THE 2006 CLASS III CULTURAL RESOURCE INVENTORY OF THE GRANITE CREEK PRESCRIBED FIRE PROJECT AREA, GRAND TETON NATIONAL PARK, TETON COUNTY, WYOMING

By

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With contributions by

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Prepared for

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Submitted by

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OWSA Project Number: WY-27-2006

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ABSTRACT

A Class III cultural resource inventory of the Granite Creek prescribed fire project area was conducted by the Office of the Wyoming State Archaeologist for the National Park Service, Grand Teton National Park. The Granite Creek project area encompasses a total of 92 acres that is located along the west side of the Snake River, about a mile northeast of Teton Village. The purpose of the prescribed fire is for habitat improvement and the preventative protection of a small residential area from future wildfires.

One new site, 48TE1730, a small, sparse, ineligible prehistoric lithic scatter was recorded, along with two prehistoric isolated finds. Also present is the previously recorded Pembles New Ditch (48TE1166), an ineligible, historic irrigation ditch. As a result, cultural clearance is recommended with the standard stipulations that should archaeological remains be uncovered during the implementation of the prescribed fire project, the appropriate state and federal regulatory agencies be contacted immediately.

ACKNOWLEDGMENTS

The completion of this project has benefitted from the contributions of a number of individuals. Jacquelin St. Clair, Grand Teton National Park (GTNP) archaeologist, provided valuable assistance with the administrative aspects of this project. The prescribed fire project summary was written by Mack McFarland, Fuels Management Specialist (NPS, GTNP). OWSA staff contributing to this report included Carmen Clayton who drafted the project area map and Lavonne Haskins who compiled and paginated the final report.

SURVEY REPORT COVER PAGE

Consultant Project No: WY-27-06	Agency No:
Review and Compliance No:	Cultural Records Office No: 52605

AUTHOR(S): Paul H. Sanders

REPORT TITLE (include client name, undertaking name, survey project type, and report number):

The 2006 Class III Cultural Resource Inventory of the Granite Creek Prescribed Fire Project Area, Grand Teton National Park, Teton County, Wyoming prepared for the National Park Service, Grand Teton National Park.

DATE OF REPORT (MO/DY/YR): January 3, 2007

LEAD AGENCY (e.g., BLM ADMINISTRATIVE UNIT): National Park Service, Grand Teton National Park

SURVEY ORGANIZATION/NAME: **Office of the Wyoming State Archaeologist (OWSA)** FEDERAL PERMIT NO. (e.g. BLM Cultural Resource Use Permit and Expiration Date): **N.A.**

BRIEF DESCRIPTION OF UNDERTAKING: GTNP proposes to convert sage/grass fuel type into grass/forb fuel type to reduce fire behavior and increase fire management response options in the event of a wildland fire start in the southern portion of Grand Teton National Park.

SURV	/FY	MET	$^{\circ}$	DS:
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Unable to share this information

XX Standard 30 Meter Transects	Non-Standard (Describe in body of report)		
Survey Width (All Linear Inventory):	100 feet (individual road or pipeline corridor)		
	150 feet (parallel road/pipeline corridor)		
	Other (indicate width: feet)		
COUNTY(IES): Teton			
USGS QUAD MAPS (NAME, DATE): Teton	Village (1996)		
LANDOWNER:*_BLM_BuREC_FS_XX_1	NPS_PRIVATE_STATE_USFWS_OTHER(Specify)		
LEGAL DESCRIPTION (T/R/Sec/up to 4 qtrs a	and identify template corner):		

ACREAGE:

FEDERAL SURFACE	BLOCK: 92 acres	LINEAR:	TOTAL: 92 acres	TOTAL ACREAGE:
NON-FED SURFACE	BLOCK:	LINEAR:	TOTAL:	92 acres

FILE SEARCH DATE(S): August 17, 2006 (File Search No. 17865)	
FIELD WORK DATE(S) (MO/DY/YR): August 21-22, 2006	
FIELD PERSONNEL: Paul H. Sanders, John Laughlin, and Carmen Clayton	
SURVEY RESULTS: NO CULTURAL MATERIAL2_ #ISOLATED FIND(S) _2	#SITE(S
+ attach continuation sheets for additional data * check all that pertain	

SITE SUMMARY TABLE (Field Agent Use)

