

The Grass Valley Archaeological Project: Looking Back and Looking Forward

HELEN FAIRMAN WELLS

Department of Anthropology, California State University, Los Angeles
5151 State University Drive, Los Angeles, CA 90032-8220

EVELYN SEELINGER

137 Garrett St., Austin, Texas 78737

RICHARD D. AMBRO

1264 64th St., Emeryville, CA 94608

C. William Clewlow, Jr. and his Berkeley colleagues began their investigation of the Grass Valley region of central Nevada in 1969. Over the course of several seasons, powered by summer field schools, their focus changed from prehistoric settlement patterns to the documentation and interpretation of nineteenth century Shoshone habitation sites. At the time, there were few models for the study of historic-period Native American sites. As Clewlow himself characterized it in 1978, the project became a series of “particularistic” studies that “will someday make a whole.” More than 30 years later, our studies and our understanding continue to evolve, as we begin to revisit the archived collections and field notes from the Grass Valley Archaeological Project. A recently completed re-examination and analysis of the historic artifact assemblage from Pottery Hill (26LA1107), one of the Shoshone habitation sites, illustrates how new approaches, along with newly available comparative data, can be used to interpret the Grass Valley material.

IN 1967, RANCHER AND UNIVERSITY OF NEVADA Regent Molly Flagg Knudtsen asked Robert F. Heizer to introduce her to some students who had been involved in political activism on the University of California, Berkeley campus. Heizer complied, arranging a meeting at Lovelock Cave. Three of his graduate students, C. William Clewlow, Jr., Richard Ambro, and Richard Cowan, subsequently accepted Knudtsen’s invitation to visit her at Grass Valley Ranch, located in central Nevada northeast of the historic mining town of Austin. Bounded by the Toiyabe and Simpson Park ranges and watered by perennial streams, Grass Valley had been occupied first by the Shoshone and then by cattle and sheep ranchers. Knudtsen had explored the valley on horseback, documenting pottery sherds and other archaeological finds as well as researching the local history (Knudtsen 1975, 1982; Magee 1964).

After two visits to Grass Valley, Clewlow, Ambro, and fellow student Allen Pastron prepared a research design and grant proposal to investigate the archaeology

of the region. The first full field season in 1969 was funded by the U.C. Berkeley Department of Anthropology and by Knudtsen herself. That summer Clewlow and his colleagues, along with a volunteer crew, conducted site survey in the southern end of the valley and excavated deposits at two large rock shelters (Pastron 1972) as well as at the historic-period Ridge Village North site, located near the ranch headquarters (Ambro 1972).

Clewlow has described Heizer’s support for the undertaking as “grudging,” but other faculty members, including Elizabeth Colson, backed the project (Clewlow, personal communication 2011). Later seasons were funded by small grants, by field schools, and by Molly Knudtsen and her husband Bill, who also provided hospitality and logistical support.

In the early 1970s, the basins and ranges of central Nevada were a magnet for archaeological research projects. David Hurst Thomas (1971, 1973) was testing a model of Shoshone settlement and subsistence derived from Steward’s (1938) ethnographic studies in the Reese

River Valley southwest of Austin, and in subsequent seasons, his research expanded to Monitor Valley, southeast of Grass Valley (Thomas 1983). The U.C. Berkeley students' project promised yet another complementary valley-wide study of prehistoric settlement.

Clewlow and Pastron (1972) initially proposed a pattern that gradually shifted through time from sporadic visits to more intensive use by groups with a broader subsistence base. According to this model, the Late Prehistoric period was characterized by more nucleated settlement on the valley floor and a use of seed collecting and hunting camps throughout the valley and ranges. Subsequent field seasons failed, however, to uncover convincing evidence of either prehistoric semi-sedentary occupation on the valley floor, or of winter camps comparable to those that Thomas and Bettinger (1976) recorded in the Reese River Valley pinyon ecotone. Clewlow (personal communication 2000) later speculated that the relatively high elevation of the valley floor (4,772–6,131 ft. or 1,455–1,869 m.) constituted an environment unsuitable for prehistoric year-round occupation.

Although survey efforts continued, Clewlow and his colleagues turned their attention to the cluster of historic-period sites in the southeastern part of the valley near the ranch headquarters. There, five separate loci of house depressions and hearths were visible among surface scatters that included both Euro-American and aboriginal artifacts. According to local tradition (Knudtsen 1975:108), these represented the settlements of Shoshone workers who began to gather near the ranch, perhaps as early as the 1860s.

Following the discovery of silver in 1862, the town of Austin had quickly grown to a mining center with a population of several thousand people. In the late nineteenth century, central Nevada was transformed by the development of several mining districts, including Cortez at the northeast end of Grass Valley. The miners who flocked to these regions were followed by ranchers who settled in the high valleys that surrounded Austin, responding to the need for beef, sheep, dairy products, grains, and vegetables to feed the mining communities. By 1863, the first ranches were established in Grass Valley (*Reese River Reveille* June 13, 1863). Ranching and mining together severely disrupted access to the traditional hunting and gathering resources of the central

Nevada Shoshone, leading them to alternative strategies, such as working in exchange for commodities and wages (Gheen 1876).

Molly Knudtsen referred to the Shoshone settlements as villages and gave each of them a descriptive name: The Dead Pile Village, Pottery Hill, Ridge Village North, Ridge Village South, and Grass Valley Tom's. Of the five, the Ridge Villages (26La1103 and 26La1104) displayed the largest quantity and densest concentration of historic artifacts. Grass Valley Tom's (26LA1106), situated in an area used by the Knudtsens as a horse corral, still retained a standing structure in the 1970s. According to local tradition, members of the Tom family had occupied it until the 1930s (Knudtsen 1975:108).

