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AN ARCHEOLOGICAL (CULTURAL RESOURCES) SURVEY
FOR THE TIMBER SALE PROGRAM
IN THE NEZPERCE NATIONAL FOREST

FINAL REPORT
(Contract No. 261-0047)

SUBMITTED TO THE

USDA FOREST SERVICE
NEZPERCE NATIONAL FOREST
GRANGEVILLE, IDAHO 83530

BY

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ABSTRACT

A two phase archeological (cultural resources) survey was conducted during mid-October, 1976, and May and June of 1977 in timber sale areas located in the Nezperce National Forest in north-central Idaho. Approximately 17,351 acres located in 26 sale areas were surveyed. No historic or prehistoric sites had been previously recorded and no significant sites were located during the survey. Environmental and cultural background data indicate that under current USDA Forest Service cutting practices cultural resources can be expected to be scarce in timber sale areas, except in historic mining districts.
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PROJECT BACKGROUND

In accordance with the provisions of Proposal 62-096-P05, Commonwealth Associates Inc. conducted a cultural resources survey of certain timber sale areas in the Nezperce National Forest during October 1976 (Figure 1), and May and June, 1977 (Figure 2). This survey was authorized under contract number 261-0047, which is being administered through the United States Department of Agriculture, Forest Service, with James Harvey and Ralph Sawyer of the Nezperce National Forest designated as contracting officer's representatives. The project was carried out during two separate phases and preliminary reports were prepared on each phase within 30 days after the completion of field work. Interim reports were prepared on certain sale areas as required. This report presents the results of both phases, and includes additional data in an attempt to explain these results.
ENVIRONMENTAL SETTING

The areas surveyed lie within the northern Rocky Mountain geomorphic province. Within this region of carved, massive rocks, summit levels tend to be accordant and stream patterns are irregular and controlled largely by geologic structure (Ross and Forrester 1958:38). Bedrock in the survey area is dominated by the Idaho batholith, which largely consists of quartz monzonite, with local exceptions ranging from true granite to granodiorite or quartz diorite (Ross and Forrester 1958:22). Examples of additional variation within the area are possible belt equivalent gneisses, quartzites, and schists (Reid 1959).

An aspect of the bedrock geology of the area that is relevant to a cultural resources survey is the abundance of quartz. In many of the sale areas angular fragments of quartz, often with sharp edges, occur frequently on or near the surface. A large quantity of quartz artifacts and chipping detritus was recovered at site 10-CW-5, located at the confluence of the main Clearwater River and its north fork (Gaardner 1968:64). However, even though quartz was used for aboriginal tool manufacture, it has an unreliable fracture and consequently quartz tools are usually thick and ill-formed (Crabtree 1967:11). Because of this it is possible that quartz tools or chippage may sometimes be virtually indistinguishable from natural fragments. An additional cultural phenomenon related to the presence of
quartz is Euro-American gold mining. Gold occurs in quartz veins and in placer deposits derived from them.

The climate of the Clearwater Mountains is characterized by high precipitation, high humidity, and cold winters, resulting in vegetation composed of the more hardy species of the Pacific coastal forests and northern mesophytic evergreen forests (Orr 1943: 514). However, microenvironmental factors can result in considerable variation within this area, and twenty-two distinctive forest habitats have been recognized within Northern Idaho (Daubenmire and Daubenmire 1968). These habitats can be grouped into four general series which are dominated by Ponderosa Pine (*Pinus ponderosa*), Douglas fir (*Pseudotsuga menziesii*), Western Hemlock (*Tsuga heterophylla*), and Subalpine fir (*Abies lasiocarpa*). The transition zone between steppe and forest, which is usually dominated by Ponderosa pine, is thought to have contained the greatest biomass usable by hunters and gatherers in the plateau (Nelson 1971:373). Ponderosa pine series habitats are present but not the most common type encountered in the timber sale areas surveyed. Although some berries would be available, habitats suitable for camas, the most important vegetable food of the Nez Perce, are generally not found within the timber sale areas (Daubenmire and Daubenmire 1968).
Elk are the most abundant mammal within the forest utilized aboriginally for food. Their abundance is thought to be related to extensive forest fires because of the greater amount of food present during early regeneration (Orr 1943:533). Other exploitable mammals present include Moose, Mountain Goat, and Mountain Sheep (Orr 1943). Several exploitable species are apparently abundant along the Lochsa-Selway divide (Orr 1943:535), and this area is mentioned as an aboriginal hunting area (Elsensohn 1971: 391-2). This area also appears to have been subject to repeated burning and to be somewhat slow to regenerate (Orr 1943:518). Such areas would be more likely to contain evidence of aboriginal hunting than densely forested areas, although some uplands and ridges subject to periodic burning during prehistoric times may now be grown up because of modern fire control. Travel by foot or horseback would also be easiest along ridges that were cleared by burning.
ARCHEOLOGICAL BACKGROUND

A search of site files at the University of Idaho Laboratory of Anthropology revealed 23 archeological sites within or adjacent to the Nezperce National Forest. This does not include the numerous sites located along the Salmon River, whose banks can be viewed as a continuous potential site. Twelve of these 22 sites are aboriginal and 11 are historic Euro-American structures or sites. None of these sites are located in timber sale areas included in our survey. All but one of the National Forest's recorded aboriginal sites are located along the Salmon, Selway, Lochsa, the South Fork of the Clearwater, or the Middle Fork of the Clearwater Rivers. Structural depressions or housepits were noted at aboriginal sites 10IH449 and 10IH452 at the confluence of the Selway and Lochsa Rivers and along the Middle Fork of the Clearwater. The only aboriginal site not located along a major river is 10IH487, which is located on a knob on the ridge above Clear Creek Canyon. All of the Euro-American sites appear to be associated in some way with mining activity.

Although no archeological sites have been excavated within the National Forest, the culture history of the region is generally known from excavations in the Grave Creek-Rocky Canyon area approximately 10 miles west of Grangeville (Butler 1966). Carbon 14 dates from the Weis Rockshelter and the
Double-House Village site indicate that this part of the Clearwater Plateau was inhabited from 7400 B.C. to the beginning of the historic period (Butler 1966:123).

During the Craig Mountain phase, which lasted from about 5400 B.C. to 1500 B.C., distinctive traits included fresh water mussel and deer remains, the edge ground cobble complex, antler wedges, and finely flaked willow leaf (Cascade) points (Butler 1966:125). Associated with the Grave Creek Phase, which dates between 1500 B.C. and 100 B.C., are edge-ground cobbles, antler wedges, Bitterroot side-notched points and milling stones (Butler 1966:125). Among the new traits listed for the Rocky Canyon Phase, which lasted from 100 B.C. to around A.D. 1600, are a wide variety of corner-notched points and circular or oblong mat houses (Butler 1966:127). The following Camas Prairie Phase is thought to represent late prehistoric Nez Perce culture, and is characterized by the circular mat lodge, the parallel-sided, round-ended community lodge, the hoppar mortar, antler wedges, dice and hand game implements, and small basal, side, or corner notched points (Butler 1966:128). Although certain changes occur in artifact styles, there is a great deal of continuity in the environmental resources that were being exploited, and Butler believes the culture of the historic Nez Perce "does not differ radically" from that of the earliest occupants of the area Butler (1966:130).
It should be pointed out that some disagreement exists over the time depth that can be attributed to historically known adaptations in the Plateau. Some estimates of the first appearance of the typical ethnographic pattern of riverine settlement and land use include 1500 B.C. (Dancey 1976), 2500-2000 B.C. (Nelson 1971), A.D. 1000 (Sanger 1969), and A.D. 1300 (Swanson 1962). Because of the uncertainties involved with projecting the ethnographic pattern back in time, likely locations for earlier sites are difficult to predict. Generally, it is thought that prior to the development of a riverine oriented economy, there was more reliance on big game hunting and certain plant foods (Browman and Munsell 1969).

