

UC Merced

Journal of California and Great Basin Anthropology

Title

Historic Northern Paiute Winter Houses in Mono Basin, California

Permalink

<https://escholarship.org/uc/item/87s7r4c3>

Journal

Journal of California and Great Basin Anthropology, 9(2)

ISSN

0191-3557

Author

Arkush, Brooke S

Publication Date

1987-07-01

Peer reviewed

Historic Northern Paiute Winter Houses in Mono Basin, California

BROOKE S. ARKUSH, Dept. of Anthropology, Univ. of California, Riverside, CA 92521.

THE Mono Basin Paiute call themselves *kucadikadi* 'eaters of brine fly [*Hydropyus hians*] pupae' (Fowler and Liljeblad 1986: 464), a name that derives from the important insect food they collected from the waters of Mono Lake, Mono County, California. Three historic (post-A.D. 1852) winter houses of this Paiute group were recorded during archaeological investigations near Mono Lake in 1986 and 1987 (Fig. 1) (Arkush 1987a, 1987b). Two of the structures reported here occur at CA-Mno-2122, a large multicomponent fall-winter encampment, and were mapped and excavated. A third winter house (CA-Mno-2382), originally recorded by U. S. Forest Service personnel, is located approximately nine kilometers northwest of Mno-2122, and was recorded and photographed by the author in 1987.

All three structures originally were conical wood houses, constructed of axe-cut Utah juniper (*Juniperus osteosperma*) posts, with circular-to-oval floor plans, and slightly excavated floors sloping inward toward the center. The superstructures of the two houses at Mno-2122 had been destroyed by fire, perhaps as a result of traditional funeral practices; all that remained were the bases of posts, rising some 10 cm. above the surface. The structure at Mno-2382 was found standing and in excellent condition.

Together, these structures share numerous architectural features that provide unique insights into aspects of cultural persistence and uniformity among the Mono Basin Paiute a half-century after initial Euroamerican settlement of the region.

By studying the patterned distribution of

cultural items and features at abandoned occupation sites, we may gain a better understanding of behavioral and organizational processes of the people who lived there (Longacre and Ayres 1968:151). The following is a reconstruction of various aspects of postcontact Mono Basin Paiute culture, focusing primarily on architectural details and, to a lesser extent, on historic ceremonial practices and subsistence economy.

Historic native house structures have been recorded elsewhere in the Great Basin (Tuohy 1969; Ambro 1972; Ambro and Wallof 1972; Clewlow and Ambro 1972; Fenenga 1975; Hattori 1975; Bettinger 1975, 1976; Tuohy and Clark 1979; Ritter 1980). However, there is a wide range of diversity among such structures (e.g., location of doorway, shape of floor plan, presence or absence of furnishings, use of traditional vs. nontraditional frames and covers, etc.). In contrast to previously documented structures, the three examples reported here are architecturally similar, and clearly demonstrate that the Mono Basin Paiute still constructed traditional winter houses as late as A.D. 1920. Such cultural persistence permits a better understanding of postcontact Mono Basin Paiute culture and world view.

The term *wickiup* has often been used by anthropologists to describe aboriginal house structures in western North America (Steward 1941:282, 284, 334-335; Stewart 1941:377, 379; Gerald 1958; Shaeffer 1958; Tuohy 1960; Longacre and Ayres 1968). The term originally was derived from non-Puebloan peoples of the American Southwest, most notably the Apache, and was not used