Between 1969 and 1975, archaeological efforts at all five sites consisted of mapping the features and systematically plotting and collecting the surface artifacts, using a grid system. House depressions were selected for partial excavation or trenching. Hearths were partially excavated and sampled for flotation. Identifying and classifying the artifacts themselves, however, presented challenges in the early 1970s. Resources were limited. The first issue of the journal *Historical Archaeology* had only appeared in 1968. At that time, the best sources available for identifying nineteenth century artifacts in the American West were Fontana and Greenleaf's (1962) analysis of Johnny Ward's Ranch, the Sears Catalog, and assorted bottle collectors' guides, which identified these objects within their original Euro-American contexts rather than in terms of their actual uses in Native American life.

As Clewlow (1978:5) has observed, archaeology in the 1970s also lacked theoretical models for investigating this rich and extensive complex of what have been referred to variously as contact period, post-contact, historic Native American, or ethnohistoric sites. The effects of Euro-American settlement on Shoshone culture in Nevada had been described in several studies (Gould et al. 1972; Harris 1940; Malouf 1966; Shimkin and Reid 1970), but these relied on ethnohistorical sources, not archaeological materials.

Cultural anthropology in the mid-twentieth century offered the perspective of acculturation studies (Linton 1940). This was one of the first approaches that the Grass Valley researchers applied to their assemblages as they documented the replacement of stone tools with metal

tools (Ambro 1972), attempted to quantify changes in the use of indigenous plants and animals versus cattle and introduced foods, and observed the presence of rectangular structures among the circular house depressions in three of the sites (Ambro and Wallof 1972; Wallof 1978).

By the third season, the promise of the New Archaeology had reached the Grass Valley project. Utilizing the categories proposed by Binford (1962), glass trade beads and handstones, as well as items that were most likely the discarded belongings of ranch families, were tentatively classified as technomic, sociotechnic, or ideotechnic (Clewlow 1978:5). But the same questions remained: were the bottles and forks whole or broken when the Shoshone acquired them? Were the tin cans valued for their contents, for their repurposing as containers, or as a source of manufacturing material?

Comparative material from other sites in Nevada finally began to appear in the mid-1970s. Thomas and Bettinger had encountered contact-period sites of comparable age to the Grass Valley sites during the Reese River Valley pinyon ecotone survey (Bettinger 1976). Hattori (1975) had already grappled with issues in Virginia City that were similar to ours. Following Hattori's lead, the Grass Valley researchers began to use contemporary newspaper accounts to complement the archaeological data (Wells 1978).

The results of the first season of the Grass Valley Archaeological Project were briefly addressed by Ambro, Clewlow, and Pastron (1970), and were presented more fully two years later in a collection of papers (Clewlow and Rusco 1972). When the second collection appeared six years later, Clewlow himself observed that a complete synthesis of Grass Valley archaeology was still a distant goal (Clewlow 1978:7).

Post-contact subsistence practices were the focus of two research efforts that were spawned by the project. Rosen (1978) addressed the question of domestic vs. indigenous species in fauna from the five historic sites, concluding that while jackrabbits, cottontails, and other small animals available near the villages were still hunted, larger game was replaced by cattle and sheep. Wells (1983) expanded the study of post-contact adaptations to the pinyon zone, finding evidence that the pine nut harvest persisted during the historic period, a practice that might reflect social as well as dietary needs.

Unfortunately, none of the Grass Valley publications appeared in national journals or received wide circulation. Although the contributions of the project were known to researchers addressing the post-contact period in Nevada and eastern California (e.g., Bettinger 1976; Wall 2009; Zeier and Elston 1992), the Grass Valley materials (or their relevance) apparently escaped the notice of others who were dealing with similar materials elsewhere in the American West. In recent years, most archaeologists studying ethnohistoric sites have abandoned—probably for the better—the theoretical approaches of the mid to late twentieth century, replacing them with other models (e.g., Silliman 2005), but data from the Grass Valley Archaeological Project might have provided relevant comparisons and insights.

By the late 1970s, Clewlow was involved in other research projects (which are discussed in other papers in this volume), and most of his Grass Valley collaborators had also moved on. Although no additional field seasons would be undertaken, the project had produced a multifaceted legacy, as well as more than a few loose ends. The most significant of these omissions is the fact that none of the five historic-period sites, on which the efforts of the final field seasons were concentrated, has yet been fully described and published.

CURRENT APPROACHES

Our recent efforts to complete the analysis and interpretation of assemblages from two of these sites, Pottery Hill (26La1107) and Ridge Village North (26La1103), have taken us in new directions that were not considered, or at least not pursued, in the 1970s. New sources of data include interviews with two Shoshone women who were born in Grass Valley and whose families had lived there for generations. We knew their surnames, the Toms and the Maines, from local history (Knudtsen 1975:108, 1982:112), but it was not until 2001 that archaeologist Mary Rusco arranged an introduction. The women's memories have added a new dimension to our interpretations.

Another direction that was briefly addressed by Wells (1983) in the pinyon zone study involves a comparison of the archaeology of Shoshone ranch workers in Grass Valley with that of Aboriginal workers on the cattle and sheep stations of Australia during the same time period.

Gould et al. (1972) were the first to use ethnographic and ethnohistoric data to identify parallels in post-contact cultural change among Nevada Indians and Aboriginal peoples of Western Australia. The corresponding archaeological data have become available in the past decade, as a result of research by Australian scholars on Pastoral Archaeology (e.g., Harrison 2004; Harrison and Williamson 2002). Cross-cultural comparisons have suggested new questions and new interpretations (Wells and Seelinger 2005).

Finally, one of the coauthors [RDA] has resumed work on Ridge Village North, treating the amassed data and records as essentially comprising a new archaeological site. This involves preparation of an updated research design, and a shift away from earlier emphases on “acculturation” to one that emphasizes the lifeways as adaptations to an environment and world occupied by Europeans. New research questions are being formulated and addressed in the renewed analyses of the old data. U.S. Census data and other extant historical records will be employed in this effort. The role of ranch work and the horse-and-wagon, as well as the question of who actually lived there, are being revisited. The goal is to explain how an assemblage that was essentially Euro-American in origin was used and then discarded or left behind in what were essentially Shoshone ways. The end product will constitute, in part, an ethnographic sketch of the Shoshone of the Ridge Village North site, as “recorded” in the late nineteenth and early twentieth century.

