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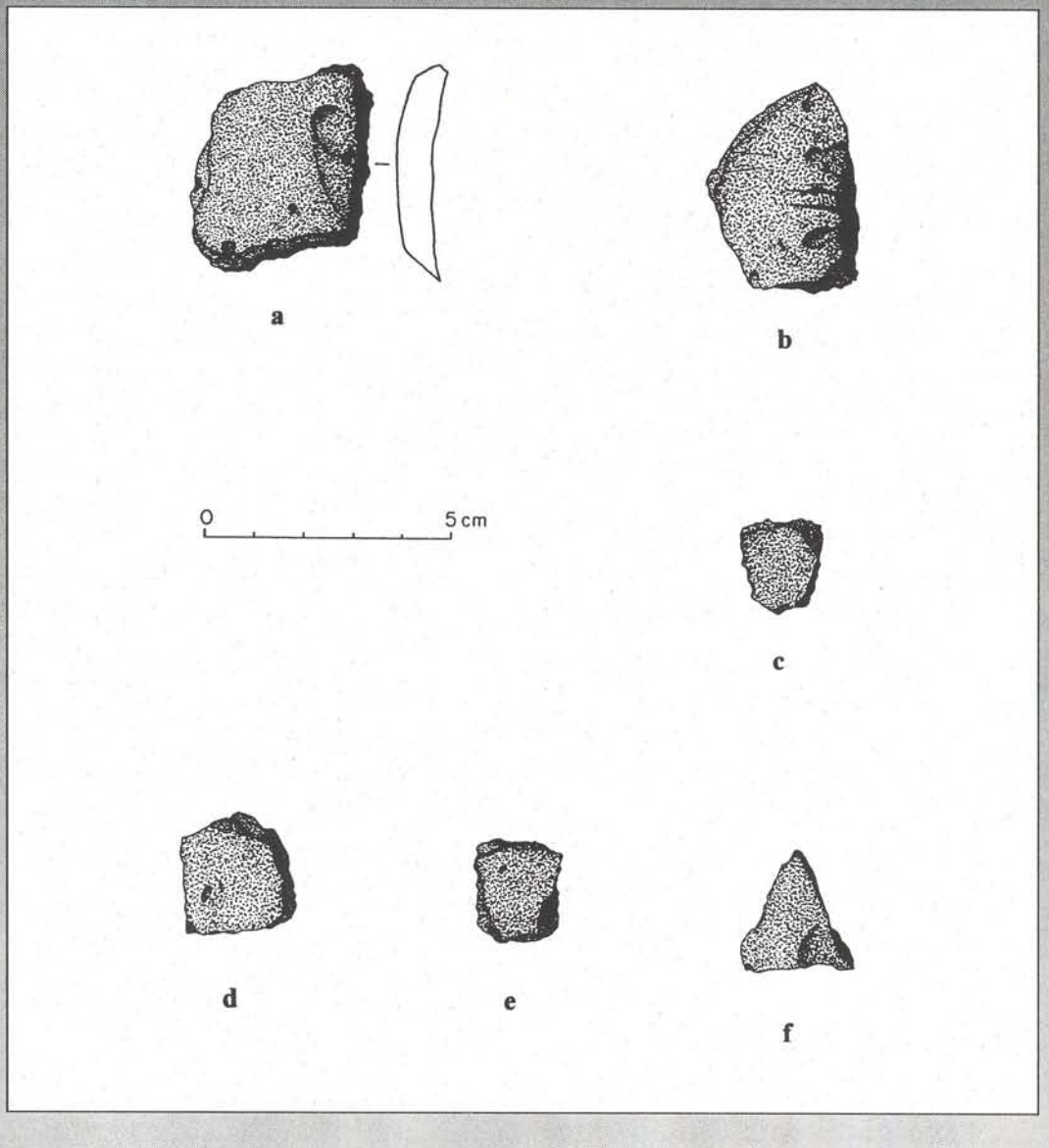

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Mark G. Plew, Editor
IDAHO ARCHAEOLOGIST
Department of Anthropology
Boise State University
1910 University Drive
Boise, Idaho 83725-1950

Cover Photo: Plainware body sherds from 10-CR-1231: a-d, Unit C:10-20 cm; e-f, Shovel test 1.

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TEST EXCAVATIONS AT 10-CR-1231 IN THE STANLEY BASIN, SAWTOOTH NATIONAL RECREATION AREA, IDAHO

Kenneth C. Reid and Daryl E. Ferguson

ABSTRACT

Results of testing a small prehistoric bivouac in the Salmon River headwaters provide insights into late Holocene seasonal land use at a high elevation valley in the Northern Rockies. The terrace remnant that includes the site is Neoglacial in age, and projectile points mark the Elko/Rosegate continuum. Obsidian bifacial tool fragments source to Timber Butte in the west and Shumway Ridge in the southwest. A small sample of Intermountain Ware potsherds could fit within the framework of "long" (A.D. 700 – contact) or "short" (A.D. 1450 – contact) ceramic chronologies for the Northern Rockies.

INTRODUCTION

This article describes the results of testing and evaluation at site 10-CR-1231 on the Salmon River in the Stanley Basin of south central Idaho (Figure 1). The site is located below the village of Lower Stanley, within the Sawtooth National Recreation Area (NRA) in the Sawtooth National Forest. It was recorded as a disturbed but potentially significant prehistoric lithic scatter on 20 July 1995 (Lundberg 1995). Part of the site was damaged by backhoe raking between 8 and 14 October 1997, and the Sawtooth NRA archaeologist conducted limited testing three days later to determine whether subsurface cultural deposits were present (Bowers 1997). Additional testing to determine site boundaries, content, and significance was recommended on the basis of that testing.

ENVIRONMENTAL SETTING

Physiography

Stanley Basin is a north oriented graben formed by Tertiary faulting. Pleistocene glaciers covered the surrounding mountain ranges, including the Sawtooths to the west, the White Cloud and Boulder Mountains to the east, and the Salmon River range to the north. The Sawtooths intercept more moisture than the other ranges because of their height and position. Glaciers in this range flowed further out into the basin than those on the east and north, forming a complex of piedmont moraines dotted with enclosed glacial lakes in the western basin. Much of the remainder of the basin floor is covered by outwash gravels emanating from the White Clouds to the east (Breckenridge et al. 1988). The site at 10-CR-1231 lies on a terrace formed in such outwash deposits.

The Stanley Basin is a hub where several riverine travel corridors converge. In a clockwise direction these include Valley Creek, the Salmon River and its East Fork, the Big Wood, the South Fork of the Boise, and the South Fork of the Payette.

Site 10-CR-1231 lies immediately downstream of an unnamed intermittent first order tributary of the Salmon River that joins it from the north (Figure 2). We have mapped the lower end of this stream as "ditch" where it passes through the culvert under Highway 75 and flows into the Salmon River at the "eroded beach" (Figure 3). Elkhorn Creek joins the Salmon River about 200 m to the west (upriver) of the unnamed creek. The site lies at an elevation of 1,865 m (6,120 ft).

Climate

Winters in the Stanley Basin are marked by cold temperatures, heavy snowfall, and generally windless conditions. Recorded temperatures have dropped to minus 62° F. However, windchill is less of a problem here than at many lower elevations, and snow tends to accumulate in place rather than drift (Linkhart 1981:166-167). Continuous monthly and annual temperature records are not available for Stanley. However, the nearby Mackay Ranger Station at nearly the same elevation has a continuous temperature record spanning most of the century (National Atmospheric and Oceanic Administration 1990:10). These data were used to calculate the effective temperature (ET) in degrees Celsius, which is 10.96.

Holocene Paleoenvironments

Pollen and sediment analyses of a core taken from a kettle lake on Pole Creek about 50 km to the south of 10-CR-1231 provide an indication of early and middle Holocene environmental change in the Stanley Basin. Glacial Peak Set B tephra near the base of the core indicates glaciers had retreated from the basin floor by 11,250 B.P. Radiocarbon dates on a massive peat indicate gradual warming between 10,835 ± 100 (P.H. 0118) and 8450 ± 85 B.P. (SI 5181). Dry conditions prevailed after the Mazama eruption at 6840 B.P. to the close of