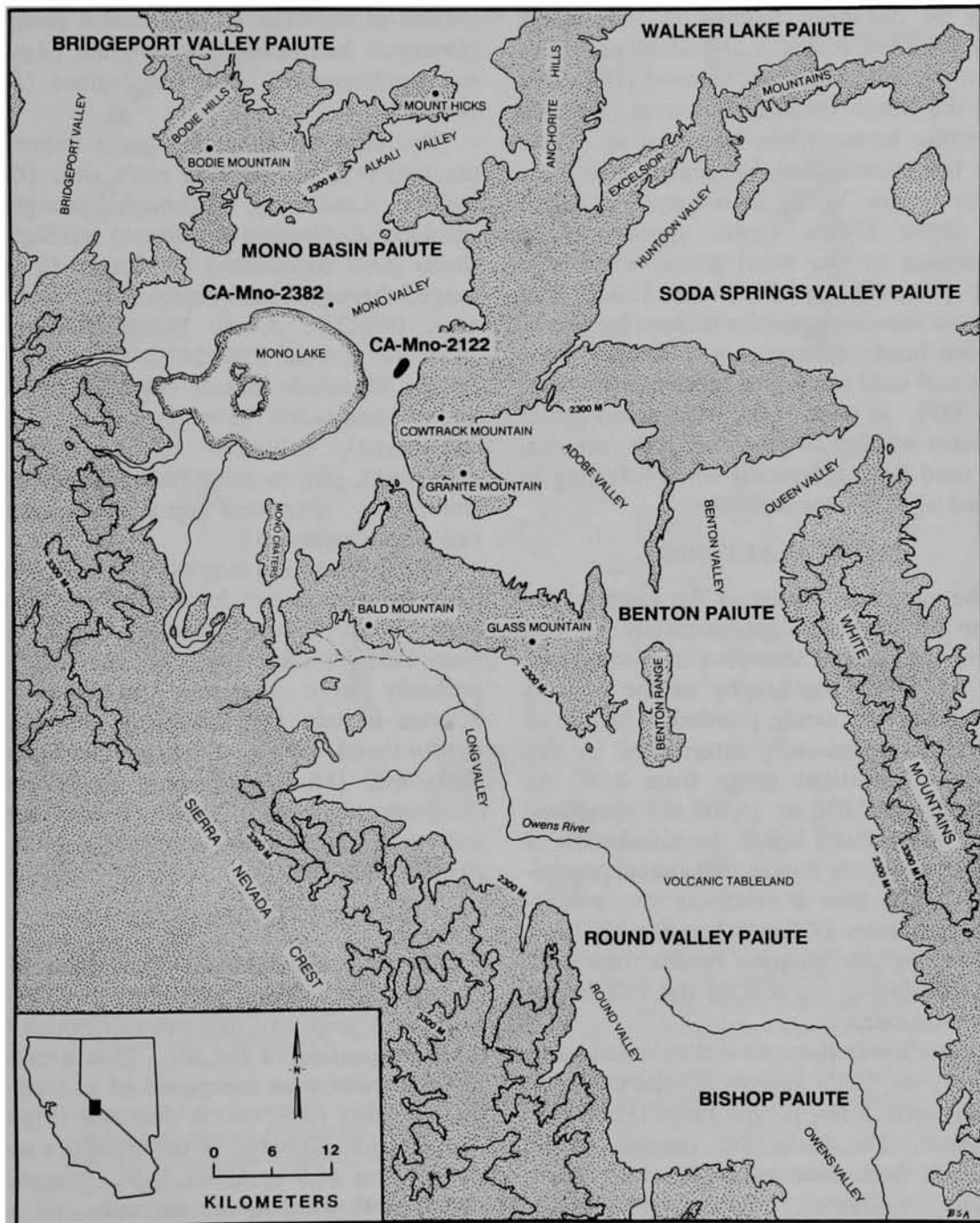


Fig. 1. Natural and cultural geography of the east-central Sierra Nevada region, with location of archaeological sites CA-Mno-2122 and CA-Mno-2382.

by Numic groups of the Great Basin. Terms such as *káni* and *karnee* were used respectively by Northern Paiutes in the Honey Lake (Riddell 1960:41) and Humboldt Sink (Scott 1966:65) regions. Steward (1933:264) gave the Mono Basin Paiute term *tomogani* for winter house, while Heizer et al. (1969) gave the term *taw-ne* for similar structures in the Owens Valley to the south. All of the above Numic terms appear to be derivations of the word *ghani*, which was used primarily by Northern Paiute and Western Shoshone peoples to describe domed wooden house structures with circular floor plans and used for winter residence (Steward 1941:334). In view of the widespread use of the term wickiup in western North America, it is used here generically when referring to domed winter house structures.

NATURAL SETTING

The sites are located in the eastern part of the Mono Basin, approximately 3.5 km. east of the present shoreline of Mono Lake (Fig. 1). The topography of the area is characterized by sandy, pumiceous terrain of low relief, occasionally interrupted by dry washes. Elevations range from 2,000 m. (6,600 ft.) to 2,030 m. (6,700 ft.) above sea level. Mono Basin lies in the rainshadow of the Sierra Nevada Range, and annual precipitation in the area is relatively low, averaging about 18 cm. (7.1 in.) (Loeffler 1977:17). Most of the precipitation results from light snowfalls during the winter; the rest comes as summer rains.

Vegetation in the area is dominated by an overstory of Utah juniper (*Juniperus osteosperma*), with a few pinyon pines (*Pinus monophylla*). The understory consists of big sagebrush (*Artemisia tridentata*), bitterbrush (*Purshia tridentata*), rabbitbrush (*Chrysothamnus nauseosus*), greasewood (*Sarcobatus vermiculatus*), four-winged saltbush (*Atriplex canescens*), horsebrush (*Tetradymia glabrata*),

cottonthorn (*Tetradymia axillaris*), and *Dalea polydenia* (no common name). Edible native grasses in the area include Indian ricegrass (*Oryzopsis hymenoides*), wheatgrass (*Agropyron trachycaulum*), and needlegrass (*Stipa comata*).

The most prevalent big game animal in the region is the western mule deer (*Odocoileus hemionus*), although pronghorn antelope (*Antilocapra americana*) and bighorn sheep (*Ovis canadensis*) are known to have ranged throughout the region in the past (cf. Muir 1916:227; Curtis 1926:61; Merriam 1955: 74; Arkush 1986:247-248). Common smaller mammals include coyote (*Canis latrans*), black-tailed hare (jackrabbit; *Lepus californicus*), cottontail rabbit (*Sylvilagus audubonii*), pinyon mice (*Perognathus* spp.), chipmunks (*Eutamias* spp.), and kangaroo rats (*Dipodomys* spp.).

The resident and migratory birds of Mono Lake were important food resources for the Mono Basin Paiute in historic times (Merriam 1955:74; Cain 1961:100, 121-122), and probably were important in prehistory. Species include the California gull (*Larus californicus*), coot (*Fulica americana*), phalaropes (*Phalaropus* spp.), eared grebe (*Podiceps nigricollis*), geese (*Branta* spp.), and various ducks (*Anas* spp.) (Winkler et al. 1977:97-100).

WINTER HOUSES AT MNO-2122

The first wickiup considered here is at Locus 7, an historic activity area 200 m. north of a jeep trail that passes through the southern portion of the site. This structure has a circular plan composed of at least 65 juniper posts 10-30 cm. in diameter (Fig. 2). The interior diameter of the structure measures 4.8 m. N-S by 4.2 m. E-W. It appears that smooth wire, square cut nails, and wire nails were used in building the structure, as these were found in various parts of the wickiup during excavation. The doorway