Although no detailed settlement pattern data are available for pre-riverine adaptations in the Nezperce National Forest area, site 10 CW 30 at the confluence of Weitas Creek and the North Fork of the Clearwater River is located in a similar environment (Keeler 1973). Excavation there has revealed that it is an upland hunting camp and lithic tool manufacturing station that, according to projectile point styles, was probably seasonally occupied from between 8000 and 6000 years ago to late prehistoric times. At this site, changes in subsistence technology thought to have occurred in the Plateau during the period that the site was occupied are reflected only by a change in occupational intensity. This leads one to believe that ethnographic data may even be of some use in predicting pre-riverine period site locations, at least in upland areas like the Nezperce National Forest.
ETHNOGRAPHIC BACKGROUND

Ethnographic data has been assembled which is useful for determining likely locations for aboriginal sites in the Nezperce National Forest. Using ethnohistorical research and ethnographic field work, Schwede has attempted to determine the relationship between Nez Perce settlement locations and several environmental variables (Schwede 1970). As one might expect the area utilized by the Nez Perce Indians includes the Nezperce National Forest.

Nez Perce settlements were found to occur most frequently at certain elevations. Villages were located primarily between 500 and 1500 feet; seasonal camps clustered between 500 and 2000 feet and between 2500 and 3500 feet (Schwede 1970:134). Camps tended to occur over a wider range of elevations than villages, with some located as high as 6500 feet. Nez Perce settlements also tended to be associated with stream confluences. Villages occur most frequently at the confluences of larger tributaries, while camps are more dispersed throughout the size range of tributary confluences (Schwede 1970: 132). In examining settlement locations in relation to food resources, it was found that both camps and villages are most often associated with fishing sites, less often with root gathering areas, and least often with hunting areas (Schwede 1970:134).
According to this study, the timber sale areas examined during our survey are not likely to contain aboriginal settlements because of their tendency to be located in high areas away from major streams where hunting would provide the only food resources. Although settlements were not usually located away from rivers on ridges, saddles, and upland flats, these features were still considered to be potential areas for specialized, temporary, aboriginal activity. Such areas may have been utilized for hunting and travel, as evidenced by the trail following the Lochsa-Selway divide to the Summit of the Bitterroots and the Lolo and Nez Perce trails (Elsensohn 1971: 391-2).

The use of upland areas may have increased following the introduction of the horse to the Plateau around 1730 (Anastasio 1972). However, this period of increased upland use would span only about 150 years, and be characterized by highly mobile groups that might leave little archeological evidence of their presence. During the later part of the period aboriginal material culture would be dominated by Euro-American materials. In contrast to earlier locally manufactured chipped stone tools and debitage, evidence of these durable materials would occur infrequently because they are manufactured externally, need less maintenance, and are disposed of less often.
HISTORICAL BACKGROUND

In 1805-06, the Lewis and Clark expedition passed along the Lolo trail to the north of what is now the Nezperce National Forest. Between this initial visit and 1861, very few Euro-Americans entered the Idaho County area. Because of its inaccessibility it was seldom visited by white traders and trappers, although John Urb, Colonel Craig, and Joe Meek may have entered the area during this period (Elsensohn 1965:3).

The first substantial Euro-American utilization of the Nezperce National Forest area occurred following the discovery of gold in the early 1860s. Elk City, Florence, Dixie, Newsome, Orogrande and, later, Buffalo Hump were centers of nineteenth century gold mining and National Forest land in these areas could be expected to contain significant cultural resources. However, none of these centers are located in Phase I or Phase II timber sale areas.

Except for during World War II when gold mining was stopped (Ross and Forrester 1958:49), intermittent activity has continued to the present day. After the initial placer deposits were abandoned by white miners they were often re-worked by Chinese miners, who were most active in the Florence area between 1869 and 1880 (Elsensohn 1965:75). Using more northern hydraulic methods, the less rich placer deposits
were mined until around 1898 when placer activity began to be drastically reduced (Thompson and Ballard 1924:14). Quartz lode mining began around 1884 and usually continued in a given area until oxidized surface ores were depleted (Thompson and Ballard 1924:14). Stimulated by a rise in gold prices, the Great Depression, and improved transportation routes, interest in placer mining increased in the 1930's (Capps and Roberts 1939; Reed 1939).

Some early logging took place to supply needs created by the mining industry, but large-scale commercial logging in the National Forest area began somewhat later and continues to the present. Other Euro-American activities that have taken place within the forest area include ranching and grazing, trapping, recreational use, and administrative activities like road construction, which have increased since the Nez perce National Forest was established in 1908.
**METHODODOLOGY**

The survey involved both literature research and field reconnaissance, carried out by members of Commonwealth's professional staff. The bulk of the background data was gathered during October, 1976, from publications maintained by the Commonwealth staff, and from personnel, files, and records at the Nezperce Forest Office in Grangeville and at various ranger district offices, the University of Idaho, Laboratory of Anthropology, the Washington State University Museum, and the Idaho State Historical Society in Boise. During May and June of 1977 some additional background data specific to Phase II sale areas were gathered from published works and interviews with rangers, foresters, and timber cruisers in the various ranger districts. The National Register of Historic Places was examined but it contained no references to any significant cultural resources within the sale areas. (Department of the Interior, National Park Service 1977).

Our field strategy was largely based on information gathered during this background research. Existing archeological, ethnographic, historic, and environmental data were used to generate site-predictive models. Expected optimal areas for aboriginal sites are located along streams or rivers, especially at the confluences of major streams, and the size and frequency of sites increases with the size of the stream. Additional areas where smaller aboriginal sites could be expected include
ridge tops, saddles, and upland flats. When these kinds of features occurred in sale areas they were subjected to intensive survey efforts. Coverage of non-optimal areas, sufficient to act as a control, was ensured by the fact that within the areas surveyed they vastly outnumbered favorable site areas.

Sources on Idaho County history and Forest Service informants were consulted to aid in locating historic sites and structures within the timber sale areas.

During Phase I, S.R. Claggett, C.H. Benn, and S.R. Treichler conducted a literature search and field reconnaissance concurrently from October 5-22, 1976; the field survey for Phase II was conducted between May 24 and June 16 by J.C. Kimball, J.G. Franzen, S.R. Claggett, and M. Vanderpuy. Meetings were arranged with designated contacts at district offices prior to field work in each ranger district. At this time, maps were secured and updated and additional background information on sale areas was obtained. The survey team agreed to recontact the appropriate district office in the event that any significant endangered cultural resources were located.

