

#67 Archeological Excavations in the River of No Return Wilderness Area

During the summer of 1984, the Laboratory of Anthropology at the University of Idaho conducted excavations at two sites in the Salmon River Mountains of central Idaho. 10-VY-31 collection of pithouse depressions on Big Creek and 10-IH-197 a large lithic scatter at Coyote Springs in the uplands. The purpose of this paper is to briefly report on the results of these excavations and to discuss how they effected our thoughts on the settlement and subsistence patterns for the region.

10-VY-31 is a collection of (#33) housepit depressions scattered across a large 1 meter terrace. The site is located at the base of a south facing slope and is vegetated with blue bunch wheat grass, rye grass and sage brush, and located at an elevation of 3500ft. There are at least 13 similarly situated sites in the 12 miles (river) from the confluence of Big Creek and the Middle For of the Salmon up to Cabin Creek.

Excavations in 1983 concentrated in these areas on the western portion of the terrace. The excavations reported in this paper were on the open eastern terrace.

Four pithouse depressions were excavated as well as an inter house area. Two of the housepits were very hard to distinguish often we had to rely more on textural differences such as compact vs loose sand, rather than color differences to differentiate them. In addition they contained very small assemblages, that will be discussed later in the paper.

A third housepit when it was tested, showed up as well defined black stain flecked with charcoal. When the feature was uncovered it was obvious that it had been burned. Fill was removed to reveal structure charred supports, converged irregularly toward the center. It appears a larger number of poles (10-12cm) in diameter were the main supports and a number of smaller poles (5-8cm diameter) leaned up against them. In a few areas patches of burned twigs lying perpendicular to the supports indicates the structure covered with branches. This structure covered a depression 4.4m in diameter and had a living area of approximately 57.6m². There was no sign of an internal hearth. It appears to be a post occupation dump. Rock feature, artifacts to outside and no date yet.

The final housepit excavated was isolated from the other three and located at the base of the 3m terrace. Before excavation this housepit appeared as an irregular depression with a small mound on either side. When the sod was removed, a living floor was revealed surrounded by 3 piles of fire cracked rock. The floor was made up of grey ashy soil with an orange stain in the southern portion that represents a hearth.

When this floor was excavated it was discovered that there was an earlier floor underlying it. This floor was marked by partially charred beams. The rim of this floor did not coincide to the rim of the floor above it. Subsequent excavation revealed at least two more floors and one more rim, giving a total of 4 floors and three rims. Two of the floors were marked by partially charred beams. The beams from the lower floor gave a radiocarbon date of 860 ± 50 BP. Because of time limitations the pithouse floors, were not excavated, but certain comparisons can be made with the other structures. The construction techniques appear to be very similar. Note the nonradial layout of the beams. In addition there is the presence of rock features on the edge of the depression.

These piles of fire cracked rock were excavated and turned out to be full of archaeological material. These three piles contained 73 artifacts and over 34 hundred pieces of bone, including 94% of all of the identified pieces of bone for the site. These piles, as well as the one in P14, are interpreted as being dumps of refuse, perhaps from the cleaning of house floors before reuse or the periodic cleaning of activity areas.

The area surrounding the three grouped house pit was also excavated, revealing features possibly associated with the houses and a pre-house occupation. These features originate at the same surface as the houses, but their exact relationship is unclear. Three of these features are large, oval depressions, averaging 1.3 X .80m that were filled with large chunks of fire cracked rock and charcoal. These features contained very few artifacts. They are interpreted as the remains of earth ovens. The other features are smaller, averaging 45 cm in diameter, circular and contain river cobbles. This type of feature also includes few or no artifacts. Its function is unknown.

The pre-house occupations appear as rock strewn surfaces containing artifacts. No structural remains were recovered from these layers, but several areas of charcoal and burnt soil may represent hearths.

The assemblages from the 7 house floors excavated all appear very similar. The assemblages are small, ranging from 10 to 42 tools per floor. From the burnt structure assemblage had the most tools. Projectile points, undifferentiated bifaces and utilized flakes, each made up about 20% of the assemblages and were the most common tool types. Other tool forms such as scrapers and graters were present. SSN Desert side notched dominates. It should be noted morphology there are slight differences in the projectile point for each assemblage.

Even though the rock features were smaller than the house floors they contain a larger assemblage. In make up, these assemblages are very similar to the house floors, with projectile points, utilized flakes, and bifaces being the most common elements, at about 20%. Thesman side notched points predominate.

The assemblage from the pre-house occupation appears very different. Most obviously, projectile point form is different with large corner notched points (tentatively Elko series) predominating. The make up of the collection is also different with projectile points making up 30% of the assemblage as opposed to 20% in the house floors. Utilized flakes and bifaces are less common, only 10% opposed to 20% on the house floors.