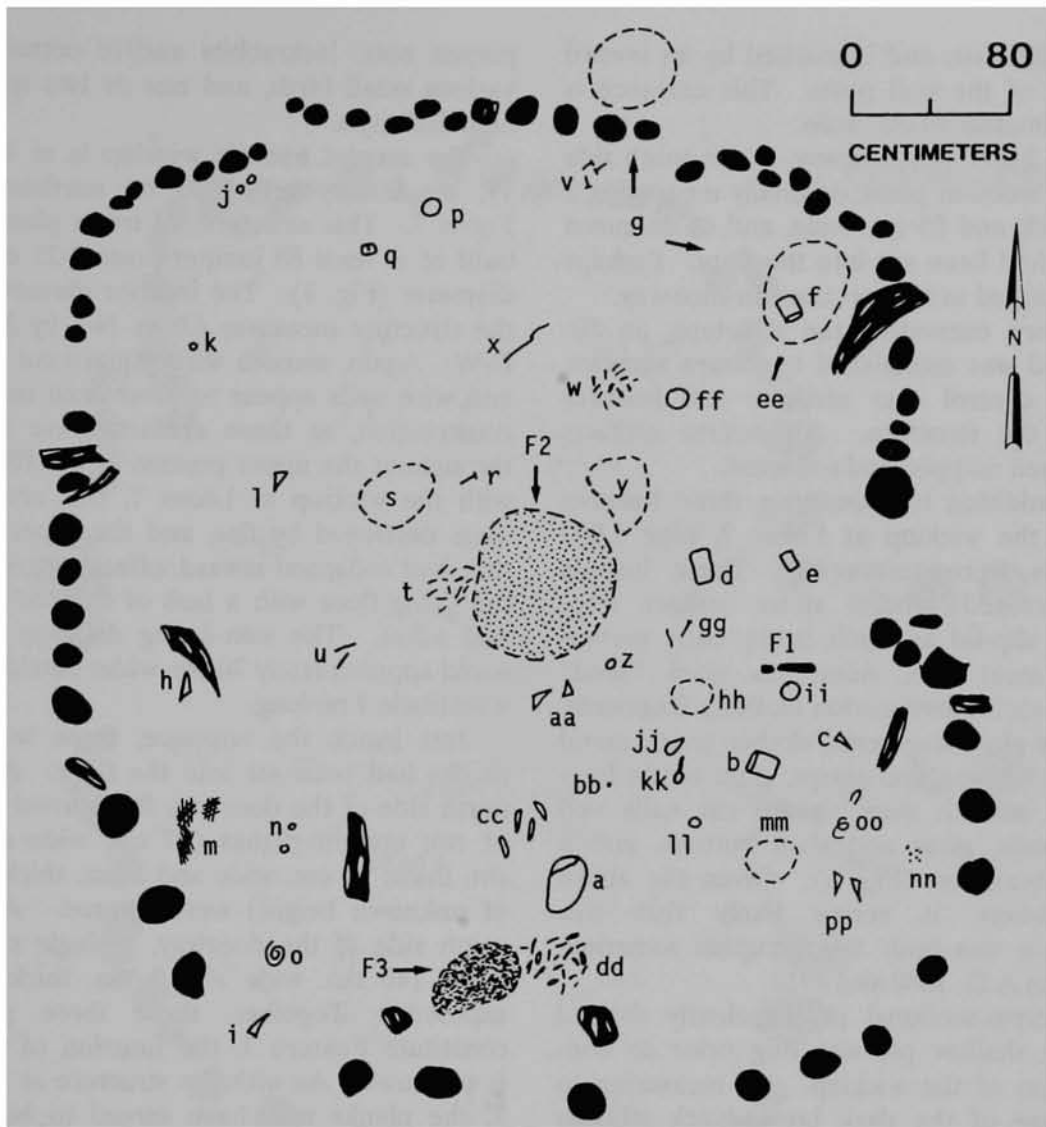


Fig. 2. Plan map of burned wickiup at Locus 7, Mno-2122, showing locations of subsurface artifacts and features. Keyed items are as follows: a, fire-fractured basalt cobble; b, slip-lid can; c, melted glass fragment; d, fire-fractured basalt cobble; e, rectangular meat can; f, slip-lid can; g, vandalized areas; h, window glass fragment; i, knife-cut mammal bone; j, 2 harness rivets; k, clothing rivet; l, amethyst glass fragments; m, carbonized cotton fabric; n, 2 metal "Boss-of-the-Road" clothing buttons; o, coiled wire; p, metal can base; q, metal belt buckle; r, wire nail; s, area of numerous glass "seed" beads (approximately 230); t, burned bird bone fragments; u, 2 square cut nails; v, 3 wire nails; w, 14 burned small mammal (probably *Lepus californicus*) bone fragments; x, wire; y, 13 metal fragments from California Powder Works (CPW) blasting powder can, apparently used for cooking; z, glass button; aa, 2 melted glass fragments; bb, Levi Strauss rivet; cc, 4 fragments melted bottle glass; dd, 25 fragments melted bottle glass; ee, railroad spike fragment; ff, axle grease "Coburn, Tevis & Co./ Sole Agents S. F." canister lid; gg, wire nail, square cut nail; hh, 9 fragments melted amethyst glass; ii, melted aqua glass bottle base; jj, fragment of porcelain china doll's head; kk, metal teaspoon; ll, bone button; mm, 5 fragments melted glass; nn, 7 shell button fragments; oo, 2 strands coiled wire; pp, 2 window glass fragments (1 melted). Features: F1, wooden plank set into ground; F2, hearth area; F3, concentration of fire-fractured ground stone artifact fragments (probably 1 large mano, 1 small bifacial metate).

faces due east, and is marked by an inward curving of the wall posts. This entrance is approximately 50 cm. wide.

Just inside the doorway, at the south side of it, a wooden plank originally measuring 2 cm. thick and 25 cm. wide, and of unknown height had been set into the floor. Perhaps it functioned to support the entrance way.

Before excavating the structure, an 80-cm. grid was established to ensure accurate spatial control over artifacts and features within the structure. All surface artifacts were then mapped and collected.

In addition to identifying three features within the wickiup at Locus 7, over 1,000 artifacts were recovered. These include fire-fractured ground stone artifact fragments, slip-lid and hole-in-cap cans, rectangular meat tins, numerous glass "seed" beads, carbonized cotton clothing fragments, window glass fragments, clothes rivets, metal overall buttons and clasps, glass bottle fragments, smooth wire, square cut nails and wire nails, glass and shell buttons, and a metal teaspoon (Fig. 2). Given the above information, it seems likely that this structure was built and occupied sometime between A.D. 1880 and 1910.

A cross-sectional profile clearly showed that a shallow pit was dug prior to construction of the wickiup. By measuring to the base of the dark brown-black stratum composed of debris from the structure, it appears that the pit reached a depth of about 18 cm. in the center.