THE POTTERY HILL SITE (26LA1107)

The remainder of this paper addresses our recent analysis of artifacts and data from the Pottery Hill site. Situated at an elevation of 5,900–5,920 feet (1,798–1,804 m.) on two low ridges on a dissected alluvial fan, this site is approximately one kilometer from Grass Valley Ranch headquarters. Skull Creek and Callaghan Creek, perennial streams whose courses were first altered by ranching activity in the late 1800s, flow south of the site (Fig. 1).

When it was first investigated in 1973, the site consisted of a dispersed scatter of flaked stone punctuated by a few areas of greater density, a few ground stone artifacts and willow poles, a scatter of

historic-period artifacts, 35 probable houses, and 14 areas of charcoal or discolored soil that were interpreted as probable hearths, all within an area measuring approximately 340 by 200 meters. Molly Knudtsen had previously collected all the brownware sherds for which the site was named (Beck 1981). In 1973, the remaining surface artifacts were collected using a grid system, two of the house depressions were partially excavated, and all of the external hearths were sampled. Selected aspects of the Pottery Hill assemblages were subsequently published by Payen (1978) and Rosen (1978).

More than two decades after the final season of the Grass Valley Archaeological Project, the directors of the 1973 excavations of the Pottery Hill site began to re-examine the data (Wells and Seelinger 2000, 2005). Fortunately, most of the Pottery Hill artifact assemblage, now curated at the Nevada State Museum, was available for examination, and although the house depressions were barely visible during a visit to the site in 2000, the map of the surface grid with the locations of features and artifact distributions was extant along with the original measurements and drawings of the house depressions. We have recently completed a comparison¹ of these with historic-period house descriptions from other sites in the Great Basin, most of which were only published subsequent to the last season of the Grass Valley Archaeological Project.

One of the most interesting assemblages from Pottery Hill was recovered from the surface collection and excavation of House 13. A large hearth area, designated Hearth 14, appeared to be associated with it. Another smaller depression, House 14, which was not excavated, was located four meters southeast of House 13 and may have been associated with the same hearth (Fig. 2). House 13, including its outer rim, measured 5.2 m. north-south by 5.5 m. east-west. Based on these dimensions, it is classified as a large, deep depression, using Ambro and Wallof's (1972) system for Grass Valley houses. Two postholes were identified at the southeast edge of the House 13 depression. Charcoal, ash, and burnt bone were present on the surface of its eastern half. The surface material surrounding House 13 consisted mainly of artifacts of European or American industrial manufacture, some of which had been modified. This material was concentrated east, northeast, and southeast of the depression. Hearth 14, also east of the house, was

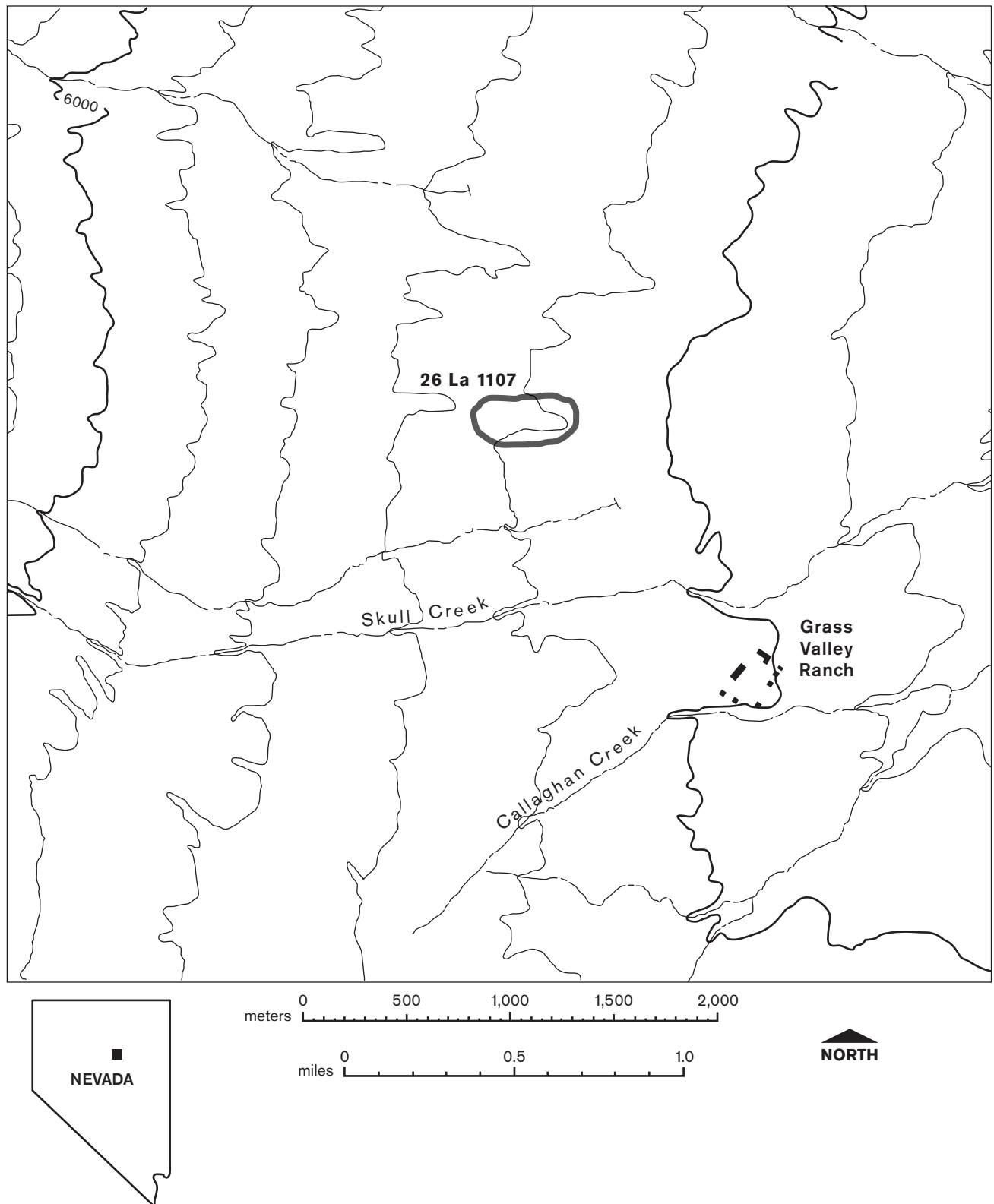


Figure 1. Pottery Hill site location map.

