

## NEW ARCHAEOLOGICAL PERSPECTIVES ON THE DONNER PARTY SAGA

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### ABSTRACT

In 1990 the University of Nevada, Reno, in cooperation with the Tahoe National Forest, began another documentary and archaeological investigation of the Donner Party camps near Truckee, California. This study, like the ones which have preceded it - one at the Murphy's Cabin Site at Donner Lake and the other at the Donner-Reed Wagon Site in Utah - have shed new light on the Donner Party saga. In addition, these archaeological investigations afforded a superb public education opportunity. Visitors who observed the excavations numbered in the thousands. On-site tours, national media coverage, and the involvement of a volunteer work force from the federal, state and private sector further enhanced these interpretive advantages. The preliminary results of this latest study are discussed.

### INTRODUCTION

The tragedy of the Donner Party is one of the best known events in American history. Trapped in the Sierra Nevada mountains of California during the winter of 1846-1847, nearly half of the group perished. Of the group of 89 taking the ill-fated Hastings Cutoff south from Fort Bridger, Wyoming, only 47 survived. This so-called "short-cut" was not what Hastings had claimed; in fact it delayed the party enough so that they were unable to cross the Sierra before snowfall and were forced to spend the winter in 2 encampments in the Truckee Basin. Written accounts suggest that some of the survivors did so by cannibalizing the dead. The fate of the Donner Party during that winter is the stuff out of which legends are made. The Donner Party's story immediately became a part of the American epic.

Most of what is known about the Donner Party ordeal comes from written records, especially contemporary journals and

somewhat later accounts based upon oral histories. Of special pertinence in the Donner Party story is the manner in which it has been overly sensationalized, and the myths surrounding the events at Donner Lake continue to flourish through fictionalized novels and popular illustrations. These factors have greatly influenced our perceptions of what may have truly happened.

Until lately, archaeology has played no significant role in the interpretation of the tragedy. In recent years 3 excavations at sites associated with the Donner Party have begun to shed new light on the Donner Party saga. Collective results demonstrate that the tangible evidence of the archaeological record, as a pathway to historical verification that is independent of the written record, has served to both confirm, refute, and supplement the sometimes contradictory written accounts.

### THE MURPHY'S CABIN PROJECT

During the summers of 1984 and 1985, archaeological excavations by the University of Nevada at Reno, under sponsorship of the National Geographic Society and California State Parks, were undertaken at Donner Memorial State Historic Park at Murphy's Cabin, 1 of the 3 cabins at the Donner Lake encampment (Hardesty 1985, 1987).

The presence of period artifacts and features confirmed the suspected location of Murphy's Cabin. The artifact assemblage was dominated by personal ornaments such as a variety of beads, a tin brooch with a cobalt blue glass setting, and a silver-plated dangling earring or pendant. Perhaps the most intriguing artifact in the Murphy's Cabin assemblage is a Catholic religious medallion. The Breens were the only Catholic family in the Donner Party, and prayers were said aloud regularly in the cabin night and morning. Other personal items included pieces of clay tobacco pipes, buttons and clothing fragments, shoe fragments, glass and ceramic tableware, medicine bottles, stoneware jugs, iron cooking pots, and hardware from wagons and furniture. Many musket balls recovered at the site are representative of rifles of the large caliber plains weapons common in the 1840s, and the presence of gunflints indicate that the weapons may still have employed a flintlock ignition.

Diaries chronicle the military expedition of General Kearny on June 21, 1847, which passed by the grim campsite just 2 months after the last survivor was removed. According to Edwin Bryant, who accompanied the expedition:

A halt was ordered for the purpose of collecting and interring the remains. Near the principal cabins I saw two bodies entire, with the exception that the abdomens had been cut open and the entrails extracted...Strewn around the cabins were dislocated and broken skulls...The remains were collected...and buried...They were interred in a pit which

had been dug in the center of one of the cabins for a cache...the cabins were..fired (Bryant 1848).

The Murphy's Cabin has been assumed historically to be this place. Excavations failed to bear out the mass grave supposedly dug by General Kearny's expedition. However, a smallish V-shaped pit filled with loose soil and containing some bone fragments and historic and recent artifacts was encountered. The intrusion of this pit into the hearth area and the presence of recent artifacts indicates that the pit had been looted sometime in the post-Donner past and refilled more recently.

One of the goals of the 1984 project was to provide a more detailed architectural rendition of Murphy's Cabin. The 1984 study was quite generalized, so in 1985 State Parks commissioned an additional study intended to carry out a more focused literature review of aspects of period cabin construction, in order to provide the details needed for their planned Murphy's Cabin reconstruction at Donner State Park (Lindstrom 1986). A "streamlined" rendition of Murphy's Cabin was developed with the helpful assistance of an experienced builder in Donner Lake's heavy snow-load region (Craig Meacham in Lindstrom 1986) (Figures 1-3).

