THE ARCHAEOLOGY OF SITE NV-PE-67

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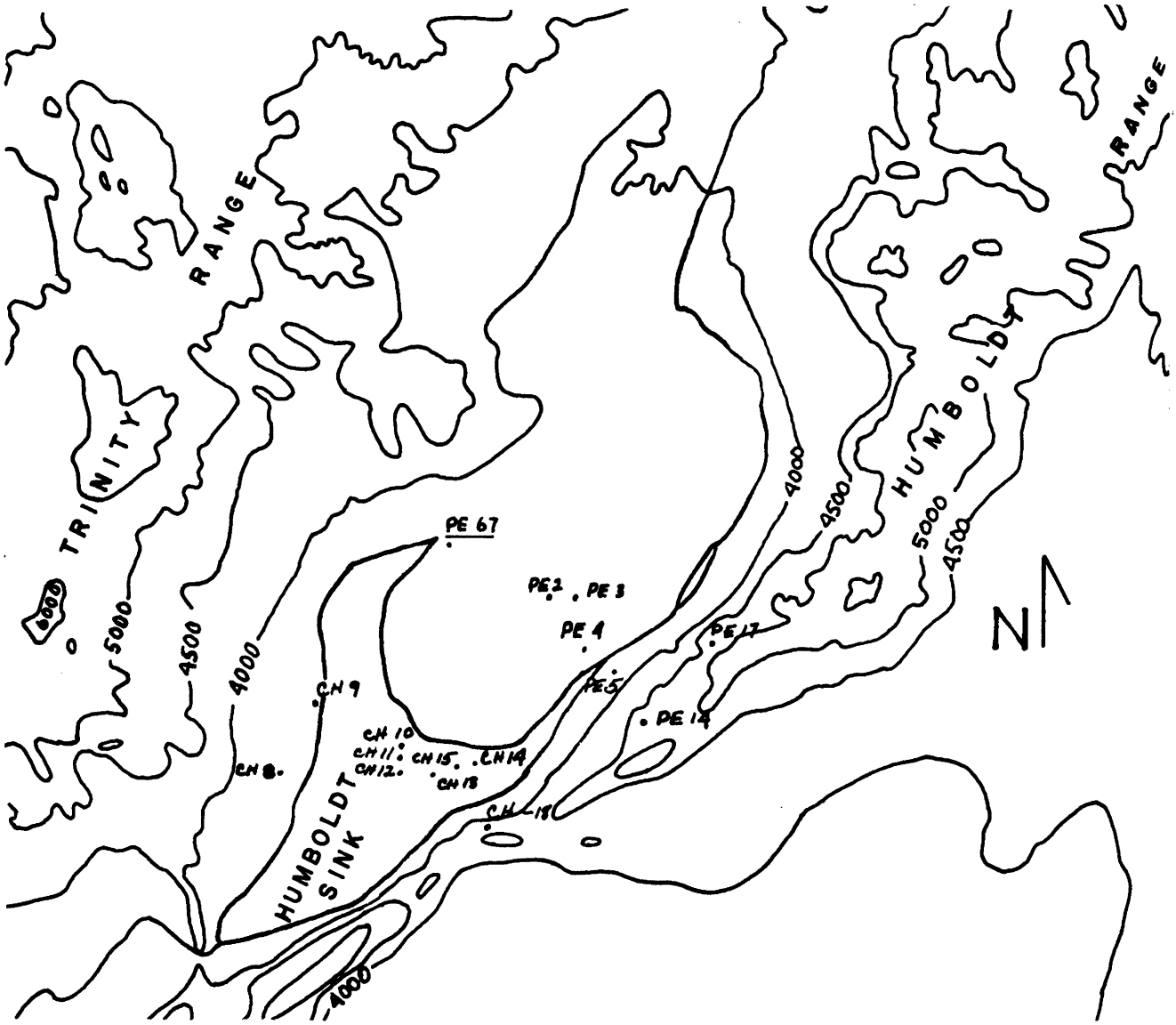
INTRODUCTION

Site NV-Pe-67 is situated at the western end of a low, stabilized sand dune 3800 feet southwest of the beacon base of Derby Airfield, a small airport ten miles southwest of Lovelock, Nevada (see map 1). The site is located in the lower Humboldt Valley at an altitude slightly above 3900 feet and is quite near the edge of the Humboldt Sink. It is possible that the first reference to the site was that by Loud (Loud and Harrington 1929:130), who referred to it as Site 1. We have recorded it as site NV-Pe-67, and have named it the Hesterlee Site in gratitude to Mrs. Ethel Hesterlee of Lovelock, Nevada, without whose kind assistance we could not have succeeded in our work there.

Site NV-Pe-67 was first brought to the attention of a field party from the University of California at Berkeley in the summer of 1965. By that time it had served for over a year as a virtual artifact quarry for local pothunters, one of whom had gone so far in his quest for loot as to gouge out large areas of the site with a tractor-drawn grader. This scraping of the site surface had the effect of exposing a number of circular, midden-filled pits of various sizes, as well as several areas where midden appeared to blanket the stable sand dunes in irregular patches. It was to these areas of midden concentration, both in the exposed pits and on the irregular surface patches, that the field party devoted its attention for several days in the summer of 1965. Two test trenches were dug, but the patches of surface midden proved to be but a few centimeters deep, with no artifact yield to provide meaningful associations. The area of the site was crisscrossed by rodent burrows, and we feel it to be this, plus the fact that there has probably been considerable shifting of sand in some areas of the site, which accounts for the random occurrence of a few artifacts within the 24 inch depths of the test trenches.

Ten house pits were excavated in 1965, primarily by cross-sectioning and removal, layer by layer, of the pit fill. Soil samples were taken and surface artifacts collected. (See section on House Pits for details of excavation procedure.)

In the summer of 1966, on the recommendation of Dr. Robert F. Heizer, the present authors revisited the site and excavated seven additional house pits which had only recently been exposed by wind action. A few more surface artifacts were also collected.



Map 1. Lovelock Valley sites

In the following report, all the artifacts collected and house pits excavated during the two short periods of work are described. The houses are designated E-1 through E-17. E-1 through E-11 were excavated in 1965, while E-12 through E-17 were exposed in 1966. The trenches, for convenience, are referred to as T-1 and T-2 (see map 2). Catalogue numbers are those of the Lowie Museum of Anthropology (LMA).

AREAL RELATIONSHIPS

By referring to Map 1, it will be noted that site NV-Pe-67 forms part of an arc of sites which lies to the north of another site cluster found at elevations below the high water limits of Humboldt Lake. Within this cluster is site NV-Ch-15, the primary occupation unit of the prehistoric inhabitants of the lower Humboldt Valley. We here postulate that this arc of sites peripheral to NV-Ch-15, as well as Lovelock Cave (NV-Ch-18), was utilized at least in part in times of flooding, when the larger site was not available.

Russell (1885:108) notes that the high water elevation of Humboldt Lake is 3929 feet. This figure is slightly amended by the 1951 U.S. Geological Survey 15 minute map for the Carson Sink area, which places the southerly run-off point of the sink at slightly below 3920 feet. Site NV-Pe-67, located at an elevation slightly higher than 3900 feet, is situated several feet higher than the base of the beacon at Derby Airfield which bears a Geological Survey Benchmark of 3903 feet. The inner cluster of sites, including NV-Ch-15, is at an elevation of approximately 3890 feet. There are no known sites between the two areas discussed above.

The "bulk of the precipitation [which feeds the Humboldt River] falls during the months December - March" (Antevs 1938:42). Furthermore, there are complex fluctuations in the yearly rainfall patterns in the mountains from which the Upper Humboldt River derives its sources (ibid. 41-47). This monthly and seasonal variation in available water is reciprocated by the Humboldt Sink. Not only is the Sink of greater extent in the winter and spring, but also its content varies on a yearly basis. For example, according to Antevs, the Sink has overflowed at least in 1859, 1882, 1887, and 1910, but in other years has been virtually dry. We thus hypothesize that the arc of peripheral sites is situated so as to be available during the high water times which usually occurred in winter and spring, but was far enough removed from the summer village as to be fairly safe from innundation in all but exceptionally wet years. This dual hypothesis would partially explain the absence of sites between the two site clusters. We do not mean to imply that site NV-Pe-67 was utilized every year, but rather in times of seasonal or yearly necessity.

This pattern of site utilization for NV-Pe-67 during periods of high water is analogous to that of site NV-Pe-5 (Elsasser 1958). Elsasser notes that this site is located just above the high water mark of Humboldt Sink. The differences in assemblages between the two sites indicates that not only was there a differential usage of the sites through time, but also that they may have had different economic functions (see Discussion, p. 211).