Existing roads, trails, and previously cut areas within each sale area were surface surveyed, and those portions in areas of high potential were given the most attention. When
their locations were designated on maps furnished by the Forest Service, proposed cutting sections and roads were surface surveyed. The reliability with which we were able to locate proposed cutting sections and roads varied, depending on the frequency of plastic flagging tape and paint blazes.

In the absence of on-the-ground markings, the approximate locations of proposed cutting sections were determined using topographic maps and compasses. If surface visibility was poor in high potential areas located in or near designated cutting sections, we compensated by employing shovel tests. Utilizing these methods, all designated areas were surveyed by two or three person field crews.
DESCRIPTION OF SALE AREAS

PHASE I

Milner (1a) - Figure 3

The Milner sale area is located in Sections 25 and 36, T27N, R3E, and Sections 30 and 31, T27N, R4E, and consists of two cutting sections totaling approximately 205 acres. Elevation ranges from 5640 feet to 5360 feet with a general north exposure. Streams in the area include Slate Creek, Dry Lake Creek, and Mill Creek, although none lie within the sale area boundaries. Slope averages 20 percent, becoming more steep in the southern portion of the area.

The mid-19th century Milner wagon road bisects the area and exists now as a cleared path along the ridge spine. According to Lynn Mason on the Slate Creek Ranger District, this road will be protected from the effects of timber harvesting operations by a corridor of trees to remain uncut along either side for a lateral distance of 75-100 feet.

No additional cultural items were located within the Milner sale area. Visual inspection of bare ground was hampered by the presence of quartzite fragments in the soil which might tend to obscure prehistoric lithic chippage. No basaltic materials or argillite debitage was noted, and there is little reason to believe that the terrain would be conducive to prehistoric habitation.
Little Boulder Creek (lb) - Figure 4

Twenty-six separate cutting sections totaling 1200 acres were surveyed in the Boulder Creek sale area. They are located in Sections 14, 22-27, 35, and 36, T26N, R3E; Section 1, T26N, R3E; and Sections 30 and 31, T26N, R4E. Elevations range from 6200 feet on the high ridges to 4400 feet near stream courses including Little Slate Creek, Moon Creek, Little Boulder Creek, and Rubie Creek. Exposures are variable and slopes average 20-25 percent, with some cutting areas containing 35-40 percent slopes.

This sale area required extensive compass work and hiking to locate and survey remote cutting sections. All staked logging roads and marked cutting sections were surveyed, as well as existing jeep trails and ridge tops, which were walked while locating the cutting sections. Streams in the area are very small, marking the headwaters of larger creeks. The majority have precipitous banks and marshy bottoms filled with downed and rotting timber.

Despite an intensive surface survey, no cultural materials were recovered. Cutting sections and roads are generally located across steep slopes. Fairly level ridges and hill tops were shovel tested along 50 feet transects, also with negative results. The lack of historic materials was surprising, considering the proximity of the area to the mining district of the Florence Basin to the southeast.
Survey of ground outside the cutting sections was also unsuccessful, even along the headwater creeks in the area. Creek bottoms were uniformly marshy, with large amounts of fallen timber present in most areas which hampered intensive survey efforts. The margins of a wet meadow near the center of Section 25 were surveyed, but yielded nothing. Construction of a new road through the eastern portion of the Little Boulder Creek sale area would not appear to have any adverse effects on possible cultural resources.

Cabin-Tollgate (2b) - Figure 5

Cutting sections (9) in the Cabin-Tollgate sale area total approximately 600 acres, averaging just over 66 acres per cutting section. The sale area includes tracts in Sections 16, 17, 19-22, 27, 28, 32-34, T29N, R3E; and Sections 3 and 4, T28N, R3E. Cutting areas, proposed logging roads, and adjacent areas were subjected primarily to visual inspection, since shovel testing was not particularly effective in the frozen rocky ground at several of the cutting tracts.

Cutting sections in the southern half of the sale area were surveyed initially and yielded no cultural materials. Stumps and piles of slash from previous logging were found which hampered survey. Those sections also contained several clear areas along high knobs and slopes which were intensively
searched, but yielded nothing. Lack of forest cover in these areas is probably attributable to the rocky nature of the soil, which also effectively prevented shovel testing. Sections in the northern half of the area, located near previously clear-cut areas, also produced no cultural materials.

Moderate slopes (5-15 percent) prevail in the cutting sections, although greater slopes are present near stream courses. Most cutting sections occupy ridge lines and saddles rather than the steep hill sides common in other sale areas. Cabin Creek and Fish Creek are the main streams in the area; however, no sites were discovered along their courses. Likewise, the property near Tollgate Ranch and Cayuse Meadows proved negative, even for historic sites.

Grouse Creek (2a) - Figure 6

Based on the settlement pattern outline previously, the Grouse Creek sale area should have some potential for location of small prehistoric hunting camps, owing to its relative proximity to south fork of the Clearwater River. Located in Section 31 and 32, T29N, R4E; and Sections 5 and 6, T28N, R4E, the sale area of 350 acres is within 1-1/2 straight-line miles of the river. However, survey failed to produce any artifacts, probably due to the steep slopes which characterize the area, averaging 20-40 percent. A further complication is the extremely dense nature of the ground cover consisting of fallen logs, brush, and marshy creek bottoms.
Altitude here is relatively low (5000-4200 feet), but the nature of the terrain has probably prevented any type of settlement in the past.

Falls Creek (4a) - Figure 7

Falls Creek is a large (800 acres) sale area located about two miles south of the Selway River. Cutting sections surveyed this fall are located north of Falls Creek in Sections 1, 2 and 9-14, T31N, R8E; and Sections 7 and 18, T31N, R9E. Cutting sections south of Falls Creek in Sections 23 and 24, T31N, R8E; and Section 19 of T31N, R9E were not surveyed because they have been incorporated into the Horse Creek sale area slated for next year's sale, according to Danny Castello, our contact at the Fenn Ranger Station.

Fifteen cutting sections were inspected by hiking along existing pack trails that run through the area. Once surveyed logging roads were located, they were followed through the cutting sections, most of which extend down 15-20 percent slopes. Cutting sections on ridge lines and saddles were shovel tested where possible, although frozen ground continued to be a problem. Ground near the extreme headwater branches of Falls Creek, SOB Creek, and Island Creek was surveyed where feasible, but steep slopes dominate most of those areas.
The Falls Creek sale area is in a location similar to Grouse Creek—near a major stream course, in this case the Selway River. Again it was felt that this situation might lead to the recovery of artifacts associated with pre-historic seasonal camps, but intensive survey produced nothing—even along ridges where such camps might logically be located.