Smithsonian Number Isolated Find Number	48TE1166	48TE1730	IF-WY-2706-1	IF-WY-2706-2
Brief Site/isolate type	Pembles New Ditch	Prehistoric lithic scatter	Prehistoric flake	Prehistoric flake
Previously recorded? (Y/N?)	Y	N	N	N
Previous Eligibility	NE	NA	NA	NA
Previous SHPO Concurrence? (Y/N?)	Y	N	N	N
Current Eligibility	NE	NE	NE	NE
NRHP Criteria (A,B,C, or D)	A, B	D	D	D
Contributing Portion? (Y/N?)				
Current Project Effect?	NE	NE	NE	NE
Proposed Mitigation	NA	NA	NA	NA
Land owner	NPS, Private	NPS	NPS	NPS
Township				
Range				
Section				
1/4'S				
Comments				

National Register of Historic Places Eligibility: E (Eligible); NE (Not Eligible); U (Unevaluated)

Previous Eligibility (Determination): R-Listed on NRHP Register; K-Eligible by NRHP Keeper; C-Eligible-SHPO/Agency concurrence; A-Eligible-Agency; E-Eligible-Consultant; U-Eligibility Unknown; N-Not eligible

Effect: NO for sites with no effect; NAE for site with no adverse effects; AE for sites with adverse effect; U for Unknown

Proposed mitigation: e.g., data recovery, avoidance, fencing, sign, etc.

*ATTACH CONTINUATION SHEETS AS NEEDED/EXPAND, ADD OR DELETE INDIVIDUAL SITE COLUMNS AS NECESSARY; Please list sites in alphabetical/numeric order first and isolates after the sites. Note: Information about the location, character, or ownership of historic properties in the report may not be disclosed to the public unless authorized by the appropriate federal agency and/or the Wyoming State Historic Preservation Office.

PROJECT DESCRIPTION AND SETTING

This report presents the results of a Class III inventory within the 92 acre Granite Creek prescribed fire project area conducted by the Office of the Wyoming State Archaeologist (OWSA) for the National Park Service (NPS), Grand Teton National Park (GTNP). The project area is on the west side of the Snake River about one mile northeast of Teton Village (Figure 1). GTNP proposes a prescribed fire to enhance habitat and protect a small residential area from future wildfires.

The project area is a broad flat, outwash plain derived from Granite Creek which forms the western boundary of the project area (Figure 1). Former, dry channels of Granite Creek cross-cut through the project area. The gentle, southerly sloping outwash plain has an elevation of 1932 m (6340 ft). Love et al. (1992) has classified the area as comprised of Holocene alluvium, although a low ridge to the north of the project area consists of drift related to the most recent Pleistocene glaciation. Granite Creek cuts through this drift ridge. Soils over most of the project area consist of brown silts, sands, and gravels. Vegetation is comprised of an open sagebrush grassland with pockets of cottonwoods, conifers, and aspen (Figure 2). Surface visibility within much of the project area was estimated at 5-15 percent due to the grass and sagebrush cover.

Weather conditions during the inventory were warm and dry. David Eckles served as principal investigator; Paul H. Sanders was field and project director with crew members consisting of John Laughlin and Carmen Clayton.

FILE SEARCH RESULTS AND SAMPLING STRATEGY

A documents search was conducted by OWSA of the records within the Wyoming State Historic Preservation Office (SHPO), Cultural Records Office (WYCRO) on August 17, 2006 (Search# 17865). Five previous projects and five previously recorded sites were noted.

The five inventories were for a variety of purposes, including a Class II sample survey (Accession No. 77-552), an entrance sign (No. 91-347), cabin removal (No. 91-355), buried power line (No. 94-310) and a road realignment and construction (No. 94-979). Two of these projects overlapped the present project area. The entrance sign inventory was conducted by and for the US Forest Service, Bridger-Teton National Forest, but no sites were recorded. The road realignment inventory was conducted for Grand Teton National Park, by McKay-McClain Cultural Resource Consultants who recorded one prehistoric site, 48TE1341. The site consists of one gray quartzite secondary flake and four fire-cracked rocks in an area measuring approximately

Map not available



View to the west at the Granite Creek project area, south side of road



View to the west at the Granite Creek project area, north side of road

Figure 2. Photographs of the Granite Creek project area.

125 by 20 m (McClain 1994:13). The site area overlaps the present project area (Figure 1), but was recommended as not eligible, with SHPO concurrence.

Four historic sites are listed in the documents search that are not associated with an accessioned project. The four sites, 48TE1166, 48TE1174, 48TE1185, and 48TE1186 were recorded by Western Historical Studies as part of a park-wide, selected historical inventory of Grand Teton National Park. These consist of the Pembles New Ditch (48TE1166), the Hobbs Cabin (48TE1174), the Curtis Place (48TE1185), and the Doing Place (48TE1186) (Figure 1). The first two are not eligible with SHPO concurrence, while 48TE1185 and 48TE1186 are unevaluated. The irrigation ditch passes through the present project area, while the historic structures are to the north of the project area.