ARTIFACTS RECOVERED

Bone Artifacts

A relatively small assemblage of bone artifacts including awls, beads, tubes, possible flaking implements, and a fishhook barb were recovered from site NV-Pe-67.

Two bone awls, both of the "straight" type, made from polished sections of mammalian limb bones were found. Both specimens are characterized by a tip tapered to a point in only the first one or two centimeters. At this point, the profiles of the specimens expand markedly, and, as might be expected, show less wear. This could be the result of the pieces having been at one time snapped off, then resharpened for further use. One piece (2-39484) is 10.8 cm. long and 1.3 cm. wide at the base. This specimen (fig. 1a) was found in the fill of house pit E-2, and weighs 6.1 grams. Specimen 2-39521 (fig. 1b) was found at a depth of 4 inches in house pit E-5. It weighs 10.7 grams, is 14.5 cm. long, and 1.5 cm. wide at the base. The piece bears 13 shallow notches along one side, beginning at the base and ending 6.3 cm. from it.

A bone bead (2-39472), 1.2 cm. long, 0.6 cm. in diameter, and weighing 0.5 grams, was found on the surface of the site. The piece (fig. 1c) was probably made from a bone of a small mammal, by incising or cutting most of the way through and then snapping it off. Three incisions are visible at one end of the piece extending one-half way around the circumference. These may have been decorative markings.

Seven bone tubes, or possible fragments thereof, were recovered from site NV-Pe-67. All were manufactured by being cut around the circumference to some depth.

Specimen 2-39550 is charred and in four fragments. It is 2.2 cm. long and 1.0 cm. in diameter, and is encircled by 8 grooves. It was found on the surface.

Specimen 2-39471 (fig. 1d), found on the surface, is a fragmentary

tube made of polished bird bone. One end is neatly cut and polished, the other broken. It is 8.15 cm. long, 0.8 cm. in diameter, and weighs 3.4 grams.

Specimen 2-40674 (fig. 1e) was found in the fill of house pit E-17. It is probably made of bird bone and shows some polishing, but no other decoration. It measures 9.8 by 0.8 cm., and weighs 4.5 grams.

Specimen 2-39544 (fig. 1f) was found in the fill of house pit E-6. It shows some weathering, measures 5.3 by 0.7 cm. and weighs 2.4 grams. The piece is made from a small mammal bone and is undecorated.

Specimen 2-39535 (fig. 1g) is a fragmentary tube made of a small mammal bone. It is well polished, undecorated, and measures 6.2 by 0.6 cm. It weighs 1.4 grams, and was recovered from the fill of house pit E-3.

One possible bone tube fragment (2-39544) is made of small mammal bone and exhibits one end which has been completely incised through (fig. 1h). The piece was found on the surface and is 4.8 cm. in length.

A polished bone tube (2-39541), larger than the others and possibly a hair ornament, was excavated from the fill of house pit E-6. The piece (fig. 1i) appears to have been made from a section cut from the shaft of a large or medium sized mammalian limb bone. It bears a triangular area of incised decoration, 3.1 cm. long and 1.3 cm. wide at the base, bounded by two converging lines and filled with 19 smaller horizontal incisions. The piece is 8.7 cm. long, 1.6 cm. in diameter, and weighs 16.4 grams.

Two possible flaking implements (fig. 1j,l) are represented in the bone assemblage. One (2-39512) is related in form to the awls, and is a polished splinter of cannon bone with part of one articular end present. The other end is smoothed and rounded, forming an arc 1.4 cm. wide at its base. The piece was recovered from the fill of house pit E-3, measures 6.0 cm. in length, is 2.0 cm. wide at the butt, and weighs 5.8 grams.

The second possible flaking implement (2-40675) is a worn antler (probably antelope) which was cut off at the natural base and subjected to considerable usage. It is 10.6 cm. long, 3.6 by 2.6 cm. wide at the base, and weighs 31.6 grams. The piece was recovered from the fill of house pit E-17.

A bone fishhook barb was recovered from the 18-24 inch level of house pit E-4. The specimen (2-39510) is 3.7 cm. long, 0.5 cm. wide at the broadest point, and weighs 0.3 grams (fig. 1k). The base appears roughened, perhaps to facilitate hafting to a wooden shank.

The final bone artifact (2-39481) is a fragment of an articular end of mammalian limb bone, with a small portion of the shaft attached. It is 3.2 cm. in over-all length, and the shaft is 1.5 cm. in diameter. The rest of the bone was separated by cutting almost completely through the shaft, then snapping it off. The weathered piece was found on the surface, and is probably industrial waste.

Shell Artifacts

Seven shell artifacts were recovered from site NV-Pe-67. Six of these are beads, and the seventh is a shell pendant. Bennyhoff and Heizer (1958) have published a detailed study of the occurrence of the California shell bead in the Great Basin, and it is on the basis of their study that the beads from this site have been classified and assigned to a chronological position in the California culture sequence. Since all of the bead types from NV-Pe-67 are discussed in the above cited article (ibid.), we have merely listed their occurrence in Table 1 and have refrained from what would be repetitive description. For a detailed description of the types we refer the reader to the earlier article.

TABLE 1

Shell Beads from Site NV-Pe-67

LMA No.	Provenience	Type
2-39538	T-1, 6-12 in.	1a Olivella
2-39552*	Surface	3c Olivella
2-39552*	Surface	2a2 Olivella
2-40680	E-12, 3 in.	3a2 Olivella
2-40681	E-13, 7 in.	1b Olivella
2-40682	Surface	Grooved rectangle Olivella

* Two separate specimens have been catalogued under the same number

The type 3c Olivella bead listed is assignable to the California Middle Horizon (Bennyhoff and Heizer 1958:65). The type 2a2 Olivella specimen is dated to Phase I of the Late Horizon (ibid., 67). The type 3a2 bead, a split,

punched specimen, is also datable to the Late Horizon in California (ibid. 66-67). The spire-lopped Olivella type 1b specimen is temporally non-diagnostic since it is common in all California periods (ibid. 63). The remaining shell artifact types from site NV-Pe-67 are not chronologically distinctive. However, the grooved rectangular bead may be part of a local shell bead complex which may date from fairly recent times (ibid. 69). Since only one of the distinctly datable types (3a2) was found in the fill of a house pit, it would be unwise to suggest a positive date on this basis for NV-Pe-67.

The shell pendant (2-39539) from NV-Pe-67 is of Haliotis, trapezoidal in outline, with a perforation at one end. It measures 2.2 cm. along one long edge and 1.8 cm. along the other. The perforated end is 0.5 cm. wide and has a notch in the center, while the unperforated end is cut transversely and is 0.6 cm. wide. The perforation appears to be drilled and is 0.125 cm. in diameter. This shape is not recorded by Bennyhoff and Heizer, but matches Gifford's (1947:25, 85) type Q1aIII.

Net Gauges

Two incomplete net gauges were recovered from the surface of site NV-Pe-67. Both specimens are of thin gray slate, subrectangular in shape, and show grinding around all edges present. Site NV-Ch-15 has produced numbers of such pieces. Dimensions are given below, and one of the specimens is illustrated in Figure 1m.

TABLE 2

Net Gauges from Site NV-Pe-67

LMA No.	Length (cm.)	Width (cm.)	Thickness (cm.)	Weight (gr.)
2-39518	7.5	4.2	0.5	22.2
2-39519	4.8	4.8	0.2	13.3

Grinding Implements

Mortars:- Three recognizable mortar specimens were recovered at the site. Two are fragmentary and one is relatively complete. The complete specimen (2-39545) is of granite and exhibits a V-shaped grinding cavity which is 15 cm. wide and 11 cm. in depth. It was found on floor B in house pit E-6. The mortar is made on a natural boulder 31 cm. in diameter, and the worked face

is roughly 30 cm. across. The piece weighs 32.93 km. Two fragmentary specimens show no diagnostic features due to their incomplete condition. One specimen (2-39483) is of rhyolite and was found in the fill of house pit E-2. It is a small fragment, weighing 0.4 km., but it would appear that the complete specimen may also have been relatively small. The second fragment (2-39528) is of granite, and was recovered in the fill of house pit E-3. It weighs 14.36 km. and was probably made on a large boulder, like the complete specimen. Although less than half the piece is present, in general outline it appears similar to 2-39545.

Mano:- One mano fragment of granite, weighing 261 grams and having dimensions of 9.7 x 8.2 x 3.0 cm., was found in the fill of house pit E-12. It was apparently utilized on both grinding surfaces. It is not possible to determine its exact original shape.