In her personal account of the inside of Murphy's Cabin, Eliza P. Donner (Houghton) leaves a chilling impression of the lives of "inmates" trapped within this subterranean snow prison:

How can one describe that fateful cabin, which was dark as night to us who had come in from the glare of day? We heard no welcome but were given a dreary resting place near the foot of the steps (snow steps - that is), just inside the open doorway, with a bed of branches to sit upon and a blanket to cover us. After we had been there a short time we could distinguish persons on other beds of branches and a man with bushy hair reclining beside a smoldering fire (Houghton 1911).

Written accounts suggest that the cabin partially enclosed a large rock into its west wall (Figure 2). The cabin was "squat", being built of logs with a rectangular floor plan and a flat roof formed of hides and canvas stretched over poles (Figures 1 and 3). Charcoal and ash deposits (Figure 4), artifact distributions (Figure 5), and charred wood confirm that the cabin was burned and suggest that it was 25 feet long and 18 feet wide. It was probably at least this large, as it had to accommodate up to 16 individuals who probably spent most of their time in prone positions on branch beds. A concentration of artifacts along the east wall (Figures 1 and 5) seems to imply a doorway through which trash was tossed (a pattern well documented at pony express stations just a few years later). A dark organic layer that was incorporated into the undulating earthen floor is explained by contemporary accounts of the muck and filth in the cabin. The wall ends which abutted against the large rock may have been

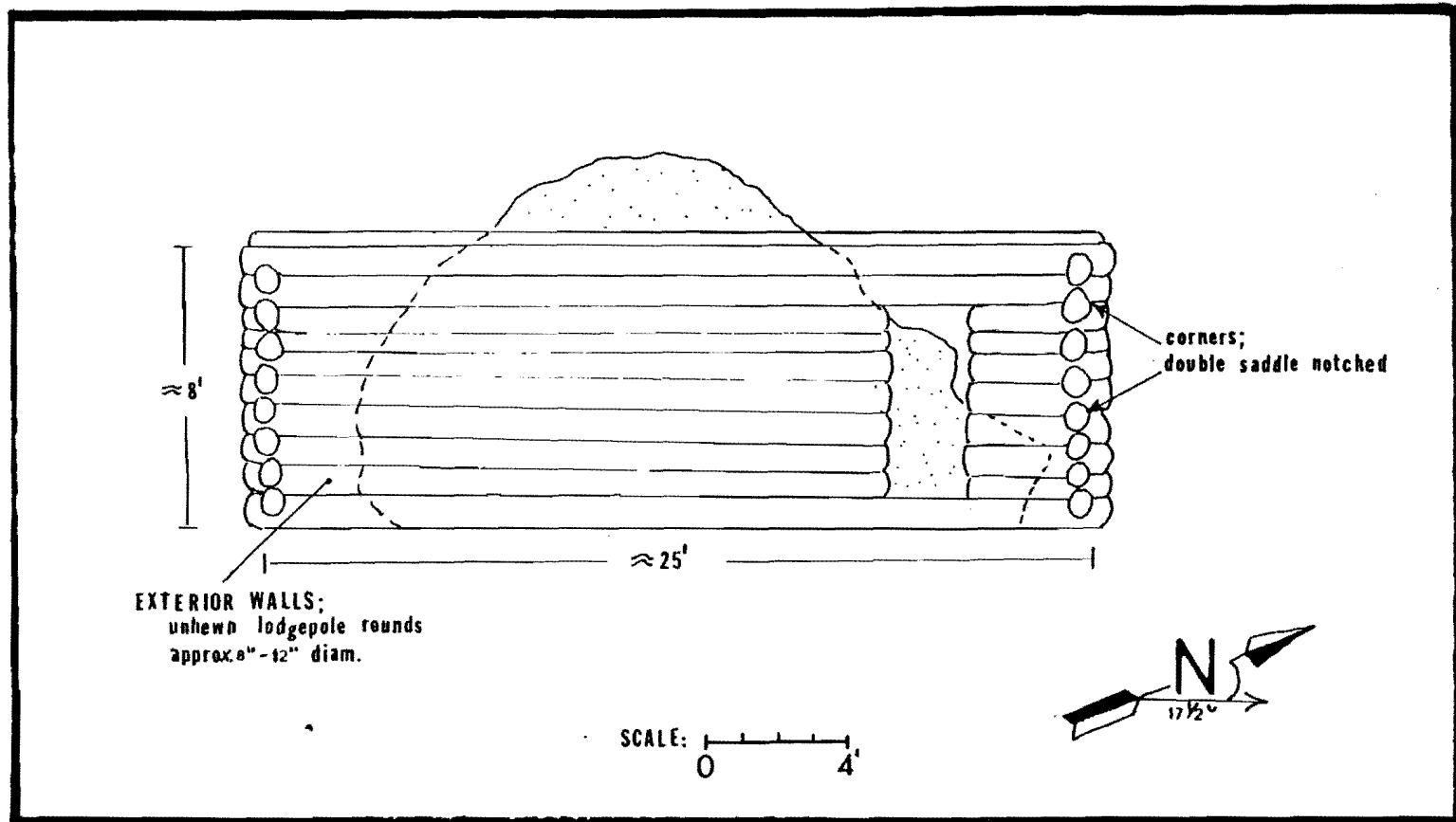


Figure 1. Murphy's Cabin east elevation (after Meacham in Lindstrom 1986:Figure 11).