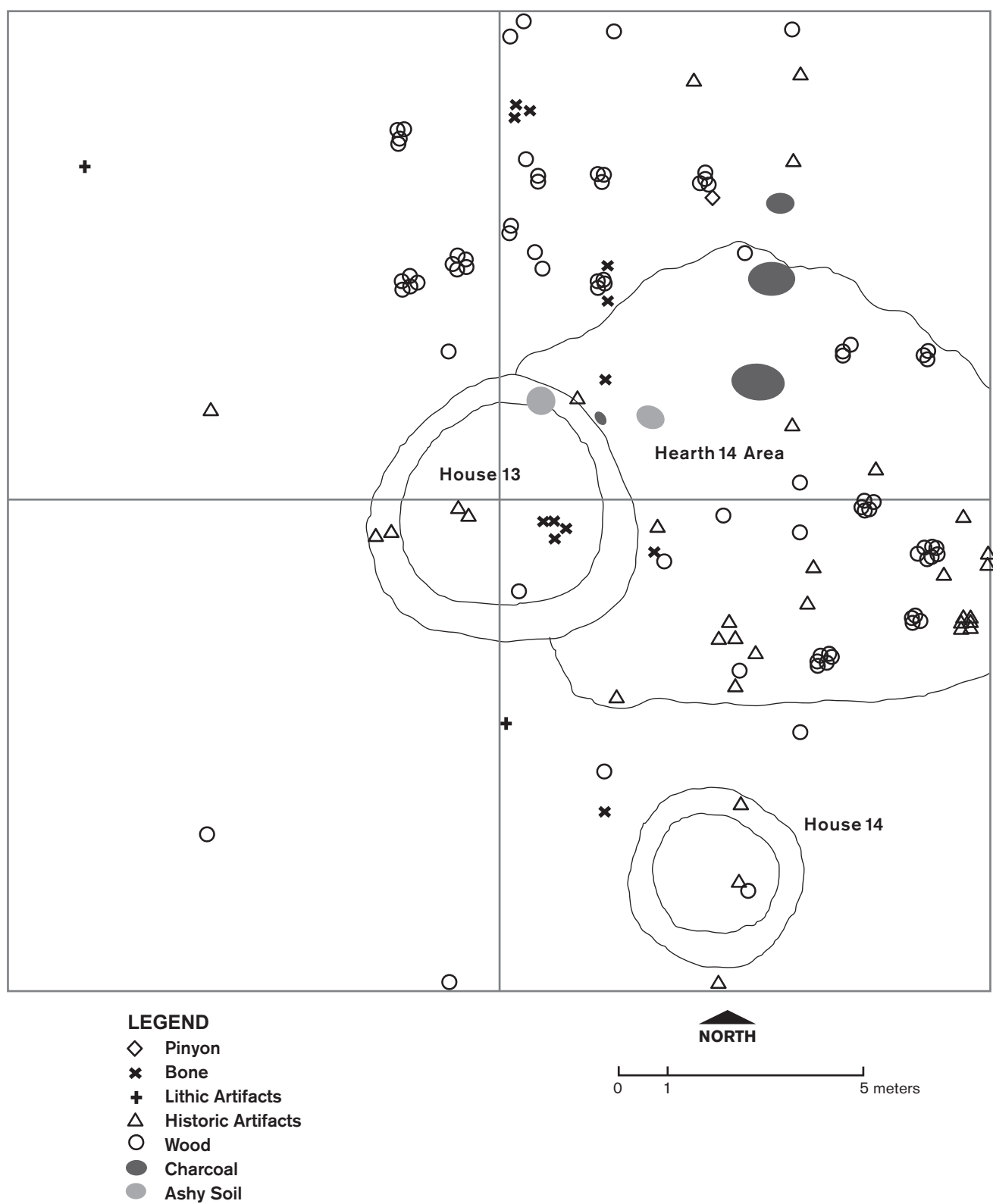


Figure 2. House 13 and Hearth 14.

an area of charcoal and ashy soil. Although we refer to it as a hearth, some or all of it may represent material cleaned from the actual locus of the fire.

The eastern half of the house was completely excavated; four internal hearth areas and a floor—which was identified by a soil color change—were encountered and recorded. An east-west trench was then excavated to a depth of 20 cm. in the western half of the depression. A second floor was identified in the trench at a shallower depth, suggesting the presence of two floors within the structure.

Faunal and Floral Remains

Faunal material from Pottery Hill's external hearths was analyzed by Martin Rosen (1978). In his published results, Rosen combined material from all proveniences together, as his objective was a comparison of the Pottery Hill material as a whole with assemblages from the four other "villages." According to his laboratory notes, samples from Hearth 14 yielded 260 pieces of bone. Cow, rabbit, and bird were present, along with 242 pieces of unidentified large mammal. Most of the bone was burned; 63 items were calcined. In his frequency count of identified bone, Rosen (1978:59) estimated two cows, five jackrabbits, one cottontail, two bobcats, one domestic sheep, and one sage grouse for the Pottery Hill assemblage as a whole, a finding consistent with his data from the other historic sites associated with the ranch. He concluded that the Grass Valley Shoshone abandoned the hunting of all game that could not be procured in the immediate vicinity of their settlements, and that domestic animals replaced the large animals they had hunted previously (Rosen 1978:70).