Miscellaneous:- Three small fragments of what may once have been ground stone implements were found in badly decomposed condition. One piece, of basalt (2-39538), is from the 6-12 inch level of Trench 1. Another small basalt piece (2-39533) was found in the fill of house pit E-4. A third specimen (2-39532) of granite is also from the fill of house pit E-4.

A rubbing stone fragment (2-39517) which may be a mano of red scoria was found in the fill of house pit E-3. It was probably subrectangular in shape, but is too decomposed for exact analysis.

The Brinkerhoff collection in Lovelock, Nevada, contains three pieces from site NV-Pe-67 which are unlike the ground stone implements discussed above. One is an "ice-pick" of the type commonly found in the lower Humboldt Valley. The piece is of granite, and is 45.8 cm. long and 10.1 cm. wide (maximum). A 3.8 cm. groove extends 14.6 cm. down the piece from one end. About 9 cm. from the same end a ridge 1.2 cm. wide and 0.6 cm. high extends around the circumference of the piece, broken only where it is intersected by the groove. In addition to the ice-pick, two "charmstones," one of basalt (7.7 cm. long) and one of lava (8.8 cm. long) are in the Brinkerhoff collection.

Carved Stone Art

In the Brinkerhoff collection are four examples of carved stone art which were collected from the surface of site NV-Pe-67. These four specimens were observed and recorded by the authors.

Three of the specimens are possible effigy representations of horned toads or frogs. Two are made of red scoria. The first (fig. 4a,b) is a roughly oval piece with a deeply incised groove around the end representing the neck.

Eyes are represented by two bilaterally placed slits in front of the neck groove. In profile, the head of the creature is seen to face upward at an angle of about 60 degrees. The neck groove which divides the head from the body extends around the entire circumference of the specimen.

The second piece (fig. 4e,f), also of red scoria, is a three dimensional representation of a frog or toad. It is possible that the animal is portrayed in a resting position. In profile, the figure has a slightly humped back, with a deep groove representing the division between body and head. The piece is 10.4 cm. high, 20.0 cm. long, 12.1 cm. wide at the rump, and 7.0 cm. wide at the ears. From the top the groove which forms the neck appears to be intersected at the center at right angles by a broad, shallow groove that extends down the back and terminates in a protuberance which may represent a tail. In full-face view, the mouth is represented by a deep groove forming two full lips and the eyes are broad pits under eye ridges which are smooth, rounded protuberances.

The third possible horned toad representation (fig. 4c,d) is a small, flattish, oval piece with one end of the oval sharper than the other. The specimen is made of soft white tuff. Two grooves have been cut into the upper surface and extend approximately two-thirds the length of the back. The center exterior surface has been removed, leaving a platform to form the head.

A fourth specimen of carved stone art (fig. 4g) is a pestle of rhyolite with a possible representation of a face at one end. What animal is intended is conjectural—one can see an owl or a human face. The carved end is oval, with bilateral pits for eyes and a raised area representing a beak or nose. The specimen is broken and measures about 33.4 cm. in length and is 13.9 cm. wide at the broken base.

Site NV-Ch-15 has yielded a great deal of carved stone art. Among the specimens are a number of carved mammalian and reptilian forms. The four specimens described above fit well into the corpus of carved stone art known from the lower Humboldt Valley.

Hammerstones

Nine hammerstones, eight of basalt and one of rhyolite (2-39493), were collected. The pieces are polyhedral cobbles which exhibit battering or wear on the edges. None show special preparative techniques as choppers, nor do they appear to be cores left after the special removal of flakes for particular artifact preparation. Although all the pieces show that flakes were knocked from them, it is apparent that no intent was shown in the procedure and that the flakes were dislodged in a random fashion as the piece

was used as a hammerstone. Two of the pieces are illustrated in Figure 2a and 2b.

TABLE 3

Hammerstones Collected at Site NV-Pe-67

LMA No.	Length (cm.)	Width (cm.)	Thickness (cm.)	Weight (gr.)	Provenience
2-39486	8.7	8.0	8.5	344.0	Surface
2-39487	10.1	8.1	5.2	687.1	Surface
2-39488	8.8	7.4	6.0	420.2	Surface
2-39489	8.2	7.0	3.3	280.3	Surface
2-39493	5.0	2.9	1.2	25.3	Surface
2-39494	5.1	5.0	1.5	78.4	Surface
2-39531	13.1	8.8	2.5	376.2	E-4 fill
2-39537	4.0	5.2	1.5	29.1	T-1, 0-6 in.
2-39547	9.1	2.7	2.7	84.0	E-7 fill

Crude Slate Knives

Six crude knives of thin slate were recovered; three were found on the surface and three were excavated. The weights, dimensions, and proveniences of these specimens are shown in Table 4. All of the pieces are made of thin natural slabs of tabular slate. Five have two edges roughly chipped into a cutting surface, while one (2-39490) has only a single cutting edge. The pieces are crudely manufactured and are similar to specimens from Humboldt Cave (Heizer and Krieger 1956:30-31), Lovelock Cave (Grosscup 1960:17), and the nearby surface site of NV-Ch-15. The rough appearance of these objects, their associations with lake margin sites, and some experimentation with their utility in cutting tule reeds has led to speculation that they were used by the natives for such a purpose. Tule reeds were used for many purposes by inhabitants of the area, and the use of the crude, easily manufactured and disposable knives for cutting the stalks is highly probable. Two of the specimens are illustrated in Figures 2c and 3a.

TABLE 4

Tule Knives from Site NV-Pe-67

LMA No.	Length (cm.)	Width (cm.)	Thickness (cm.)	Weight (gr.)	Provenience
2-39479	7.0	6.1	1.3	71.8	Surface
2-39480	22.1	6.5	1.5	280.2	Surface
2-39490	14.1	7.2	1.0	168.0	Surface
2-39539a	14.3	7.9	1.1	196.4	T-1, 12-18 in.
2-39542	18.2	4.4	1.8	140.4	E-3 fill
Field Cat. No. 1228	19.9	frag.	1.6	248.2	E-17 fill

Chippage

A small amount of chippage was recovered from the fill of four of the house pits at NV-Pe-67. Their weights were as follows:

E-12	2.9 gr. obsidian
	0.6 gr. chert
E-13	9.8 gr. obsidian
	29.5 gr. chert
E-15	1.1 gr. obsidian
	26.8 gr. chert
E-17	18.7 gr. chert

In addition to the above, 457.4 grams of non-obsidian (flint) debitage, primarily basalt, rhyolite, and chert, were collected from the surface of the site, weighed, and discarded.

Drills

Two obsidian pieces (fig. 3b,c) which show possible utilization as punches or drills were recovered. One piece (2-39558) was apparently snapped off a larger implement as three sides show fracture breaks. The point exhibits secondary retouch, and is relatively sharp. It is about 0.7 cm. in length, and protrudes from a small body which is 1.4 x 0.8 x 0.3 cm. in dimensions.

The piece weighs 1.4 grams and was found in house pit E-8 at a depth of 11 inches.

The second drill (2-39516), found on the surface, has a much duller point and is apparently a complete piece. The point is 1.1 cm. long and is attached to a body measuring 3.2 x 1.1 x 0.3 cm. This piece weighs 4.3 grams.

Scrapers

A total of five deliberately fashioned scrapers were collected on the surface of site NV-Pe-67. Of these, one (2-40619) appears to show bifacial utilization along one edge. It is a fragmentary specimen made of green chert, measuring 4.2 x 3.8 x 1.1 cm., and weighing 22.3 grams. Despite its being fragmentary, its relatively large size as well as its shape suggest that it may have been a core which later saw utilization as a scraper.

The four remaining scrapers are worked unifacially. One of these is a subtriangular piece of yellow chert worked around two of the edges, the third edge being broken off. The specimen appears to have been used in random fashion. It weighs 6.1 grams and its dimensions are 3.3 x 2.4 x 0.8 cm.

Specimen 2-40601 (fig. 3d) is a pinkish-chert side scraper showing unifacial working along one edge of a prismatic blade. The piece is 6.5 x 2.3 x 0.7 cm. in dimensions and weighs 9.3 grams.

Another side scraper (2-40602), made of yellow and white chert, is fashioned on a single, nearly complete, hinge-fractured flake (fig. 3e). It shows unifacial working along two of the edges. The dimensions of the piece are 5.8 x 3.7 x 0.8 cm., and the weight is 19.8 grams.

The final scraper specimen (2-40618) is fashioned on a peculiar fragment of gray obsidian which may have originally been intended for use as a different artifact type. The piece (fig. 3f) shows unifacial working on small sections of two edges. It is 4.0 x 1.6 x 0.9 cm. in dimensions, and weighs 4.4 grams.