Faunal remains: Over 5200 pieces of bone were recovered, with about 70% of them coming from the rock features around the house floors. The bone is heavily processed, most of it being smashed into pieces smaller than 2cm in diameter. Only 4% of the bone was identifiable to the genus level. Of this identified bone 83% of the specimens are mountain sheep, 7% are deer, and 10% other, primarily rabbit, marmot and bear.

From the data a number of conclusions can be drawn. Each of the projectile point assemblages from the house floors is slightly different morphologically. This is interpreted as temporal differences rather than functional factors. This is supported by stratigraphic data, which shows deposition of a small amount of backfill from one pit to another. After two summers of excavations 9 house floors have been completely or partially excavated, and none of them are contemporaneous. While there are approximately 27 unexcavated depressions at the site, it is strongly suggested that this site is not the result of a large population aggregation, but of frequent reoccupation by a small group, possibly even a family unit. The occupations are short term, probably only one season based on the very small size of the assemblages. The sheltered location of the site on a south facing terrace, the presence of structures, and the predominance of small fragments of bone, suggesting manufacture of bone grease, are all evidence for a winter period of occupation, though this is hardly conclusive. The predominance of mountain sheep remains indicates that the group's subsistence during this occupation was based on the hunting of bighorn, as will be discussed by Leonhardy and Kohler later in this symposium, though the importance of vegetable and stored foods has proved very difficult to measure.

The second portion of the summer was spent making an intensive surface collection, and conducting test excavations at the Coyote Springs Site (10-IH-197). This site is a very large lithic scatter located on a flat in a west facing cirque adjacent to the headwaters of Cave Creek. These two sites are only 10 map miles apart. But are in very different environments. At 10-VY-31 the weather is very xeric especially in the summer. Even in cold winters the ground is rarely covered with snow. Coyote Springs is located at 8700 feet elevation. Rain is frequent through the summer and snow, which reaches depth, of over 10 feet, is present on the ground until late June.

In most areas, if sites were located only 10 miles apart traveling between excavations would be no problem. However, the restrictions on the use of internal combustion engines in the wilderness area make the movement of people and equipment very difficult. In addition, the Salmon River Mountains are typified by extremely deep and steep canyons, and Big Creek is no exception. The most efficient method of travel was by horseback and pack string. However, the horse's gait puts stresses on the load unanticipated by those more used to packing cars or even backpacks, and the end result could be termed a mess.

The Coyote Springs site was reported in earlier surveys by Dahlstrom and Kotzia. It is easy to see why a camp was established here. It is one of the few constant water supplies along the ridge top. In addition it is located at the junction of three ridgelines, which frequently served as travel corridors. The presence of aboriginal trails near this locality is indicated by the fact that it was nearby that the Sheepeater Indians surrendered to the U.S. Cavalry to end the Sheepeater War.

The site area itself is open, being vegetated by forbs and mosses. The spring area is dominated by water tolerant grasses. The surrounding forest is dominated by subalpine fir, spruce, and white bark pine.

After a datum was established and a grid set up, survey lines were laid out across the site. These lines were intensively surveyed in 2 X 2 meter units, one meter on each side of the line and 2 meters along it. The ground surface was covered with small pieces of feldspar, which had been eroded out of granite cobbles, so all survey had to be done at extremely close range. All tools located, whether in the survey lines or not, were collected separately and their provenience recorded.

Forty-two tools and 570 flakes were collected from the surface of the site. The site covered an area approximately 40 X 60 meters, with the densest concentration just to the east of the trail.

The most frequent tool types were Utilized flakes and undifferentiated bifaces, only 15% of the collection was projectile points. Scrapers and cores were also present.

The most frequent material type was a weld tuff making up 41% of the collection. Followed by chalcadney and chert at 19% each, obsidian at 17% and basalt, quartzite and quartz all at a trace.

Most of the flakes were secondary and tertiary thinning flakes and there were very few decortication or primary thinning flakes indicating that most flint knapping was done for tool repair or reduction of blanks, rather than the reduction of cores.

In addition to the survey, 6 one X one meter test squares were excavated. At the beginning of the excavation we were expecting 20 to 30 cm of soil on top of bedrock. Thus we were surprised when the first test revealed 60-70cm of soil on top of weathered till. This soil depth appears to be constant across all of the tests. No detailed study of soils.

Lower strata appear to be in situ development from the decomposition of the till. Upper strata appear to be the result of slope wash and each stratum is actually made up of a large number of small strata indicating frequent, small depositional events rather than infrequent large depositional events. Flecks of charcoal are frequently present in most of the strata, these may be redeposited cultural material or the result of forest fires.

These tests revealed 17 more tools. Once again a majority of the tools could not be functionally typed but were listed as biface or utilized flake. One item of interest that was recovered is a large 500 gram river cobble that shows evidence of grinding on one side. As river cobbles are not found in this locality, it appears that it was transported some distance to the site for use in processing food, probably seeds.

