is overgrown with shrubs and small trees, camouflaging the structure. A large walnut tree is to the northeast of the cabin and may date from the same time the cabin was constructed. A road trace is on the east of the cabin, in a north/south orientation, and may be a drive or parking area associated with the log cabin.

The log cabin foundation is in poor condition.

It is unknown when the log cabin was built, but it is possible that it was present during the time of the battle. Further research and field investigations are needed to determine if the log cabin is a contributing or noncontributing feature.

House Foundation (tour stop 2)

A stone foundation is located just northwest of the parking area at tour stop 2 along the Tour Road. A mown path extends from the parking area to the foundation. The foundation is stone blocks, measuring approximately twenty-feet square. The foundation is covered with grasses and is in good condition.

It is unknown if this foundation is associated with a building or structure from the time

^{3.32 1973} Historic Structures Report. 3.33 1984 NRHP.



Figure 3-55. A house foundation near tour stop 2 consists of stone blocks, and measures approximately twenty-feet square. The foundation is covered with grasses and is in good condition (MB: DSC_0089.jpg).



Figure 3-56. It is unknown when the house located near tour stop 2 was built, although it was not present in the 1970s. Winton Springs House is in the background (PICT0030.jpg).

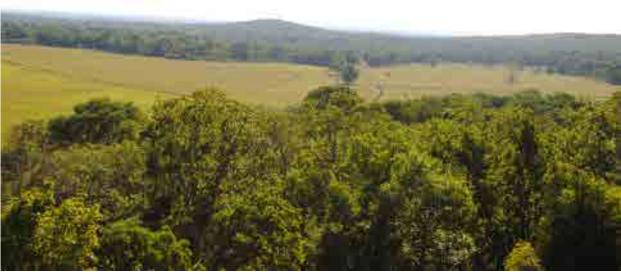


Figure 3-57. Current view from the east overlook towards Ford Road (MB: DSC_0176.jpg).



Figure 3-58. The Ruddick (Ford) House was built after the battle of Pea Ridge but was extant in the 1940s. It is unknown when the house and barn were removed (1940_East_Overlook_W.jpg).

of the battle. The 1963 master notes a remnant to be extant at that time, labeled as "Pratt's House Foundation."^{3.34} It is now thought that Pratt's Store and associated buildings are further south on the south side of U.S. Highway 62. It is not known when the building was removed, but several structures and small fields are visible in this area on the 1940 aerial photograph. The remnants of one structure is visible on the 1960 aerial photograph.

Ruddick (G.W. Ford) House and Barn Foundation

These foundations were not observed during the June 2013 field investigations. It is unknown when the structures were built, but G.W. Ford's house and barn were present at the time of the battle. According to Colonel Coler, "Early on the morning of the 8th the wings of the regiment (the 25th Illinois) were again united, and I was ordered to take a position in an open field under cover of a fence and log barn almost 100 yards in front of Welfley's battery, and not over 900 yards from the batteries of the enemy." 3.35

It is unknown what happened to the structures after the battle. They may have burned and been rebuilt. Later sources report that the Ford House was actually built by a later occupant of the property. In the 1860s after G.W. Ford passed away, eighty acres of the original farmland was sold. The land was forfeited for taxes in 1872. Eli Shepherd later reacquired the land from G.W. Ford, Jr. and others. Historian Alvin Seamster reported that the "ruins of the so-called Ford house were probably built by Eli Shepherd." house were probably built by Eli Shepherd."

The Ruddick (Ford) House was built after the battle of Pea Ridge. The building was removed by the NPS in 1965.

Wallace Scott House

This foundation was not observed during the June 2013 field investigations.^{3,37} Historic photographs document its presence. The building was removed by the NPS in the 1960s.^{3,38} It is unknown when this building was constructed or where within the park it was located.

Radium Rice House

The Radium Rice House served as the park headquarters from 1960 to 1963.^{3,39} It is unknown where this building was located. It is likely the building was removed when the visitor center opened in 1965.