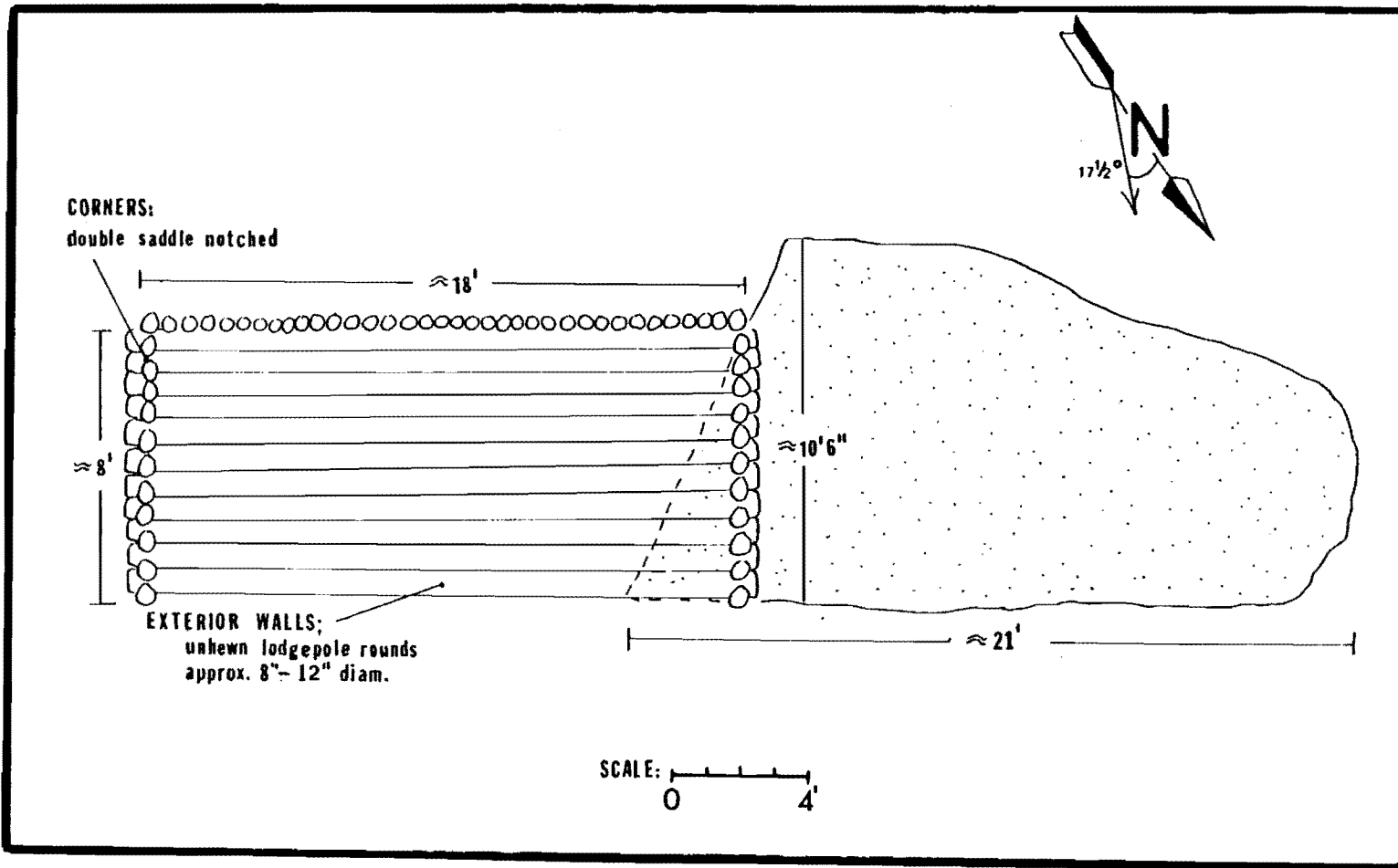


Figure 2. Murphy's Cabin north elevation (after Meacham in Lindstrom 1986:Figure 12).