Baston-Jungle (3a) - Figure 8

Red River Ranger District contains three sale areas that were surveyed during Phase I. The largest of these, Baston-Jungle, holds 24 cutting sections which total more than 550 acres. Situated near Red River and within an historic mining district, Baston-Jungle was felt to have the highest potential for cultural remains of any sale area investigated during Phase I. No materials or structures of any type were noted by the survey crew, however, and none were reported by our contact at Red River Ranger Station, Bill Wulf. All cutting sections and planned logging roads were surveyed with particular attention given to tracts along Soda Creek and Red River, where minor elevations alternate with marshy bottom lands. High slopes, averaging 15-25 percent, below Soda Creek Point were also surveyed, but with less intensity than those along streams. Shovel testing was tried in several stream side locales, but was again attenuated by frozen, marshy ground.
This sale area, like Little Boulder Creek, was fairly widespread, requiring extensive cross-country hiking to reach certain cutting sections. The sale area boundaries encompass all or parts of 16 sections, including: Sections 16, 17, 19-21, 28-33, T28N, R10E; Sections 4-6, T27N, R10E; and Sections 25 and 36, T28N, R9E. A total of more than 600 acres was surveyed, with negative results throughout.

**Poacher's Ridge (3b) - Figure 9**

Poacher's Ridge sale area is situated in Sections 11-14, T28N, R8E, about one mile west of Red River. Two cutting sections are involved which total approximately 88 acres, although at least 120 acres within the sale area boundaries were surveyed. Both sections were inspected, as well as the single proposed logging road and all other existing roads connected with previous clear-cutting, which has been extensive within the sale area. Ground visibility along roads and in clear-cuts was good, although much disturbance of the upper soil layers was evident. The soil in this area was very friable and micaceous, probably due to the nature of the parent materials, but the humus layers visible in other sale areas have undoubtedly been removed by logging operations. Nevertheless, no cultural materials were recovered, despite these relatively good survey conditions.
Pat Brennan (3c) - Figure 10

Initial contact with Bill Wulf at the Red River Ranger Station indicated that no cutting areas or access road locations had been decided for the Pat Brennan sale area. However, an attempt was made by the field crew to cover as much ground in the area as our schedule allowed. By investigating ridges, toe slopes, and stream courses, we covered approximately 50 percent of the total area, avoiding the steep slopes (20-30 percent) which constitute about one-half (500 acres) of the sale area. No cultural materials were found, either through visual inspection or limited shovel testing along Pat Brennan Creek.

Allison Creek (5a) - Figure 11

Allison Creek was the last and smallest sale area investigated during Phase I operations. Four cutting sections are involved in Sections 15, 16, 21 and 22, T29N, R7E, which total only 50 acres. However, coverage exceeded this figure by surveying nearly the entire sale area of approximately 100 acres. Roughly bisected by Allison Creek, a tributary of South Fork of the Clearwater River, the sale area is confined to two ridge lines and the creek banks, none of which produced archeological sites. Dredge tailings on lower Allison Creek are evidence of previous gold mining activities, but no evidence of any mining was located inside the boundaries of our study area. Here again the situation involves ground near a major stream which did not produce evidence of prehistoric habitation.
PHASE II

Robbin Creek (lc) - Figure 12

Located in the Salmon River Ranger District, this is a large sale area of approximately 1500 acres. It comprises 28 separate cutting sections located in Sections 25, 26, 35, and 36, T25N, R3E; Sections 30, 31, 32, T25N, R4E; Sections 1 and 2, T24N, R3E; and Sections 5, 6, 7, and 8, T24N, R4E. Elevations within the sale area range from 4000 to 6500 feet. Access to cutting areas and surface visibility were generally good but no aboriginal cultural materials were observed. Although some cutting units are within 2 miles of the Salmon River, a major focus of aboriginal activity, access to the sale area from the salmon would require climbing 2500 to 4000 vertical feet on at least a 20 percent slope.

The Robbin Creek sale area is in an historic mining district and the Hi-Yu Mine just outside the north boundary of the sale area was active as early as 1872 (Elsensohn 1965:73). However, maps furnished by the Forest Service indicated no cutting is planned in the vicinity of the Hi-Yu. Forest Service personnel at the Salmon River District Office reported several cabin, dump, and shaft locations in the vicinity of cutting sections 9, 15, 16, and 22. All datable cultural material observed during our survey of these areas was modern, and probably dating no earlier than 1935. The same is true for artifacts we observed near ditches, pits,
and trailings along Chester Creek on the west edge of cutting Section 8 and along Grouse Creek on the northeast edge of cutting Section 27. No objects, sites, or structures of archeological or historical significance were located.

**Clear Creek Pulp (2c) Figure 13**

The Clear Creek Pulp timber sale area, located in Sections 26, 27, 33, 34, 35, and 36, T31N, R5E; and Sections 1 and 2, T30N, R5E, consists of 9 cutting sections totaling approximately 200 acres. Most surfaces slope between 20 and 35 percent, and elevations range from approximately 4200 to 5000 feet. The area is drained by Hoodoo Creek and the West Fork of Clear Creek, but both are very small streams.

Cutting sections and existing roads were surface surveyed, along with adjacent previously cut areas where archeological materials would be highly visible. Shovel testing was conducted along Hoodoo Creek and in two level areas along the south boundary of sale area. None of the survey efforts conducted yielded any evidence of cultural resources.

**Sprig (2d) Figure 14**

Located in Sections 28, 33, and 34, T30N, R4E; and Sections 3 and 4, T29N R4E, the Sprig timber sale area consists of a 200 acre cutting section. Elevations range
from 4400 to 4754 feet and Covert Creek is the only stream in the area. Foot survey throughout the cutting section and shovel testing Covert Creek failed to produce any evidence of cultural resources. Black Tail Ridge was accorded particular attention because it appeared to be a likely route for aboriginal travel, but it failed to show any evidence of utilization.

Twin-Jungle (2e) Figure 15

The Twin-Jungle timber sale area is located in Sections 10, 11, 12, 13, 14, 15, 22, 23, 24, 25, 26, and 27, T28N, R3E, and consists of 14 cutting areas totaling approximately 950 acres. Elevation ranges from approximately 5000 to 5520 feet. Streams within the sale area include Asbestos, Jungle, Twin Cabins, Tepee, and the south fork of White Bird Creek. Except for stream valley sides, slopes are relatively gentle and average 10 to 15 percent for most of the area. However, the suitability for human habitation of some of these relatively level areas is diminished by the fact that they are quite swampy and densely forested.

Cutting sections, proposed roads and existing roads were surface surveyed with negative results. The edges of previously cut areas adjacent to planned cutting areas provided excellent surface visibility. In addition, shovel testing was conducted along Jungle Creek and in a level area in the south-central portion of the sale area, but no cultural materials
were encountered. Because it is the largest stream in the area, the south fork of White Bird Creek was examined even though no cutting will take place within 1/8 mile of the stream.

The Milner Trail, which was opened in 1862, passes about 1/2 mile northeast of the sale area, and a 1910 newspaper account locates an asbestos mining property in this general area (Elsensohn 1971: 261,433). However, our survey failed to produce evidence of any historic or prehistoric activity in the sale area.