A total of 9 temporally sensitive artifacts were recovered from the surface and test excavations, all projectile points. The oldest projectile point recovered is a lancolate base that we interpret as a portion of a McKean point. It was recovered at a depth of 57 cm below surface, right above the glacial till. A carbon 14 date on a piece of charcoal from the 50-60 cm layer of this test gave a date of 5450 ± 385 BP, which correlates well with dates for McKean Points from the mountains of Northwestern Wyoming and Southeast Idaho.

While this date is not as early as dates from Shoup Rockshelters or Big Creek Cave, it does indicate an early utilization of the uplands.

Other projectile points recovered include several large side notched points, possibly Bitterroot, tentative dates 6,000-3,500 BP, large corner notched points, possibly Elko series, tentative dates 3,300-1250 BP. Small corner notched possibly rosegate date 1250- 600BP and small side notched, probably desert side notched 600-150 BP.

From this data we can draw several conclusions about the Coyote Springs Site. The site has been periodically reoccupied for the past 5,500 years or so. The wide range of temporal types indicate the collection represents not a single assemblage but a number of mixed assemblages. "The large number of bifaces and utilized flakes as opposed to projectile points may indicate that some sort processing, either of meat or plant material was important at the site. The small assemblage given the temporal span indicates the site was probably occupied by small groups, possibly a family unit. The season of occupation was most likely late summer to early fall as this is the only time that this location is not covered with snow. This is supported by the lack of evidence for structure. The function of the site is a little more difficult to determine. Very little subsistence information, plants, charcoal, no bone-acidic soil? One possibility is that the inhabitants were hunting big game on their summer ranges. Several herds of Bighorn rams are known to summer on the talus slopes nearby. Elk are common in the nearby wet meadows and often feed at the site. White tail and Mule deer are also present. Another possibility is the inhabitants were occupying the site to utilize plant foods. The site is located on the margin of an area that contains a large amount of white bark pine. And the White bark pine may have been even more numerous before disease epidemics earlier this century. There are several ethnographic accounts of the white bark pine cones being collected, roasted, winnowed, and ground very similar to the utilization of Pinyon further to the south. In addition, there are a number of plants with a tuberous root such as bistort, found near the site which may have been utilized. Probably not procuring food for transport and use back in the canyon due to high cost of transportation.

Looking at these sites in a regional perspective allows us to propose a tentative model of settlement and subsistence, for the Salmon River Mountains. In doing the model it should be noted how tentative this model is. In the entire River of No Return Wilderness Area, an area of over one million acres. Only four open sites have been partially excavated, 10-VY-31, 10-IH-197, and Corn Creek reported at this symposium and Waterfall Village which was tested by the Forest Service in 1981. In addition only two rock shelters have been excavated. Alpha and Beta at Shoup by Swanson in 1965, and Big Creek Cave by the Forest Service. Since there are probably thousands of sites in the Salmon River Mountains the present data base is extremely limited.

Two years ago before we started excavating in the Wilderness we checked ethnographic data for populations to the North and South due to lack of data directly for the area itself and developed a preliminary model. This model had winter population aggregation in sheltered canyons near primary streams,

with emphasis on stored foods. In the summer, distribution would be up stream and to the uplands, with base camps being established, out of which extractive activities would take place. Just looking at the survey data, this model appeared to hold up fairly well. We had a number of large sites with pithouse depressions along Big Creek with a large potential summer base camp at Coyote Springs and a number of small lithic scatters that seem to be extractive camps.

However, the new data recovered last summer forces us to reexamine this model. With the lack of contemporarity at 10-VY-31 we can no longer hypothesize winter aggregation, and it appears winter subsistence may be heavily based on the procurement of mountain sheep. The long time span represented at Coyote Springs, seems to indicate an small camp that was reoccupied mutiple times rather than a larger base camp.

With these factors in mind a new model can be suggested. Winter settlement is in small dispersed camps, possibly a family group. Not more than one or two structures at any one time. These sites would probably be located in close proxim ty to big game wintering ground. These sites would be occupied only a short time, probably one season. After one or at the most two seasons at one location, the winter camp would be moved to exploit fresh resources.

Settlements during the other seasons would also be dispersed, during the spring the river canyon would remain the primary focus with early blooming plants and remenant sheep herds. In the summer and fall both the canyon and uplands provide suitable resources for exploitation. The canyon in summer provides tubers and berries as will be discussed by Lucille Housely and salmon. The uplands provide big game, pine nuts and other plant resources.

This model places very little emphasis on stored foods. This is probably possible because the restricted winter range for sheep and other game animals increases the chances for winter hunting success.

This model also places very little emphasis on population aggregation. Aggregation would be possible, but it would be more for social purposes rather than a necessity to exploit resources. Similarly movement out of the Big Creek drainage may have occurred, but it would be more for social reasons rather than to obtain some necessary resource.

Once again this model is very tentative and surely will change as further research is done in the Salmon River Mountains. There are many gaps that need to be filled such as what resources were being utilized in the up lands and how important stored foods were. However, with the undistribred state of both the cultural and natural resource base, there is an excellent opportunity for the testing of archaeological hypothesis.