Further research is needed to identify the location of the Radium Rice House and to determine its significance.

Pratt's House / Store

According to Bearss and Weih, Pratt's House / Store was located on Pratt's Road just to the north of Telegraph Road, near tour stop 2 on the Tour Road. Newer research indicates that this is an incorrect location, and that Pratt's House / Store was located south of Highway 72. This location was not reviewed during the June 2013 field investigations.

It is unknown when Pratt's House / Store was originally built or when it was removed. Pratt's House / Store was present at the time of the Battle of Pea Ridge. It was used by Union General Curtis, Generals Sigel, Asboth and other commanders of divisions as headquarters. It is possible that like Leetown Hamlet, the building was abandoned after the battle.

^{3.34 1963} Master Plan, sheet G-9.

^{3.35} O.R., Series I, Vol. VIII, 222; in Bearss, sheet 49.

^{3.36} Seamster, untitled document.

^{3.37} Photographs dated 1960.

^{3.38 1962} Master Plan.

^{3.39} PERI Historic Photograph.

Further research is needed to identify the location of Pratt's House / Store.

J. Ruddick

According to Bearss and Weih, a structure associated with J. Ruddick was located to the east of the Winton Springs House across Winton Springs Branch. These structures are non-extant and no remains were identified during the June 2013 field investigations. The exact location is unknown.

Further research is needed to identify the location of the J. Ruddick structures or remnants. If evidence of the structures is found, the site and remnants may be considered contributing features as the J. Ruddick Farm was present at the time of the battle.

Patton House

A photograph from the park archives shows this house, built in 1888. It is unknown where this house was located.

Further research is needed to identify the location of Patton House and to determine its significance.

Wiley Foster

According to Bearss and Weih, two structures associated with Wiley Foster are located west of Foster's Lane, and west of Highway 72. This location was not reviewed during the June 2013 field investigations. According to park staff, these structures are non-extant, but foundations may remain. Other elements such as wells may also remain.

Further research is needed to identify the exact location of the Wiley Foster structures or remnants. If evidence of the structures is found, the site and remnants may be considered contributing features as the Wiley Foster farm was present at the time of the battle.

Amos J. Patterson

According to Bearss and Weih, three structures associated with Amos J. Patterson are located north of Ford Road along the west boundary of the park. According to park staff, these structures are non-extant. The Patterson area was not reviewed during the June 2013 field investigations.

Further research is needed to identify the exact location of the Amos J. Patterson Structure or remnants. If evidence of the structures is found, the site and remnants may be considered contributing features as the Amos J. Patterson farm was present at the time of the battle.

Sturdy Cabin

According to Bearss and Weih, the Sturdy Cabin was located at the intersection of Leetown Road and Ford Road, on the west side. According to park staff, this structure is non-extant and the foundation was not identified during the June 2013 field investigations.

Further research is needed to identify the exact location of the Sturdy Cabin or remnants. If evidence of the structure is found, the site and remnants may be considered contributing features as the cabin was present at the time of the battle.



Figure 3-59. It is unknown where the Patton House was located, but it was extant in 1888. (Patton House_1880_ PRNMP.jpg).

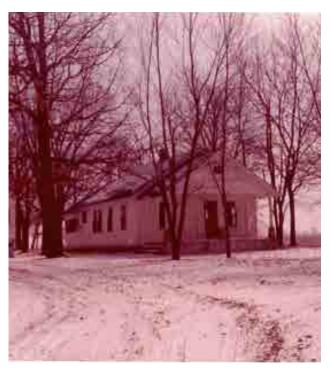


Figure 3-60.It is unknown when the Wallace Scott house was built. It was extant in the 1960s, and likely removed by the NPS (Wallace Scott House #1.tif).



Figure 3-61. The Radium Rice House served as park headquarters prior to the construction of the visitor center (Old Park Headquarters_PRNMP.jpg).