**Storm Creek (2f) Figure 16**

The Storm Creek timber sale area is located in Sections 9, 15, 16, T30N, R5E, and consists of a single 200 acre cutting section. Portions of Storm and Meadow Creeks flow along the boundaries of the sale area but are not included in the cutting section. Elevations range from 4200 to 5360 feet and nearly the entire area is on approximately a 40 percent slope. The only area favorable for aboriginal utilization is the knoll located on the north-central edge of the area, which was shovel tested with negative results. The remainder of the area, including creek banks, was surface surveyed, but no historic or prehistoric cultural remains were observed.
Upper Peasley Pulp (2g) Figure 17

The Upper Peasley Pulp timber sale area is located in Sections 23, 24, 25, and 26, T30N, R5E, and consists of a 200 acre cutting section. Approximate elevations range from 5200 to 6040 feet. No major streams flow through the sale area. Slopes average 20 to 30 percent, but several relatively level ridge tops and knolls are present. Survey efforts, including shovel tests, were concentrated there and along the north boundary road. No cultural resources of any kind were identified within the sale area.

Hungry Ridge Lodgepole and Intermediate (2h) Figure 18

Located in Sections 9, 10, 15, 16, 20, 21, 28, 29, 32, and 33, T28N, R4E, the Hungry Ridge Lodgepole and Intermediate timber sale consists of approximately 200 acres of planned cutting. Elevations range from approximately 4400 to 5040 feet. The sale area follows the top of Hungry Ridge, which forms the divide between Johns and Mill Creeks. Because of this, most surfaces within the sale area slope 10 percent or less. The predominant tree species are Ponderosa Pine and Lodgepole Pine.

Roads and trails provided a transect with good surface visibility following Hungry Ridge through the entire sale area. This was supplemented by shovel testing in one very level area. No cultural resources were observed within the sale area. Structural remains in the northeast portion
of the sale area probably relate to twentieth century ranching or logging activity and do not appear to be significant.

As evidenced by the Gilmore Ranch to the east and the Lamb Ranch to the west, the climate and topography in this area make it more suitable for grazing or ranching than higher, steeper areas.

Deer Creek (2i) Figure 19

This sale area consists of 13 cutting sections located in Sections 1, 2, 11, 12, 13, 14, and 15, T28N, R4E, which total approximately 700 acres. Elevations range from 3400 to 4700 feet and Ponderosa Pine is abundant. Except for ridge tops and knolls, most surfaces have 20 to 40 percent slopes. Deer Creek is the only major stream within the area.

Cutting sections and existing roads, trails, and previously logged areas were surface surveyed. Shovel testing was conducted along a ridge top in the SW 1/4 of Section 11 and along Deer Creek. The only cultural materials observed in the sale area were recent (twentieth century) structural and artifactual remains located in the SE 1/4 of the NW 1/4 of Section 11. This material does not appear to be of historical, cultural, or archaeological significance and is beyond the limits of the actual cutting sections.
Figure 17
UPPER PEASLEY PULP (2g)
Siegel-Hawk (3d and 5d) Figure 20

The Siegel-Hawk timber sale area is located in Sections 1, 2, 3, 4, 5, 8, 9, 10, 11, 12, 14, 15, 16, and 22 T28N, R9E; and Sections 23, 25, 26, 34, 36, T29N, R9E. It consists of 23 cutting sections in the Red River Ranger District totaling about 1000 acres and 400 acres in the Elk City Ranger District, where approximately 25 cutting sections are planned. Slopes range from 15 to 40 percent and exposures are variable, with elevations ranging from 4200 to 6000 feet. Siegel, Little Siegel, and Ditch Creeks drain the sale area.

Designated cutting sections were foot surveyed and additional optimal areas for sites within the sale area were also examined. The areas bordering the largest stream in the area, Siegel Creek, have been greatly altered by mining activity and dredge tailings are abundant. No datable materials were observed in direct association with these tailings but artifacts and structures in the general area were recent. Ditches, pits, and structures observed in the west-central portions of the sale area south of an existing road were also recent. This road provided a transect of the portion of the sale area most likely to contain aboriginal sites, which is the ridge separating Siegel Creek from Little Siegel and Ditch Creeks, but only recent Euro-American material was observed.

West Fork O'Hara (4b) Figure 21

The West Fork O'Hara timber sale area is located in Sections 32 and 33, T31N, R7E; and Sections 3, 4, 9, and 10,
T30N, R7E and consists of 3 cutting sections totaling approximately 250 acres. Slopes average 20 to 25 percent in the sale area and elevation ranges from 5200 to 5600 feet. Features in the area that might have been utilized aboriginally include a spring, the ridge along the west boundary of the area, and the West Fork of O'Hara Creek.

Fresh snow covered the ground in some areas during our survey but we compensated for this by employing shovel testing when necessary. An existing road provided good visibility along the ridge on the west edge of the sale area and near the spring. Additional shovel tests were conducted along the West Fork of O'Hara Creek where it leaves the sale area. None of our survey efforts yield any evidence of cultural resources in the sale area.

Horse Creek (4c) Figure 22

Totaling 428 acres, the 22 cutting sections comprising the Horse Creek timber sale area are located in Sections 25, 26, 27, 34, 35, and 36, T31N, R8E; and Sections 19, 20, 21, 28, 29, and 30, T31N, R9E. The sale area is situated along and to the south of the divide between Falls Creek and Horse Creek. Horse Creek is the only stream in the area, but it is largely beyond the limits of the actual cutting sections, with the exception of two cutting sections in Sections 29 and 30, T31 R9E. Elevations range from 4800 to 5880 feet and most surfaces have 20 to 30 percent slopes.
After several attempts to reach the area failed because of poor road conditions, the sale area was reached via Elk City. Cutting sections and proposed roads were surface surveyed and shovel testing was conducted along Horse Creek in Sections 29 and 30, but no cultural materials were encountered. The ridge, with its associated saddles, that generally follows the north boundary of the sale area is the most likely area for aboriginal sites, but nothing was found there, even though an existing road provided good visibility. The absence of historic materials in the area was not surprising, since it is not in an area of mining activity.

Tahoe Salvage (4d) Figure 23

Consisting of approximately 2328 acres, the Tahoe Salvage timber sale area is located in Sections 9, 13, 14, 15, 16, 19, 20, 21, 22, 25, 26, 27, 28, 29, 30, 33, 34, 35 and 36, T32N, R6E. Elevations range from about 3600 to 5000 feet and most slopes vary from 10 to 40 percent. Streams within the area are small, with Pine Knob and Browns Spring Creek being the largest.

An estimated 40 percent of the sale area was surveyed with negative results. Approximately 1/2 of the area has already been logged, and visibility was excellent along roads and the edges of clear-cuts. Large areas in the western portion of the sale area are relatively flat, but surface survey and
limited shovel testing in remaining forested areas yielded no evidence of aboriginal utilization. Since the area is not within a known mining district, the absence of any historic cultural resources was not surprising.

Goddard Salvage (4e) Figure 24

The Goddard Salvage sale area is located in Sections 1, 12, 13, T31N, R6E; Sections 6 and 7, T31N, R7E; Sections 25 and 36, T32N, R6E; and Section 31, T32N, R7E. It consists of 970 acres situated along the ridge separating the Clear Creek and Brown's Spring Creek drainages from the Goddard Creek drainage. Elevations within the sale area range from 5000 feet to 5700 feet, and slopes average about 25 percent.

