The field project for the Summer of 1974 had three primary goals, each of which was attained with some interesting results which we will give here briefly. A full report is currently in preparation for the National Park Service (Wright, 1975).

1. Complete the surface survey of the valley floor.
2. Extend the survey into the high country.
3. Test excavate at least two sites.

1. As we had suspected from previous surveys, archaeological sites in Jackson Hole, itself, tend to cluster along or near to the major migration routes into and out of the valley. One such cluster is around Blacktail Butte and Ditch Creek, where more than two dozen sites have been recognized. In contrast, from Ditch Creek north to Pacific Creek, there are but nine sites. Each of the latter is quite small.

Prehistoric populations in Jackson Hole apparently avoided certain types of terrain, topography, and soil conditions. Sites are rare or absent along the lakes at the base of the Teton Range (Jackson Lake, Jenny Lake, etc.), along the river terraces of the present Snake drainage or its former channels (e.g., the Hollow), on the outwash plain, on the moraines, Signal Mountain, and in the "Potholes". For example, in the approximately ten square miles of the potholes, we have only one site. The potholes are today a major elk (Cervus canadensis) summer range, and the lack of sites there gives support to our hypothesis that elk were absent in the area until very recently (Wright and Starna, 1973).

Reasons for the distribution of sites are undoubtedly complex: lack of game in certain ecozones; distance to water; difficulty of access by pedestrian nomads; length of stay on the valley floor by prehistoric peoples; timing of migration and the appearance of seasonal resources, and so on. For example, the Mad River of the Astorians (the Snake) would have been hazardous to pedestrian crossing. For groups exploiting the Blacktail Butte area, the river would have created a barrier. This coupled with a general lack of game on the outwash plain north to the potholes would have made frequent river crossings unproductive and energy
consuming with little or no return. Our current data suggest only two major fords, both which were used in historic times: north of Jackson Lake and around the confluence of the Hoback and Snake.

2. During the summer we had the opportunity to explore more closely two migration routes in the high country. One of these was Berry Creek up to Jackass Pass. Scattered archaeological material was found along the route which reaches its highest point at the pass itself. Here, we found a large site and an ignimbrite source (Wright and Starna, 1973). This route, which connects the Idaho Plain with the north end of Jackson Lake, is frequently mentioned in the ethnohistoric documents from the fur trapping period (ca. 1811-1840). We also briefly covered the area between Jackass and Conant Pass. We hope to make this region the focus of a major research project in the future for several reasons: (a) this was an important migration route, (b) raw materials for stone tools are present, and (c) it contains bighorn sheep (Ovis canadensis canadensis) and we know this animal was a major food resource at the time of white contact locally (Wright and Moore, 1974).

One additional migration route was visited briefly. A two day ride by horseback allowed us to cover the route from the south end of Yellowstone Lake along the Thoroughfare to Bridger Lake, then up Atlantic Creek, across Two Oceans Pass (Dividing Spring of the fur trappers) and down Pacific Creek into Jackson Hole. We also plan to survey this route in detail in the future.

3. Exploratory excavations were conducted at several sites: at three sites along the fault south of Blacktail Butte (BTB #7, 8, 9); Two Ocean Lake #1 (at the outlet of the lake); at the Biological Research Station; and at the Eagle Site, just downstream from the research station. Most important, currently, in our research plans are BTB #7 and Two Ocean Lake #1.

At BTB #7, we found good stratification and excellent bone preservation. Two widely spaced test units (2m x 2m in size) produced a stratification sequence which, according to a single corner notched obsidian point, begins around 2,000 years ago. The dating is based on the point style. The levels continue downward into a buried volcanic ash (Mazama Ash?, dating to ca. 6,600 B. P.) and may go below it. The ash is now being studied. A tipi ring on the surface may date to a more recent occupation. Identified bone is mainly bison (Bison bison). No elk bone was present.

The second site, Two Ocean Lake #1, produced two stratified levels. We tested only one day and stopped with level 2. The site may go deeper. The upper level contained a lanceolate point of Tensleep quartzite, with ground edges. In shape it is similar to points from Mummy Cave, east of Yellowstone Park, which date in the 8,000-9,200 B. P. range (Wedel, et al., 1968). Level 2 had a hearth. The fill was "floated" and we recovered a small quantity of sedge and buttercup seeds and needles and cone scales of lodgepole pine.
The samples have been sent to the Illinois State Museum for positive identification. A C-14 sample was collected for dating.

The data we have gained so far from survey, excavation, and the ethno-historic documents will now allow us to construct hypotheses about resource exploitation and the past ecosystems of Jackson Hole. These we will test during the coming field seasons.

Acknowledgments

Field work supported by the National Park Service. We wish to thank Oscar Paris, George Frison, Wilfred Logan, J. D. Love, Charles Love, Charles McCurdy, Ann Johnson, our field crew, and all other individuals who helped make this past field season a success.

BIBLIOGRAPHY