The location of a hearth was marked by a concentration of gray ash measuring roughly 70 x 75 cm., situated 1.3 m. inside the doorway. During the excavation, this hearth area was pedestaled, quartered, and two quarters collected as separate flotation samples. Preliminary analysis of data from both the hearth area and the living floor deposit indicates that the occupants of the wickiup at Locus 7 processed and consumed

pinyon nuts, jackrabbits and/or cottontails, various small birds, and one or two species of artiodactyls.

The second historic wickiup is at Locus 17, an activity area 540 m. northeast of Locus 7. This structure, of ovate plan, was built of at least 63 juniper posts 8-25 cm. in diameter (Fig. 3). The interior diameter of the structure measures 4.0 m. N-S by 2.9 m. E-W. Again, smooth wire, square cut nails, and wire nails appear to have been used in construction, as these artifacts were found throughout the upper portion of the fill. As with the wickiup at Locus 7, this one had been destroyed by fire, and the superstructure had collapsed inward, effectively sealing the living floor with a lens of charred wood and ashes. The east-facing doorway measured approximately 70 cm. wide; outside was a vestibule 1 m. long.

Just inside the entrance, three wooden planks had been set into the floor. At the north side of the doorway, the burned bases of two upright planks (27 cm. wide and 2 cm. thick; 24 cm. wide and 3 cm. thick; and of unknown height) were located. At the south side of the doorway, a single similar plank (40 cm. wide and 3 cm. thick) was exposed. Together, these three planks constitute Feature 1, the function of which is unknown. As with the structure at Locus 7, the planks may have served to buttress the doorway, or to create a draft to clear smoke from the interior.

As with the wickiup at Locus 7, an 80-cm. grid was established on the structure prior to excavation. During the course of excavation, two features were identified and over 800 artifacts were recovered. These included numerous glass "seed" beads, window glass and bottle fragments, smooth wire, square cut nails and wire nails, two 10-gauge shotshell bases, metal and glass buttons, two obsidian projectile points, metal can lids, the base of a 5-gallon kerosene can, and part of