Unidentified Structures

Several structures are known to exist within the park but have not yet been identified. According to Bearss and Weih, there were nine locations in the park where unidentified structures are located. These include:

- three unidentified structures north of Wiley Foster near Ford Road
- one near Sturdy Cabin
- two on the Tour Road near Winton Springs
- two near the J. Ruddick's Structures
- one between J. Ruddick's Structures and tour stop 2
- one at tour stop 2
- two north of Winton Springs within Pratt's Field
- three at the tanyard
- two at the Williams Hollow hospital site.

Aside from the tanyard, these locations were not reviewed during the June 2013 field investigations.

Further research is needed to identify the locations of these structures or remnants. If evidence of these structures are found, the site and remnants may be considered contributing features if they were present at the time of the battle.

Matthews House / Ray-Galen House

These two features are unidentified structures, and were not reviewed during the June 2013 field investigations.

Study Area Contributing Buildings and Structure

- Elkhorn Tavern (Elkhorn Tavern / Williams Hollow landscape character area)
 - o Barn, stable at Elkhorn and other outbuildings
 - o Blacksmith shop near Elkhorn Tavern
 - o Tanyard building (possible)
 - o Clemens' House and Barn
- Federal Trenches (Federal Trenches landscape character area)
- Leetown buildings (Leetown Hamlet landscape character area)
- Winton Springs House (foundation remnants)
- Winton Springs remnants / foundations – flour mill, spring houses /pump houses or other features
- Log Cabin (Morgan's Woods)
- Sturdy's House foundation
- Scott House foundations
- Pratt's House / Store
- J. Ruddick Structures
- Patton House
- Wiley Foster Structure
- Amos J. Patterson Structure

Study Area Non-Contributing Buildings and Structures

- visitor center
- administrative buildings (two)
- maintenance buildings (seven)
- Ruddick (G. W. Ford House) foundations and structure foundations
- House foundation (tour stop 2)
- Unidentified structures
- Radium Rice House foundations



Figure 3-62. The U.S. Army Headquarters Monument is located along U.S. Highway 62, and was built in 1935 (B&W U.S. jpg).

Small Scale Features Existing Condition and Analysis

Small scale features within Pea Ridge NMP are primarily recent additions that provide safety, clarify access, and assist in interpretation. These features include fences and signs. One small scale feature, the U.S. Army Headquarters Monument was built in 1935 as a commemorative memorial.

At the time of the Battle of Pea Ridge, the area included many other small scale features that were important to the battle. Remnants of some may remain, such as remnant grade lines from the fencing used at the time to enclose fields. Most are non-extant.

U.S. Army Headquarters Monument

This feature is located along U.S. Highway 62. The monument marks the site of the headquarters of the Union army and the location where the commanding officers camped during the Battle of Pea Ridge. The stone monument is a rough masonry fieldstone pillar approximately five-feet square. The monument is in good condition.

A bronze plaque is mounted at the center of the monument and reads:

U.S. Army Headquarters
1862
This site was the camp-ground for
commanding
officers and headquarters of
U.S. Army for Battle of Pea Ridge.
Here councils of war were held camp
for 10,500 soldiers U.S. Army located
1 1/2 miles south depot of supplies 1
mile north of this site.
Marked by
Winton Spring Farm
1935



Figure 3-63. The worm fence is the most common fence within Pea Ridge NMP. It is used to define historic fields and roadways (MB: DSC_0676.jpg).

The U.S. Army Headquarters Monument was built in 1935, to commemorate the site of the headquarters of General Curtis. Although the monument was built outside the period of significance, it is a contributing feature as it assists in commemorating the battle. The monument has been determined eligible for listing on the NRHP by the SHPO.