In addition to the above scrapers, a total of 37 flakes showing some edge damage were collected from the surface of NV-Pe-67. Of these flakes, 19 were made of obsidian. Their average length is 2.8 cm., the average width 1.8 cm., the average thickness 0.6 cm., and the average weight 4.2 grams.

The remaining 18 flakes are made of chalcedony. These pieces average 3.6 x 2.4 x 0.7 cm. in size, and 8.3 grams in weight.

None of the 37 flakes could be determined to be a definitely fashioned scraper. All are rather nondescript in appearance, and the flaking is such as to make distinctions between random usage or natural edge damage impossible.

Knives

A number of bifacially flaked stone artifacts, roughly resembling projectile points in shape but being noticeably heavier and thicker, were collected at NV-Pe-67. These pieces are generally referred to as knives. Of the eight specimens described in Table 5, only three have complete basal portions. All three (2-40603, 2-40615, 2-40616) exhibit broad, flattish bases, and are roughly equivalent to what Lanning (1963:255) has termed Type 2. At the Rose Spring site Type 2 knives showed no temporal significance (ibid.). It is assumed that they offer no clue as to the temporal placement of site NV-Pe-67. Five of the more complete specimens are illustrated in Figure 3g-k.

TABLE 5

Knives Recovered at Site NV-Pe-67

LMA No.	Length (cm.)	Width (cm.)	Thickness (cm.)	Weight (gr.)	Material	Provenience
2-39474	4.9	2.8	0.8	11.5	Basalt	Surface
2-39499	4.6	3.6	0.7	9.5	Chert	Surface
2-39539	*	*	*	*	Chert	T-1, 12-18 in.
2-40599	*	*	*	*	Chert	E-17 surface
2-40600	*	*	*	*	Chert	E-17, 0-6 in.
2-40603	*	4.0	0.9	13.7	Chert	Surface
2-40615	4.9	2.7	0.8	9.6	Chert	Surface
2-40616	5.3	4.2	0.8	19.1	Chert	Surface

* Too fragmentary for significant measurement

Baked Clay

Specimen 2-39555 is a clump of gray-brown baked clay with reed impressions on one surface. The piece is apparently of random manufacture, giving no impression of having been deliberately fashioned. It was found on the surface and is 5.3 x 4.4 x 1.5 cm. in size, and weighs 4.2 grams.

Historical Material

In addition to the stone, bone, and shell artifacts recovered from site NV-Pe-67, a few metal objects of historical origin were collected. Included among these are two badly corroded brass buttons; seven small, round, lead rifle (or pistol?) balls; and a broken segment, badly rusted, of a steel ring.

The ring (2-39548) is about 5 cm. long, and is shaped like a quarter of an arc. It was no doubt once a complete circular piece, probably part of a harness rig.

The seven lead balls are about 1.4 cm. in diameter and weigh roughly 1.1 grams each. They may have been some type of projectile, possibly musket balls.

The two brass buttons (2-39551) are so corroded as to be almost nondescript. They consist of little more than an indistinct, rusted clump of metal.

We have not attempted to relate these pieces of metal to the aboriginal occupants of the site because they were found on a plowed portion of the surface and cannot in any way be associated with other material from the surface. These artifacts may be evidence of use of the site as a camping area by immigrants heading west in the late 1840's and early 1850's.

Projectile Points

A total of 32 projectile points and portions of projectile points were recovered from site NV-Pe-67. Six of these are too fragmentary to classify. The remaining 26 pieces have been segregated into 6 projectile point types. In terms of dating NV-Pe-67, these point types are the most useful kind of artifact, since the types represented have been identified in several other sites and their positions in the general Great Basin sequence have been established. Dimensions and proveniences are given in Table 6.

Cottonwood Triangular:- Five of the projectile points (pl. 1a-e) fall into this category of small, light, roughly triangular points. Four of the specimens are made of obsidian while one is of white chert. This type of point is generally considered as an indicator of late times in the Great Basin prehistoric sequence (Heizer and Baumhoff 1961:130; Clewlow 1967:145), and probably has a temporal equivalence to Desert Side-notched points (see Baumhoff and Byrne 1959).

Desert Side-notched:- These points have been established as time markers in California and parts of the Great Basin, and are generally believed to

fall between 1300 A.D. and historic times (Baumhoff and Byrne 1959). Seven of the points recovered (pl. 1f-l) from NV-Pe-67 are of this category. Three are made of chert and four of obsidian. All are small and relatively well made.

Rose Spring Corner-notched:- For a detailed description of this type see Heizer and Baumhoff (1961:123). Ten of these small, stemmed, corner-notched points (pl. 1m-v) were recovered at the site. Three are made of chert and seven are of obsidian. They are slightly larger and heavier than the Cottonwood Triangular and Desert Side-notched points, and can be roughly dated to cover the period from 600 to 1300 A.D. (Clewlow 1967:144-145).

Humboldt Concave Base B:- These points, two of which (pl. 1w,x) were found at site NV-Pe-67, are normally a relatively long, narrow type, thick and biconvex in cross section (see Ragir and Lancaster 1966:7), with a thinned base which is usually concave. They are similar in shape to Humboldt Concave Base A points, but are considerably smaller and lighter in weight. This size difference is extremely important since it probably carries both functional and temporal significance. It is probable that Humboldt Concave Base B points are of about the same age as Rose Spring Corner-notched points and should not be confused with the larger points, which are considerably older (Clewlow 1967:144). Some of the smaller Humboldt Concave Base B points from the Humboldt Lakebed (site NV-Ch-15) are almost indistinguishable from Cottonwood Triangular points and may have formal connections to them. The two NV-Pe-67 specimens are poor examples of the type, as one is crudely worked (2-40596) and the other is fragmentary and difficult to type.

Elko Eared:- The one specimen of this type (pl. 1y) has been so classified almost entirely due to its basal form which, indeed, presents a typical "eared" appearance. It should be pointed out, however, that the piece is considerably smaller and lighter than the type range (O'Connell 1967:131), and weighs even less than the Karlo site specimens (Riddell 1960:16-17) which are considered extremely light examples of the type (O'Connell 1967:131). For this reason, and since only one specimen was recovered from NV-Pe-67, we will not attempt to draw the temporal conclusions generally associated with the type.

Elko Corner-notched:- One specimen (pl. 1z), although broken, seems to fit into this category (Heizer and Baumhoff 1961:128; O'Connell 1967). It is of obsidian, large and triangular, and has wedge-shaped corner notches.

Six portions of points are too fragmentary to be classified. It is worth noting, however, that two are of basalt- one from the fill of house pit E-3 and the other from T-1 at a depth of 12-18 inches. Three of the fragments are of obsidian, one from house pit E-8 at a depth of 8 inches and a second

TABLE 6

Projectile Points Recovered at Site NV-Pe-67

LMA No.	Type	Length (cm.)	Width (cm.)	Thick. (cm.)	Weight (gr.)	Provenience	Material
2-39502	CT	2.9	1.1	0.4	0.9	E-4, 3 in.	Obsidian
2-40614	CT	3.1	1.1	0.5	1.3	E-14, 10 in.	Chert
2-40613	CT	2.2	1.5	0.4	1.2	Surface	Obsidian
2-39475	CT	1.7	1.6	0.4	0.9	Surface	Obsidian
2-40595	CT	1.9	1.1	0.3	0.5	Surface	Obsidian
2-39557	DSN	2.2	1.5	0.2	1.2	E-8, 4 in.	Obsidian
2-40593	DSN	3.8	1.3	0.5	1.7	E-16, 5 in.	Obsidian
2-40597	DSN	3.0	1.6	0.2	0.8	E-14, 21 in.	Chert
2-40594	DSN	2.4	1.1	0.4	0.7	Surface	Chert
2-40612	DSN	3.1	1.4	0.3	1.2	Surface	Chert
2-39476	DSN	2.4	1.6	0.3	0.8	Surface	Obsidian
2-39507	DSN	2.1	1.5	0.4	0.7	E-4, 5 in.	Obsidian
2-39540	RSCN	2.6	1.6	0.2	1.0	T-1, 18-24 in.	Chert
2-40610	RSCN	3.8	1.7	0.4	1.9	Surface	Chert
2-39539	RSCN	2.3	1.1	0.3	1.1	T-1, 12-18 in.	Obsidian
2-39530	RSCN	3.7	1.5	0.7	2.5	E-4, 3 in.	Obsidian
2-39515	RSCN	2.6	1.8	0.3	1.0	Surface	Obsidian
2-39554	RSCN	3.5	1.2	0.4	1.3	E-8, 18 in.	Obsidian
2-39473	RSCN	3.5	1.6	0.4	1.5	Surface	Chert
2-39553	RSCN	3.2	1.8	0.5	2.2	Surface	Obsidian
2-39538	RSCN	2.4	1.6	0.3	1.0	T-1, 6-12 in.	Obsidian
2-40611	RSCN	2.6	1.4	0.4	1.2	Surface	Obsidian
2-40596	HCBB	3.4	1.7	0.4	2.2	Surface	Chert
2-39525	HCBB	frag.	-	-	-	E-5, fill	Chert
2-39506	EE	4.4	1.0	0.5	1.6	E-4, 5 in.	Chert
2-39477	ECN	2.8	3.2	0.5	3.3	Surface	Obsidian

CT = Cottonwood Triangular DSN = Desert Side-notched EE = Elko Eared
RSCN = Rose Spring Corner-notched HCBB = Humboldt Concave Base B
ECN = Elko Corner-notched

from T-1 at a depth of 0-6 inches; the third fragment was from the surface of the site. One chert fragment also was found on the surface.

