

Project Completion Report Rocky Mountains Cooperative Ecosystem Studies Unit (RM-CESU)

Project Title: Montana-Yellowstone Archeological Project, Boundary Lands Part 2 (2008)

Project Code: UMT – 164, J1580080264

Type of Project: Research

Funding Agency: National Park Service

Partner University: The University of Montana

NPS Agreements Technical Representative:

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Start Date of Project: April 1, 2008

End Date of Project: August 30, 2009

Funding Amount: \$42,000

Number of Students Involved, and Type of Student (Undergraduate, Graduate, Post Doctorate): 12 Undergraduates, 2 Graduates

Project Summary, including descriptions of project deliverables, any changes made during the life of the project, work accomplished and/or major results. If the information is restricted (e.g. location of endangered species or cultural resources), indicate the title and location of the final report.

The information contained in the final report is restricted from the general public. Copies of that report are located at the Archeology Laboratory at YNP's Heritage Research Center, at the WYSHPO'S office, and an electronic copy has been sent to the RM-CESU office.

The Yellowstone National Park 2008 Boundary Lands Archeological Survey was completed by the University of Montana Archeological Field School, under the direction of Douglas MacDonald, Ph.D., RPA.

Of the 37 archeological sites (29 newly discovered and 8 previously recorded) investigated by the University of Montana Field School, Yellowstone Montana Archeological Project (MYAP), many sites have multiple components with 24 sites having prehistoric components and 23 sites having historic components. The 2008 archeological inventory covered over 3,000 acres and was conducted in support of the revegetation project to restore the agricultural area, annexed to the park in the 1930s, to natural vegetation more nutritious to wildlife in the area. The 2008 survey is the second phase of the project begun in 2007.

The more archeologically significant multi-component (historic and prehistoric components) sites documented in the 2008 archeological inventory are 24YE182, 24YE198 (combined with 24YE118), 24YE201, and 24YE357. The prehistoric component of site 24YE182 includes five stone circles, diagnostic Late Archaic Pelican Lake projectile points and other stone tools. The historic component includes the known grave of a cowboy who died while working a horse for the Hendersons (an early pioneer family and park concessionaire), historic fences, historic bridges over an irrigation ditch, and shell casings. Yellowstone National Park (YNP) determines both the historic and prehistoric components of this site eligible for listing on the National Register. Site 24YE198 is combined with previously recorded site 24YE118. The site consists of several historic irrigation ditches associated with the Gardiner Flats irrigation project to provide winter feed for the dwindling elk herd. The prehistoric component of the site contains three dispersed lithic scatters and a possible hearth. Yellowstone National Park has determined both the historic and prehistoric components of the site eligible; the historic component eligible under Criterion A and the prehistoric component eligible under Criterion D. The 2009 UM field school crew leaders conducted shovel tests in the area around the North Entrance kiosk (test map included) and found asphalt and concrete below the surface indicating the area was previously disturbed. The areas impacted by previous and current road and entrance kiosks do not contribute to the eligibility of the site. The prehistoric component of site 24YE201 consists of flake debris in and around the ephemeral streams, a Middle Archaic McKean projectile point on the surface and shovel tests revealing buried soils with a buried living surface. Few historic artifacts were recovered from the site. Yellowstone National Park determines the prehistoric component eligible for listing on the National Register with the historic component not contributing to eligibility. Site 24YE357 is a significant tipi ring site comprised of 11 stone circles from multiple occupations (Middle Archaic, Late Archaic, and Late Prehistoric), the earliest occupation represented by an Oxbow projectile point associated with a 4500+ before present (BP) radio carbon date. The historic component of the site is metal debris possibly associated with the Henderson homestead operation, but may be associated with the later Hoppe ranching operations. A master's thesis on the site is in final draft form and will be presented for Montana SHPO review upon completion. The park determines the prehistoric component of this site to be eligible for the National Register with the historic component of the site not contributing to the site's eligibility.

Archeological sites 24YE167, 24YE180, 24YE181, 24YE183, 24YE185, 24YE206, and 24YE207 contain both prehistoric and historic components. Site 24YE167 is comprised of historic irrigation ditch components, unremarkable in nature of construction and ubiquitous within the area farmlands, and prehistoric lithic flaked stone debris that appear to be impacted by slope wash. Site 24YE180 is a small obsidian scatter within a fluvial washout area and a historic rock alignment that appears to be a slope wash dam or the results of ditch cleanout. Site 24YE181 consists of a small scatter of prehistoric flake debris mixed in with historic fencing and farm equipment. Site 24YE183 consists of historic fence posts and cut lumber, possibly a corral, and a light scatter of obsidian flakes. The historic artifacts are un-distinctive and common. Site 24YE185 consists of building foundations, irrigation ditches, historic trash, and a culturally scarred tree (probably marking the park's western boundary) and is the site of the Stermitz homestead. The site has been impacted by NPS cleanup and road construction through the site. Site 24YE206 consists of a small lithic scatter and a historic hearth. Site 24YE207 is recorded as historic corral remnants mostly destroyed by natural processes and seven possibly prehistoric stone piles. Yellowstone National Park interprets these small stone piles the result of historic cleanup operations possibly associated with the corrals or early roads. Yellowstone National Park agrees with the University of Montana in determining these multi-component sites not eligible for inclusion on the National Register of Historic Places.