Worm Fences

The predominant fence type within the park is a wood worm fence, built using notched alternating timbers that create a zig-zag line. The fence is approximately four-feet in height, and each rail section is approximately six-feet in length. This fence type is used to delineate the extents of fields, barnyards, woodlots and homesteads. It is also used as a barrier to control visitor access. For example, worm fencing lines both sides of the entry into the east overlook shelter. All existing worm fences are reproductions of historic fence type and are placed as close as practicable to known historic fence lines.^{3.40}

^{3.40} Interview with park staff, October 2013.



Figure 3-64. A worm fence with a top rail surrounds the peach orchard at Ford's Farm (MB:DSC_0326. jpg).



Figure 3-65. A post/rail fence is used at the visitor center (MB:DSC_03579.jpg).

To determine the placement of fences to delineate historic fence lines, park staff consulted Bearss 1965 map and Weih's 2006 historic land use map. They verified the fence lines from these documents by reviewing the 1899 Fayetteville quadrangle and photographs from the 1940s and 1960s. When placing fence lines they investigated the site for evidence of grade change. In some cases, linear mounds or lines were identifiable. This enabled park staff to construct extant worm fence lines.^{3,41}

The use of the worm fence to delineate known historic fence lines is compatible with the historic landscape and provides an important characteristic of the historic battlefield—the delineation of the historic fields. The worm fence is non-contributing, but the fence alignments when placed along historic lines are contributing features as they reflect the fences and fields present at the time of the battle.

Post and Rail Fence

A wood post and rail fence lines U.S. Highway 62 at the park entrance. At the entrance road, the fence connects to an entry sign / monument. The fence is in good condition.

The post and rail fence is a non-contributing feature as it was not present at the time of the battle.

Chain-link Fence

Chain-link fences of approximately six-feet in height enclose the maintenance facility and the rear entrance and maintenance area associated with the visitor center. The fence at the visitor center is black chain-link. The fences are in good condition.

The chain-link fences are non-contributing features as they were not present at the time of the battle.

Entrance Sign / Monument

The park entrance at U.S. Highway 62 is marked by a small sign / monument. The entrance sign / monument is a low rubble stone wall that connects to a concrete sign noting Pea Ridge National Military Park. The feature is in good condition.

The entrance sign / monument is a non-contributing feature as it was not present at the time of the battle. The entry monument was built in the 1960s as part of the Mission 66 program and retains a character similar to its original installation.

Stone Walls

Three of the Tour Road's interpretive stops include stone walls. These were originally built to define overlooks and tour stops, and in the case of the east and west overlooks, as railings for safety. The walls were built in the 1960s as part of the Mission 66 program for the interpretation of the battlefield landscape. The stone walls are in fair to good condition.

The stone walls are non-contributing features as they were not present at the time of the battle.

- At tour stop 2, a sandstone wall defines the west edge of the parking area. The wall is approximately one-foot wide and three-feet in height. It forms a rectangular terrace that has a view across the field to the north. Originally, this overlook held an interpretive panel, but it has been removed. This wall is in good condition.
- Tour stop 6 is the west overlook, and is located on the plateau of Elkhorn Mountain. This stop includes a large terrace, enclosed on the south by sandstone stacked walls. The walls are approximately one-foot wide and eighteen-inches in height above the terrace surface. The walls form a retaining wall on the downhill side, approximately five-feet at

^{3.41} Interview with park staff, October 2013.





Figure 3-66. Stone walls, built as part of NPS Mission 66 program in the 1960s, define the east and west overlooks. These walls are at the west overlook (MB:DSC_0600.jpg, left and MB:DSC_0597.jpg, right).





Figure 3-67. Lines of artillery are emplaced within the study area. The replica artillery are moved occasionally by park staff to depict battle segments (MB:DSC_131.jpg, left and MB:DSC_0678.jpg, right).

the highest point. Two rectangular stone walls create planters at the center of the terrace. They measure approximately six by eight-feet. The walls at tour stop 6 are in good condition.

• Tour stop 7 is the east overlook. The walls associated with this site are described and evaluated with the east overlook shelter in the Buildings and Structures section.