Discussion of Projectile Points

Since several of the projectile point types which occur at site NV-PE-67 are considered as time markers, the projectile point assemblage becomes the most important category of chipped stone at the site. From the types represented, it may be safely guessed that occupation did not begin until at least 600 A.D. and that the site was used at least occasionally until protohistoric times. Moreover, the small amount of historical material recovered indicates that, if not an aboriginal living area, the spot where site NV-Pe-67 lies was, at any rate, an enticing camp area for immigrants traveling west during the historic period.

There are two other well known open sites in the lower Humboldt Valley, and it is instructive to compare the point types represented, as well as other artifact types, at all three. The Humboldt Lakebed site (NV-Ch-15) is a very large site from which a collection of over 1800 projectile points has been made; these are now in the Lowie Museum of Anthropology. Over 20 named types have been distinguished in this collection, and, from the time markers present, it is safe to say that the site was occupied as early as 2000 B.C. Time markers include Pinto, Humboldt, Elko, Rose Spring, and Desert Side-notched points (Heizer and Clewlow 1968).

At site NV-Pe-5, on the other hand, a more limited range of point types is present (Elsasser 1958). The NV-Pe-5 collection was typed according to the currently used point categories, and of 82 classifiable points, 28 were Elko Eared/Elko Corner-notched, 8 were large Humboldt Concave Base A, and only 7 fitted the Rose Spring Corner-notched category. No Cottonwood Triangular or Desert Side-notched points are known from this site (ibid. 40-41).

This fact permits the suggestion that NV-Pe-67 came into use, or at least was more heavily used, after site NV-Pe-5 was abandoned; that is, we have evidence of what has sometimes been referred to as "horizontal stratigraphy." It may be that the difference in periods of occupation at these two sites correlates to the transition from the atlatl to the bow and arrow (Clewlow 1967:146). The presence of a number of large "ice-picks" at NV-Pe-5 (Elsasser 1958:43-44,46) and their almost total absence at NV-Pe-67 (see p. 202 this volume) is interesting in connection with, and may support, the suggestion that NV-Pe-5 was a fishing village, possibly one of winter occupation (ibid. 46-47). The large amount of chippage at NV-Pe-5, and the inference that the site was a workshop area, is in sharp contrast to NV-Pe-67 where very little debitage was found in house fills or on the surface.

The Humboldt Lakebed site (NV-Ch-15) was, in contrast to both NV-Pe-5 and NV-Pe-67, apparently a large and important center which was occupied over a long period of time (Heizer and Clewlow 1968). Certain parallels between the two sites are discussed below in connection with house pits. With regard to artifacts, it may be said that site NV-Ch-15 duplicates and surpasses everything in the NV-Pe-67 inventory. Especially interesting is the fact that carved stone art from both sites share a number of similarities. These stone pieces, and the recent authentication of a carved wooden grasshopper from Lovelock Cave (Jones, Weaver and Stross 1967), are indicative of the possibility that the aboriginal population of the Humboldt Sink paid considerable attention to the production of small naturalistic sculpture.

HOUSE PITS

Excavation

As mentioned in the Introduction, the house pits at site NV-Pe-67 were initially discovered due to an amateur's scraping of the site surface. In doing so, he was merely hastening the process of exposure, for the stationary dunes upon which the site lies are subject to wind erosion. Thus the field party found a site whose midden had been partly blown away and whose structural remains were somewhat eroded.

The plan of excavation was executed with the above in mind. Rather than trench the severely ablated midden, house pits were excavated as individual units and were mapped in relation to an arbitrary datum point. As a check against the possibility of a lower stratum of cultural deposit, Trenches 1 and 2 were dug during the 1965 field season. No lower deposit was discovered.

In regard to the excavation of individual house pits, a uniform method was selected. Basically, the outside diameter of each house pit was gauged by soil stains (pl. 3a), and each pit was cross-sectioned at its widest point with an 18 inch wide trench. This trench was dug beyond the visible diameter of each pit so that the presence of possible larger but deeper house pits could be discovered. The trench was excavated by trowels or shovel-shaving, and the excavated fill was screened. In the case of superimposed house floors, efforts were made to screen each fill individually. With the completion of the trench, measurements and drawings of the now visible house pit profiles on the trench walls were made. Finally, individual floors and their fills were troweled out, using the profiles as initial guides, and the excavated material was screened. Artifacts discovered during troweling were plotted in relation to the house floors. During the process of excavation and at the time a house pit was completely excavated,

photographs were taken. We consider the method utilized yielded all essential information on house pit size and shape, while at the same time allowing for careful artifact plotting in relation to the house pits. In one case, that of house pit E-3, a slightly different procedure was employed in that a balk was left across the center of the house pit while the fill on either side was removed by troweling. In this case, the superimposition of a second floor is shown clearly in the balk profile (pl. 3b; fig. 5).

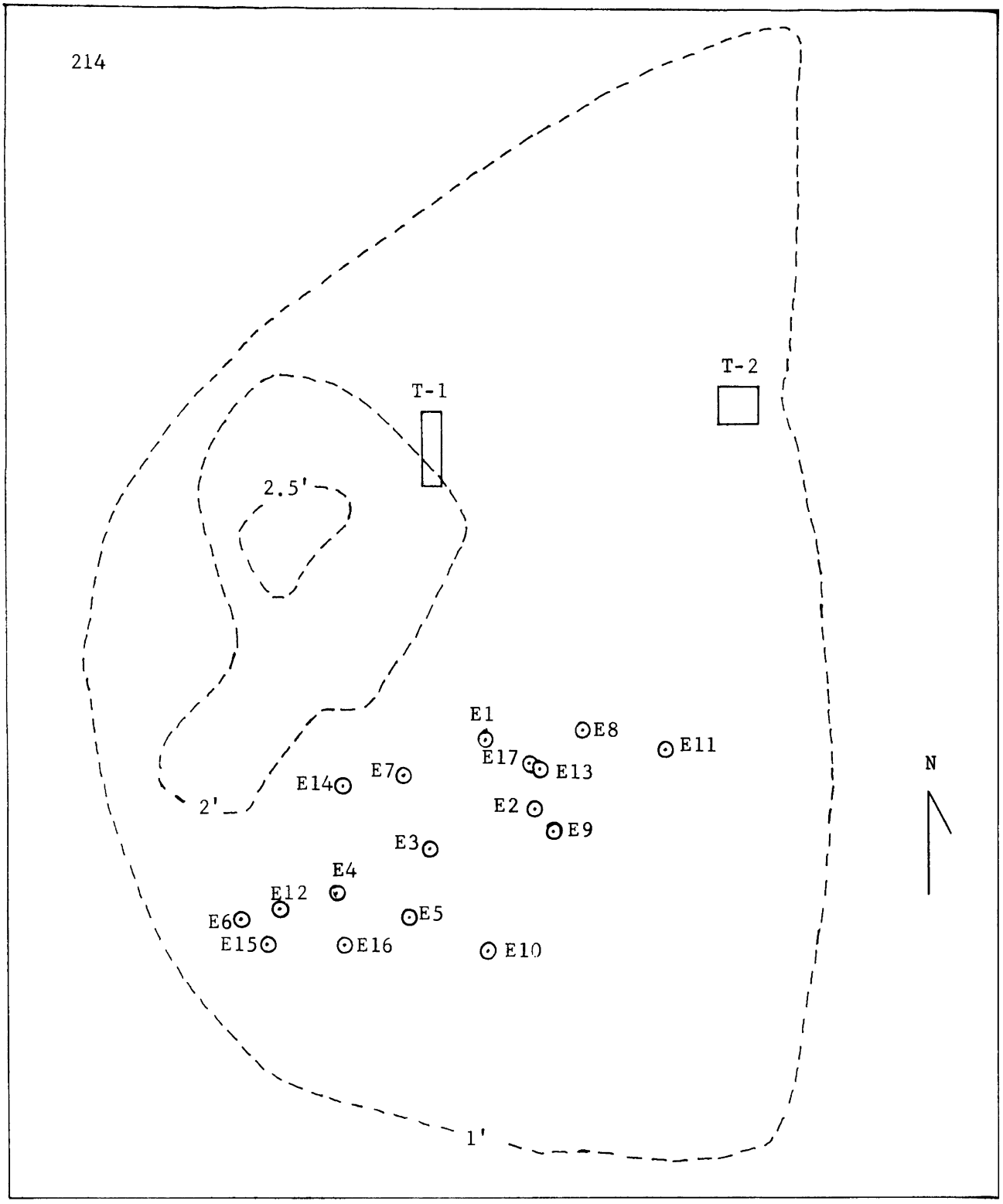
Description

Sixteen house pits were excavated during the two seasons of work at site NV-Pe-67. Map 2 and Figure 7 depict their intersite relationships, and Table 7 records their dimensions and depths. Figures 5 and 6 depict their profiles.