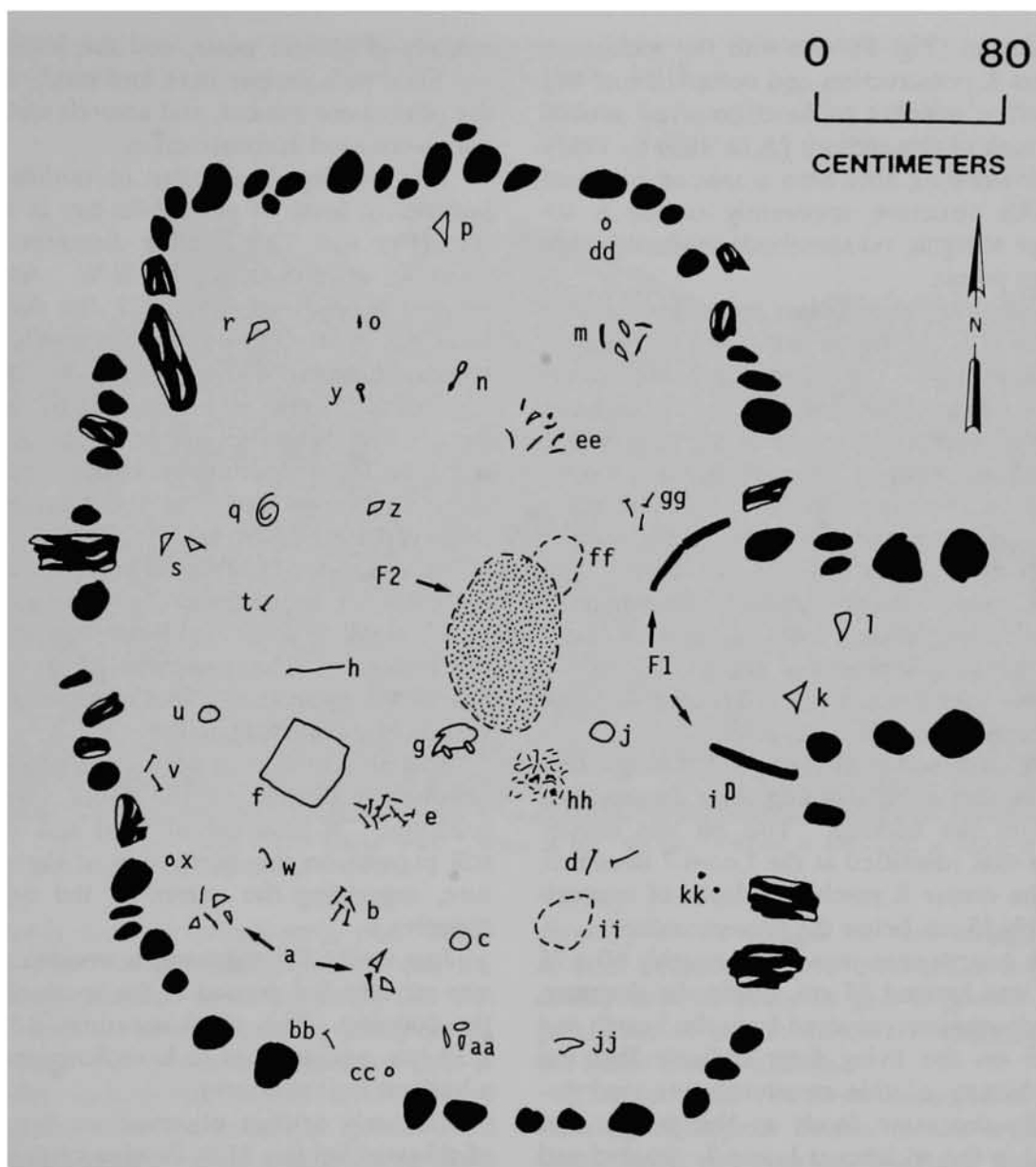


Fig. 3. Plan map of burned wickiup at Locus 17, Mno-2122, showing locations of subsurface artifacts and features. Keyed items are as follows: a, window glass fragments; b, 4 spike nails; c, slip-lid can lid; d, 2 spike nails; e, 12 wire nails; f, base or lid of 5-gallon kerosene can; g, portion of raincoat; h, strand of wire; i, spice can lid; j, slip-lid can lid; k, window glass fragment; l, aqua glass bottle fragment; m, aqua glass bottle fragment; n, metal teaspoon; o, broken Desert Side-notched projectile point; p, window glass fragment; q, coiled wire; r, window glass fragment; s, 2 window glass fragments; t, square cut nail; u, slip-lid can lid with holes punched in it; v, 2 wire nails; w, metal handle; x, shotshell "No. 10 U.S. Defiance" base; y, jackrabbit scapula; z, metal spout (from coffee pot?); aa, 3 fragments melted bottle glass; bb, wire nail; cc, shotshell "U.M.C. Co./No.10 High Base" base; dd, metal "Boss-of-the-Road" clothes button; ee, 6 window glass fragments; ff, 20 burned small mammal bone fragments (probably *Lepus* or *Sylvilagus*); gg, 3 wire nails; hh, 15 wire nails; ii, 22 sheet metal fragments; jj, amber (whiskey or beer) bottle fragment; kk, 2 white glass buttons. Features: F1, 3 wooden planks set into the ground; F2, hearth area.

a raincoat (Fig. 3). As with the wickiup at Locus 7, construction and occupation of this structure appears to have occurred around the turn of the century (A.D. 1880 to 1910). An interesting note here is that an occupant of this structure apparently owned a 10-gauge shotgun, yet somebody produced stone arrow points.

Four projectile points were recovered at Locus 17. One is an aberrant corner-notched point; the other three are of the Desert Side-notched type. One of the latter points recovered from inside the structure had been broken in half by a perverse fracture that occurred while notching the base. These artifacts point to the historic production of arrow points at the site. This phenomenon was confirmed ethnographically by a Mono Basin Paiute elder, who stated that his people produced and used bows and arrows until about A.D. 1920 (Foster Murphy, personal communication 1987).

A cross-sectional profile of the structure shows that a pit was dug prior to construction of the wickiup. This pit was deeper than that identified at the Locus 7 structure; in the center it reached a depth of approximately 35 cm. below the present surface.

A hearth area measuring roughly 50 x 75 cm. was located 85 cm. inside the doorway. Food remains recovered from the hearth and from on the living floor indicate that the inhabitants of this structure consumed basically the same foods as the people that lived in the wickiup at Locus 7. Burned and fragmented pinyon nuts and hulls, jackrabbit, cottontail, small bird bone, and cut ungulate bone were identified.

WINTER HOUSE AT MNO-2328

This house is in a dune field nine kilometers northwest of Mno-2122, just west of the old Bodie Railroad and Lumber Company grade that skirts the eastern edge of Mono Lake. The frame of this wickiup is made

entirely of juniper posts, and the interstices are filled with juniper bark and sand. All of the posts were axe-cut, and smooth wire and nails were used in construction.

This wickiup is circular in outline and includes at least 94 posts 8-35 cm. in diameter (Fig. 4). The interior diameter measures 4.7 m. N-S by 4.5 m. E-W. As with the two wickiups at Mno-2122, the doorway faces due east. The entrance is nearly rectangular, tapering slightly toward the top. It measures 75 cm. in height and 65 cm. in width. The maximum height of the wickiup is 2.1 m. The structure was built next to a standing juniper tree, and the central roof beam is part of that tree.

Because wind-blown sand and pumice obscured the original floor, it was impossible to tell whether a pit had been dug prior to construction. The presence of a central hearth was indicated by bits of charcoal and burned bird bone fragments.

This structure is in very good condition, although a portion of the south wall has collapsed. A covering of sand and sod is still present on the north side of the structure, suggesting the nature of the original covering.

Just inside the entrance, a wooden plank was set into the ground at the south side of the doorway. This plank measures 2.5 x 30 x 33 cm., and appears to have functioned as a buttress for the doorway.

The only artifact observed on the floor of this wickiup is a Hills Brothers coffee can lid embossed "PACKED AND/GUARANTEED BY/HILLS BROS./SAN FRANCISCO/CUT THIS SEAL OUT." Various historic artifacts were found scattered around the exterior of the structure. Included are several strands of smooth wire, two slip-lid cans, several pieces of milled lumber, one railroad tie, one lard bucket, one rectangular meat tin, two half-gallon metal canisters, one granite-ware handle



Fig. 4. Historic Mono Basin Paiute winter house. When in use, the two wickiups at Mno-2122 probably looked very much like this structure. View west.

(probably from a coffee pot), one "Schilling's Best" 16-oz. baking powder can lid, one large pumice abrading stone, two No. 2½ sanitary cans, and one evaporated milk can. The presence of sanitary cans at this site indicates a slightly later date of occupation than the structures at Mno-2122 mentioned above. This wickiup most likely was built between A.D. 1900 and 1920. The absence of glass and other miscellaneous artifacts is unexplained, but possibly indicates prior surface collection.

ARCHAEOLOGICAL COMPARISONS

As noted above, the occurrence of aboriginal house structures dating to the historic period is well documented in the Great Basin. Nevertheless, there is a great deal of

diversity in the designs of such structures. A brief review of these differences is presented here in order to gain a greater appreciation of the architectural similarity of the Mono Basin wickiups.

One of the earliest descriptions of standing aboriginal houses in the western Great Basin was provided by Tuohy (1969), who discussed two conical wood houses with rocks around their bases near the abandoned mining town of Masonic, also in Mono County, California. These structures very likely were built either by Mono Basin Paiute or by Bridgeport Valley Paiute. Unfortunately, there is no information regarding the specific dimensions of these structures, nor other architectural components. However, the method of construction would

seem to indicate that these shelters were used for fall and/or winter habitation, and the presence of various types of glass trade beads definitely places them in a protohistoric or historic context.