Artillery

Several lines of artillery are emplaced within the study area. At the time of the field investigations, artillery were placed in Oberson's Corn Field in two lines facing each other north/south; and in another line oriented east towards Leetown Road. Two lines of artillery occurred at Foster's Field, oriented north/south. At times, artillery has also been emplaced in Jesse Cox's Corn Field, one line facing northeast and the opposite facing southwest. Artillery have been emplaced at the intersection of the Tour Road with Ford Road, and in Ruddick's Field. The artillery are reproductions of those that are known to have been in use during the Battle of Pea Ridge.

The replica artillery are moved occasionally by park staff to depict other segments of the battle. Each is oriented as it would have been during one of the battles during the two-day battle. These are non-contributing features, however they assist in interpreting the battle to visitors.

Interpretive Signs

Interpretive signs are a part of each tour stop. These signs are typically interpretive panels that describe actions of the battle that took place near the tour stop.

The tour stops and locations for interpretive signs were first installed with the construction of the Tour Road in 1963. The signs were replaced in 2010, and are in fair to good condition. The interpretive signs are non-contributing features.



Figure 3-68. The standard interpretive signage at Pea Ridge NMP (MB:DSC_03579.jpg).

Regulatory and Directional Signs

Signs throughout the park provide regulatory information such as identifying universal accessible parking and noting areas of closure. Other signs assist in wayfinding including small medallions placed on trees along the park loop trail such as on Foster's Lane and at the tanyard and Williams Hollow hospital site. The signs are non-contributing.

Study Area

Contributing Small Scale Features

- Fence Lines
- U.S. Army Headquarters Monument

Non-Contributing Small Scale Features

- Worm Fences
- Chain-link Fences
- Post and Rail Fences and Entrance Sign / Monument
- Interpretive Signs
- Regulatory and Directional Signs



Figure 3-69. The view from Elkhorn Mountain indicates the stark contrast between forest and field, and the vegetation in the fields appears less diverse than what had occurred in the 1940s, and likely in the 1860s as well (MB: DSC_0172.jpg).



Figure 3-70. In 1940, as seen from Elkhorn Mountain, the vegetation appeared to be more diverse than today. The transition from cropland to woodland was not as abrupt, and different stages of forest regrowth occurred (Looking S from Elkhorn Tower. Limit of Confederate advance in center of photo-1940.jpg).

Vegetation Existing Condition

The plant communities of the park are relatively diverse, and are influenced by topography, water courses, and past and current human uses. The park is primarily composed of oak woodlands in a natural condition that surround mown grasslands and orchards. Tallgrass prairie occurs in the northwest section of the park.

The majority of the park supports a wet forest type. Elkhorn Mountain supports a dryer forest type than the rest of the park.

The mown grasslands define the extents of former agricultural fields that also served as battlefields during the Battle of Pea Ridge. Grasslands are mowed more than once annually, and in some areas shrubland and sparse woodland have grown up after abandonment from previous agricultural production. 3.42

Restoration of the tallgrass prairie began in 1975.^{3,43} These efforts included planting native tall grasses from seed with some native forbs present in the seed mixes. Over time, both native and non-native grasses and forbs may volunteer. ^{3,44}

Several extant trees that date to the time of the battle occur throughout the park. These large, mature trees have been identified by tree-ring dating. Some are more than 300 years old. These extant trees include fifteen oaks present during the battle: twelve are post oaks (*Quercus stellata*) and three are white oaks (*Quercus alba*). Of these, six trees date to the 1600s and two trees date to the 1700s. Many are along the edges of agricultural fields and historic roads, such as Telegraph Road.

Two orchards are within the park. One is at Ford's Farm and contains twenty peach trees. The orchard at Elkhorn Tavern has twenty-eight apple trees. The trees are managed for appearance, not production.