Faunal remains from House 13 have been identified by Dave N. Schmitt. Nine bones were recovered from the surface collection unit that was centered on the house depression. One of these was identified as a cow-size rib and one as a cow molar fragment. The remaining specimens, some of which were charred or burned, were too fragmentary to identify. One cow rib, cut on one end and exhibiting a cut mark from a metal tool, was recovered from a depth of 27 cm. in the house fill. A few fragments of rodent bones were also recovered from the fill.

The remaining faunal remains related to House 13 (also analyzed by Schmitt) came from two hearth areas within the house. Screening and flotation of soil samples

from the hearths yielded 36 pieces of bone, 24 of which were calcined. None could be identified to species; 16 are from large mammals.

A cluster of pine nuts (*Pinus monophylla*) was collected from the surface of House 13. Additional pine nut shells were recovered from Hearth Area 1 in the excavated part of the house, and from Hearth 14. Pine nuts were recovered from other hearths and houses in the sites associated with the ranch, reflecting the continued use of this prehistoric resource during the historic period.

Artifacts

Two flaked stone artifacts, one of which is a gray chert biface tip (PH2-031) that appears to represent an arrow point, were collected from the surface. One handstone of volcanic material was also collected. Surface artifacts from within and around the depression include 20 sherds of Chinese stoneware, one piece of solarized glass stemware and other pieces of solarized glass, one metal buckle, two metal corset lasts, one shotgun primer, one metal file, one soldered lapped-seam can, one end from a small can, one Royal Baking Powder can lid, four square-cut nails, one small strip of tin, one piece of wire, three buttons, one broken blue glass bead, one thimble with the closed end cut away, and several objects that we have classified as possible tools made from cans.

The 1973 excavations recovered artifacts from house fill to a depth of 27 centimeters. These include four cut nails, one bolt, one can rim, one end from a small tin can, one metal file, one piece of solarized glass, five blue glass beads, and one basalt flake. Four artifacts, all glass beads, were recovered from Hearth 1 within House 13.

Hearth 14 yielded six glass seed beads, one metal needle, one metal rivet, one metal stud, one metal button, one clear glass fragment, and one cut nail 2 in. in length. The assemblages from House 13 and Hearth 14 are described in detail elsewhere (see endnote). Selected artifacts are discussed below.

Chinese Stoneware. The 20 Chinese ceramic sherds (PH2-009) are brown-glazed stoneware, apparently from a single vessel, probably a wine bottle. Identification of the vessel is based on a comparison with descriptions of Chinese stoneware from the Nevada State Museum's excavation at Ninth and Amherst in Lovelock, Nevada (Hattori et al. 1979). Brown glazed stoneware was used

by the Chinese for a variety of food storage containers as well as for wine. Wine bottles, the most common form at Lovelock as well as at other sites in the American West, were globular in shape “with a narrow neck, wide slightly splayed rim, and raised base...” (Praetzellis and Praetzellis 1979:153). They were made in three sections, from rim to base, which were joined first at the shoulder and secondly at the widest part of the vessel. Wine bottles are also distinguished from other types of vessels by their rich brown glaze, their fine fabric with few inclusions, and the thinness of their walls.

When glued together, the Pottery Hill sherds clearly show the joint between the base and the middle section, which appears as a ridge on the interior. The walls are thin, 5 mm. at the base and 1.1 mm. on the body. The fabric is fine without obvious inclusions and the glaze is a rich brown. Like the vessels described for the Lovelock site, specimen PH2-009 is unglazed on the interior and has an unglazed band above the base, the result of dipping the vessel into the glaze base up (Praetzellis and Praetzellis 1979:152).

Other Chinese artifacts, primarily small glass medicine bottles, were found at some of the other sites near Grass Valley Ranch, and Knudtsen (1975:115–116) reported finding fragments of Chinese porcelain at other sites in the valley. Chinese immigrants worked in the late nineteenth-century mining industry in central Nevada. Originally, we considered (as did Molly Knudtsen) the possibility that these artifacts might have been obtained by the Shoshone from the Chinese settlement at Cortez, a mining community that was founded in the 1860s in the Simpson Park Range at the north end of the valley (Hardesty 1988). Brown-glazed stoneware sherds from the archaeological investigations at Cortez have been identified as food containers (Hardesty and Hattori 1983:37).

Alternatively, the Pottery Hill specimen may have originated with Chinese household workers whose existence is not acknowledged in local tradition nor in the historic accounts we have consulted to date. According to Knudtsen (1975:115–116), larger ranches in the region employed Chinese cooks, but the presence of Chinese ceramics in the Grass Valley sites was a “mystery.” According to one of the Shoshone women who spent her childhood in Grass Valley, however, Chinese domestic workers were employed at Grass Valley Ranch in her parents’ time in the early twentieth

century, and she thought they had been there earlier as well. It is interesting that the stoneware sherds from Pottery Hill appear to represent a wine bottle, while similar materials from Cortez represent food containers. While few inferences can be made from the presence of the sherds, they do indicate contact, direct or indirect, between the Pottery Hill Shoshone and Chinese workers. The presence of this broken vessel in the House 13 assemblage is significant in light of the fact that only two other non-Shoshone ware sherds of any kind were recovered from this site; both are small pieces of white ware that were found on the surface at separate locations. It appears that Euro-American ceramics were either not useful or were not available to the Pottery Hill Shoshone. It may be that the Chinese wine bottle was more valuable, possibly for reuse as a container, than ceramic artifacts from the rancher’s household.

