

SUMMARY OF THE 1976 JACKSON HOLE ARCHAEOLOGICAL PROJECT

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During the 1976 field season, we continued the previous year's ethnobotanical and plant resource investigations, the site survey, and test excavated six archaeological sites.

A. Reeve:

Ethnobotanical research stressed survey of plant communities adjacent to archaeological sites. As anticipated, sites were generally oriented to areas of high vegetative productivity. Camassia quamash was apparently an important food plant throughout northern Jackson Hole, as illustrated by the correspondence of extensive camas meadows and prehistoric sites at Soldier Meadow. Other food plants restricted to areas of settlement in northern Jackson Hole include Valeriana edulis, Sagittaria cuneata, Sium suave, Potentilla anserina, and several species of Allium.

Within southern Jackson Hole, the association of Calochortus nuttallii, and the Juniperus scopulorum belt with the distribution of archaeological sites was investigated. The archaeological chronology of southern Jackson Hole suggests the initial use of sego lily habitats at approximately 4000 B.P., corresponding to the end of the Altithermal. Substantial shifts in vegetation patterns should be recognized from future pollen studies, with the behavior of juniper possibly reflecting conditions favorable to the abundance of sego lily. Identification of specific exploitive technologies has also progressed with this research.

High altitude environments of the northern Teton Range provided a third area of botanical collecting and pollen sampling. Limestone formations between 8200 and 9500 feet elevation support extensive parklands dominated by such potential food plants as Ligusticum filicinum, Valeriana edulis, Frasera speciosa, Hedysarum occidentale, Epilobium angustifolium, Angelica arguta, Polygonum bistortoides, and Claytonia lanceolata. Also interesting, Lewisia pygmaea was found near each large archaeological site, a relationship noted for high altitude sites throughout the Pryor Mountains, Montana (Loendorf, personal communication). The major concern of pollen research is to describe the history of plant communities, shifts in the tree-line or periods of neoglaciation probably affecting plant species and therefore the adaptive alternatives of hunting and gathering societies. A 2.5 meter sample was taken from Owl Creek Lake at 9150 feet.

B. Chernick:

An intensive survey was undertaken in the three northernmost canyons (Webb, Owl and Berry Creeks) in order to define the nature and extent of prehistoric occupation in the Teton high country. Our field work reveals a consistent patterning of site location. The well-known Lawrence site at the base of the three canyons and located on the north shore of pre-dam Jackson Lake is understood to be the major lower elevation base camp site in the northern Tetons. In addition, high elevation base camp sites have been located on Hominy Peak, near Conant Pass, off the eastern slope of Red Mountain, and in the Moose Basin. Other, smaller sites were found on the traverse between Conant Pass and the Forellen Peak saddle, on the saddle proper, and along the Moose Basin Divide. These indicate habitual intramontane movement by aboriginal groups. However, at lower elevations there is a marked difference of site patterning among the three canyons. Only Berry Creek Canyon exhibits ample evidence of prehistoric activity; Owl and Webb Canyons are essentially devoid of archaeological material, except for a few random scatters of flaked stone.

Projectile point typology reveals that these archaeological remains represent a considerable time span. Point types from the Lawrence site encompass an +8,000 year time interval, and a large side-notched point from a site at 9200 feet has been assigned a date of ca. 6,000 B.P. Post-altithermal types are most abundant in the higher elevations but, curiously, we have not as yet found any evidence for a high country occupation clearly datable to later than ca. A.D. 1300. The presence of different projectile point types widely separated in time but located on the same sites indicates that the site distribution outlined above is the result of a stable prehistoric adaptation of high country conditions.

Our data suggest several preliminary conclusions. First, the dichotomous arrangement of base camp sites at the Lawrence site and at the mountainous heads of the canyons suggests that aboriginal groups adjusted their economic activities to two altitudinal zones. The Berry Creek drainage is viewed as the major access route between these two zones. Secondly, the consistent scatter of sites throughout the high altitude zone, some in relatively inaccessible areas, is indicative of a purposeful pursuit of specific economic resources indigenous to that zone. Future research will concentrate on determining the relative importance of bighorn sheep, mule deer, productive high country herb meadows and lithic raw material sources in the adaptive strategy evidenced by the patterning of the northern Tetons archaeological sites.

C. Marceau:

Southern migration routes were investigated; however, due to the extensive areas involved and the limited manpower available these routes were only minimally surveyed with an eye to areas which ought to be extensively walked during the summer 1977 field season.

Previous data suggested the exploitation of Calochortus nuttallii utilizing unifacially flaked tools of Tensleep quartzite. To test this hypothesis other areas were chosen in locations removed from the quartzite source at Blacktail Butte: (1) those slopes forming the eastern boundary of the National Elk Refuge and (2) those drainage systems which feed into Flat Creek south of the town of Jackson, i.e. Wilson, Horsethief, and Game Creek Canyons. Evidence gathered from these locations hints that a working hypothesis might now be advanced such that any locally occurring lithics which exhibit signs of having been unifacially flaked were used in the exploitation of sego lily as a plant food.

Future research will be conducted to ascertain the similarities in manufacturing technology and patterns of wear of unifacially flaked tools taken from sites in the southern valley, as for example from the Blacktail Butte series, the base of the Gros Ventre foothills and regions south to the Hoback drainage in an attempt to identify and/or isolate a sego lily exploitive technology.

While plant resources seem to predict the location of most sites, this approach breaks down in certain areas of the valley. For instance, west of the Snake River several sites have been recorded near the outlets of the lakes at the base of the Teton range. Test excavations suggest large mammals were not the key factor for site location and plant resources are limited. Survey disclosed that sites occur along potential spawning streams also within this region. Cutthroat trout (Salmo clarkii Richardson) may have been a primary resource here and future research will be directed to resolving this issue.

D. Wright:

Excavations were conducted at Jenny Lake I (48 TE 414). The site produced two cultural levels. Surface finds included serrated corner notched points C-14 dated elsewhere in a time range of 1230-1290 B.P. The upper level had one corner notched point. The lower contained the base of a lanceolate point, but is still undated. A Scottsbluff basalt point was found on the surface. Jenny Lake II (48TE 576) is a late Shoshone encampment and produced three small side notched, basal notched points. One hearth was C-14 dated to less than 220 B.P. We suggest a date of ca. A.D. 1800. String Lake (48 TE 575) included one hearth; a C-14 sample was submitted, but the date has not been received. The Hunt site, just north of Wilson, showed considerable evidence of slope wash above a depth of ca. 20 cm. Below this charcoal was recovered in association with an obsidian biface. The lithics indicate that considerable tool preparation was done on the site. A C-14 sample will be submitted. Corridor 5 is adjacent to Soldier Meadow noted above. Tools and chipping debris were limited, but camas roasting pits were excavated. A C-14 sample has been submitted. Corridor 6 had no depth and no associated features. Excavation reports are now being prepared.

Last year we reported that several C-14 samples had been submitted. The resultant dates are: Two Ocean Lake 1 on the camas roasting pits, 320, 420, and 1840 radiocarbon years (these correct to A.D. 1520, 1430, and 175 respectively using the bristlecone pine correction); the firepit at Gros Ventre 1, 310 radiocarbon years (= corrected to A.D. 1580).

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