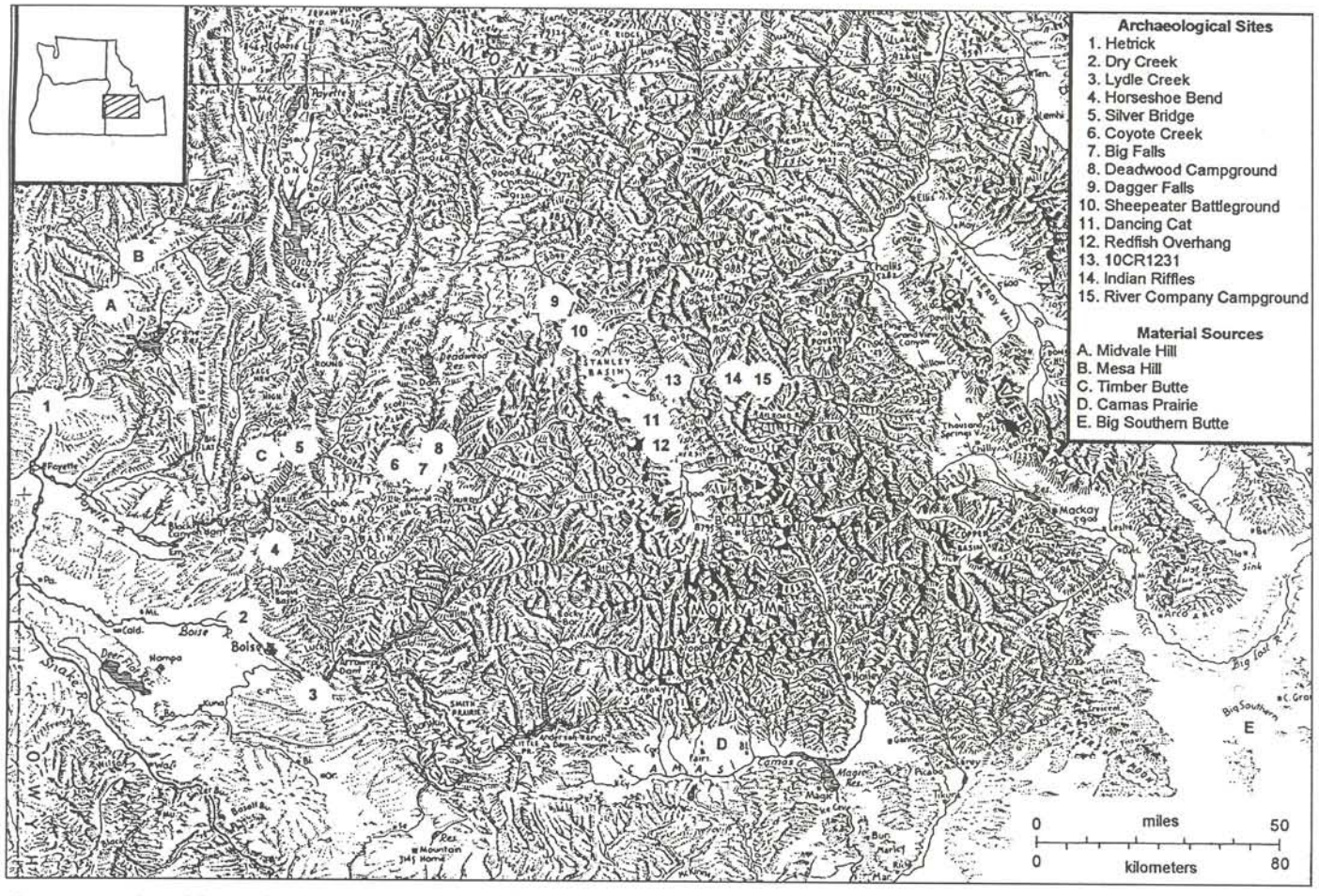

Figure 1. Location of the Stanley Basin study area and other sites mentioned (after Erwin Raisz, 1961).

sediment accumulation at 4350 B.P. (Breckenridge et al. 1988:213-215).

Flora and Fauna

Native plants potentially available for hunter-gatherers included camas and whitebark pine seeds. Camas meadows are found in the headwaters of the South Fork Payette, the headwaters of the Middle Fork Salmon, along Valley Creek, and in the north end of Stanley Basin (Gallagher 1979:7). Detailed reviews of present-day whitebark pine distributions in the area can be found in a recent Forest Service symposium volume (Schmidt 1990).

Large mammals native to the Stanley Basin included bighorn sheep, deer, and elk. Economically important fish included several species of trout and chinook and sockeye salmon. Chinook spawned as far upstream as Valley Creek. Sockeye spawned in Redfish Lake. The Kokanee salmon in the lake spawned in Redfish Lake Creek in August (Parkhurst 1950:28).

CULTURAL BACKGROUND

History

Alexander Ross and a party of trappers from the Hudson's Bay Company traversed the Stanley Basin in September, 1824. Peter Skene Ogden of the same company was in the vicinity in 1828. A trapper named Warren Ferris of the American Fur Company passed through in the summer of 1831. Captain Benjamin Bonneville's party may have spent the winter of 1832-33 near the present town of Stanley (d'Easum 1977:5-12).

Fur hunters and explorers left little evidence of their passage through the region. The three historical activities that have most directly influenced the site at 10-CR-1231 are gold placers, the construction and improvement of the roadway now known as State Highway 75, and the steady expansion of recreational camping since the 1970s.

The town and basin are named for John Stanley. He arrived in July, 1863 with a party of 23 prospecting miners by way of the Lowman Road and the Boise Basin. The following April saw two hundred miners at the mouth of Valley Creek (Black n.d.:3). However, this "Stanley Basin Stampede" ended almost as soon as it began. Hydraulic placering continued year around at Robinson Bar as early as 1868, but mining did not boom in the area until the Yankee Fork discoveries several years later. Stanley district workings occupied only 29 miners as late as the early summer of 1870, due in part to water scarcity problems (Wells 1983:52-53). Strikes at Joe's Gulch, a few miles upstream of the study area, coincided with the Sheepeater and Bannock campaigns in 1878-79. More gold was discovered just downstream of the study area in 1900 at Big Casino Creek. These prospects probably coincide with the first cultural impacts to the deposits at 10-CR-1231.

Increasing recreational use of the study area after the

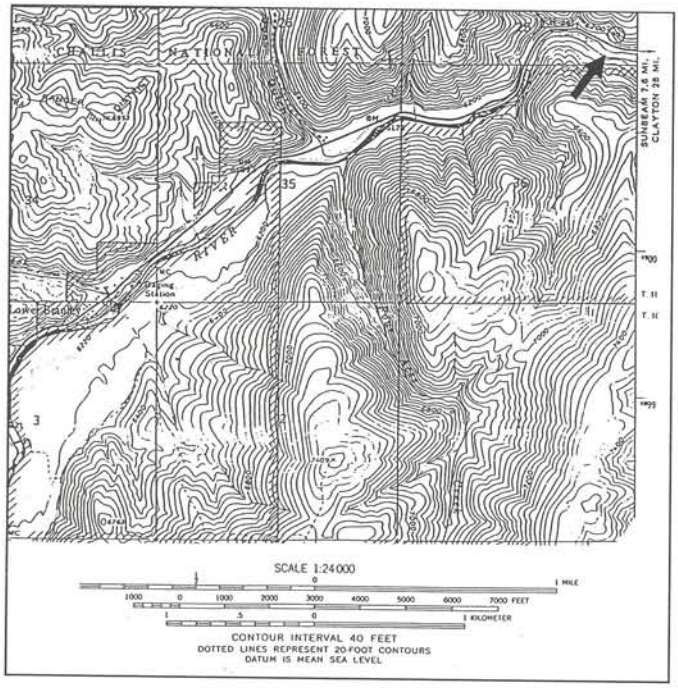

Figure 2. Landform position of 10-CR-1231 on the USGS 7.5' Stanley quadrangle.

establishment of the Sawtooth National Recreation Area (NRA) in 1972 accounts for most of the camping impacts noted during fieldwork at 10-CR-1231. Twelve years after the establishment of the NRA, it was estimated that the Stanley Basin experienced nearly 1,000,000 visitor days annually (Gallagher 1984:34). The figure is probably higher today. Most of this impact occurs during the relatively brief summer.

Ethnohistory

The Stanley Basin lies within the 19th century territory of the *tukudeka* (or *tukurika*) band of Northern Shoshone. The name is often translated as "meat eaters" or "sheep eaters." Early explorers in the Northern Rockies sometimes referred to them as "Broken Moccasins" or *dignes de pitie*. A Shoshone quizzed by William Clark on the Lemhi River in 1805 described them as fierce people who lived like bears in holes and fed on roots and the flesh of stolen horses (Coues 1993:Vol. 2:513). "Holes" might refer to naturally roofed rockshelters and overhangs such as Redfish Overhang.

Liljeblad (1957:96) characterized the *tukudeka* as "essentially a hunting people." Individuals or small groups of hunters pursued large game animals such as bighorn sheep, deer, and elk. Their hunting tactics included stalking and coursing with dogs, but not communal drives. The *tukudeka* formed minimum bands of two or three families when hunting, but wintered in larger assemblies of twenty or more families. Liljeblad placed the *tukudeka* in the Northern Rockies "for centuries."

Gallagher's map of seasonal movements among Shoshone populations in central Idaho shows three groups using the Stanley Basin in the early 19th century (Gallagher 1979: Figure 3). To the west, the Boise-Weiser Shoshone wintered in the lower reaches of the Boise, Weiser, and Payette Basins, but spent summer and fall in the Stanley Basin. To the east, the Lemhi Shoshone wintered in the lower Lemhi Valley, but spent summer and fall in either the Stanley Basin or Birch Creek Valley. Stanley's party met a group of about sixty Indians camped along a large creek in the valley in the summer of 1863. They seem to have been Lemhi Shoshone on a hunting trip who had not previously seen white men (d'Easum 1977:20).

The Sheepeaters exhibited a more circumscribed settlement pattern, summering in the Stanley Basin but wintering at somewhat lower elevations along the East Fork and Middle Fork of the Salmon. This pattern may be historically anomalous, the reaction of refugees to regional turmoil in the early 19th century, rather than a long-term pattern with its own archaeological record. For example, after thirty families wintering in a mountain village north of Clayton succeeded in procuring horses at Camas Prairie, they promptly joined other Shoshones in buffalo expeditions to the east (Steward 1938:188).

At least one long-term resident and local historian of the Sawtooths asserts that Indians "seldom, if ever, remained in the valley all winter" (d'Easum 1977:20). It is difficult to imagine thirty families, or about 150 people, overwintering above an elevation of 6,000 feet without leaving evidence of substantial structures, storage facilities, or both.