Thimble. The thimble with the closed end removed (PH2-027) may be a tinkler. According to Ehrhardt (2005:119–120), hollow metal cone-shaped objects were used to decorate clothing throughout a wide area of North America during the protohistoric and historic periods. In regions where Native Americans worked copper, they manufactured these from metal, possibly beginning during pre-contact times as well. Elsewhere, Euro-American artifacts were modified to produce the items. Woodward (1976:23) illustrates four examples that were made by punching a hole in the end of a thimble. A strip of buckskin with a bead on the end was threaded through the hole. Thimbles with holes punched in the end to produce artifacts that are interpreted as tinklers have been found in Ute sites (Jonathan Horn, personal communication 2001).

Modified Cans and Metal Files. Among the artifacts recovered from House 13 are modified pieces of tinned steel that have been cut from flattened cans or can ends, and that we believe may have been used as tools. Eight of the nine were recovered from the charcoal scatter on the surface of the southeast quadrant. These fall into two categories. One type, which is elongate in shape, has been made by folding the cut piece of metal, apparently to provide a smooth grip on one side. The unfolded edges could be used for scraping or cutting (Fig. 3). The other type is a small triangular artifact that uses the rim of the can as a probable grip and has two edges suitable for scraping or cutting.



Figure 3. Possible tin can tools, House 13.

The possible can tools were examined by Eugene Hattori (personal communication 2002), who observed use wear on one of the elongate specimens (PH2-024) and pointed out that projections occur on several of the edges. He suggested that this type of tool would have been suitable for splitting willows. He also observed that the triangles had been manufactured by cutting a strip of can with shears, as evidenced by the fact that they were swept down on one side. The pieces were turned as they were cut. Hattori suggested that the triangles might also be blanks for another type of artifact.

When several of the six elongate artifacts were viewed with an electron microscope, a heavy accumulation of rust was apparent on them. However, the flat metal surface adjacent to some of the long edges clearly exhibited a different color and a finer-grained texture in comparison to the rest of the artifact. Specimens

PH2-019 and PH2-024 also had a wavy edge on one side only, possibly indicating a use for scraping, and specimen PH2-012 showed some scratches on one side within the finer-grained surface adjacent to the edge. Two of the triangular artifacts were also examined under the microscope. Specimen PH2-043, which has a notch in the corner where the side seam meets the rim of the can, exhibited the same fine-grained texture and color change on the cut edge that we observed on the elongate artifacts. However, Specimen PH2-025, the smallest of the triangles, did not exhibit any color or texture change, but did show a slight folding or bending of the edge. It is possible that the triangles may have been intended as some kind of ornament, rather than a tool.

The two three-corner metal files recovered from House 13 may have been used for sharpening the edges of tools made from cans. Specimen PH2-016 was found

in the charcoal area in the southeast quadrant, where most of the can tools were found. Specimen PH2-064 was found in fill in the same quadrant. Metal files were reportedly valued throughout post-contact aboriginal North America because they could be used to resharpen and repair other metal tools that were obtained from Euro-Americans (Lohse 1988:401). A triangular example from one of the ethnohistoric sites in Diamond Valley, California (4-Alp-223) has been discussed by Furnis (1992:143). She suggests that it was used to maintain household implements.

The Pottery Hill files may have been used to maintain other Euro-American tools that the Shoshone obtained from the ranch or the town, as well as to sharpen the tools made from cans. Alternatively, Pottery Hill artifacts made from cans may have been sharpened on stone, a practice that is known from Australia, where cutting tools made from metal artifacts made by Aboriginals were sharpened using traditional ground stone artifacts (Rodney Harrison, personal communication 2001). The use of stone tools to manufacture tools from metal has also been reported from an archaeological site associated with the Oregon Trail in Idaho (Crabtree 1968: 38).

House 13 yielded three other pieces of tinned steel that were cut from flattened cans and perforated with nail holes. Two similar pieces were found elsewhere on the surface of the site, and artifacts of the same type have been found in the Ridge Villages, where they were interpreted as construction materials for houses (Ambro 1972). One of the Grass Valley Shoshone women with whom we spoke immediately identified photos of the Pottery Hill examples as construction materials.

Two of the specimens from House 13, both from the northeast quadrant, have multiple holes that suggest another possible use. PH2-002 has 11 holes in three different sizes, all punched from the same side. One edge of the can piece has been folded over in a manner similar to that of the “can tools” described above. PH2-033 has 19 holes, again all punched from the same side. The piece has been folded over in the middle. This artifact was cut from a can that was hand-soldered, indicating an early date. Arkush (2000:209) illustrates a similar artifact from a Mono Basin site that he suggests may have been used for sizing warp and weft materials for basketmaking. Artifacts similar to PH2-002 and PH2-033 have also

been identified at other Nevada sites as tools for sizing basketry materials (Hattori 2008; Roberta McGonagle, personal communication 2001).

CONCLUSIONS

The Chinese ceramics, the thimble, the files, and the modified cans are only a few of the artifacts we have analyzed from the Pottery Hill assemblage. We describe them here because they provide clues about the unique ways in which the Pottery Hill Shoshone incorporated certain material objects from non-Native American cultures into their lives.

Part of the legacy of the Grass Valley Archaeological Project lies in the experiences and education it provided to the students who participated in those six field seasons. Part of it will endure in the published contributions, which are an important resource for archaeologists investigating cultural changes resulting from the earliest stages of sustained contact between Native Americans and Euro-American settlers in the Great Basin.

Finally, we have a well-documented assemblage of artifacts and the aggregate memories of key participants in the Grass Valley Archaeological Project, along with new approaches to the archaeology of the early post-contact period. Little remains of those five sites that Molly Knudtsen called villages, but for us, the data and collections are like unexcavated sites, waiting for rediscovery and analysis. Although they were recorded and excavated decades ago, the documentation was state-of-the art for its time, allowing meaningful analyses to continue.

NOTES

¹Two of the authors, Helen Wells and Evelyn Seelinger, are currently preparing a monograph entitled *The Pottery Hill Site: A Late 19th Century Shoshoni Settlement in Nevada*. It includes a complete description and analysis of the features and artifacts that are summarized here.