The house pits at site NV-Pe-67 are roughly circular in plan and semi-subterranean in profile. Although their average diameter is 2.34 meters and average depth is 33 cm., these figures are perhaps somewhat misleading. Due to the high degree of deflation, the original house pits may have been somewhat larger. This same factor of erosion, plus extensive rodent burrowing and tractor damage, has also tended to blur some of the features of the individual house pits. Here we will note features as they occur and then reconstruct an ideal type Humboldt Valley house pit. We consider that the nature of the evidence at NV-Pe-67 does not allow for any meaningful type of house pit seriation. Furthermore, it is impossible to tell how many house pits were utilized at a given moment in time. Of course, given the law of superposition, no more than 16 of the excavated houses could have been occupied simultaneously, but whether all sixteen were actually occupied at one time cannot be determined.

House pit fill is generally comprised of charcoal and bone-flecked midden. A preliminary faunal analysis of the the midden fill is appended at the end of this report. There seems to be little or no differentiation between this fill and the few remaining vestiges of the original NV-Pe-167 midden. House pits E-12 and E-14, which were still surrounded by vestiges of burnt midden, had a midden fill composition almost identical to that which surrounded them. On the other hand, house pit fill is readily distinguishable from the underlying sediments upon which the site is located. Whether this implies purposeful filling of house pits after utilization had ended or erosional activity, is a matter of conjecture. The only exception to the above was in house pit E-9b, which was filled with clay.

Silica "ghosts," which are the remains of tule or grass floor mattings, line the floors of several house pits. At NV-Pe-67 house pits E-1, E-2, E-4a, E-9, E-12, E-13, E-15a, and E-16a exhibit this feature. These "ghosts" are



Map 2. Site NV-Pe-67

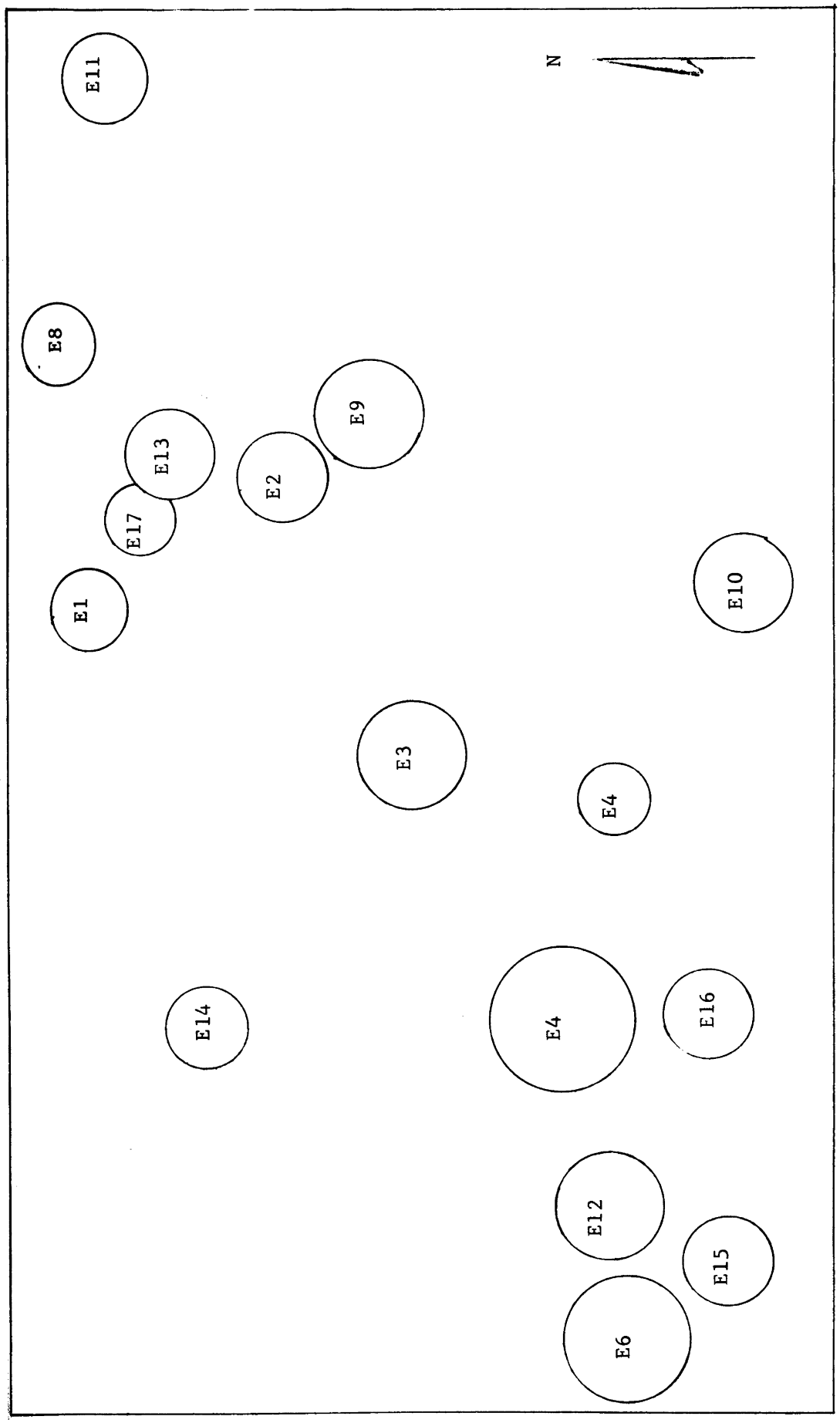


Fig. 7. Locations of house pits (detail of map 2)