The park's record of non-native plant species that exist within the park's boundaries includes patches of eastern red cedar (*Juniperus virginiana*). In addition, the park has identified twenty-two non-native plant species that are of most concern including Japanese honeysuckle (*Lonicera japonica*), fescue grasses (*Festuca spp.*), spotted knapweed (*Centaurea maculosa*), sericea lespedeza (*Lespedeza cuneata*), and Canada bluegrass (*Poa compressa*). The spread of these invasives has been facilitated by their ability to colonize and dominate areas, making the survival or succession of native plants difficult to impossible.^{3.46}

The Vegetation Management Plan (VMP) identified nine natural and semi-natural vegetation communities.^{3.47}

- Bottomland Deciduous Woodland and Forest with Black Walnut (Juglans nigra), Red Mulberry (Morus rubra), and American Elm (Ulmus americana) as key species. Coverage: 54.77 acres; less than 1.5%
- Dry Deciduous Woodland and Forest with Post Oak (Quercus stellata), Blackjack Oak (Quercus marilandica), Black Oak (Quercus velutina), Black Hickory (Carya texana), and Little bluestem (Schizachyrium scoparium) as key species. Coverage: 480 acres; 11.2%
- Eastern Redcedar Woodland and Forest with Eastern Red cedar (Juniperus virginiana) as the key species,. Coverage: 673.96 acres; 15.8%

^{3.42} Pea Ridge NMP Vegetation Mapping Draft, 3.3.43 Huggard, Administrative History, 172.

^{3.44} Pea Ridge NMP Vegetation Mapping Draft, 41.

^{3.45} Edmondson and Stahle.

^{3.46} NPS, State of the Parks, June 2009, 48.

^{3.47} Pea Ridge NMP Vegetation Mapping Draft, 41.



Figure 3-71. Peach orchard at Ford's Farm. (MB: DSC_0328.jpg)



Figure 3-72. Tall grasses in the fields contrast with the dense deciduous woodland in most locations. (MB: IMG_5798.jpg)

- Marsh with Cattail (*Typha latifolia*) as key species. Coverage: .53 acres; less than 1.5%
- Mowed Grassland with Tall Fescue (Schedonorus phoenix) as the key species. Coverage: 568 acres; 13.3%
- Restored Tallgrass Prairie with Little Bluestem (Schizachyrium scoparium), Big Bluestem (Andropogon gerardii), and Coralberry (Symphoricarpos orbiculatus) as key species. Coverage: 60 acres; less than 1.5%
- Ruderal Grassland and Shrubland with Coralberry (Symphoricarpos orbiculatus), Winged Elm (Ulmus alata), Pennsylvania blackberry (Rubus pensilvanicus) and Tall Fescue (Schedonorus phoenix) as key species. Coverage: 363 acres; 8.5%
- Silver Maple Forest with Silver Maple (Acer saccharinum) and American Elm (Ulmus americana) as key species.

Mown lawn exists within the administrative area, visitor center, Elkhorn Tavern, horse trailhead, Ford Cemetery, and the Federal Trenches. Additional areas are also mown routinely, including areas adjacent to waysides and tour stops. Lawns are primarily fescue, and are located in areas that are heavily used by visitors. They are routinely mown, dependent on funding and personnel, and in line with the parks established mowing plan.^{3,48}

Analysis

The present-day patterns and type of vegetation within the park remains relatively similar to what existed at the time of the battle and during the period of significance. The natural and man-made patterns of fields versus forested woodland remain similar to historic patterns.

3.48 VMP, 110.

Most existing woodlands and fields reflect the patterns and character of the battlefield vegetation despite some changes in the species composition. Other major changes include the encroachment of the forest into previously open areas, and an increase in density within the forest and woodlands. Fields have changed due to the elimination of crop and pastureland vegetation, replaced by grasses. Other changes include the increase of non-native species in the woodlands and forests, and the effects of fire suppression on the native vegetation.