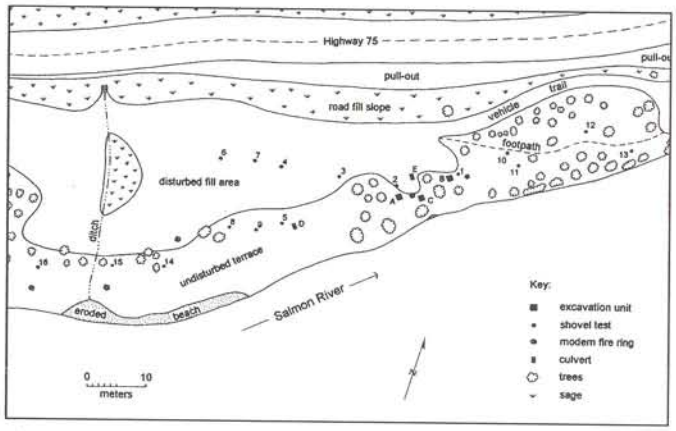

Figure 3. Sketch map showing the location of recent site impacts, shovel test transects, and excavation units.

Prehistory

The prehistoric archaeological record of the Stanley Basin is poorly understood. Excavations at Redfish Overhang revealed early Holocene occupations dating between 10,000 and 8,000 years ago. Distinctive artifacts found at the site include Haskett projectile points and a cache of bifacial blanks (Sargeant 1973).

Middle Holocene industries are represented at Sheepeater Battleground, and have been tentatively cross dated to the andesite workshops in the Weiser Basin (Gallagher 1979:57). These in turn have been cross dated to the Stockhoff workshop in the Blue Mountains, where large quarry blanks and bifaces were in production at least as early as the Mazama ashfall. Hydration dating of Timber Butte obsidian artifacts at Sheepeater Battleground suggests two periods of occupation, the first between 4000 and 2000 B.P., the second between 1000

and 500 B.P. (Michels 1983).

The late Holocene record is represented at Redfish Overhang (Sargeant 1973), Dancing Cat (Sargeant 1972), Sheepeater Battleground (Gallagher 1979), Indian Riffles (Reid 1997), and the River Company Campground (Reid and Gallison 1995). Two earth ovens excavated at Dancing Cat, and ceramics from three other sites, seem to document new developments in food preparation within the late Prehistoric period. However, until the larger assemblages at Redfish Overhang, Sheepeater Battleground, and Dancing Cat are more fully reported, it is premature to offer broad generalizations about adaptive change.

When the radiocarbon record from these sites is placed in the context of the Boise, Payette, and Upper Salmon Basins (Table 1), a picture emerges of early Holocene deposits surviving in protected shelters, and later Holocene deposits surviving in a variety of shelters and open riparian contexts from the Neoglacial to the Protohistoric periods. In contrast to the well preserved deposits in Hells Canyon to the west, the middle Holocene or hypsithermal interval is difficult to discern. A sharp increase in the number of radiocarbon ages from the past thousand years probably reflects the interaction of better site preservation and discernable population growth at the regional level.

FIELD INVESTIGATIONS

The site was recorded as a prehistoric lithic scatter on 20 July 1995. Site dimensions based on surface evidence were estimated as 58 by 25 m. Artifacts included obsidian and chert flaking debris and an obsidian biface fragment.

The site was examined again by Roshanna Stone, the Forest Archaeologist, on 8 October 1997. She noted that heavy equipment had been working nearby but saw no disturbance to the site itself. However, a second visit six days later discovered evidence of fresh backhoe bucket

TABLE 1

SUMMARY OF RADIOCARBON DATED OCCUPATIONS FROM THE STANLEY BASIN AND THE BOISE, PAYETTE, AND UPPER SALMON BASINS.

Site	Elevation	Radiocarbon Age	Lab No.	Material Dated	Reference
Redfish Overhang (10-CR-201)	1,920 m (6,300 ft.)	10,000 ± 100 9,860 ± 300 8,060 ± 285	WSU-1396 WSU-1395 WSU-1397	charcoal charcoal (?) charcoal	Sargeant 1973
Dagger Falls (10-VY-76)	1,756 m (5,760 ft.)	3,990 ± 80	Beta-40609	charcoal	Torgler 1993
Silver Bridge (10-BO-1)	975 m (3,200 ft)	3,680 ± 100	Beta-6529	charcoal	Plew et al. 1984
Dry Creek Rockshelter (10-AA-68)	969 m (3,152 ft.)	3,530 ± 85 3,270 ± 110	WSU-1486 WSU-1574	bone bone	Webster 1978
Dagger Falls (10-VY-76)	1,756 m (5,760 ft.)	2,950 ± 60 2,010 ± 60	Beta-40611 Beta-41780	charcoal charcoal	Torgler 1993
Dry Creek Rockshelter (10-AA-68)	969 m (3,152 ft.)	1,710 ± 75	WSU-1514	charcoal	Webster 1978
Indian Riffles (10-CR-1233)	1,756 m (5,760 ft.)	1,460 ± 60	Beta-98270	charcoal	Reid 1997
Dry Creek Rockshelter (10-AA-68)	969 m (3,152 ft.)	1,410 ± 70	WSU-1513	charcoal	Webster 1978
Deadwood Campground (10-VY-34/49)	1,134 m (3,720 ft.)	1,400 ± 60 1,380 ± 50	Beta-66595 Beta-66591	charcoal wood	Reid and Gallison 1994
Lydle Gulch (10-AA-72)	863 m (2,830 ft.)	1,170 ± 90 1,010 ± 90	WSU-2062 WSU-2063	charcoal charcoal	Sappington 1981
Dagger Falls (10-VY-76)	1,756 m (5,760 ft.)	980 ± 60	Beta-40610	charcoal	Torgler 1993
Horseshoe Bend (10-BO-419)	1,066 m (3,500 ft.)	820 ± 90	Beta-26137	charcoal	Lewarch and Benson 1989
Lydle Gulch (10-AA-72)	863 m (2,830 ft.)	790 ± 100	WSU-2061	charcoal	Sappington 1981
Deadwood Campground (10-VY-34/49)	1,134 m (3,720 ft.)	750 ± 60	Beta-66592	organic sediment	Reid and Gallison 1994
Redfish Overhang (10-CR-201)	1,920 m (6,300 ft.)	670 ± 130	WSU-1410	charcoal	Sargeant 1973
Horseshoe Bend (10-BO-419)	1,066 m (3,500 ft.)	380 ± 60 280 ± 80 170 ± 70 120 ± 70	Beta-26136 Beta-25816 Beta-25814 Beta-25815	charcoal charcoal charcoal charcoal	Lewarch and Benson 1989

rakings to depths of 10-20 cm at the west end of the site. Two smaller impacts were noted at the vegetated east end. At this point, testing information became necessary for management planning.

The Sawtooth NRA archaeologist placed a transect of five shovel tests at 10 m intervals on a WNW bearing parallel to and about 15 m southwest of Highway 75. A sixth shovel test was placed on a perpendicular bearing 10 m southwest of Shovel Test 3 (Figure 3). Sediments were dry screened through 1/8th inch wire mesh and the finds were field sorted and collected (Table 2).

Table 2

Dimensions and Contents of the Shovel Tests at 10-CR-1231

Shovel Test	Depth (cm)	Contents
1	40	2 plainware body sherds, 1 hafted uniface, 5 chert flakes, 1 obsidian flake, 1 glass chip
2	60	1 corner notched dart point, 1 chert biface fragment, 1 obsidian flake, 1 chert flake
3	50	—
4	60	—
5	30	2 obsidian flakes, 1 cortical obsidian chunk, 3 chert flakes, 5 green glass flakes
6	50	—
7	80	—
8	50	—
9	86	1 obsidian and 6 chert flakes
10	86	1 chert chunk
11	75	—
12	100	6 obsidian flakes
13	90	1 piece of fire cracked rock, 1 green glass bottle fragment
14	70	1 poptop, 1 glass chip, 5 obsidian and 2 chert flakes
15	100	1 piece of brown bottle glass, 1 amethyst tinted glass chip, 1 blue plastic bead, 1 biface tip of obsidian, 1 chert stage 1 edged blank proximal fragment, 8 obsidian flakes, 18 chert flakes
16	60	1 chert and 1 obsidian flake

Site Impacts

Impacts to the site include construction of the roadbed for State Highway 75, not only the pavement but the areas mapped as pullout, road fill slope, disturbed fill area, vehicle trail, and the culvert and ditch (Figure 3). The beach remnant, where the ditch enters the river, has probably been eroded by fluvial action. This erosion may have been accelerated by upstream placering between the 1860s and about 1900. A third impact can be attributed to recreational campers, who have built hearths, fire rings, and privy pits across the surface, trampled and compacted sediments, and undoubtedly collected artifacts over the years.