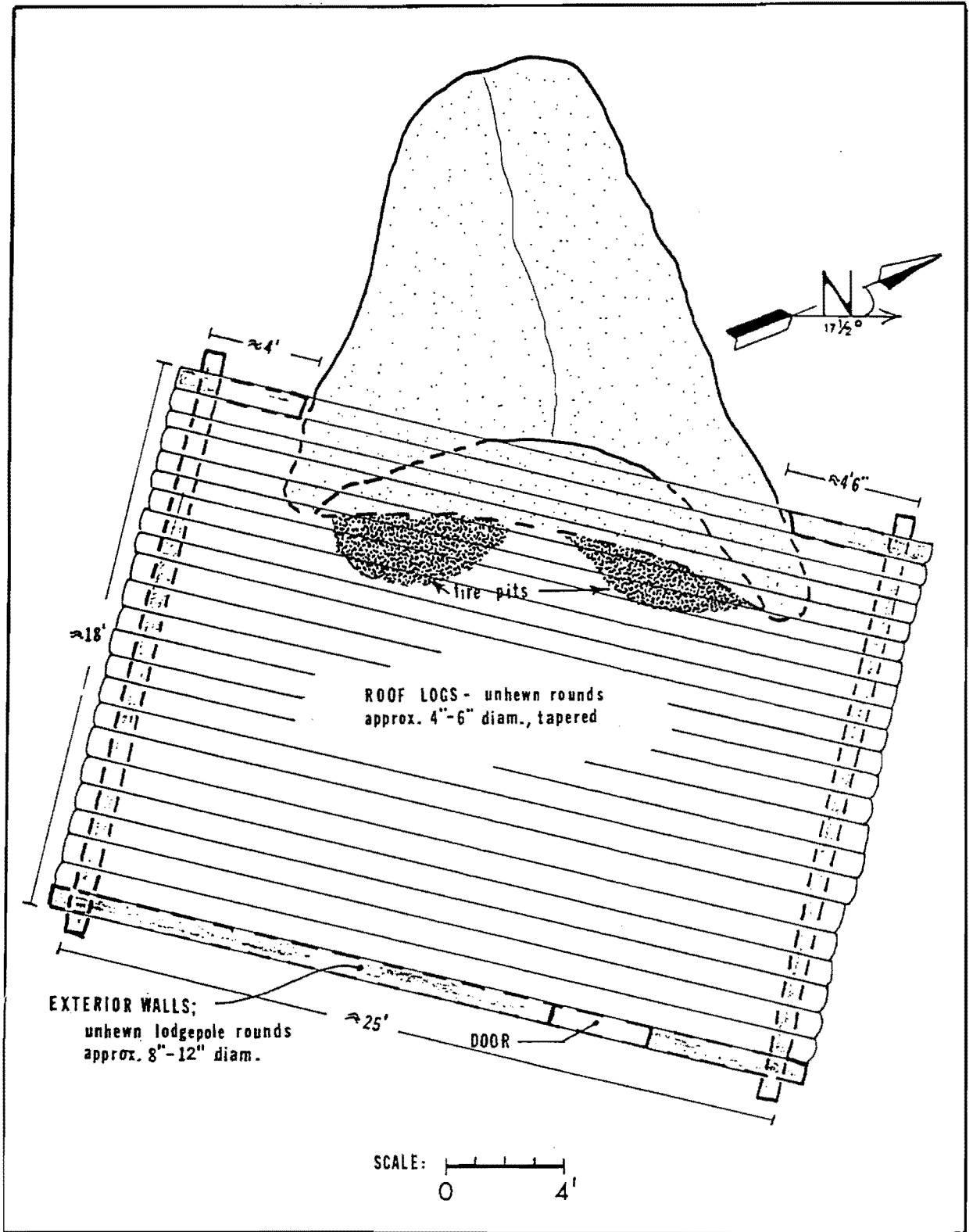


Figure 3. Murphy's Cabin floor plan (after Meacham in Lindstrom 1986:Figure 10).