The existing road running along the west boundary of the sale area provided excellent access and enhanced surface visibility along the ridge it follows. This ridge is the most favorable location within the sale area for aboriginal sites, but no cultural material was observed. The area around Brown's Spring and the slopes east of the ridge were also checked with negative results. The remains of a cabin were located north of Brown's spring but all artifacts in the area were recent. The USGS 7.5' Lodge Point Sheet indicates the cabin was standing as late as 1966, and it appears to be without archeological historical, or cultural significance.
Hamby Salvage (4f) Figure 25

The Hamby Salvage sale area consists of approximately 2625 acres located in Sections 13, 14, 23, 24, 25, T31N, R6E; Sections 1, 2, 7, 8, 9, 10, 15, 16, 17, 18, 19, 20, 21, 28, 29, 30, T31N, R7E; and Sections 35 and 36, T32N R7E. Since the sale area was not subdivided into individual cutting units, our survey efforts were concentrated in areas of good visibility or high potential. Previously cut or burned areas and roads where cultural materials would be readily apparent were abundant, but were surveyed with negative results. Most of the area ranges from 2600 to 5600 feet in elevation and is dominated by 20 to 40 percent slopes. However, a number of more level areas exist along ridges, saddles, and along the bank of Hamby Fork. Several of these topographic features where existing archaeological and ethnographic data indicate sites might be located were shovel tested with negative results.

Moose Creek (5b) - Figure 26

Consisting of 22 cutting sections totaling approximately 350 acres, the Moose Creek sale area is located in Sections 11, 12, 13, 14, 15, 22, 23, and 24, T29N, R7E. Elevations range from about 4600 to 5311 feet and most of the area has a slope of 20 to 25 percent. Access was gained to the sale area by hiking up the Dutch Oven Jeep Trail from the South Fork of the Clearwater River. No cultural materials were observed in any of the cutting sections or along existing and
proposed roads in the area. Shovel testing was conducted in a relatively level area in the cutting section in the southeast part of the sale area and along Dutch Oven Creek in the central part of the area with negative results.

Evidence of mining activity was observed along Dutch Oven Creek and along the Dutch Oven Creek Jeep Trail south of the sale area, but no indications of mining were found within the sale area. The Elk City Stage Road follows the northeast boundary of the sale area for a short distance, but does not actually enter the area.

Deadwood (5c) Figure 27

Located in Sections 4, 5, 6, 7, and 18, T28N, R8E; and Sections 1, 2, 11, 12, 13, and 14, T28N, R7E the Deadwood timber sale area consists of 11 cutting sections totalling approximately 350 acres. Elevations in the area range from approximately 4200 to 5320 feet. Slopes in the cutting sections average 30 percent, except for the three eastern most sections which average 15 percent.

Cutting sections, proposed roads, and existing roads were examined but no cultural resources were located. Shovel testing was conducted along Campbell Creek and in a relatively level area along the divide between the Campbell Creek and Crooked River drainages, with negative results. Trenches and pits were
observed but all appeared to be the result of modern mineral exploration. Some were so recent that back dirt piles remained unvegetated. Reference is made to mining activity on Deadwood Mountain in a 1892 newspaper account (Elsensohn 1971: 253), but nothing was observed in the sale area that we were able to date to this period.

Falls Creek (4a) - Figure 22

The Falls Creek sale area is a large area whose cutting sections total approximately 800 acres. The majority of this proposed timber sale north of Falls Creek was surveyed during the Phase I archeological cultural resources survey carried out in October, 1976. Cutting sections located south of Falls Creek in Sections 23 and 24, T31N, R8E; and Section 19 of T31N, R9E were not surveyed at that time because they were incorporated into the Horse Creek sale area slated for this year's sale.

Accordingly, the cutting areas located south of Falls Creek in Sections 23 and 24, T31N, R8E; and Section 19, T31N, R9E were surveyed during the course of the Phase II archeological cultural resources survey. The timber sale area south of Falls Creek is dominated by steep slopes and ranges in elevation from approximately 4200 to 5560 feet. Six cutting sections were inspected by hiking along existing pack trails and proposed logging roads. The only water resources located in close
proximity to the proposed cutting sections consist of small intermittent streams. The limited availability of water is far outweighed by the steepness of the cutting areas which approach 50 percent in some instances, however.

The investigation of these cutting areas did not result in the location of any historic or prehistoric cultural resources, the steepness of the areas and absence of reliable water resources mitigating against the occurrence of cultural resources.
CULTURAL MATERIAL

None of the Euro-American cultural material mentioned in the individual sale area descriptions was collected. Field evaluation and background research indicated that they lacked significance and they were simply recorded in our field notes. The same is true for undatable structural features observed. No datable materials that could definitely be linked to early mining activity were located. In most cases, observed artifacts were of styles still in use, or only recently discontinued.

Along Chester Creek near the edge of Robbin Creek cutting Section 8, open top tin cans, solid top beverage cans, and enamelware were noted, with a likely date of 1935-1960 (Fontana and Greenleaf 1962:73; Baron 1962:327; Woodruff and Phillips 1974: 209; Lifshey 1973:156). Near cutting section 27 (Robbin Creek) a collapsed wood frame cabin built with wire nails, open top tin cans, and both solid top and easy open beer cans were observed, which most likely date from 1935 to the present (Fontana and Greenleaf 1962: 55, 73; Baron 1962: 327). Similar artifacts, including auto parts, bottles with seams running their entire length, tobacco cans, undatable stove parts and an entire late 1940s automobile enabled us to assign likely post-1935 dates to additional materials observed in the Deer Creek, Siegel-Hawk, and Goddard Salvage sale areas. Based on these materials it appears that the most intensive use of the sale areas surveyed followed the
increased interest in placer mining which took place during the 1930s (Capp and Roberts 1939; Reed 1939).
RESULTS AND EVALUATIONS

Although no aboriginal cultural material was located, the survey still serves as a source of information by requiring us to explain this absence. Both ethnographic and existing archeological data indicate that the size and frequency of sites is probably greatest along major rivers in the area. Timber sale areas tend to be located well away from these rivers for both environmental and aesthetic reasons, although streamside sites are still greatly endangered by construction activities and recreational use.