The Forest Service "portopotty" after which the site was first named is part of this impact, and site sediments probably contain many old and unmarked catholes. Five modern fire rings were recorded at 10-CR-1231. Three of them cluster along the lower end of the ditch on the undisturbed terrace near the tree line. The fourth occurs between Excavation Units A and C and the fifth near

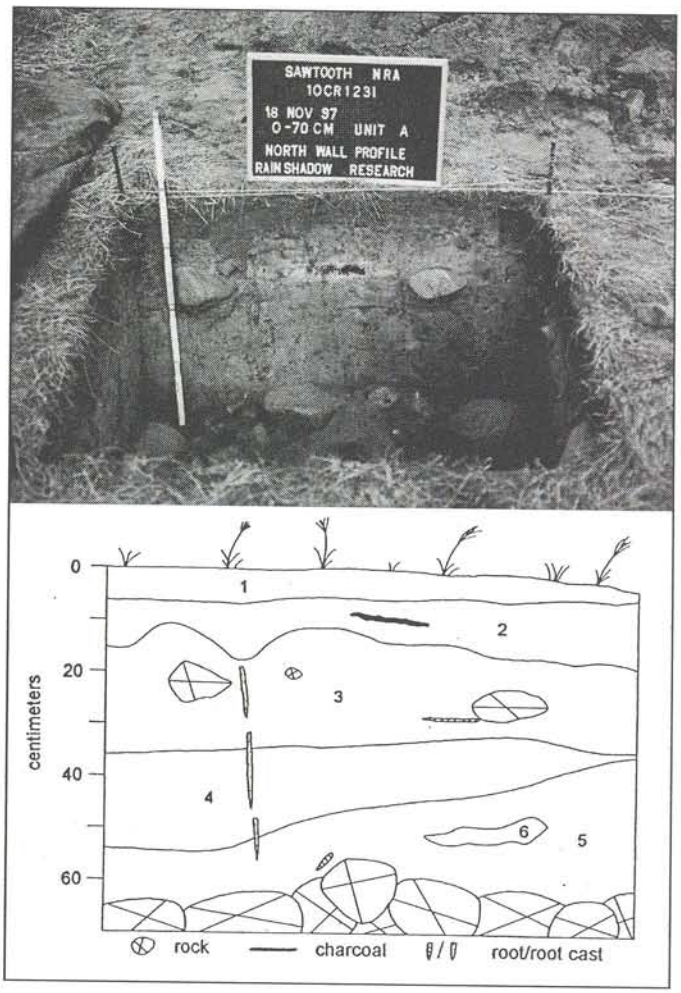

Figure 4. Stratigraphic profile of the north wall of Excavation Unit 1, 10-CR-1231.

Shovel Test 1 (Figure 3). A fifth modern hearth was intercepted in Excavation Unit A at a depth of approximately 10 cm (Figure 4). The latter was represented by a charcoal lens rather than a stone circle. These features were made by contemporary campers, picnickers, fishermen, and hunters.

The contract scope of work for the undertaking described here indicated that a recently impacted prehistoric site with ceramics, obsidian, and projectile points would be the focus of investigations. The testing level was stipulated at 10 shovel probes and five 1 m^2 excavation units.

Shovel Tests and Excavation Units

Fieldwork involved three people for six days between 12-18 November 1997. The weather was cold and then snowy. The temperature on the morning of the first day was 8°F, dropping to 3°F on the second. Heavy snow fell on the third day but the temperature rose above 20°F. Units A, B, C, and E were clustered in a stand of trees about 60 m downstream of the point where the ditch flows into the Salmon River. Unit D was about 40 m downstream of this point (Figure 3).

Sediments were frozen to depths of 20 cm over much of the excavation space. When necessary, the upper sediments were broken up into chunks and laid out on tarps

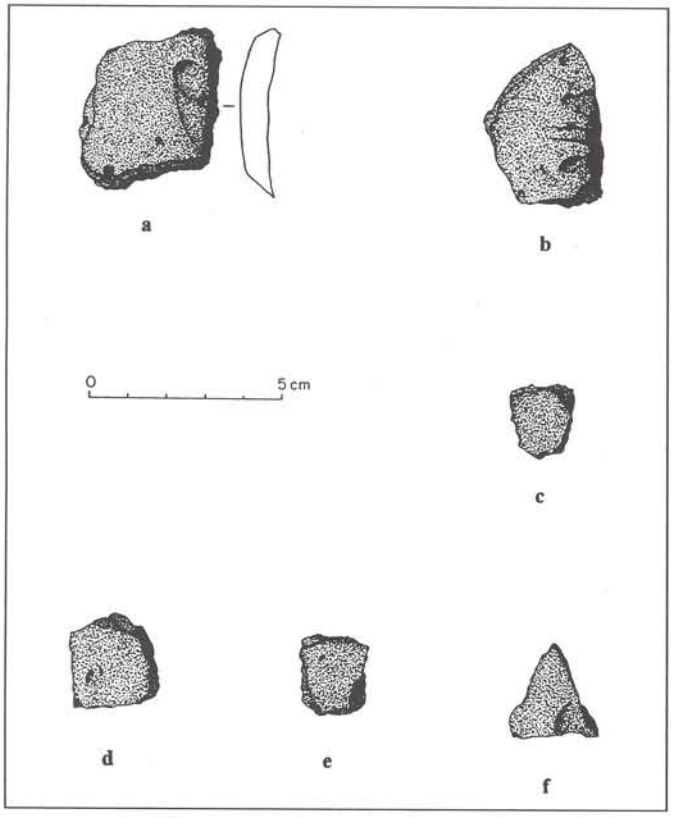

Figure 5. Plainware body sherds from 10-CR-1231: a-d, Unit C:10-20 cm; e-f, Shovel test 1.

to thaw, or brought back in pails to warm in the motel room before screening. The frozen blocks were separated by level before screening. Once thawed, the sandy sediments passed easily through the 1/8th inch mesh. The high ratios of small to large flakes recovered in these levels by field sorting indicates the procedures were effective.

RESULTS

Shovel Tests

A total of 16 shovel tests were excavated, six by the Sawtooth NRA archaeologist on 17 October, and the other ten at the start of this project. The dimensions and contents of the shovel tests are summarized in Table 2. Their distribution across the site is shown in Figure 3. The first six shovel tests succeeded in locating the concentration of prehistoric cultural debris. The remaining ten were used to determine the western and eastern limits of the deposit.

The prehistoric artifacts cluster in four places: between Shovel Tests 1 and 2, between Shovel Tests 5 and 9, at Shovel Test 12, and between Shovel Tests 14 and 15 (Figure 3). The core area seemed to be between Shovel Tests 1 and 2. Two plainware body sherds (Figure 5e,f) and a hafted chert uniface came from ST 1, and a corner notched Elko series chert dart point from ST 2. The only surface collected artifact was the distal fragment of a chert dart point that was found about 1 m northeast of Shovel Test 2. We placed three 1 m^2 units (Units A, B, and C) here, and one of the 1 x .5 m units (Unit E). The remaining 1 x .5 m unit (Unit D) was placed in the hot spot bracketed by Shovel Tests 5 and 9.

Excavation Unit A

The unit was excavated to 70 cm below surface, but artifacts were not found below 60 cm, and only one obsidian flake was recovered below 50 cm. Sediments were frozen in the upper 10 cm. A stratigraphic profile of the north wall of this unit (Figure 4) is representative of the five excavation units. Stratum 1 is an A_p horizon consisting of a slightly sandy loam (10YR3/3) with numerous roots and organics from grass sod. It extends to 6 cm below surface. Stratum 2 is a charcoal mottled sandy loam A_1 horizon (10YR5/2) that extends from between 6 and 15 to 18 cm below surface. A small lens of charcoal was recorded as a recent hearth. Stratum 3 is an A_{11} horizon (10YR5/3) consisting of a charcoal mottled loamy sand with numerous small pebbles or pea gravels that extends to an average depth of 35 cm below surface. Evidence of floralturbation (vertically aligned root casts) appeared in this stratum. Stratum 4 is an A_{12} horizon (10YR5/3) similar to the A_{11} but without charcoal mottling. Stratum 5 is a B_1 horizon (10YR4/3) of moist sand with fewer pebbles and little charcoal. It contained a small lens of slightly darker sand. Alluvial gravels formed the base of this stratum.

Small obsidian pressure flakes clustered in the 0-5 cm

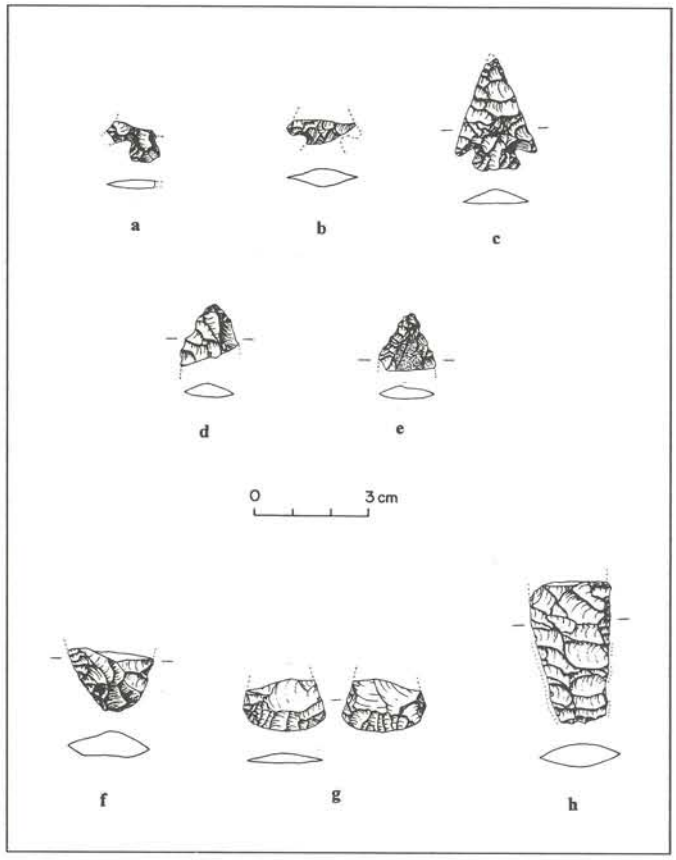

Figure 6. a. Rosegate point base, unidentified obsidian, Unit E:0=20 cm; b. dart point midsection, chert, Unit A:10-20 cm; c. Elko series dart point, Shovel Test 2; d. biface tip, unidentified obsidian, Shovel Test 15; e. biface tip, Timber Butte obsidian, Unit A:40-50 cm; f. biface base, Shumway Ridge obsidian, Unit C:20-30 cm; g. preform fragment, chert, Unit C: 10-20 cm; h. lanceolate or stemmed point fragment, Unit E: 30-40 cm.