The Pinyon House site in the Inyo Mountains of eastern California features a conical wood structure made of 30 to 40 large pinyon pine limbs and trunks arranged in a circle (Bettinger 1975). The structure is 2 m. high and 2 m. in diameter, and has a north-facing entrance. The floor is a shallow depression, and the structure is supported primarily by an internal upright post set east of center. At the time it was recorded, no evidence of thatching was observed. A majority of the beams had been axe-cut, and a broken glass bottle that had been made in a double-seam mold lay next to the structure. These occurrences indicate that the house was built during historic times, most likely by Owens Valley Paiute.

Bettinger (1976) also reported on the remains of a Western Shoshone house at the Flat Iron Ridge site (26Ny313) in the upper Reese River drainage of central Nevada. The living floor was delineated by a circle of about 50 boulders; overhead construction was no longer present. Eight post holes were identified within the rock circle, indicating that some type of roof had existed at one time (Bettinger 1976:313, 315). The diameter of the structure measured slightly over 4 m. A gradually sloping floor had a maximum depth of 15 cm. A probable doorway was identified at an opening on the east side of the structure.

Excavation of the structure resulted in the recovery of an assemblage quite similar to those from the two wickiups at Mno-2122. The artifacts included square cut nails and wire nails, tacks, screws, wire, rivets, glass and metal buttons, leather fragments, shoe nails, various glass "seed" beads, can lids, bottle fragments, ground stone artifact frag-

ments, debitage, and shotshell bases (Bettinger 1976:316-317). The remains of cottontail, jackrabbit, sheep, and two unidentified birds were recovered from the fill. Approximately 92% of these bones were charred (Bettinger 1976:323). Bettinger concluded that this house was occupied during the winter months, and was abandoned sometime between A.D. 1880 and 1890.

The Grass Valley, Nevada, Archeological Project (Clewlow and Rusco 1972) was highly successful in documenting various types of historic Shoshone house structures. At Ridge Village North, Ambro (1972:90) identified 29 house structures, 28 of which were of aboriginal design (i.e., round structures built of willow and brush). Four of the largest structures were from 5 to 6.2 m. in diameter and had floors excavated as deep as 50 cm. These structures were interpreted as suitable for winter habitation. The use of willow poles, nails, and wire was documented, and one structure apparently had a window set with glass (Ambro 1972:92). Three houses at Ridge Village North yielded evidence of the continuation of traditional funerary practices, in which houses were either partially or completely destroyed after one of the occupants died (Ambro 1972:95).

In addition to the historic native houses recorded at Ridge Village North, other traditional Grass Valley Shoshone house structures were identified at Ridge Village South, Grass Valley Tom's Village, and Dead Pile Village (Clewlow and Pastron 1972). All of these habitation sites were occupied primarily between A.D. 1870 and 1910. Of the two large house pits excavated at Ridge Village North, one had a doorway on the east side (Ambro and Wallof 1972:110, 119).

Of all the historic aboriginal house structures reported thus far in the western and central Great Basin, one recorded by Ritter (1980) in the Panamint Mountains of

Inyo County, California, is most similar to those in the Mono Basin. This conical structure is circular in plan, and consists of 80 pinyon and juniper posts resting on two forked juniper center posts and two parallel juniper crossbeams (Ritter 1980:98-99). Wire was used to bind the center posts and crossbeams and to secure a secondary crossbeam and several wall posts. This wickiup measures 4 m. in diameter, and is 2 m. high.

An examination of the structure plan map (Ritter 1980:Fig. 2) reveals a vestibule 1.4 m. long leading to a rectangular doorway facing southwest. A feature that this structure shares with the Mono Basin structures is the presence of two low walls beginning just inside the doorway and continuing inward for slightly more than one meter at opposing 45° angles. Instead of using milled lumber, the occupants of this house used boulders to construct these low walls. Ritter (1980:99) believed that this particular feature functioned as a buttress for the doorway. Based on numerous time-sensitive artifacts found at the site, Ritter concluded that the structure was built and occupied by a family group of Panamint Shoshone or Owens Valley Paiute around the turn of the century. Additional historic Northern Paiute house floors have been described by Hattori (1975:37-41) and by Tuohy and Clark (1979:73-82).

ETHNOGRAPHIC COMPARISONS

Julian Steward (1933:264) provided the most thorough ethnographic description of Mono Basin Paiute winter houses. He noted that the Mono Basin *tomogani* was conical, 3-4 m. high, and of equal diameter. These structures were built by first digging a pit approximately 70 cm. deep, after which four main posts were placed around the pit edge, with their upper ends joined. Smaller poles were then added to complete the frame, with an opening left at the top to allow smoke to escape. Bundles of wildrye or "oats," and

pine or juniper needles were then added to complete the covering. Construction of a vestibule was common, as Steward (1933:264) noted that "the doorway extended eastward several feet." Based on his visits to Mono Lake during the early 1900s, Merriam (1955:73) also noted that winter houses in that area had low projecting entrances. Steward (1933:263-265) described this same general type of structure as having been used by Owens Valley Paiute and Fish Lake Valley Shoshone for winter residence. Descriptions and photographs of this general type of Northern Paiute winter house have been published by both Heizer (1960:5, 6, Pls. 6, 9) and Merriam (1955: Pl. 20; 1966: Pls. 27, 28).

In the Culture Element Distribution lists, the majority of Northern Paiute consultants indicated that traditional winter houses had circular floor plans, averaged about two to three meters in height and up to six meters in diameter. A wood or willow frame was covered with layers of grass, tule, and/or woven mats, and sod was piled up some 30 to 60 cm. against the wall. An east-facing doorway about one meter tall either was flush with the wall or was part of a vestibule. Some type of door was usually present, and a fireplace was centrally located (Stewart 1941:378-379; Steward 1941:283, 334).