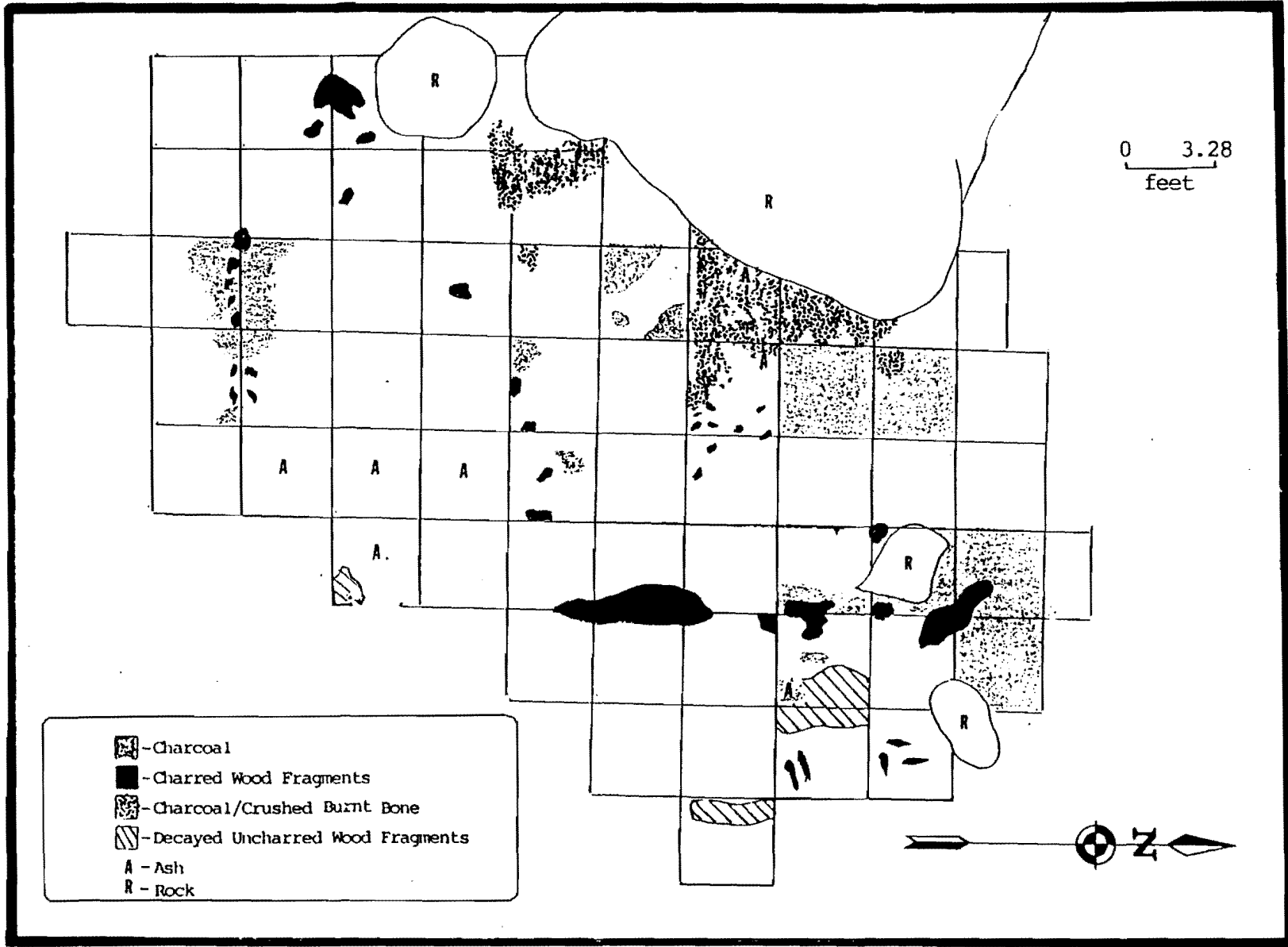


Figure 4. Murphy's Cabin fire features and charcoal distribution (after Lindstrom 1986:Figure 4).