level. The upper 15 cm were a sandy loam containing several historic as well as prehistoric artifacts. Charcoal mottled sands began at about 15 cm and continued to 30 cm. This stratum contained most of the prehistoric artifacts. Several pieces of fire cracked rock were noted in the 10-20 cm level. A few pieces of fire cracked rock in the 20-30 cm level were clustered near the top. The fire cracked rock did not form a pattern or delineate a hearth basin. Two refitted pieces occurred 50 cm apart. One mammal bone fragment was recovered 21 cm below the surface. Cultural material dropped off abruptly between 30-40 cm, and the charcoal mottling ended at 33 cm.

The 0-10 cm level included 21 fragments of unidentified musselshell, one small mammal bone fragment, and 20 modern artifacts. The latter included four poptops, a 9d wire nail, a metal ear ring, and several scraps of plastic and container glass. The 10-20 cm level included a .22 cartridge, 15 chips of bottle glass, a cortical spall of fire cracked granite, three small chunks of charred wood, a medial fragment of a corner notched point of brown chert with a neck width of 9.0 mm (Figure 6b), and a spalled ceramic body sherd. The 20-30 cm level included two small chunks of charred wood, a piece of wire fishing tackle, one large percussion spall from an alluvial cobble, and two refitted fragments of heat spalled alluvial or till-derived granite. A Grade 2 obsidian flake from this level was sourced to Timber Butte. No tools or implements were recovered in the 30-40 cm level. A marginally retouched distal tip of an obsidian tool was recovered from the 40-50 cm level (Figure 6e). The obsidian was sourced to Timber Butte.

A total of 190 lithics were recovered from Excavation Unit A, including 103 obsidian flakes. Projected debitage density here was 271/m³. The size grading described here followed the procedures outlined in Reid (1997:4-5) except for the absence of the Grade 5 fraction from constant volume samples. The ratio of Grade 4 to Grade 3 flakes was above 1.0 in the upper three levels, indicating relatively intact deposits (Table 3).

Excavation Unit B

The 0-10 cm level included two poptop fragments, one chip of brown bottle glass, one piece of clear flat glass, and one plastic *hors d'oeuvre* skewer base. The 10-20 cm level included a glass chip, the top of a tin can with a diameter of about three inches, and a small chip of mammal bone. The 20-30 cm level included a heat spalled argillite tabular flake with possible edge wear and a smaller heat spall of the same material, also with edge wear. A cortical Grade 2 obsidian flake from this level

Table 3

Size Grades and Counts for Lithics Recovered in Excavation Unit A, 10-CR-1231 [Obsidian in brackets]

Level (cm)	Grade 2		Grade 3		Grade 4		Subtotals		4:3 Ratio	
00-10	01	[00]	03	[02]	10	[07]	14	[09]	3.3	[3.5]
10-20	11	[01]	24	[03]	36	[19]	71	[23]	1.5	[6.3]
20-30	00	[01]	12	[04]	25	[07]	37	[12]	2.1	[1.8]
30-40	00	[01]	03	[01]	10	[03]	13	[05]	3.3	[3.0]
40-50	00	[01]	03	[00]	01	[01]	04	[02]	0.3	—

The unit yielded 144 flakes, of which 62 were obsidian (Table 4). The projected density here was 411/m³. The ratios of Grade 4 to Grade 3 flakes were above 1.0 in the upper three levels, and above 3.0 for the obsidian subsample. The lack of dispersal among these smaller flakes may indicate relatively intact deposits.

Table 4

Size Grades and Counts for Lithics Recovered in Excavation Unit B, 10-CR-1231 [Obsidian in brackets]

Level (cm)	Grade 2		Grade 3		Grade 4		Subtotals		4:3 Ratio	
00-10	00	[00]	11	[06]	15	[21]	26	[27]	1.4	[3.5]
10-20	06	[01]	08	[03]	10	[10]	18	[13]	1.3	[3.3]
20-30	03	[01]	12	[03]	22	[17]	34	[20]	1.8	[5.7]
30-35	00	[00]	03	[00]	01	[01]	07	[01]	0.3	—

Excavation Unit C

The 0-10 cm level included a .22 cartridge, three chips of container glass, and a plastic clip. The 10-20 cm level included a chert preform proximal fragment suggestive of a Bliss or Desert series arrowpoint (Figure 6g), two chips of charred wood, four plainware body sherds (Figure 5a-d), and several historic artifacts: three poptops, one ball of wadded tinfoil, one bottlecap, eight chips of brown and clear container glass, one stamped metal barrette, a metal cap, and a gnurled plastic knob. The 20-30 cm level included an exhausted heat treated bipolar core of white chert (Figure 7b), an obsidian biface tip (Figure 6f) sourced to Shumway Ridge (Hughes 1998), three small cortical spalls of fire cracked rock, two mammal bone fragments, a plastic nozzle cap, a cut nail shank, and a chip of brown bottle glass.

The unit yielded 88 flakes, of which 28 were obsidian (Table 5). Projected flake density here is 220/m³. Again, the ratios of Grade 4 to Grade 3 flakes seem to indicate relatively intact deposits.

Table 5

Size Grades and Counts for Lithics Recovered in Excavation Unit C, 10-CR-1231 [Obsidian in brackets]

Level (cm)	Grade 2		Grade 3		Grade 4		Subtotals		4:3 Ratio	
00-10	00	[00]	00	[02]	00	[00]	00	[02]	—	—
10-20	02	[00]	07	[02]	05	[02]	14	[04]	2.8	[2.0]
20-30	06	[00]	23	[07]	17	[15]	46	[22]	2.7	[1.5]

Excavation Unit D

The unit measured 1.0 x .50 x .40 cm. The 0-10 cm level included a .22 cartridge, a chip of flat glass, six chips of dark green bottle glass, three chips of brown bottle glass, and three chips of clear glass that probably came from the same curved dish. The 10-20 cm level included a cortical siltstone spall with slight recession and wear on one edge (Figure 7a), a piece of plastic, and 39 small glass chips representing dark green, brown, and clear glass containers. The 20-30 cm level included one small brown and one small clear glass chip, and one edge worn chert tool fragment. The 30-40 cm level included one small brown glass chip.

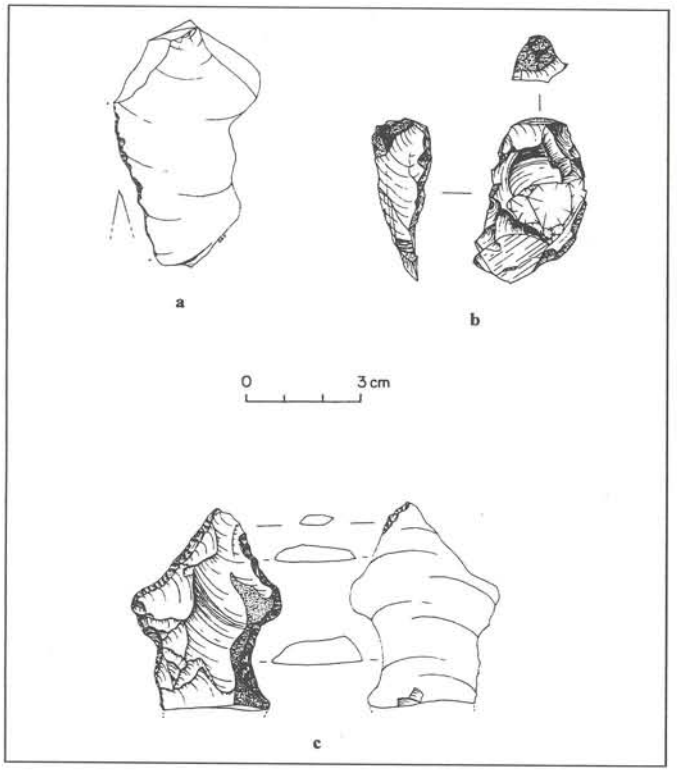

Figure 7. a. utilized argillite spall, Unit D:10-20 cm; b. bipolar core, chert, Unit C:20-30 cm; c. hafted unifacial tool, chert, Shovel Test 1.

The unit yielded only 45 flakes, ten of them obsidian (Table 6). The projected flake density here is 225/m³. The ratios of Grade 4 to Grade 3 flakes between 10-30 cm are high, dropping abruptly below 30 cm. Deposits seem to be relatively intact.