DISCUSSION

The three winter houses reported here are examples of cultural persistence among the Mono Basin Paiute. The historic component at Mno-2122 suggests that a segment of the Mono Basin Paiute purposefully isolated themselves from the local Euroamerican population during the fall and winter. On the east side of Mono Lake they established encampments, built traditional winter houses, produced traditional crafts such as basketry and beadwork, and collected and processed pinyon nuts. Given the fact that the three Mono Basin wickiups are architecturally

similar, it appears that the construction of a "proper" winter house was still an important part of postcontact culture.

In order to build a "proper" wickiup, one had to use a circular or ovate floor plan, excavate a shallow pit, use local vegetation to construct a frame and covering, and locate the doorway due east. It is unfortunate that none of the Owens Valley Paiute consultants interviewed by Steward (1933) explained the function of an east-facing doorway. It seems likely that a major function of such an arrangement was to receive the morning sunlight (cf. Kelly and Fowler 1986:371), although this design may also have been related to traditional religious concepts, as many Shoshonean groups offered prayers to the morning sun (Hultkrantz 1986:632).

Another example of Mono Basin Paiute cultural persistence exhibited by two of the winter houses is the apparent continued practice of traditional funerary rites. It appears that both structures at Mno-2122 were intentionally burned, as they still contained serviceable items at the time of their destruction. This pattern was also identified by Ambro (1972:95) at Ridge Village North in Grass Valley, Nevada. It seems unlikely that both structures at Mno-2122 were completely destroyed by range fires. This is especially evident at Locus 7, where the trunks of two juniper trees just south of the wickiup are not fire-scarred. Both structures at Mno-2122 probably were abandoned and intentionally burned following deaths in the families that occupied them (cf. Scott 1966:65, 83).

CONCLUSIONS

The three Mono Basin Paiute houses discussed here apparently were constructed sometime around the turn of the century, and used primarily for winter residence. Of course, this does not preclude the possibility that they were occupied on a more permanent basis. It is possible that occupants of

these structures worked for the Bodie Railroad and Lumber Company, which operated from 1881 to 1890, and again from 1893 to 1917 (Billeb 1968; Fletcher 1987). Although no evidence is available to support the conclusion that the occupants of the two structures at Mno-2122 worked for the railway, it seems reasonable to suggest that someone who lived at Mno-2382 near the railroad grade was in some way connected with the Bodie Railroad and Lumber Company. It is known that Mono Basin Paiute men were employed by the railroad to maintain the track (Billeb 1968:128-129; Fletcher 1987:77-78).

In light of ethnographic data provided by Davis (1965:35), it appears that the two wickiups at Mno-2122 were related exclusively to winter habitation camps. Davis identified the general area of the site as one that was popular among the local Paiute for this purpose:

In the recent past, it was customary to stay in the [Mono] basin all winter. Two areas seem to have been favored as winter camps. The South Side People preferred some warm sand hills about a mile inland from Warm Springs, at the east end of the lake. The North Side People camped in the Lime Kiln and Twin Peaks area at the northeast corner of the lake.

Several aspects of precontact culture were practiced by the Mono Basin Paiute in postcontact times. The evidence suggests that all three structures were still occupied as late as A.D. 1920. Furthermore, the two wickiups at Mno-2122 suggest that traditional funerary practices were retained into the twentieth century.

By studying these aboriginal houses, we stand to gain a more complete understanding of acculturation processes among the Mono Basin Paiute, including aspects of traditional culture that survived during historic times. These data indicate that various components of traditional Paiute culture were still

thriving some three generations after Euroamerican settlement of the Mono Basin. Perhaps further work will result in the discovery of additional historic Northern Paiute winter houses in the area, permitting comparison with those already known and identification of patterns of interregional similarities and/or differences. These data in turn will help to establish trends of cultural change and continuity among Great Basin Shoshonean societies.

ACKNOWLEDGEMENTS

I am grateful to a number of people for their help in this work. Thomas Balint, Nicholas Faust, Christine Havlena, Elizabeth Lawlor, Eric Levy, Donald Lipp, Hayden Lockhart III, Dana McGowan, Scott Montague, William Olsen, Richard Perloff, Marian Revitte, and William Sawyer helped record and excavate the structures at Mno-2122. Eric Levy, Foster Murphy, William Olsen, Louis Payen, Mark Q. Sutton, and Philip J. Wilke offered their original thoughts on various aspects of the research. Finally, and most importantly, Bureau of Land Management personnel from the Sacramento State Office, Bakersfield District Office, and Bishop Resource Area Office were of inestimable value in providing logistical and financial support.

REFERENCES

- Ambro, Richard D.
1972 Preliminary Observations on the Surface Archeology of Ridge Village North, an Historic Period Shoshone Village. In: *The Grass Valley Archeological Project: Collected Papers*, C. William Clewlow, Jr., and Mary Rusco, eds., pp. 85-106. Nevada Archeological Survey Research Papers No. 3.
- Ambro, Richard D., and Kurt Wallof
1972 Preliminary Notes on Historic Period Shoshone House Types. In: *The Grass Valley Archeological Project: Collected Papers*, C. William Clewlow, Jr., and Mary Rusco, eds., pp. 107-126. Nevada Archeological Survey Research Papers No. 3.
- Arkush, Brooke S.
1986 Aboriginal Exploitation of Pronghorn in the Great Basin. *Journal of Ethnobiology* 6(2):239-255.
- 1987a A Summary of Work Completed During the 1986 Field Season at CA-Mno-2122: A Protohistoric/Historic Site in Mono Basin, Mono County, California. MS on file at the Archaeological Research Unit, University of California, Riverside.
- 1987b A Summary of Work Completed During the 1987 Field Season at CA-Mno-2122. MS on file at the Archaeological Research Unit, University of California, Riverside.
- Bettinger, Robert L.
1975 Late Prehistoric and Historic Structures in Owens Valley, Eastern California. *The Journal of California Anthropology* 2:199-204.
- 1976 Flat Iron Ridge Site, 26-Ny-313 (D-13). *Anthropological Papers of the American Museum of Natural History* 53(3):313-327.
- Billeb, Emil W.
1968 *Mining Camp Days*. Berkeley: Howell North Books.
- Cain, Ella M.
1961 *The Story of Early Mono County*. San Francisco: Fearon Publishers, Inc.
- Clewlow, C. William, Jr., and Richard D. Ambro
1972 *The Grass Valley Archeological Project: An Introduction*. In: *The Grass Valley Archeological Project: Collected Papers*, C. William Clewlow, Jr., and Mary Rusco, eds., pp. 1-10. Nevada Archeological Survey Research Papers No. 3.
- Clewlow, C. William, Jr., and Allen G. Pastron
1972 *The Grass Valley Archeological Project: Preliminary Investigations*. In: *The Grass Valley Archeological Project: Collected Papers*, C. William Clewlow, Jr., and Mary Rusco, eds., pp. 11-32. Nevada Archeological Survey Research Papers No. 3.
- Clewlow, C. William, Jr., and Mary Rusco, eds.
1972 *The Grass Valley Archeological Project: Collected Papers*. Nevada Archeological Survey Research Papers No. 3.