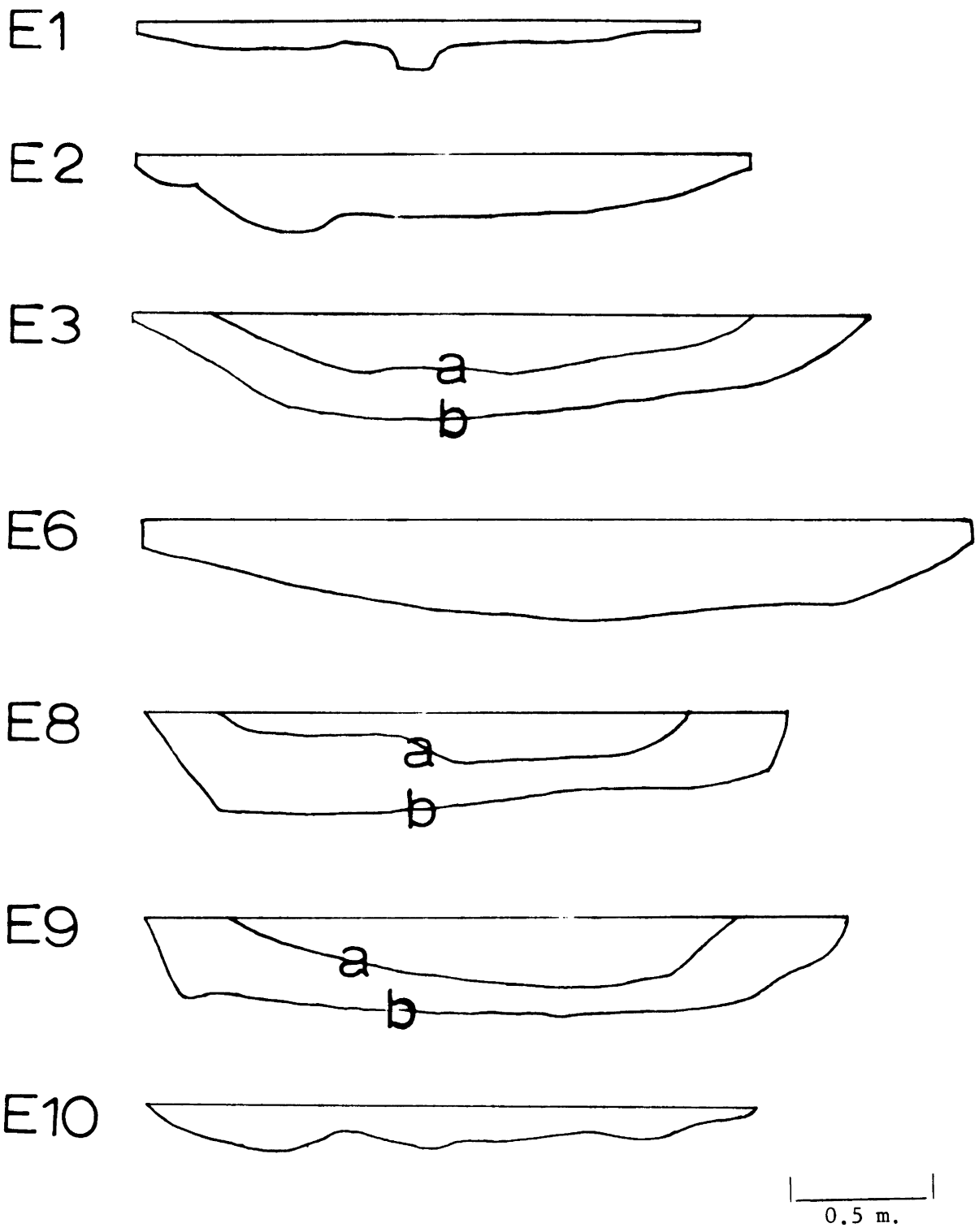


Fig. 5. House pit profiles

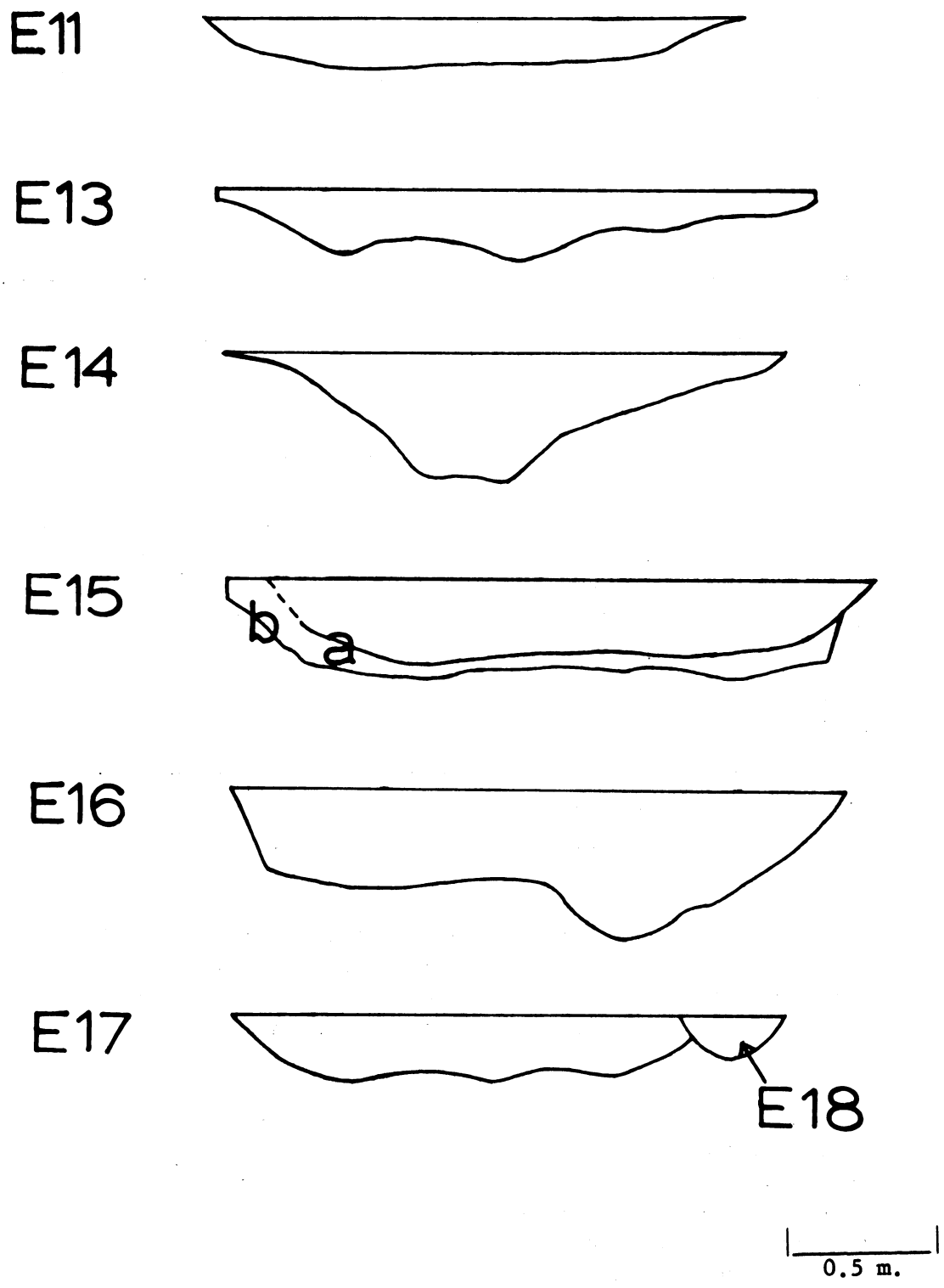


Fig. 5. House pit profiles

thin layers of apparently siliceous white material which lie on the floors of the house pits. These layers are often imprinted with a tightly formed, criss-crossed pattern identical to that formed by matting. We believe that the "ghosts" represent vegetal matter.

TABLE 7

Measurements of House Pits at Site NV-Pe-67

	E-1	E-2	*E-3a	E-3b	E-4a	E-4b	E-5	E-6	E-8a	E-8b	E-9a
Diameter (meters)	2.16	2.39	2.02	2.85	3.79	3.82	1.60	3.24	1.83	2.49	1.68
Center Depth(cm)	23	25	23	41	34	51	69	37	20	41	28

	E-9b	E-10	E-11	E-12	E-13	E-14	E-15a	E-15b	E-16	E-17	Aver.
Diameter (meters)	2.41	2.36	1.98	1.88	2.36	2.21	2.21	2.36	2.29	1.80	2.34
Center Depth(cm)	38	17	19	28	27	46	32	37	56	23	33

* The use of a and b following housepit numbers refers to superimposed pits at the same location

Centrally located fire pits are present in house pits E-1, E-2, E-3a, E-3b, E-4, E-5, E-8, E-13, E-14, E-16, and E-17. They are not lined with stones nor are they always circular. Rather, they represent an area of heavy charcoal concentration containing fragments of bone and stone.

Several house pits contain side walls. House pits E-1, E-2, E-6, E-9, E-13, E-15a, and E-15b retain this feature. Side wall depth ranges from 2.5 cm. at house pit E-13 to 31 cm. at E-9. The exact depth of house pit side walls, as well as the problem of whether every house contained this feature, becomes impossible of solution due to the factor of soil ablation. The composition of the house pit fill differs from that of the surrounding sand to such an extent that side walls, when occurring, can be easily detected by probing with a trowel at the edge of the house pit.

Post holes occur only in house pits E-3 and E-13, and profiles of post

holes at these two house pits are identical. The post holes are approximately 8 cm. in diameter and extend about 30 cm. below the surface of the ground. Their fill is comprised of dark midden. Only one post mold occurs at housepit E-13, but at E-3 three have been preserved. They are located at three of the four corners of the largest possible square which can be projected to inside the housepit. Plate 3a shows these before excavation.

Cache Pits

Two pits, E-7 and E-18, which were originally thought to be the remnants of house pits and which were so numbered in our initial survey of the site later proved to be cache pits. E-7 is a small pit, round in plan. It is 33 cm. in diameter and 8 cm. deep, with a round bottom. It was filled with dark midden containing some bone and lined with a silica "ghost." E-7 is located 7 feet north of house pit E-3. Pit E-18 is located on the east edge of house pit E-17. It too is small and round in plan, having a diameter of 33 cm. and a maximum depth of 16 cm. It has a round bottom and was filled with dark midden.