Excavation Unit E

The unit measured 1.0 x .50 x .45 m. The 0-20 cm level included two small chips of brown glass and one chip of clear glass, and a proximal fragment of an obsidian Rosegate projectile point (Figure 6a) with a neck width of 6.2 mm. The obsidian could not be sourced to a known outcrop. It exhibits heat pocking but was not found in a hearth. The 20-30 cm level included two small chunks of fire cracked rock. The 30-40 cm level included the proximal fragment of a stemmed or lanceolate projectile point (Figure 6h). The material is brown chert, probably heat treated. The cross section at the break is lenticular. Maximum thickness at the break is 6.9 mm. Width at the base is 12.3 mm, and at the break, 6.9 mm. Light grinding occurs on the lateral margins. Invasive facial flaking displays a parallel oblique orientation on both sides. The point is well made.

Table 6

Size Grades and Counts for Lithics Recovered in Excavation Unit D, 10-CR-1231 [Obsidian in brackets]

Level (cm)	Grade 2		Grade 3		Grade 4		Subtotals		4:3 Ratio	
00-10	00	[00]	00	[00]	00	[00]	00	[00]	—	—
10-20	01	[00]	02	[01]	08	[01]	11	[02]	4.0	[1.0]
20-30	01	[00]	00	[01]	06	[03]	08	[03]	6.0	—
30-40	03	[00]	05	[00]	08	[05]	16	[05]	1.6	—

Table 7

Size Grades and Counts for Lithics Recovered in Excavation Unit E, 10-CR-1231 [Obsidian in brackets]

Level (cm)	Grade 2		Grade 3		Grade 4		Subtotals		4:3 Ratio	
00-20	02	[00]	04	[00]	03	[01]	09	[01]	0.8	—
20-30	03	[00]	05	[01]	05	[05]	13	[06]	1.0	[5.0]
30-40	00	[00]	00	[01]	04	[06]	04	[07]	—	[6.0]
40-45	00	[00]	01	[00]	01	[01]	02	[01]	—	—

The unit yielded 43 flakes, 15 of them obsidian (Table 7). Debitage density here is 191/m³. Size grade ratios are strong for the obsidian, but the samples are too small to characterize with confidence.

DISCUSSION

Surface evidence and testing data show that the site includes contemporary, historic, and prehistoric records. The historic record is sparse and insignificant. The prehistoric record may represent as many as four components. A late prehistoric occupation may be represented by the ceramics and possible Bliss or Desert series arrowpoint preforms. Rosegate and Elko occupations are identified by projectile points. An early Holocene occupation may be indicated by the lanceolate point base. However, this seems doubtful given the probable late Holocene age of the landform.

Contemporary Debris

Modern camping debris includes a metal earring, a barrette, bottle fragments, can tabs and lids, picnic trash, fishing tackle, .22 cartridges, and probably the thin purplish musselshell fragments in the upper 10 cm of Excavation Unit A. This modern trash is concentrated in the upper levels but extends to 40 cm below surface. It is mingled throughout the prehistoric ceramic occupation at 20-30 cm. It includes a buried charcoal lens in Excavation Unit A, and all of the surface fire rings mapped in Figure 3.

Historic Assemblage

Glass and metal artifacts more than 50 years old include the cut nail shank from Excavation Unit D, a sherd of amethyst tinted container glass from Shovel Test 15, and two sherds of flat glass from a windowpane. Glass production using manganese oxide bleaching (weathering to an amethyst tint) dates to between 1880-1917 (Hardesty 1988:79). The flat glass sherd from Excavation Unit B has a thickness of .1120" and probably postdates 1915, while the thinner (.0850") specimen from Unit D may date to between 1855-1885 (Roenke 1978:116).

The set of historic artifacts at 10-CR-1231 retains little information potential. The site may have been associated with and indirectly damaged by upstream hydraulic placering, but it does not appear to contain a significant 19th century mining occupation.

Prehistoric Assemblage

Fire cracked rock, lithic tools and manufacturing debris, plain surfaced earthenware ceramics, and fragments

of large mammal bone make up the prehistoric assemblage. As many as three components may be represented, and the younger components may represent more than one occupation.

Ceramic Analysis

The ceramic sample from 10-CR-1231 consists of seven sherds, six of which display both interior and exterior surfaces. Four sherds were recovered at 15 cm below surface in Excavation Unit C. Two came from Shovel Test 1, which was excavated to 25 cm in a single level. A small spall with only one surviving shaped surface was recovered from the 10-20 cm level of Excavation Unit A. Color on all sherds is basically brown (7.5YR4/2), but with occasional soot smudges and weathered patches. The entire sample clusters within an area no more than 20 m in diameter at the east end of the site.

The six sherds with two surviving surfaces are illustrated in Figure 5. They were coded for surface smoothing, weighed, and measured for wall thickness and maximum temper particle size (Table 8). These variables were selected to understand the sample within a larger comparative context of potter mobility and plainware production.

Table 8

Descriptive Summary of the Ceramic Sample

Provenience	Wall Thickness (mm)	Surface Texture	Maximum Temper Size (mm)	Weight (g)
Unit C	7.2	smooth	4.2	15.5
Unit C	8.6	smooth	4.1	14.2
Unit C	8.4	smooth	3.5	6.4
Unit C	6.8	smooth	2.8	3.3
ST 1	7.1	smooth	3.0	3.5
ST 1	6.4	rough	2.8	2.8
Unit A	n.a.	rough	2.7	1.7

The hypothesis, framed to evaluate late prehistoric plainwares from northern Utah (Simms et al. 1997), predicts that as mobility increases, labor investment in ceramic manufacture decreases. Pots made by people who move frequently should have thicker walls, larger temper particles, and rougher surfaces. When people stay put in the same place for longer periods, the labor investment in pottery should go up, resulting in thinner pots, finer tempers, and smoother surfaces (Simms et al. 1997). Results from 34 sites in the northeastern Great Basin tended to support the hypothesis. Samples from agricultural and residential bases were thinner and more finely tempered than ceramics from residential and short term camps. However, the variable of surface texture did not show clear patterns (Simms et al. 1997:784-785).

Wall thickness on a sample of six sherds at 10-CR-1231 ranges between 6.4 and 8.6 mm with a median of 7.2 mm. Frequency of surface smoothing on a sample of seven is .71. The maximum size of temper particles on a sample of seven ranges between 2.7 and 4.2 mm, with a median of 3.0 mm. Weight ranges between 1.7 and 15.5 g on a sample of seven, with a median weight of 3.5 mm. The single sherd from the nearby Indian Riffles site had a wall thickness of 7.8 mm (Reid 1997) and a maximum temper particle size of 3.0 mm (Dean 1997), values very close to this sample.

Table 9

Comparative Summary of Wall Thickness and Maximum Temper Size by Site Mobility Type

Site Type	Wall Thickness (mm)	Maximum Temper Size (mm)
Northeastern Great Basin[1]:		
Agricultural Base (n = 3)	4.5	0.2
Residential Base (n = 12)	5.0	0.5
Residential Camp (n = 13)	4.9	0.7
Short Term Camp (n = 6)	5.4	1.5
Idaho Highlands:		
10-CR-1231	7.2	3.0
10-CR-1233	7.8	3.0
10-VY-76	—	3.0
10-BO-419	6.0	—

[1]Data from Simms et al. 1997

The wall thickness of the sample is also comparable to a much larger sample (n=188) recovered from Horseshoe Bend, which ranged between 2.0 and 18.0 mm with a median thickness of 6.0 mm (Lewarch 1989). The maximum temper size of the 10-CR-1231 sample compares well with a sample of four sherds from Dagger Falls, which ranged between 3.0 and 5.0 mm with an average of 3.75 mm, and a single sherd (4 mm) from 10-VY-653 (Dean 1993). These Idaho plainwares are thick and coarsely tempered vessels.

Table 9 summarizes wall thickness and temper size data for four short term camps in the Idaho highlands with the data from the northeastern Great Basin. Results suggest that the Idaho samples were made by highly mobile potters.

Although not undertaken in this study, petrographic and X-ray diffraction studies of temper composition might provide additional insights into mobility and ceramics in the Stanley Basin. Thus, the number of temper sources in regional plainwares seems to increase with mobility (Simms et al. 1997:788-789). If the collection of ceramic temper tends to be embedded in other activities, more mobile potters should sample a wider range of temper sources.

Lithic Analysis

The lithic assemblage consists of nonlocal obsidians, discussed below, and local alluvial or till derived toolstones that include chert, argillite, and probably cherty argillite as well as several unknown lithologies. Evidence of deliberate thermal pretreatment is fairly common. A detailed technological analysis does not seem warranted by so small a sample, but a few generalizations can be offered. Two Grade 2 cortical specimens of obsidian suggest that nodules were introduced to the site and reduced in place. However, most of the obsidian appears to reflect the manufacture and maintenance of small bifaces such as projectile points and preforms. The local, cherty toolstones display longer reduction sequences including Grade 2 cortical flakes, occasional percussion "chunkage," and exhausted flake cores.

The assemblage is dominated by chipped stone flaking debris and small bifacial tools and fragments. Groundstone artifacts or "site furniture" such as grinding slabs are absent. The distinctive andesite quarry blanks that figured so prominently at nearby Sheepeater Battleground are not present. Andesitic toolstones are absent in the flaking debris.

Style Analysis of Projectile Points

One Elko series corner notched dart point of brown chert and one obsidian Rosegate point suggest site occupations between about 2500-1000 B.P. Two point blanks or preforms fall into a size range typical of Bliss or Desert Series (including Cottonwood) arrowpoints, and may be contemporaneous with the ceramics. The proximal fragment of a large lanceolate or stemmed point hints at a nearby early Holocene occupation, perhaps contemporaneous with the Haskett occupation at Redfish Overhang.