- Curtis, Edward S.
1926 *The North American Indian*, Vol. 15. Cambridge: The University Press.
- Davis, Emma Lou
1965 *An Ethnography of the Kuzedika Paiute of Mono Lake, Mono County, California*. University of Utah Anthropological Papers No. 75:1-55.
- Fenenga, Franklin
1975 *A Washo Pine Nut Camp in Douglas County, Nevada*. *The Journal of California Anthropology* 2:205-213.
- Fletcher, Thomas C.
1987 *Paiute, Prospector, Pioneer: A History of the Bodie-Mono Lake Area in the Nineteenth Century*. Lee Vining, CA: Artemisia Press.
- Fowler, Catherine S., and Sven Liljeblad
1986 *Northern Paiute*. In: *Handbook of North American Indians*, Vol. 11, Great Basin, W. L. d'Azevedo, ed., pp. 435-465. Washington: Smithsonian Institution.
- Gerald, Rex E.
1958 *Two Wickiups on the San Carlos Indian Reservation, Arizona*. *The Kiva* 23(3):5-11.
- Hattori, Eugene M.
1975 *Northern Paiutes on the Comstock: Archaeology and Etnohistory of an American Indian Population in Virginia City, Nevada*. Nevada State Museum Occasional Papers No. 2.
- Heizer, Robert F.
1960 *Notes on Some Paviotso Personalities and Material Culture*. Nevada State Museum Anthropological Papers No. 2.
- Heizer, Robert F., Dennis Bailey, Marke Estis, and Karen Nissen, eds.
1969 *The C. Hart Merriam Collection of Data Concerning California Tribes and Other American Indians*. Berkeley: University of California Archaeological Research Facility.
- Hultkrantz, Åke
1986 *Mythology and Religious Concepts*. In: *Handbook of North American Indians*, Vol. 11, Great Basin, W. L. d'Azevedo, ed., pp. 630-640. Washington: Smithsonian Institution.
- Kelly, Isabel T., and Catherine S. Fowler
1986 *Southern Paiute*. In: *Handbook of North American Indians*, Vol. 11, Great Basin, W. L. d'Azevedo, ed., pp. 368-397. Washington: Smithsonian Institution.
- Loeffler, Robert M.
1977 *Geology and Hydrology*. In: *An Ecological Study of Mono Lake, California*, David W. Winkler, ed., pp. 6-38. Davis: University of California Institute of Ecology Publication No. 12.
- Longacre, William A., and James E. Ayres
1968 *Archeological Lessons From an Apache Wickiup*. In: *New Perspectives in Archeology*, Sally R. Binford and Lewis R. Binford, eds., pp. 151-160. Chicago: Aldine Publishing Company.
- Merriam, C. Hart
1955 *Studies of California Indians*. Berkeley: University of California Press.
1966 *Ethnographic Notes on California Indian Tribes*. Berkeley: University of California Archaeological Survey Reports No. 68 (Part 1).
- Muir, John
1916 *The Mountains of California*. Boston: Houghton Mifflin Co.
- Riddell, Francis A.
1960 *Honey Lake Paiute Ethnography*. Nevada State Museum Anthropological Papers No. 4.
- Ritter, Eric W.
1980 *A Historic Aboriginal Structure and Its Associations, Panamint Mountains, California*. *Journal of California and Great Basin Anthropology* 2:97-113.
- Scott, Lalla
1966 *Karnee: A Paiute Narrative*. Reno: University of Nevada Press.
- Shaeffer, Margaret W. M.
1958 *The Construction of a Wickiup on the Fort Apache Indian Reservation*. *The Kiva* 24(2):14-20.
- Steward, Julian H.
1933 *Ethnography of the Owens Valley Paiute*. University of California Publications in American Archaeology and Ethnology 33(3).

- 1941 Culture Element Distributions: XIII, Nevada Shoshone. University of California Anthropological Records 4(2).
- Stewart, Omer C.
1941 Culture Element Distributions: XIV, Northern Paiute. University of California Anthropological Records 4(3).
- Tuohy, Donald R.
1960 Two More Wickiups on the San Carlos Indian Reservation. *The Kiva* 26(2):27-30.
1969 Two Conical Wood Houses Near Masonic, Mono County, California. *Nevada Archeological Survey Reporter* 3(3):5-11.
- Tuohy, Donald R., and David T. Clark
1979 Excavations at Marble Bluff Dam and Pyramid Lake Fishway, Nevada. Report prepared for the Bureau of Reclamation, Mid-Pacific Regional Office. MS on file at the Department of Anthropology, Nevada State Museum, Carson City.
- Winkler, David W., Christine P. Weigen, F. Brett Engstrom, and S. Elliot Burch
1977 Ornithology. In: *An Ecological Study of Mono Lake, California*, David W. Winkler, ed., pp. 88-113. Davis: University of California Institute of Ecology Publication No. 12.