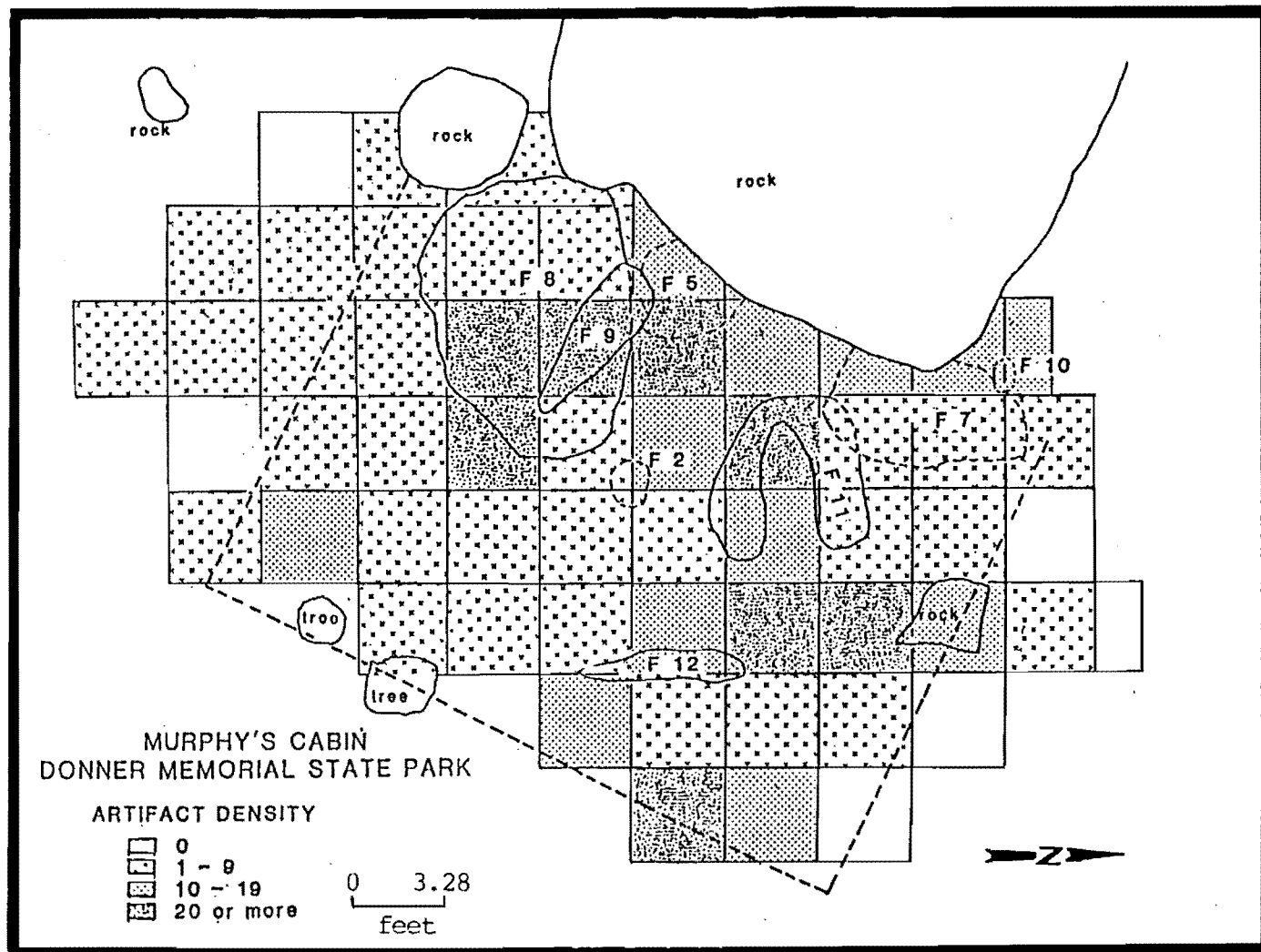


Figure 5. Murphy's Cabin artifact density (after Hardesty 1987:256).

secured by vertical "cribbing", formed by 2 upright logs sunk into the ground. Incorporating the rock's natural curvature allowed the westernmost roof log to lay flush against the rock and to be cradled within 2 prominent notches located about eight feet up on the rock face (Figures 2 and 3). The rock served as both hearth and chimney (Figure 3). These construction details were later "ground-truthed" by the presence of twin post holes, located along the base of either side the rock (Figure 2).

Identified species in the Murphy's Cabin faunal assemblage include cattle, oxen, mule, and a grizzly bear. This confirms written accounts which mention that an 800-pound grizzly bear was killed by William Eddy, one of the Murphy's Cabin occupants. Some of the larger bone fragments are sawn or show impact fractures, suggesting that elements were crushed in order to extract the marrow. Most of the small pieces of bone are charred white, calcined from being burned in the low oxygen atmosphere that occurs deep within a hot ash bed under a fire. Written accounts suggest that the Donner Party soon learned to eat bones directly by boiling or by slightly charring over the fire. Several bone fragments subjected to radioimmunoassay analysis were identified as human. Historians have interpreted the written accounts of cannibalism different ways. Murphy's Cabin is one of the places where it is most suspected to have occurred. Patrick Breen (in Steward 1960:171, 267) notes, for example, in his diary on February 26, 1847, that "...Mrs. Murphy said here yesterday that (she) thought she would commence on Milt and eat him". Three days later the rescue party led by James Reed (in Steward 1960:171) observed in the same cabin "...lying at the door the mutilated body of the faithful Milt. The head and the face were untouched, but elsewhere most of the flesh had been torn away. Bones and half-consumed parts were in the cabin. Tufts of human hair, of different colors, lay about the fireplace." These statements certainly imply cannibalism but, so far, they are minimally supported by the archaeological record.

#### ARCHAEOLOGY OF THE DONNER-REED WAGONS

After the Murphy's Cabin excavation, another glimpse of the Donner Party through the archaeological record was provided in the 1986 excavations, by the Utah State Historical Society, of five abandoned wagon sites near the Great Salt Lake (Hawkins and Madsen 1990:131-132). Four of these wagons belonged to the Donner Party and another to the 1850 John Wood Party. One of the Donner wagon sites does appear to be the place where James Reed's "Pioneer Palace" wagon was abandoned sometime between August 31 and September 2, 1846. Although the wagon apparently was retrieved a few days later, some of the goods from the wagon were left behind. The artifacts from the Utah wagon sites are very similar in many ways to the Murphy's Cabin assemblage; however, differences also are clear. Personal adornment, for example, is not represented in the Utah wagon site assemblages but is common at Murphy's Cabin. Unlike the Murphy's Cabin site, there is no

evidence of flintlock ignition; rather, percussion caps were found.