ACKNOWLEDGMENTS

The authors thank Kenneth Kules, who prepared Figures 1 and 2, and David Madsen, who provided helpful comments on this paper.

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. W. Clelow, Jr. and Mary Rusco, eds., pp. 85–106. *Nevada Archeological Survey Research Papers* 3. University of Nevada, Reno.
- Ambro, Richard D., C. William Clelow, Jr., and Allen Pastron
1970 Preliminary Investigations in Grass Valley, Lander County, Nevada. *Nevada Archaeological Survey Reporter* 4(1):9–10.
- Ambro, Richard D., and Kurt Wallof
1972 Preliminary Notes on Historic Period Shoshone House Types. In *The Grass Valley Archeological Project: Collected Papers*, C. W. Clelow, Jr. and Mary Rusco, eds., pp. 107–126. *Nevada Archeological Survey Research Papers* 3. University of Nevada, Reno.
- Arkush, Brooke
2000 Improving our Understanding of Native American Acculturation through the Archaeological Record: An Example from the Mono Basin of Eastern California. In *Interpretations of Native North American Life*, Michael S. Nassaney and Eric S. Johnson, eds. Gainesville: University Press of Florida.
- Beck, Colleen M.
1981 Shoshoni Brownware from Grass Valley, Nevada. *Annals of Carnegie Museum* 50(1):1–29. Pittsburgh: Carnegie Museum of Natural History.
- Bettinger, Robert L.
1976 Flat Iron Ridge Site. In *Prehistoric Piñon Ecotone Settlements of the Upper Reese River Valley, Central Nevada*, David Hurst Thomas and Robert L. Bettinger, eds. *Anthropological Papers of the American Museum of Natural History* 53, Part 3.
- Binford, Lewis R.
1962 Archaeology as Anthropology. *American Antiquity* 28(2):217–225.
- Clelow, C. William, Jr.
1978 Housepits to Horseshoes: Process and Change in Central Nevada. In *History and Prehistory at Grass Valley, Nevada*, C. W. Clelow, Jr., Helen F. Wells, and Richard D. Ambro, eds., pp. 3–9. [Monograph VII.] Los Angeles: Institute of Archaeology, University of California, Los Angeles.
- Clelow, C. William, Jr., and Allen G. Pastron
1972 Preliminary Investigations. In *The Grass Valley Archeological Project: Collected Papers*, C. W. Clelow, Jr. and Mary Rusco, eds., pp. 11–32. *Nevada Archeological Survey Research Paper* 3. University of Nevada, Reno.
- Clelow, C. William, Jr., and Mary Rusco, eds.
1972 The Grass Valley Archeological Project: Collected Papers. *Nevada Archeological Survey Research Papers*. University of Nevada, Reno.
- Crabtree, Don E.
1968 Archaeological Evidence of Acculturation along the Oregon Trail. *Tebiwa* 11(2).
- Ehrhardt, Kathleen L.
2005 *European Metals in Native Hands*. Tuscaloosa: University of Alabama Press.
- Fontana, Bernard L., and J. Cameron Greenleaf
1962 Johnny Ward's Ranch. *The Kiva* 28(1–2):1–115.
- Furniss, C. Lynn
1992 Historic Artifacts from 4-Alp-223. In *Changes in Washoe Land Use Patterns: A Study of Three Archaeological Sites in Diamond Valley, Alpine County, California*, Charles D. Zeier and Robert G. Elston, eds., pp. 135–146. [Monographs in World Archaeology 5.] Madison, Wisconsin: Prehistory Press.
- Gheen, Levi A.
1876 *Report of the Commissioner of Indian Affairs, 1876*. Washington, D.C.: Government Printing Office.
- Gould, Richard A., Don D. Fowler, and Catherine S. Fowler
1972 Diggers and Doggers: Parallel Failures in Economic Acculturation. *Southwestern Journal of Anthropology* 28(3):265–281.
- Hardesty, Donald L.
1988 *The Archaeology of Mining and Miners: a View from the Silver State*. [Special Publication 6.] Pleasant Hill, Cal.: Society for Historical Archaeology.
- Hardesty, Donald L., and Eugene M. Hattori
1983 *Archaeological Studies in the Cortez Mining District, 1982*. [Technical Report 12.] Reno: Bureau of Land Management.
- Harris, J. S.
1940 The White Knife Shoshone of Nevada. In *Acculturation in Seven American Indian Tribes*, Ralph Linton, ed., pp. 32–118. New York: Appleton.
- Harrison, Rodney
2004 Contact Archaeology and the Landscapes of Pastoralism in the Northwest of Australia. In *The Archaeology of Contact in Settler Societies*, Tim Murray, ed., pp. 109–143. Cambridge: Cambridge University Press.
- Harrison, Rodney, and Christine Williamson (eds.)
2002 *After Captain Cook: the Archaeology of the Recent Indigenous Past in Australia*. [Sydney University Archaeological Methods Series 8.] Sydney: Sydney University.
- Hattori, Eugene M.
1975 Northern Paiutes on the Comstock: Archaeology and Ethnohistory of an American Indian Population in Virginia City, Nevada. *Nevada State Museum Occasional Papers* 2. Carson City, Nevada.
- 2008 Ethnoarchaeology of Northern Paiute Women at Virginia City, Nevada. Paper Presented at Society for Historical Archaeology Annual Meeting, Albuquerque, New Mexico.