Obsidian XRF Analysis

Seven artifacts were chemically analyzed to determine their sources. The sample included one projectile point base (Figure 6a), three biface tip fragments (Figure 6d,e,f), one interior lamellar flake, and two large cortical specimens. This represented all of the formed obsidian tools. The two cortical specimens were selected because they seemed to illustrate the "procurement without quarry production" postulated by Sappington (1981) at the Timber Butte source in the lower Payette Basin. A similar pattern of simply picking up small nodules of obsidian at the source and packing them off for reduction as needed at other camps has been postulated for the Dooley Mountain source area in eastern Oregon (McDonald 1985).

Results indicate the lamellar flake, one of the biface tips, and a cortical flake originated from Timber Butte 140 km to the southwest. A second biface tip came from the Shumway Ridge source in the lower Malheur Basin about 260 km to the southwest. The third biface tip, the Rosegate point fragment, and a cortical chunk represent the same distinctive source, but its origin remains unknown (Hughes 1998).

SUMMARY

Prehistoric occupations at 10-CR-1231 are summarized here in terms of site function, site chronology, and site integrity. Site function is evaluated in terms of evidence for settlement type, subsistence, and season of occupation, as well as assemblage contents. Site chronological evidence includes Harrold's (1978) terrace sequence for the study area, typological dating of projectile points and ceramics, and results of an AMS radiocarbon age on a mammal bone fragment found with the ceramics (Reid and Ferguson 1998: Appendix A). Site integrity is evaluated in terms of surviving area and volume estimates, surface damage, and subsurface disturbance.

Site Function

Settlement Type. The site resembles other small terrace encampments along the Salmon River such as Indian Riffles and the River Company Campground in that it does not lie at a significant confluence. These appear to represent short-term family camps that were reused many times during the last 3,500 years. This inference is based mainly on negative evidence, including the lack of structures, midden development, prepared hearths, storage facilities, discernible activity areas, graves, etc. The lithic debris densities (191-411/m^3) are typical of short-term camps elsewhere in the region.

Subsistence. The Stanley Basin lies in the Salmon River headwaters, with a catchment of about 1,295 km^2 or 500 square miles. The importance and productivity of the prehistoric fishery can sometimes be exaggerated. Unlike terrestrial ecosystems such as forests and steppe grasslands, in-place succession does not influence the biological productivity of rivers. Much of their productivity depends on the movement downstream of aquatic insects and the movement upstream of crustaceans and molluscs, processes that tend to enrich the middle reaches (Vannote et al. 1980:135). By comparison, headwaters are relatively impoverished. This ecological constraint suggests that streams heading in the Stanley Basin have always been less productive than the middle and lower reaches of the Middle Fork and main of the Salmon (Cannon et al. 1998:67). Prehistoric subsistence activities at 10-CR-1231 are unlikely to have focused on the river to the extent documented further down the watershed, where salmonids, non-anadramous fish, and shellfish were available at the same places in successive seasons.

Seasonality. The wintering zones of native populations along the middle and lower Snake River consistently occur in sheltered spots with effective temperatures (ET) between 13 and 14. Other things held constant, the low ET of 10.96 for the Stanley Basin argues against winter residency. However, recent discoveries of exceptionally high altitude winter villages in California and Nevada cautions against relying too heavily on temperature thresholds to infer settlement zones. It is apparent that some late prehistoric communities wintered above 3,130-3,856 m (10,270-12,645 ft) in structures with "circular, multiple-course stone footings" (Bettinger 1991:657).

We are not aware of any such structures recorded in the Stanley Basin or on the Sawtooth NRA. However, a local history of Custer County reports that:

> A few miles above Stanley, on the side of a hill one or two hundred yards from Valley Creek, are three forts in a row and a few feet distant from each other. They are built of unhewn granite boulders and have an ancient look, being almost filled with earth. When the first white man visited them in 1863, and built the cabin which still stands in a gulch north of the Duffy place, between the intersection of Valley and Stanley Creeks, they appeared as old as they do at the present time (Black n.d.:4).

If these were prehistoric cultural features, they might conceivably represent hut foundations comparable to those described for the White Mountains and Toquinas. Another possibility is that they were correctly identified as Indian forts [see Bonneville's letter to General Macomb, in Irving 1986: Appendix B)].

However, until better information becomes available, we are inclined to agree with the local historic and ethnographic evidence that the Stanley Basin was not a wintering zone for either the Sheepeaters or the Boise-Weiser and Lemhi groups. We assume that family bands used campsites such as 10-CR-1231 when the salmon spawned in August, but moved to lower and more sheltered spots by the time snow began falling in mid-November.

Site Chronology

Radiocarbon Age. No hearth charcoal or carbon was recovered for dating. The radiocarbon assay from the mammal bone sample from Excavation Unit C included atomospheric "bomb carbon" indicating a late 20th century age (Reid and Ferguson 1998: Appendix A).

Terrace Age. Using Herrold's (1978) terrace sequence, the site corresponds to the T-1 terrace cut in the late Holocene Torreys Fill, and correlates with Neoglacial stillstands. Volcanic tephras suggest the terrace is not more than 3,500 years old in the reach between Stanley Basin and Round Valley (Harrold 1978:177-178). Site 10-CR-1231 occupies the same landform position as Indian Riffles and the River Company Campground further downstream. A hearth at Indian Riffles gave a radiocarbon age of 1460 ± 60 B.P. (Beta-98270). An undated lower and earlier occupation was present at Indian Riffles, but thought to be not much older than the hearth. At the River Company Campground, two occupations underlie a charcoal burn line dated at 600 B.P. (Beta-83921).

Projectile Point Crossdates. Time sensitive projectile points include a complete Elko series dart point from Shovel Test 2 that probably dates between 1100-2400 B.P. (Boaz 1984). A fragment of a Rosegate series point from Excavation Unit E (0-20 cm) can be crossdated to similar specimens from Deadwood Campground, which has radiocarbon ages between 1400 ± 60 B.P. and 750 ± 60 B.P. (Reid and Gallison 1994).

The only evidence for a possible older age for the landform, and an earlier cultural occupation, is the lanceolate point fragment recovered from Excavation Unit E. The point resembles Haskett points from nearby Redfish Overhang dating to between 10,000 and 8,000 B.P. (Gallagher 1979). The specimen shows no evidence of water tumbling or edge/arris rounding, and appears to be *in situ*. We conjecture that it was found elsewhere and brought to the site.

Ceramic Crossdates. Ceramics are known from at least three sites in the Stanley Basin. A single sherd recovered from Indian Riffles (10-CR-1233) above a hearth with a radiocarbon age of 1460 ± 60 is younger than A.D. 490 (Reid 1997). At Redfish Overhang (10-CR-201) ceramics were concentrated in a buried A_1 horizon (Level 2) that formed sometime after a radiocarbon age of 670 ± 130 B.P. from near the base of Level 3a (Gallagher 1979:20). The ceramics here must have been deposited sometime after A.D. 1280.

At Sheepeater Battleground (10-CR-202), a sample of 64 sherds was recovered in stratigraphic layer 2. The sherd counts fell off abruptly with depth. There were 35 sherds in Level 1 (0-15 cm), 24 in Level 2 (15-30 cm), and five in Level 3 (30-45 cm). These deposits exhibited evidence of extreme faunalturbation (Gallagher 1979:18). The sherds are probably quite recent and the occurrence of a few as deep as 45 cm seems to reflect disturbance.

Idaho plainwares have traditionally been attributed to Shoshonean potters (Tuohy 1956:260). A recent regional review concluded that "...the earliest, indisputable dates for Intermountain Brown Ware throughout the Great Basin fall only within the 15th to 18th centuries" (Pippin 1986:17). This estimate accords well with much of the western Idaho evidence.

Brown plainwares recovered in late prehistoric contexts in the Weiser and Boise Basins to the southwest date to within the past 500 years. At 10-BO-419 at Horseshoe Bend, a sample of nearly 200 sherds was associated with four radiocarbon ages indicating they were deposited less than 470 years ago, or since A.D. 1480 (Lewarch and Benson 1989:8-8,9). A single plain surfaced grit tempered bodysherd from the 20-30 cm level at Hetrick (10-WN-469) at the mouth of the Weiser River is dated by a bone fragment from the same level to 290 ± 60 B.P., or A.D. 1660 (Rudolph 1995:6-99). At 10-WN-30 on Mann Creek in the Weiser Basin, a sample of 67 sherds was recovered in the upper 38 cm. Sixty of the sherds occurred in the upper 30 cm, where horse bones were also found. A radiocarbon age of 600 B.P. from more than 1 m below surface suggests the sherds are much younger than A.D. 1350. The horse bones association suggests they are not older than A.D. 1700 (Bowers 1967:55). An unusual find of what appears to be a single broken pot (136 sherds) found within a charcoal-rich hearth basin has been reported from the Middle Fork Salmon River. The hearth was exposed in a trail tread in a small stand of ponderosas a short distance downstream of Aparejo Point. A radiocarbon age on four kilograms of carbon stained sediment gave an uncorrected date of 250 ± 50 (Stoddard 1996).

However, there are exceptions to this pattern. These include the Wahmuza site in the Fort Hall bottoms, Dagger Falls in the upper Salmon Basin, and an isolated sherd from the Middle Fork that has been dated directly.