#### THE DONNER FAMILY CAMP AT ALDER CREEK

In 1990, yet another archaeological study of the Donner Party tragedy was begun at the Donner family camp at Alder Creek by the University of Nevada, Reno, in cooperation with the Tahoe National Forest. This latest study was preceded by the excavation of some test probes by the Forest Service in 1989. Recall that the Donner Party wintered in 2 encampments. Most of the group stayed in the 3 cabins at Donner Lake, one being Murphy's Cabin. The other 21 members of the group, the George Donner and Jacob Donner families and their 4 teamsters, camped in 3 tent shelters several miles north of Truckee along Alder Creek. Historian George Steward (1960:84) described the George Donner shelter:

The George Donners had cleared the snow from a space just under a large pine tree, and had set their tent south of the tree and facing east. In front of the tent and using the tree for the north wall, they had hastily built a crude semi-circular lean-to of pine branches. This they covered with old quilts, rubber coats, buffalo robes, and odds and ends of cloth. In the ground near the base of the tree they scooped out a hollow for a fireplace.

The Jacob Donner shelter was similar, and the 4 teamsters built a sort of "wigwam" across the stream from the other 2.

Key research questions that guided the project at Alder Creek concerned the validation of the presently marked sites at the Alder Creek camp and the clarification of the camp's internal layout. Based upon an oral tradition extending back to 1870, and verified by early Donner Party historian C.F. McGlashan (1927), P.M. Weddell (1945) placed wooden signs designating the George and Jacob Donner campsites during the 1920s. He marked them as being about 100 yards apart. McGlashan's and Weddell's "tightly packed" model is supported by most written accounts, including the diary entries of James Reed and Eliza Donner (Houghton). Further basis for this Donner camp location is found in John Markle's generalized diary account of 1849 and by the existence of 12-foot high stumps, allegedly left from trees cut out of the deep snows by the Donner Party (Weddell 1945:74). A photograph, taken sometime before 1960, shows 2 stumps still standing near the George Donner campsite marked by Weddell. Weddell's identification of the Donner family camps has been challenged, however, by others who would favor a more "widely spaced" model and have either placed the camps beneath present-day Prosser Reservoir, located 1/2 mile to the east, or over 1/4 mile to the south on the other side of Alder Creek. The merits of both the "tightly packed" and "widely spaced" models were tested during the archaeological work.

In order to better understand the archaeological context, geomorphological, soils, and dendrochronological analyses were initiated out of the Desert Research Institute. Tree ring studies, in particular, helped to interpret the chronology of the site and reconstruct past climates, forest patterns, and post-Donner Party vegetation change. Also, as part of the Alder Creek project, paleoclimatic data are being collected from deck logs recorded from the U.S. sloops Portsmouth and Warren, which were anchored off the California coast during that winter. They provide information about weather, temperature, and barometric pressure every 4 hours in the time period from October 1846 to March 1847. While most written accounts either suggest or assume that the winter of 1846-1847 was unusually severe and that the Donner Party tragedy was due, at least in part, to abnormal climatic conditions (Steward 1960:72; Weddell 1945:74), both deck logs (John Cordine, personal communication 1990, in Hardesty 1990) and tree ring evidence (Marty Rose, personal communication 1990) indicate that the winter of 1846-1847 was about average. Perhaps the Donner Party's predicament might partially be attributed to their unfamiliarity and inexperience with the conditions of even normal winters in the Sierra Nevada.

With these research issues in mind, along with a general interest in documenting the material culture of one of the earliest and most celebrated emigrant parties on the California Trail, excavation commenced at the Weddell-marked sites of the Donner brothers' shelters. Given Weddell's seemingly well-reasoned arguments, expectations of confirming the suspected site locations prevailed. Imagine the surprise at finding nothing at either site!

At this point, the field plan was changed. Perhaps, after all, McGlashan and Weddell were wrong about the location of the Alder Creek camp. The strategy shifted from one of confirmation of and intensive data collection from a historically-documented site to an extensive survey of a broad area in an effort to locate the proverbial "needle in a haystack". Faced with examining a large area and assuming that many artifacts would either be metallic or associated with metal and that they would be relatively close to the surface, systematic metal detection was employed in the survey. After a period of fine-tuning for local conditions and after uncovering countless numbers of isolated aluminum pulltabs and .22 cartridges, 2 metallic "hot spots" were located, each one being only a few hundred yards distant from the Weddell-marked locations of the George and Jacob Donner campsites.

Without question, the largest number of artifacts recovered from the Alder Creek site date to the mid-19th century and appear to be associated with an emigrant party. The first impressions of the assemblage are that it is quite similar to those at Murphy's Cabin and the Donner-Reed wagon sites in Utah but much more comparative work needs to be done.