The change of agricultural vegetation types, from corn and other crops to primarily pasture grass, has altered the appearance of the landscape from a working landscape to one that is more static. Agricultural fields such as Oberson's, Cox's, and Ruddick's fields remain relatively intact to their 1862 arrangements. Others are similar but have changed slightly such as those fields that are not cultivated to the extent that they were historically, such as at Clemens' Field and the west edge of Pratt's Field. Despite this change, the overall appearance of the pasture grasses reflects the alternating pattern of open fields contrasting with enclosed forest.

The Ford Farm peach orchard is fenced in a pattern similar to what occurred historically. Only a portion of the original orchard, approximately thirteen percent, has been replanted. An estimated 1500 trees would have existed historically. The existing trees were planted in the old roadbed of U.S. Highway 72.

Some areas of woodlands and forest are now denser than they were historically, including Morgan's Woods, near the Winton Springs House, Pratt's Store, near Leetown Hamlet and in Williams Hollow. In other locations, forest vegetation encroaches into historically open fields. Also, some areas that were historically forested are now open fields.



Figure 3-73. Unmown pasture grasses are used to indicate former agricultural fields (MB:DSC_0141.jpg).

Prior to European settlement, vegetation would have been composed of deciduous woodlands interspersed with tall grass prairie. After the 1830s, areas of forest and prairie were converted to agricultural fields, changing the native vegetation composition. This was further altered by fire suppression and logging. During the Battle of Pea Ridge, established agricultural fields, orchards, and woodlots existed on more level slopes with the native deciduous woodlands on steeper topography. During and immediately after the battle, it is likely that the agricultural fields were abandoned for a time. After the war, the area remained agricultural, as noted in the 1940s aerial photography, and continued as fields and pasturelands.^{3.49} By the 1960s, fewer agricultural fields existed, some likely abandoned permanently and forest succession began. ^{3.50}

By the time the park opened in the 1960s, the extents of the agricultural fields no longer accurately reflected the period of significance. The restoration of native tall grass prairie began in 1975 within a limited area on the west edge of the park. This area was a tallgrass prairie at the time of the battle.

During the 19th and early 20th century, fire suppression resulted in changes to the species composition within the park's hardwood forests and caused the eastern red cedar to dominate the vegetation in many areas. In compliance with the fire management plan, the park has used prescribed burns to restore the native plant communities within the park. Recent clearing of these trees has begun.

Figure 3-74. Vegetation includes mature trees that edge fence lines and roadways. While likely not from the period of significance, they reflect a pattern of tree planting established in the area in the 1800s (MB: DSC_0677.jpg).

^{3.49 1940}s aerial photograph3.50 1960s aerial photograph



 $Figure~3-75.~Existing~Vegetation,~DMP~2014~(PERI_Veg_Mapping_DRAFT_Oct2012).$

Extant mature trees, primarily oak species, remain from the period of significance. It is unknown how many historic trees exist within the park, as not all have been documented. The historic trees are a significant feature of the cultural landscape, as they were witness to the battle in 1862. Some are associated with domestic areas and others are within the forest and woodlands. It appears that some trees were allowed to grow along the edges of agricultural fields, around farmhouses, barns, and roadways. Some of these trees could have been intentionally planted, while others were allowed to grow where they did not obstruct historic activities.

These historic trees are contributing features as they were present during the battle. They contribute to the overall setting and feeling of the landscape. The witness trees are contributing features of the cultural landscape.

In general, the alternating pattern of fields and woodlands reflects the setting and feeling of the historic landscape. In comparison to its historic appearance, the forest and woodland vegetation is more dense with undergrowth and smaller, more closely spaced trees. The vegetation located in the fields is different today than what occurred during the period of significance. During the historic period, the fields would have had a variety of crops grown, such as corn, wheat, or vegetables; today, the fields have a uniform appearance of grasses. Despite this change, the overall vegetation patterns remain similar to what existed at the time of the battle and contribute to the historic character of the cultural landscape.