There are a few General Land Office (GLO) plats for the project area, but most are recent resurveys. There is an 1894 plat of T42N, R116W, but no buildings or structures are shown in sections 17, 18 or adjoining sections 19 or 20. Daugherty (1999) also does not show the area as an area of intense historic homesteads.

The documents search indicates that there is some potential for historic and prehistoric sites within the present project area. If additional prehistoric sites are found they are likely to consist of a few cultural items. Any historic sites would likely consists of features or isolated historic materials related to the historic occupation of the general area; no major historic occupations are anticipated.

Granite Creek Prescribed Fire Project Summary (by Mack McFarland)

The 92 acre Granite Creek prescribed fire project has been designed to convert sage/grass fuel type into grass/forb fuel type to reduce fire behavior and increase fire management response options in the event of a wildland fire start in the southern portion of Grand Teton National Park. Fire suppression response times to the Granite Creek area are generally longer than many other areas within the park due to the current road configuration. Modification of sage/grass fuels to a mostly grass component across 60-80 percent of the area will allow for greater fire containment options in the event of a wildfire in the area. Project would utilize a spring or fall burn prescription to minimize risk of escape onto adjacent private lands.

A public information campaign will be initiated following approval of this project. Addition of acres may occur if private landowners are interested in treating parcels adjacent to the project boundaries. The Jackson Hole Land Trust has been consulted and is currently seeking landowner feedback.

Prescribed fire operations may include some preparation of fuels along unit boundaries including mowing with walk behind or tractor mounted mower decks, and thinning and limbing of trees with chainsaws. During the project implementation, fire vehicles may drive off road along the perimeter of the unit or along fence lines as necessary to keep the fire within the project area.

INVENTORY METHODS

The present inventory followed standard archaeological inventory procedures accepted by the SHPO. Personnel were spaced at no more than 30 m intervals. In areas with lower surface visibility, special attention was paid to areas of subsurface disturbance (e.g., rodent burrows, animal trails, cutbanks, etc.).

At this time, GTNP has not signed off on the new SHPO site definitions. As a result, for this inventory, a site was defined as consisting of two or more artifacts within 30 m of each other or one artifact and one or more features. An isolated find was defined as a single artifact, more than 30 m from any other artifact. Road trash and objects less than 50 years old were not recorded. Wyoming Cultural Properties Forms were filled out for each site, and a Wyoming Isolated Resource Form for isolated finds. Each locale was plotted on the appropriate USGS 7.5 minute topographic quadrangle using coordinates derived from a handheld GPS unit with UTM coordinants based on the WGS 84 Datum. A site map was created showing location of cultural items, site datum, and local topography. The site datum consists of a metal spike with an attached aluminum tag inscribed with the temporary field site number, date, and initials of OWSA and the field director. Shovel tests were excavated at the archaeological sites to reveal the subsurface soils and the potential for intact buried cultural deposits. The depth and diameter of each shovel test, its soil characteristics and description of any cultural materials were recorded. Excavated fill was screened through 1/4" hardware cloth. Appropriate photographs were taken of the project area and any sites or features that might be present. All field notes, maps, photographs, etc. will be eventually curated with the National Park Service, Grand Teton National Park, but in the meantime, these records will be held at OWSA. No cultural materials were collected during this project.

SURVEY RESULTS

The Class III cultural resource inventory of the 92 acre Granite Creek prescribed fire project area resulted in the recording of one new prehistoric site and two prehistoric isolated finds. The ineligible Pembles New Ditch also passes through the present project area (Figure 1), but will not be impacted. Descriptions of the new resources are described below.

SITE NUMBER: 48TE1730 (Figures 1 and 3)

DESCRIPTION: This site consists of a small, widely dispersed scatter of five obsidian flakes and two obsidian flake tools. These materials were found in an area measuring approximately 75 m north-south by

Map not available

15 m east-west. They were located on a low, 1-1.5 m high terrace between Granite Creek to the west and a dry, former outwash channel to the east. Both drainage channels flow southward through a cobbly, outwash plain that slopes at 1-2 degrees to the south.

Vegetation consists of thick sagebrush and grasses (Figure 4). Willow, narrow leaf cottonwood, and spruce/fir conifers also occur in the general site area, but mostly line Granite Creek to the west of the site. Surface visibility was estimated at about 5-20 percent. Soils consist of a 50-100 cm thick layer of brown silty sand with pebbles that overlies outwash gravels and cobbles. Elevation is at 1932 m (6340 ft).