At Wahmuza (10-BK-26) a "significant number" of sherds were recovered on a house floor with a radiocarbon age of 1270 ± 120 (Beta-13915). This has a calibrated calendar date range of A.D. 590 – 910 at two sigmas (Holmer and Ringe 1986:62). The sherds were identical to several hundred from a higher unit dated A.D. 1490 ± 75 (Beta 13916), as well as to those from a scatter of more than a thousand clustered around a near-surface hearth dated A.D. 1795 ± 80 (Beta 14554). The earliest and deepest occupation at Wahmuza was dated A.D. 40 ± 45 (Beta 17592) and lacked ceramics.

At Dagger Falls a radiocarbon sample from Isolated Hearth E in Stratum AIV had an age of 2010 ± 60 B.P. (Beta 41780). Sherds found in and around the hearth were assigned to this age. However, no dates are reported from Isolated Hearths B, C, F, and H, which lie within and below Strata AIV and V where the ceramics are concentrated (Torgler 1993:9). There may be oppor-

tunities here for direct dating by AMS, since 27% of the 191 sherds at Dagger Falls displayed a carbon residue on the surface (Lemmon Wilson 1993:90). Dating of interior surface organic residues might give the least ambiguous results.

For example, carbon from the interior paste or core of a sherd from 10-CR-576 on the Middle Fork (Hackenberger 1988:394) gave an AMS radiocarbon age of 1230 ± 60 B.P. (AA-1386), the same age as the earlier sherds at Wahmuza. Hackenberger acknowledged uncertainty as to whether this age marked the time the pot was made or the age of organic inclusions within the clay from which it was made.

Perhaps the "old wood" problem is implicated in the early age for ceramics at Dagger Falls. This factor could also explain an early radiocarbon date associated with ceramics at Horseshoe Bend, where three assays from Feature 7 were 170 ± 70, 380 ± 60, and 820 ± 90 B.P. The investigators set aside the earliest date as anomalous (Lewarch and Benson 1989:8, 9). The argument for an early age for the ceramics at Dagger Falls would certainly be strengthened by a second or third radiocarbon age on Isolated Hearth E, and more dates from the nearby hearths.

Thin section analyses of a sample of the Dagger Falls sherds found them very similar to those from nearby Redfish Overhang and Sheepeater Battleground (Dean 1993, 1997). Both of the latter samples are undated, but their stratigraphic positions argue for ages of less than 600 years. Holmer (1994:185) accepts the early age of the Dagger Falls ceramics, and notes that the Wahmuza sherds were formed by coiling while the Dagger Falls sherds were hand-molded. He would trace these practices forward in time to the Fort Hall and Lemhi bands of Shoshone, respectively.

To summarize: the "short" chronology for Idaho ceramics points out the clustering of most radiocarbon ages between about A.D. 1400 – 1800, and views the outliers at Wahmuza, Dagger Falls, and 10-CR-576 as anomalies needing confirmation. The "long" chronology asserts that pottery appeared in the Northern Rockies at about the same time it did in the desert Southwest, in a hunting and gathering rather than horticultural context.

Thus in Arizona the earliest Hohokam pottery appears at about A. D. 1, Anasazi pottery between A.D. 200 and 300, and Mogollon pottery between A.D. 200 and 400. A recent review observed that "pottery is recovered in low frequencies until two to three centuries after its initial appearance" (Crown and Wills 1995:242) in all areas of the Southwest. Whether the "aceramic centuries" in Idaho between 2000 and 1200 years ago are real or a sampling artifact seems to be a question that can only be answered with more data.

Pottery remained continuously in use in the Southwest after its first appearance, while, if we accept the early date at Dagger Falls, the Idaho record seems to start and stall, with pottery appearing 2000 years ago, widely present in the late prehistoric period, but absent between 1400 and 700 B.P. at well dated sites such as Deadwood Campground on the South Fork Payette (Reid and Gallison 1994).

Still more surprisingly, early and late ceramics are nearly identical products (Lemmon Wilson 1993:90). Thick walled, coarsely tempered pots seem to have served the same purpose for 1800 years, without undergoing discernible improvements in thermal efficiency or impact or abrasion resistance. Compared with the evolution of other ceramic traditions in North America (Brown 1989), the Idaho plainware sequence appears uniquely static.

Site Integrity

The original site area was estimated at 1,450 m^2. A relatively intact site remnant with an area of about 400 m^2 and an estimated volume of 160 m^3 survives at the east end of the site between Excavation Unit A and Shovel Test 13. Shovel testing suggests other potential "hot spots" survive at the eastern and western edges of the site. Without investigating deposits on the north side of Highway 75, there is no way of knowing how much of the site was destroyed by road construction and maintenance work. Surface deposits between the highway and the river have been disturbed by trampling, compaction, the cumulative effect of miscellaneous digging episodes, and artifact collecting. Perhaps only 150 people moved around in the Stanley Basin in the summer of 1860. Today, the same campsites are visited by tens of thousands of people.

Preservation of faunal and floral remains throughout the deposit is poor. We doubt if this situation will improve with larger sample sizes. Given the postulated settlement type, we think the absence of any evidence for structures, midden deposits, prepared hearths, or storage features is a "true negative." However, fire cracked rock is present in small quantities, and subtle, unprepared basin hearths with charcoal lenses similar to Feature 3 at nearby Indian Riffles may survive in places. The buried artifacts do not appear to have been laterally displaced by burrowing rodents. Size graded debitage ratios suggest that lithic reduction sequences may be relatively intact. Since much of this debris is chemically distinctive obsidian with potentials for both sourcing and relative hydration dating, opportunities are clearly present to analytically separate occupational episodes.

CONCLUSIONS

Site 10-CR-1231 lies in the Salmon River headwaters a short distance downstream of Lower Stanley at an elevation of 1,865 m. The site occupies part of an outwash terrace that has been disturbed by highway construction and maintenance, and by campground and recreational impacts. Surface inspection of the property suggests an area of 1,450 m^2. Testing indicates a subsurface remnant of 400 m^2 with an estimated volume of 160 m^3. Test excavations included 16 shovel tests with an average depth of 70 cm, and three 1 x 1 m and two 1 x .5 m excavation units with a total volume 1.875 m^3. The work involved three people for six days in November, 1997.

The testing revealed a small and insignificant debris scatter of historic artifacts, and a much larger and more significant prehistoric deposit that represents three or four cultural components. A late prehistoric Numic or

Shoshone presence is suggested by seven Intermountain Brownware potsherds. This occupation is hypothesized to date to between the 15th and 18th centuries. However, similar potsherds from nearby Dagger Falls have been associated with a hearth dated at 2,000 years B.P. Technological analysis of the sherds found them typical of thick, coarsely tempered, expediently made vessels used at other short term camps in the Northern Rockies and northeastern Great Basin in the late Prehistoric period.

Preceramic and probably earlier components may be indicated by a Rosegate, an Elko, and a possible Haskett projectile point. A local terrace sequence suggests that the terrace is Neoglacial in age (< 3,500 B.P.), making the early Holocene Haskett point anomalous.

No prehistoric hearths or other features were intercepted in the excavation units, although a few pieces of fire cracked rock were recorded. Organic preservation was poor, and there was no evidence of structures, storage facilities, middens, or graves. However, size graded debitage fractions from the five excavation units show high ratios of small to medium sized flakes, which we interpret as a clue to relatively intact deposits. The site does not appear to have been horizontally inflated by burrowing rodents. High integrity may be a measure of youthful deposits.

Nearly half (43%) of the debitage is obsidian, mostly small pressure flakes. Chemical sourcing of a sample of seven obsidian bifacial tool fragments and large Grade 2 flakes and cortical flakes assigned three specimens to Timber Butte, 140 km to the southwest, one to Shumway Ridge, 260 km to the southwest, and three to a distinctive but as yet unidentified source.

Several lines of evidence indicate 10-CR-1231 represents superimposed short-term seasonal camps rather than a winter village. The high elevation, heavy snows, and cold temperatures of the Stanley Basin, together with the site's relatively exposed position, make 10-CR-1231 a poor place to winter. The small size of the site, the limited range of tool types, and the debitage density values are typical of short-term seasonal camps in the region. The co-occurrence of ceramics and lithics implies men and women camping together, or family camps rather than specialized stations or locations (Binford 1980). The modest carrying capacity of the environment within a day-radius travel distance of the site is a further argument for short visits by small groups.

The thick, coarsely tempered potsherds reflect an expedient ceramic technology favored in the region by mobile hunter-gatherers. The lithic tools are dominated by small bifaces, hafted unifaces, casually used percussion spalls, and easily transported obsidian nodules, a combination that again suggests mobility and short occupations. The site was probably occupied briefly several times in late summer and fall to fish for spawning salmon and hunt and process larger mammals such as bighorn sheep and deer. The relative scarcity of fire cracked rock, especially in comparison with the nearby Dancing Cat and Sheepeater Battleground sites, argues against the presence of camas ovens. Taken as a whole, the assemblage at 10-CR-1231 resembles two other small terrace campsites, Indian Riffles and the River Company Campground, located along the upper Salmon between the Yankee Fork and East Fork. These terrace camps appear to represent a site type focused on spawning salmon, rather than camas meadows or whitebark pine stands.

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BOISE STATE UNIVERSITY

College of Social Sciences
and Public Affairs
1910 University Drive
Boise, Idaho 83725-1950
028L101010