Perhaps the most striking artifacts encountered in the Alder Creek assemblage are 2 coins, one a U.S. liberty head penny dated 1830 and the other a British half-penny dated 1839. Along with some small bottle fragments and tiny pieces of undecorated tableware, are a few rim fragments of what appear to be an early type of blue shell-edge white improved earthenware. Some other white improved earthenware fragments at Alder Creek are decorated with a floral design that appears to nearly match the tableware set that was recovered from the Donner-Reed wagon site. Personal artifacts include clothing fasteners, such as stamped brass and pewter buttons. A unique artifact in this class is a brass American eagle with a shield and holding arrows. As in all the Donner Party sites, the most common artifact class is musket balls. At Alder Creek, sizes ranged from bird shot to .28 to .64 caliber. Bars and chunks of lead sprue that appear to be associated with the manufacture of musket balls were also recovered. Among the most exciting artifacts are 6 small percussion caps, probably from a pistol. Recall that percussion caps were also located at the site of the Donner-Reed wagons and that only gunflints were located at Murphy's Cabin. Wagon parts are comprised of wagon tongue brackets, wrought wagon nails, and wagon bolts. Equestrian artifacts include harness buckles and a snaffle bit, and ox shoes and shoe nails. Construction-related artifacts include wrought and cut nails, cut tacks, nuts and washers, and door hinge fragments. Woodworking activities are represented by wood bits, a masonry bit, an iron wedge, and one flat file. The vast majority of animal bone recovered from the Alder Creek site is burned and calcined and preserved in tiny fragments, as was the case at Murphy's Cabin; for this reason, it could not be identified by species morphologically and awaits biochemical analysis.

These artifacts obviously represent a Donner period emigrant party, but that they actually belonged to the Donners must remain a hypothesis for now. However, the presence of large amounts of bone and artifacts suggest that this emigrant party stayed for a relatively long period of time, in contrast to the usual pattern of short-duration camps lasting no more than a few days at most; for this reason alone, Alder Creek is likely the site of the Donner family camp. One thing now positively known is that the McGlashan-Weddel marked shelter locations of the Donner brothers' camps, which have been regarded as "fact" for over a century, are incorrect. Rather, the results of this study support 2 alternative locales as possible places associated with the Donner family camp. The hot spot in the meadow nearest the refuted Jacob Donner campsite, is difficult to interpret because of extensive mixing by rodents. That it may represent a Donner Party campsite is evidenced by a wide range of period artifacts, bits of charcoal, and abundant charred and calcined bone fragments. To date, however, excavations have not located a hearth, such as the one at Murphy's Cabin, which would give the best evidence for a shelter site. It is plausible that the concentration of bone and charcoal marking the hearth most likely has been dispersed by rodents to the point that its integrity has

been lost completely. The other hot spot, located across the meadow and nearest to the refuted George Donner camp site, contains no bone or charcoal, and domestic artifacts are completely missing. One possible explanation is that this locale was a "storage dump," perhaps for goods off-loaded from the Donner Party wagons, or for dumped goods from another emigrant party.

By way of summary, it can be said that all 3 of the Donner Party studies demonstrate how historical archaeology can provide important mutual checks and balances between different data sets. The Alder Creek study particularly illustrates how history and archaeology can be at odds, necessitating significant revisions in current perceptions of historical events. Much work lies ahead, in order to discern more about the nature of artifact distributions and associations and to more fully inquire into the behavioral aspects of the terrible ordeal that the Donner Party endured.

#### PUBLIC EDUCATION AND INVOLVEMENT

Donner Party research has been a public education bonanza. Months before excavations began at Murphy's Cabin and at Alder Creek, both the California State Parks and the U.S. Forest Service recognized that there would be considerable public interest in the work and that these projects would provide an excellent opportunity to share with the public the excitement and importance of archaeological and historical research. For example, in preparation for the Alder Creek excavation, Tahoe National Forest archaeologists and public affairs personnel issued news releases that went out to all TV, radio, and print media in Northern California. On site, they set up an information table, distributed press packages, erected interpretive signs, and led site tours. They further eased the research effort by providing logistical help and site security. In addition, the Forest Service prepared a documentary videotape of the dig, which will continue to inform the public of the event.

Volunteers from the local community participated in virtually all phases of the archaeological projects. Perhaps the most significant contribution to research efforts was made at Alder Creek by volunteers with metal detectors who worked almost daily at the site under the supervision of the university archaeologists. Their tools and skills complemented time-consuming test excavation strategies to insure that if an 1840s archaeological component did, in deed, exist at Alder Creek, it certainly would be found.

These projects received national media attention. Over 3,000 people visited the Alder Creek site during the excavations and visitors to the Murphy's Cabin excavation also numbered in the thousands. The commitment of all project personnel to

fulfilling the needs of the news media and the public insures enduring support and interest.

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