Ethnographic data indicate that the nature of the aboriginal utilization of upland areas for seasonal hunting and travel may have been such that the resulting archeological manifestations would be difficult, if not impossible, to identify. Upland hunting camp occupations were probably small and of short duration. Additionally, faunal remains would be poorly preserved because of the moistness and acidity of coniferous forest soils. Because of the high energy requirements of human movement on slopes, upland sites would probably still be relatively close to major rivers like the Salmon, Clearwater, and Selway, but very few of the timber sale areas are within easy access of these rivers. Although upland areas well away from these rivers were used by the Nez Perce to travel to and from the plains after the introduction of the horse, no known trails pass through the survey areas.
In some sale areas, such as Robbin Creek, Siegel-Hawk, Deadwood, and Moose Creek, the potential exists for cultural resources relating to nineteenth century Euro-American mining activity. These were the only areas where we observed cultural material other than isolated roadside trash, but no nineteenth century material was located. Much of the early mining activity seems to have taken place at lower elevations or in areas now privately owned or claimed. Our work in timber sales within the mining districts revealed only relatively late materials, all dating to the twentieth century and most appearing to be post-1935. In many instances features were observed, such as tailings or ditches, that could only be tentatively dated by artifacts observed in the general area. Rather than collect twentieth century materials, we simply recorded their locations in our field notes. Although recency alone does not rule out significance, none of these twentieth century materials or structures appears to be unique, associated with a significant event or person, or to exemplify particularly well the architecture or any other aspect of this period. For these reasons they were judged to be without archeological, historical, or cultural significance.
RECOMMENDATIONS

During both phases of our archeological survey of timber sale areas within Nezperce National Forest, no significant cultural resources were located. Using surface survey and shovel testing techniques, proposed cutting sections and logging roads, existing roads and cleared areas, and selected high potential areas for sites were surveyed with negative results. Literature and archival research, including an examination of the National Register of Historic Places, revealed no previously known sites within the sale areas. These results can be explained by the nature of Forest Service timber harvesting practices and the aboriginal and Euro-American utilization of the area. Since no cultural resources were identified that warrant further investigation or mitigation, it is recommended that the timber sale program in the areas surveyed proceed as planned.
REFERENCES

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Dancey, William S.

Daubenmire R., and Jean B. Daubenmire

Elsensohn, Sister M. Alfreda

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Fontana, Bernard L., and J. Cameron Greenleaf

Gaardner, Lorin R.
Keeler, Robert W.

Lifshey Earl

Nelson C.M.

Orr, Robert T.

Reed, John C.

Reid, Rolland R.
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Ross, Clyde P. and J. Donald Forrester

Sanger, David

Schwede, Madge L.

Swanson, Earl H.
Thompson, Francis A., and Samuel M Ballard

U.S. Department of the Interior, National Park Service

Woodruff, Jasper Guy, and G. Frank Phillips
# APPENDIX A: DESIGNATED CONTACTS AT NEZPERCE NATIONAL FOREST RANGER DISTRICT OFFICES

<table>
<thead>
<tr>
<th>District</th>
<th>Contacts</th>
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<tbody>
<tr>
<td>Slate Creek</td>
<td>Larry O'Brien, Lynn Mason</td>
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<tr>
<td>Clearwater</td>
<td>Joe Bednorz, Larry Lindner</td>
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<tr>
<td>Red River</td>
<td>Phil Jaquith, Bill Wulf</td>
</tr>
<tr>
<td>Selway</td>
<td>Forest Hayes, Dan Castello</td>
</tr>
<tr>
<td>Elk City</td>
<td>Vern Fleisher, Jimmy Chew</td>
</tr>
</tbody>
</table>
JAMES E. FITTING
Manager — Human Resources Planning

Background in cultural and human resources management planning, archeology, anthropology, history and historic preservation including positions in universities, museums and government.

EXPERIENCE: Gilbert/Commonwealth since 1975
1977 to Present Manager-Human Resources Planning, Environmental Systems Division, responsible for overall supervision of land use planning, social and economic and cultural resources studies for industrial and governmental clients.

1975-77 Supervisor-Cultural Resources responsible for directing a group of professionals involved in cultural resources evaluations including literature searches, field evaluations, test excavations and historical, archeological and anthropological planning on more than 70 projects throughout the United States.

1972-75 State of Michigan
State Archeologist responsible for organizing first meeting of state archeologists in Washington, D.C.; served as a member of the Michigan Intergovernmental Environmental Review Committee; and was a contributor to the State Historic Preservation Plan.

1964-72 Case Western Reserve University, University of Michigan and Wayne State University
Instructor, Research Assistant, State College Fellow, Museum Curator, Assistant Professor, Professor and Chairman of the Anthropology Department in these institutions.

Involved in research projects in eastern and southwestern U.S., Guatemala and the Virgin Islands. Principal investigator for 24 research and training grants and cultural resources management contracts between 1963 and 1975.

EDUCATION: B.A., Division Social Science (with High Honor), Michigan State University, 1960
M.A., Anthropology, University of Michigan, 1962
PhD., Anthropology, University of Michigan, 1964

(Continued)
CERTIFICATION: NASDS Scuba Certification, 1973
Society of Professional Archeologists; Accreditation in Field Research, Collections Research, Theoretical, Library and Archival Research; Archeological Administration; Cultural Resources Management and Teaching (1976) and Museology (1977).

SOCIETIES: Society for American Archeology
Society for Historical Archeology (Board of Directors 1976-79)
American Anthropological Association (Fellow)
Eastern States Archeological Federation
American Institute of Nautical Archeology
American Society for Conservation Archeology
National Trust for Historic Preservation
Council on Abandoned Military Posts
Approximately 20 State and Local Historical and Archeological Societies

PUBLICATIONS: (Over 100 books, monographs, articles, chapters and reviews in the fields of archeology, anthropology, history and planning).

Editor of THE MICHIGAN ARCHEOLOGIST, CASE WESTERN RESERVE UNIVERSITY STUDIES IN ANTHROPOLOGY, SOUTHWESTERN NEW MEXICO RESEARCH REPORTS and MICHIGAN HISTORY DIVISION, ARCHEOLOGICAL SURVEY REPORTS. Served on the editorial committees of ABSTRACTS IN ANTHROPOLOGY, BULLETIN OF THE TOLEDO ABORIGINAL RESEARCH CLUB and the Smithsonian Institution HANDBOOK OF NORTH AMERICAN INDIANS.


HERBERT L. WHITTIER
Supervisor – Cultural Resources

Over fourteen years of professional experience in socio-cultural anthropology including university teaching and research in this field with particular emphasis on the peoples of southeast Asia.

EXPERIENCE:
Gilbert/Commonwealth since 1977
1977 to Present Supervisor — Cultural Resources Section. Responsible for coordination of Nezpearce Archeological Survey for U.S. Department of Agriculture; Cultural Resources Survey, Falls Lake, North Carolina for the National Park Survey; and archeological testing for Downtown Development Authority of Detroit.

Senior Community Planner responsible for socio-economic research and analysis on Antelope Creek surface mine for Peabody Coal Company.

Adjunct Assistant Professor, Michigan State University Asian Studies Center.

1976-77 Michigan State University, Department of Social Sciences, E. Lansing, Michigan
Assistant Professor of Anthropology. Taught courses in Asian Studies and Social Science.

1975-76 Michigan State University, Department of Anthropology and Asian Studies Center
Assistant Professor in Anthropology.

1973-75 Sarawak Museum, Kuching, Sarawak, East Malaysia
Research Associate involved in ethnographic survey of the Baram River including analysis of data on Kenyah peoples, socio-cultural conditions, religion and development; also coordinated seminars on development research reports.

1972-73 Michigan State University, Department of Anthropology
Involved in teaching and research in anthropology; student counselling.