Cultural materials included five obsidian tertiary flakes, a retouched flake (FS-1), a stage 3 biface fragment (FS-2) (Figure 4). Most of these items were found at the northern end of the site area. Additional cultural materials are likely to occur at the site, but surface visibility is obscured by dense sagebrush and grass cover. A post-fire investigation of the site is likely to expose additional surface cultural material. The limited amount of cultural materials on the site suggest the site functioned as a very temporary locale where, a very limited number of activities were performed.

A local homeowner that lives about 250 m north of the site informed us that large numbers of projectile points and other artifacts occurred on their property that lies at the base of the low ridge of glacial drift. It is possible the site's artifacts may have been redeposited by erosion from this unrecorded site on private land. However, intervening cultural materials between the two locales are lacking, which would be expected if erosion was dispersing cultural materials downslope from this apparent site on private land. Nonetheless, this information suggests that more complex and diverse prehistoric sites occur in the general project area, particularly in the more topographically and environmentally varied areas than the wide sagebrush flats that characterize the present project area.

TESTING: One 40 cm diameter shovel test was excavated in the northern portion of the site where most of the cultural materials were located. The unit was excavated to 40 cm below the surface (BS) revealing a brown well sorted sandy silt with rounded and subrounded pebbles. More pebbles were found in the upper 20 cm. No cultural materials were encountered. It should also be noted that no cultural materials were observed along the eastern, dry drainage cutbank, suggesting a limited potential for buried cultural materials at the site.

IMPACTS: Present impacts consist of erosion. The proposed fire treatment program will not affect the site. **NATIONAL REGISTER STATUS:** The site consists of a very sparse lithic scatter that lacks cultural or temporal diagnostics, features or a diversity of materials, and no indications of buried cultural materials that could yield information important to the prehistory of the area (Criterion D). As a result, the site is recommended as not eligible for nomination to the National Register of Historic Places.



View to the west at the site area



FS-1, Retouched Flake



FS-2, Biface Fragment

Figure 4. Photographs of site 48TE1730.

RECOMMENDATIONS: Based on the present prescribed fire plan, it is very unlikely that the low intensity fire will impact the site or its contents.

ISOLATED FIND: IF-WY-2706-1

DESCRIPTION: This isolated find is an obsidian tertiary flake located on a 1-2 degree slope of flat outwash plain (Figures 1 and 5). Vegetation is a dense sagebrush-grassland community with a surface visibility estimated at 5-15 percent. Soil is a brown silty sand with numerous gravels. The rocky soil, and lack of any other cultural materials on the surface or along the small erosional channels that dissect the locality preclude any additional intact buried cultural deposits at this locale. As a consequence, no test excavations were considered necessary or warranted.

NATIONAL REGISTER STATUS: This isolated find is recommended as not eligible to the NRHP. It has no integrity, and there are no indications of any associated buried cultural materials. This isolated find contains no significant data and no further work is recommended.

ISOLATED FIND: IF-WY-2706-2

DESCRIPTION: This isolated find is an obsidian tertiary flake that is also located on the nearly flat outwash plain (Figures 1 and 5). Vegetation is a dense sagebrush-grassland community with a surface visibility estimated at 5-15 percent. Soil is a brown silty sand with numerous gravels. The rocky soil, and lack of any other cultural materials on the surface or along the small erosional channels that dissect the locality preclude any additional intact buried cultural deposits at this locale. As a consequence, no test excavations were considered necessary or warranted.

NATIONAL REGISTER STATUS: This isolated find is recommended as not eligible to the NRHP. It has no integrity, and there are no indications of any associated buried cultural materials. This isolated find contains no significant data and no further work is recommended.



View to the north at isolated find IF-WY-2706-1 locality



View to the north at isolated find IF-WY-2706-2 locality

Figure 5. Photographs of isolated find localities.

MANAGEMENT RECOMMENDATIONS

A Class III cultural resource inventory of the 92 acre, Granite Creek prescribed fire project area was conducted by the Office of the Wyoming State Archaeologist for the National Park Service, Grand Teton National Park. The purpose of the prescribed fire is for habitat improvement and the preventative protection of a small residential area from future wildfires.

One new site, 48TE1730, a small, sparse, ineligible prehistoric lithic scatter was recorded, along with two prehistoric isolated finds. Also present is the previously recorded Pembles New Ditch (48TE1166), an ineligible, historic irrigation ditch. As a result, cultural clearance is recommended with the standard stipulations that should archaeological remains be uncovered during the implementation of the prescribed fire project, the appropriate state and federal regulatory agencies be contacted immediately.

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