Figure 3-76. The quarry is located near the intersection of the tour road and Ford Road. It is oval shaped, approximately fifty-feet at the longest width, and is filled with water (MB: DSC_0154.jpg).



Figure 3-77. The stock pond is located on the west plot of Pratt's field. It was likely built to hold water for animals and irrigation (MB: DSC_0285.jpg).

Constructed Water Features Existing Conditions and Analysis

Water features include a stock pond located in Pratt's Field, the quarry/pond in the northwest portion of the park, and miscellaneous cisterns and wells. Some of the existing water features within the park may date from the period of significance, while most likely date from after the battle.

Quarry/Pond

A quarry is located near the intersection of the Tour Road and Ford Road. It is oval in shape and approximately fifty-feet at the longest width. The quarry is filled with water so it appears more like a pond than a quarry. The edges are wooded and some debris has fallen into the water making the water appear cloudy and brackish. Local oral histories suggest this quarry was used in the construction of Highway 72.

The quarry operations began in the early 1950s, and were stopped after the national park was established.^{3.51} The quarry/pond is a non-contributing feature that is incompatible with the cultural landscape.

Stock Pond

A stock pond is located on the west plot of Pratt's Field, north of Winton Springs. This pond was likely built to hold water for animals and irrigation, and is situated in the center of the field. The edges of the pond have been kept clear of large vegetation with grasses and small shrubs lining the edge of the pond.

This pond was built sometime after the Civil War. It is not a contributing feature, although it is compatible with the agrarian landscape.

Wells

Several wells occur throughout the park. These wells were not recorded or evaluated during the June 2013 field investigations. Many have been filled in by the NPS for safety reasons, while others have not been and must be flagged in order to be visible.

Well on Foster's Lane

A stone well exists along the north/south portion of Foster's Lane in the woods between Oberson's Corn Field and Foster's Lane.

The well is approximately four-feet in diameter, and is located close to Foster's Lane. It is obscured by grasses, and has a wire screen over the top. The well is marked with flags.

It is unknown when this well was dug as no house remains have been located nearby. It is possible that it was installed as part of Foster's Farm.

Study Area Contributing Constructed Water Features

- Wells pre-1865
- Well on Foster's Lane

Non-Contributing Constructed Water Features

- Quarry / Pond
- Stock pond

^{3.51} Interview with park staff

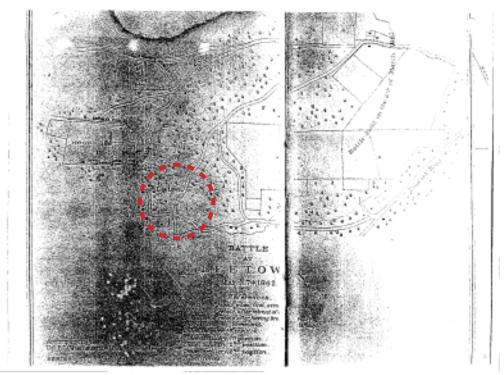


Figure 3-78. Map from Edwin Bearrs 1965 report on Leetown Hamlet (Bearrs Leetown report image.jpg).

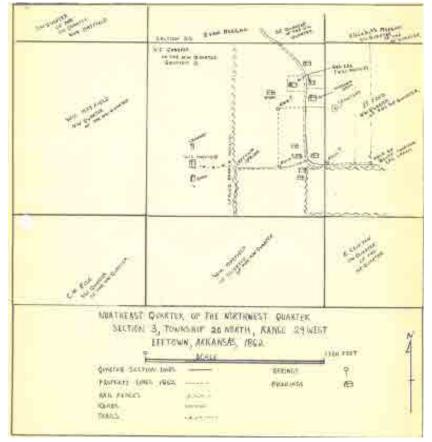


Figure 3-79. Bearrs' map of Leetown Hamlet, c.1965 (Map of Leetown.jpg).