1970-71 Lembaga Ilmu Pengetahuan Indonesia (LIPI), Jakarta, Republic of Indonesia
Research Associate involved in research in Borneo on the Lepu Tau Kenyah social organization.

1966-69 Michigan State University, Department of Anthropology
Graduate Teacher/Research Assistant in the field of Asian anthropology; counselling students; and preparation of bibliography and reports.

(Continued)
HERBERT L. WHITTIER (Cont’d.)

1964-65 Florida State University, Department of Geography, Tallahassee, Florida
Graduate Assistant in NDEA Summer Institute in Geography responsible
for coordinating graphics; testing; and land use study of future capitol
building complex site.

1963 University of South Florida, Department of Anthropology, Tampa,
Florida
Undergraduate Student Assistant responsible for coordinating
archeological field school; reported on excavations at Buck Island.

1958-59 Ohio State Highway Department, Ashtabula, Ohio
Engineering Aide, Step III/Highway Inspector

EDUCATION: B.A., Anthropology, University of South Florida, 1963
M.S., Geography, Florida State University, 1965
M. A., Anthropology, Michigan State University, 1969
Ph.D., Anthropology, Michigan State University, 1973

SOCIETIES: American Anthropological Association (Fellow)
Association for Asian Studies
Borneo Research Council (Board Member)
Society for Applied Anthropology
Southern Anthropological Society
Society of Professional Anthropologists

PUBLICATIONS: “Sequence Occupation of West Greenland: An Historical Geography,”
M.S. Thesis, Florida State University, 1965

“Social Organization and Symbols of Social Differentiation: An
Ethnographic Study of the Kenyah Dayaks of East Kalimantan
(Borneo),” Ph.D. Dissertation, Michigan State University, 1973

“A Data Source from Kalimantan-APDN Skripsi,” Borneo Research

“The Distribution of Punan in East Kalimantan,” Borneo Research

“The Kenyah” published in “Uplands Peoples of Island Southeast Asia,”

LANGUAGES: Indonesian/Malay
Kenyah
CANDICE H. BENN
Archeologist/Historic Site Specialist

Background in prehistoric and historic sites survey and evaluation, lithic technology, applied anthropology and computerized data retrieval systems.

EXPERIENCE: Gilbert/Commonwealth since 1974
1974-77 Responsible for data collection, interpretation, report writing and editing. Project Coordinator on St. Croix National Scenic Riverway Survey in Wisconsin and Minnesota. Phase Coordinator for Potomac Edison transmission routing historic/archeological evaluations in Maryland. Survey team leader for projects in Delaware and Illinois.

1970-72 University of Arizona
Graduate Research Assistant and computer specialist, Division of Business and Economic Research. Marketing studies, graduate study in Applied Anthropology and Archeology.

1968-70 University of Kansas
Field Archeologist and laboratory supervisor. Participated in projects in Kansas, Nebraska and Missouri. Participated in excavation of an Upper Paleolithic rock shelter in the Dordogne region of France. Special study in lithic technology.

EDUCATION: B.S., Anthropology, University of Kansas, 1970
M.A., Anthropology, University of Arizona, 1972

Background of professional experience in prehistoric and historic archeology including record search, surveys excavation, preparation of reports and mitigation plans.

EXPERIENCE: Gilbert/Commonwealth since 1976
1976 to Present Historic Archeologist/Field Supervisor responsible for field surveys, testing and report preparation for Cooperative Power Association/United Power Association (CPA/UPA) 230 kV lines in North Dakota. Federal projects included surveys for Madrid Bend Levee and Cairo (Illinois) Pumping Stations for Memphis Corps of Engineers; St. Croix National Scenic Riverway, Pennsylvania Highway 209 relocation and Falls Lake Reservoir for National Park Service; Nez Perce National Forest and Nicolet National Forest Surveys for USDA National Forest Service; and for Loran-C site for U.S. 9th District Coast Guard.

1975-76 I. W. Bernheim Foundation, Louisville, Kentucky
Consulting Archeologist responsible for survey, testing and report preparation (Bernheim Forest).

1974-75 Wake Forest University, Winston Salem, North Carolina
Archeology Lab Assistant responsible for teaching artifact analysis, photography and cartography, field survey and report preparation.

1969-74 Centre College of Kentucky, Dansville, Kentucky
Archeologist/Field Supervisor responsible for supervising excavations and student training in archeological techniques.

EDUCATION: B.A., (History), Centre College of Kentucky, 1973
M.A., (Anthropology), Wake Forest University, 1977

SOCIETIES: Michigan Archeological Society
Committee on Michigan Archeology
Society for American Archeology
American Anthropological Association
Kentucky Archeological Association


“An Archeological Survey of Bernheim Forest, Bullitt and Nelson Counties, Kentucky,” 1977

(Continued)
STEPHEN R. CLAGGETT (Cont'd)

"An Archeological Evaluation of the Proposed Southeast Sewer Projects Bluegrass and Clearview Subdivisions, Richmond, Kentucky," 1976

"An Archeological Survey of the Taylor County, Kentucky Airport," 1975

Background in archeological and historical research, lithic technology and environmental impact evaluation in midwestern and far western United States.

EXPERIENCE: Gilbert/Commonwealth since 1977
1977 to Present Archeologist/Consultant on projects in Idaho and other midwestern and western states.

1976-77 Idaho State University, Pocatello, Idaho
Laboratory Assistant responsible for lithic analysis and report preparation.

1976 Northern Michigan University, Marquette, Michigan
Research and Teaching Assistant; Director of Archeological Field School.

1973-74 Field Assistant for Field Program in Upper Peninsula. Field Director for Michigan History Division survey programs in Upper Peninsula.

1972 Mackinac Island State Park Commission, Mackinac Island, Michigan
Field Archeologist.

1971 Michigan State University, East Lansing, Michigan
Field Archeologist for excavations in northern Michigan.

EDUCATION: B.A. (with honors), Anthropology, Michigan State University, 1972
M.A., Anthropology, Idaho State University, 1977

SOCIETIES: Society for American Archeology


JEFFREY C. KIMBALL
Archaeologist

Background in surveys and excavation projects specifically in highway salvage.

EXPERIENCE: Gilbert/Commonwealth since 1976
Archaeologist in Land Planning Services Department involved in surveys, field testing and excavation projects, artifact analysis and report preparation.

1974-76 Michigan State University Museum
Field supervisor for survey and excavation projects including highway salvage projects in Michigan.

1973 State University of New York, Binghamton, N.Y.
Field supervision of highway salvage survey and testing in New York.

1972 Michigan State University
Salvage excavations at the Pine River Channel Site.

1972 Lehman College
Field Assistant at the Late Archaic Site in New York.

1971 Michigan State University
Field Assistant in excavation projects in northwestern Michigan.

1970 Clarion College
Field Assistant in excavations at a Late Woodland site in Pennsylvania.

EDUCATION: B.A., Anthropology, Lehman College (CUNY), 1972
M.A., Anthropology, State University of New York, Binghamton, New York, 1975

SOCIETIES: American Anthropological Association
Society of American Archaeology
Michigan Archaeological Society