Significant prehistoric archeological sites documented during the 2008 inventory include 24YE179, 24YE184, 24YE186, 24YE187, 24YE188, 24YE190, 24YE191, 24YE193, 24YE197, 24YE200, 24YE203, 24YE204, and 24YE356. Each of these sites has the potential to yield archeological data important to understanding prehistoric lifeways, travel patterns, and use of the boundary lands resources. Site 24YE179 is an undisturbed large lithic scatter containing mostly chert but with green obsidian sourced to Obsidian Cliff and Late Archaic Pelican Lake projectile points. Site 24YE184 is a surface lithic scatter with a Late Archaic Pelican Lake projectile point and a

perform for a projectile point. Site 24YE186 is a surface and subsurface site near the modern Wilson Springs water system that indicates heavy prehistoric use of obsidian. Site 24YE187 is an upland lithic scatter site with three heavy concentrations of artifacts and possible subsurface cultural materials. Site 24YE188 contains seven concentrations of lithic debris, and although altered by farming activity, may contain buried surface deposits. Site 24YE190 has eight clusters of dense lithics with 14 tools (points, bifaces, scrapers, drill, and Knife River Flint utilized flake tools) recovered indicating Late Archaic Pelican Lake occupation. Site 24YE191 is a small lithic scatter with Middle Archaic projectile points and, although in an area previously plowed, subsurface excavations will probably yield more information about the poorly understood Middle Archaic peoples' use of the area. Site 24YE193 revealed both Late Archaic Pelican Lake occupation and Late Prehistoric occupation of the site. Site 24YE197 is a low density, wide lithic debitage scatter with fire cracked rock and possible hearths located near four other prehistoric sites. Site 24YE200 yielded a light lithic surface scatter of flakes and tools and shovel tests indicate limited buried cultural deposits. Site 24YE204 is comprised of three tipi rings with roasting pits (or hearths) and tools, although it is likely the site has been previously looted. National Register eligibility for this deserving site would provide greater protection under the Archeological Resource Protection Act laws. Further investigation at Site 24YE356, the 6-Point site, determined eligible as a result of the 2007 inventory recovered two additional Middle Archaic projectile points, lending more information to support the sites National Register eligibility. Yellowstone National Park has determined each of the above described prehistoric sites eligible for listing on the National Register of Historic Places.

The significant historic archeological sites documented during the 2008 field work include 24YE189, 24YE195, 24YE196, 24YE199, 24YE202, and 24YE355. The Henderson homestead bunkhouse, site 24YE189, is where the Henderson family and hired hands took up residence after the Nez Perce burned the family house in the 1877 battle. The site has intact subsurface and surface features with good integrity and is eligible for the National Register under Criterion A and D. Historic archeological site 24YE195 is the remains of a structure, perhaps a garage or shop, with good surface and subsurface integrity. Site 24YE196 is the site of the original Henderson homestead house that was burned by the Nez Perce in 1877. The site contains extensive diagnostics, some that may be associated with the battle between the Hendersons and the Nez Perce, and subsurface deposits. The NPS determines the site eligible for the National Register under Criteria A and D. The North Entrance Ditch, site 24YE199, constructed by Hiram Chittenden with additional work on the ditch authorized by Theodore Roosevelt in his 1903 visit to the park to provide hydroelectric power to the town of Gardiner, consists of 15 wood flood gates along the length of the ditch. Yellowstone National Park determines this historic site eligible for listing on the National Register of Historic Places under Criteria A, B, and C. Site 24YE202 consists of the historic homestead and dairy operation of the Stohl family. The 2008 survey work on this site expands the boundary of the dairy site 24YE170, recorded in 2007, to include the associated homestead foundations and ruins. Yellowstone National Park determines the expanded site eligible for listing on the National Register. Additional work on the Cinnabar town site, 24YE355, included the excavation of the Blacksmith Shop in support of a master's thesis. The site was determined eligible as a result of the 2007 survey work and the site boundary was not expanded as a result of the 2008 excavations.

Yellowstone National Park has determined historic archeological sites 24YE18, 24YE19, 24YE192, 24YE194, 24YE205, and 24YE349 not eligible for listing on the National Register of Historic Places. Site 24YE18, the Rife water system, was disturbed by the 1990 NPS construction of a new water system. The ditch system, site 24YE19, previously recorded by Ann Johnson, lacks integrity as the ditches are deflated and the water take outs and head gates are missing. The historic trash scatter, site 24YE192, cannot be associated with any particular occupation or activity. Site 24YE194 consists of irrigation features of simple construction, deflated ditches, and lacks integrity. The Gardiner City Dump, 24YE205, has three to six meters of fill, is in poor condition, and not yet fifty years old. Site 24YE349, previously recorded but unevaluated, consists of a small wooden dam across Landslide Creek with historic trash scatter and no diagnostics.