- Hattori, Eugene M., Mary K. Rusco, and Donald R. Tuohy (eds.)
1979 *Archaeological and Historical Studies at Ninth and Amherst, Lovelock, Nevada*. Carson City, Nev.: Nevada State Museum Archaeological Services Report.
- Knudtsen, Molly Flagg
1975 *Here Is Our Valley*. [Helen Marye Thomas Memorial Series 1.] Reno: University of Nevada Press.
1982 *Under the Mountain*. Reno: University of Nevada Press.
- Linton, Ralph (ed.)
1940 *Acculturation in Seven American Indian Tribes*. New York: Appleton.
- Lohse, E. S.
1988 Trade Goods. In *Handbook of North American Indians, Vol. 4: History of White-Indian Relations*, Wilcomb E. Washburn and William C. Sturtevant, eds., pp. 396–403. Washington, D. C.: Smithsonian Institution.
- Magee, Molly
1964 A Flat-Bottomed Earthenware Vessel from Central Nevada. *American Antiquity* 30 (1):96–98.
- Malouf, C.
1966 Ethnohistory in the Great Basin. In *Current Status of Anthropological Research in the Great Basin, 1964*, W. L. d'Azevedo, W. Davis, D. Fowler, and W. Suttles, eds., pp. 1–38. [Desert Research Institute Publications in the Social Sciences 1.] Reno: Desert Research Institute.
- Pastron, Allen G.
1972 The Grass Valley Archeological Project: Excavation of Two Rock Shelters. In *The Grass Valley Archeological Project: Collected Papers*, C. W. Clewlow, Jr. and Mary Rusco, eds., pp. 33–67. *Nevada Archeological Survey Research Papers* 3. University of Nevada, Reno.
- Payen, Louis A.
1978 Smoothshod-Roughshod, An Analysis of the Farriery and Other Horse Equipment from Two Historic Shoshoni Village Sites in Grass Valley, Nevada. In *History and Prehistory at Grass Valley, Nevada*, C. W. Clewlow, Jr., Helen F. Wells, and Richard D. Ambro, eds., pp. 83–104. [Monograph VII.] Los Angeles: Institute of Archaeology, University of California, Los Angeles.
- Praetzellis, Adrian, and Mary Praetzellis
1979 The Lovelock Ceramics. In *Archaeological and Historical Studies at Ninth and Amherst, Lovelock, Nevada*, Eugene M. Hattori, Mary K. Rusco, and Donald R. Tuohy, eds., Vol. 1:140–198. Carson City, Nev.: Nevada State Museum Archaeological Services Report.
- Reese River Reveille*
1863 Newspaper published June 13, 1863, W. C. Phillips, ed. Austin, Nevada.
- Rosen, Martin D.
1978 Faunal Remains as Indicators of Acculturation in the Great Basin. In *History and Prehistory at Grass Valley, Nevada*, C. W. Clewlow, Jr., Helen F. Wells, and Richard D. Ambro, eds., pp. 35–82. [Monograph VII.] Los Angeles: Institute of Archaeology, University of California, Los Angeles.
- Shimkin, Demitri B., and Russell M. Reid
1968 Socio-cultural Persistence among Shoshoneans of the Carson River Basin (Nevada). In *Languages and Cultures of Western North America: Essays in Honor of Sven Liljeblad*, Sven S. Liljeblad and Earl H. Swanson, eds., pp. 172–200. Pocatello: Idaho State University Press.
- Silliman, Stephen W.
2005 Culture Contact or Colonialism? Challenges in the Archaeology of North America. *American Antiquity* 70(1):55–74.
- Steward, Julian H.
1938 Basin-Plateau Aboriginal Sociopolitical Groups. *Bureau of American Ethnology Bulletin* 120, Washington, D.C.: Smithsonian Institution.
- Thomas, David Hurst
1971 *Prehistoric Subsistence-Settlement Patterns of the Reese River Valley, Central Nevada*. Ph.D. dissertation, University of California, Davis.
1973 An Empirical Test for Steward's Model of Great Basin Settlement Patterns. *American Antiquity* 38(2):155–176.
1982 The Archaeology of Monitor Valley: 1. Epistemology. *Anthropological Papers of the American Museum of Natural History* 58(1):1–194.
- Thomas, David Hurst, and Robert L. Bettinger
1976 Prehistoric Piñon Ecotone Settlements of the Upper Reese River Valley, Central Nevada. *Anthropological Papers of the American Museum of Natural History* 53, Part 3.
- Wall, Bridget Rebecca
2009 *An Ethnohistoric Examination of Native American Subsistence Strategies in the Eastern Sierra*. Master's thesis, California State University, Sacramento.
- Wallof, Kurt
1978 A Three-Sided Structure from Grass Valley, Lander County, Nevada. In *History and Prehistory at Grass Valley, Nevada*, C. W. Clewlow, Jr., Helen F. Wells, and Richard D. Ambro, eds., pp. 119–134. [Monograph VII.] Los Angeles: Institute of Archaeology, University of California, Los Angeles.
- Wells, Helen
1978 Historical Accounts of Grass Valley, 1863–1872. In *History and Prehistory at Grass Valley, Nevada*, C. W. Clewlow, Jr., Helen F. Wells, and Richard D. Ambro, eds., pp. 11–34. [Monograph VII.] Los Angeles: Institute of Archaeology, University of California, Los Angeles.

- 1983 *Historic and Prehistoric Pinyon Exploitation in the Grass Valley Region, Central Nevada: a Case Study in Cultural Continuity and Change*. Ph.D. dissertation, University of California, Riverside.
- Wells, Helen, and Evelyn Seelinger
- 2000 Another Look at Grass Valley: New Data from the Pottery Hill Site. Paper presented at the Great Basin Anthropological Conference, Ogden, Utah.
- 2005 Indians and Ranchers in Grass Valley, Nevada: Data from the Pottery Hill Site. Paper presented at the Society for Historical Archaeology Conference, York, England.
- Woodward, Arthur
- 1976 *Indian Trade Goods*. Oregon Archaeological Society. Portland, Oregon: Thomas Binford, Publisher.
- Zeier, Charles D., and Robert G. Elston (eds.)
- 1992 *Changes in Washoe Land Use Patterns: A Study of Three Archaeological Sites in Diamond Valley, Alpine County, California*. [Monographs in World Archaeology 5.] Madison, Wisconsin: Prehistory Press.