PROVENIENCE OF ARTIFACTS

Provenience of artifacts from site NV-Pe-67 is listed in Table 8. It should be noted that over half the artifacts are from the surface, and approximately 10 per cent are from the small amount of midden located in trench T-1. Thus only 35 artifacts (under 40 per cent of the total) can be directly related to the house pits. In terms of a chronological seriation of the house pits, the artifacts present are of little value. Most of the shell beads and projectile point types that are acceptable as time markers are not associated with the house pits in any meaningful context for differentiating different usage patterns through time. Only in regard to house pits E-8a and E-8b can the differences in chronological order attributable to Desert Side-notched and Rose Spring Corner-notched points (Clewlow 1967) serve to show a possible wide chronological range between the two house floors at this locus. Artifacts present in the house pit fill do serve to show, however, the range of activities of the inhabitants of site NV-Pe-67. They indicate an economy geared to hunting, fishing, and seed gathering, and further imply that at least some tools were manufactured at the site. The fact that almost every artifact type included in the NV-Pe-67 assemblage is found within the house pits implies that they were all either utilized or stored inside the houses.

In general, the NV-Pe-67 house pits were roughly circular and semisubterranean. Taking soil ablation into account, we would guess that they

TABLE 8

Provenience of Artifacts from Site NV-Pe-67

	E-1	E-2	E-3	E-4	E-5	E-6	E-8	E-9	E-10
Bone awls	1				1				
Bone bead									
Bone tubes			1			2			
Bone flakers			1						
Bone fishhook				1					
Shell bead									
Haliotis pend.									
Net gauge									
Mortars		1	1		1				
Manos			1						
"Ice-pick"									
Effigies									
Pestle									
Hammerstones				1					
Charmstone									
Slate Knives			1						
Obsidian drills							1		
Scrapers									
Knives									
Baked clay									
CT points				1					
DSN points				1			1		
Frag. points			1				1		
RSCN points				1			1		
HCBB					1				
EE points					1				
ECN points									

TABLE 8

Provience of Artifacts from Site NV-Pe-67

	E-11	E-12	E-13	E-14	E-15	E-16	E-17	T-1	Surface
Bone Awls									
Bone bead									1
Bone tubes							1		3
Bone flakers							1		
Bone fishhook									
Shell bead		1	1					1	3
Haliotis pend.									1
Net gauge									2
Mortars									
Manos		1							
"Ice-pick"									1
Effigies									3
Pestle									1
Hammerstone								1	6
Charmstone									2
Slate knives							1	1	3
Obsidian drills									1
Scrapers									5
Knives							2	1	5
Baked clay									1
CT points				1					3
DSN points				1		1			3
Frag. points								2	2
RSCN								3	5
HCBB									1
EE points									
ECN points									1

were originally about 46 cm. deep at the center, with floors sloping inwards from 20 cm. high side walls. They were from 2.5 to 3.0 meters in diameter and their floors were covered with grass or tule matting. We conjecture that the pits were covered by bending supple branches over an inner structure. This inner structure was apparently a "log" frame which was square in plan. The "logs" may have been large willow trunks or cottonwood. The outer, flexible frame was probably of small green willows. In the center of the house pit was a fire pit. The presence of so few artifacts within the house pits and the two cache pits leads us to believe that the houses were primarily used as living quarters and only secondarily for storage. However, the presence of animal bones within the fire pits indicates that this feature was used for at least some cookery as well as for warmth.

Discussion of House Pits

The archaeological evidence for house pits in the western Great Basin is extremely scarce. However, the ethnographic literature documents a winter shelter structure that remained practically uniform stylistically throughout this area (Stewart 1941). In regard to the archaeological record, data from CA-Iny-2 (Riddell 1951) and the Karlo site (Riddell 1960) are too sparse for useful comparison. House pits at site CA-Iny-2 range from 10 to 30 feet in diameter, while post hole circles at the Karlo site are approximately 10 feet in diameter. Thus the NV-Pe-67 house pits are similar in size to those at the Karlo site but are smaller than the CA-Iny-2 house pits. The occurrence of burials in association with house pits at the Karlo site is at variance with the situation at NV-Pe-67 where no burials were discovered. Thus, given very limited data, there seem to be real differences between NV-Pe-67, the Karlo site, and CA-Iny-2.

The house pits at NV-Pe-67 are somewhat more similar to those at NV-Ch-15. Examples from the two sites are almost identical in form, feature, and size. However, post hole impressions at NV-Ch-15 are only 2 inches in diameter. A group of 12 post holes were found in a house pit excavated in the latter site during the summer of 1965. These were evenly spaced around the perimeter of the house pit which, unfortunately, was only about five-eighths preserved. The rest of the structure, including the presumed doorway area, had been eroded away. There are, furthermore, many more cache pits at site NV-Ch-15 than there are at NV-Pe-67. It is not surprising, given an overlapping period of use and close geographic proximity, that the house pits of the two sites evidence great similarity.

Subterranean house pits were also excavated at the Rodriguez site (CA-Las-194) in northeastern California. J. O'Connell notes (personal communication) that the house pits at this site are from 10 to 15 feet in

diameter, disc-shaped in profile, and from 6 to 12 inches deep at their centers. They were lined with grass mats and occasionally metates were found on their floors. While no post molds were discovered, remains of aspen or cottonwood framing timbers 2 to 4 inches in diameter were discovered within several house pits. The CA-Las-194 house pits do not have vertical side walls; in this respect they are somewhat similar to those at site NV-Pe-67.

Turning to the ethnographic literature, the NV-Pe-67 house pits show both similarities and differences when compared to the historic house pits found in the Humboldt Valley and over much of the western Great Basin. Stewart (1941) notes that the Kupa band of Northern Paiutes living in the Lovelock area during historic times built circular houses with diameters of from 14 to 20 feet. These houses had center fire pits and the floors were lined with grass and/or tule matting.

Annie Lowry, a Northern Paiute woman living in the twentieth century, provides a fairly detailed description of the building of one of these Humboldt Valley houses. She notes (Scott 1966:65-66) that the first step in making a karnee was the weaving of 2.5 by 8.0 foot tule mats. Then, "the uprights of the house were made of large willows planted in a circle about two-and-a-half feet apart. Beginning about four feet from the ground, they were drawn gradually toward the center to make a slanting roof. They were not brought completely together, for a hole had to be left for the smoke to go through the top.... Then they tied the mats securely to the willows and had a karnee both rain and wind proof." Heizer (1960, pls. 6 and 9) illustrates Northern Paiute houses from Pyramid Lake which are nearly identical to those from the Lovelock area. A similar Paiute house in Inyo County, California, is illustrated here in Plate 2a; Plate 2b shows several of these house at Pyramid Lake in 1903.

J. Remy, writing in 1855, recorded (1861:81) a small village situated on the summit of a sand ridge. There were six houses, "solely composed of rushes set upright in a line, to form a shelter from the mid-day sun; [they] were roofless and without the slightest protection to the south, east, and west. A rush mat propped up lengthwise, pointing east and west, and suspended almost vertically, gives the best idea of these primitive habitations."

Ethnographic Paiute houses thus appear to parallel the NV-Pe-67 examples in their basic outlines, in the use of a central fire pit, and in the use of matting as a floor covering. Structurally there are perhaps differences in the construction of their frames, but the evidence from NV-Pe-67 is so sparse that comparison is difficult. Of more importance is the fact that only the prehistoric house pits were semisubterranean. Thus, while there is a general similarity between the ethnographic examples and the house pits from NV-Pe-67,

the archaeological houses differ from the historic ones in this structural feature. If they were indeed forerunners of the later examples, then they were modified significantly by the time the Paiutes first had contact with the white explorers and settlers.

FAUNAL REMAINS

In the process of screening the fill from the house pits at NV-Pe-67, a small quantity of faunal remains was recovered. The majority of these were unidentifiable bones of birds and small mammals such as mice. Those few bird bones which were complete enough for identification have not yet been specifically identified due to the difficulty of locating an adquate type collection.

A small quantity of faunal remains was also recovered from the surface of the site. Again, most of the pieces were unidentifiable portions of bird and small mammal bones. In this regard, one is struck by the fragmentary nature of faunal material from the site. As we have mentioned, the area is literally criss-crossed with numerous rodent burrows, and it is not unlikely that rodents are responsible both for the presence and fragmentary condition of many of the bones. This becomes even more likely when we note that mink, lynx, and deer are represented by only one bone each; there are only two antelope bones in the collection. The majority of the bones, being of small mammals such as mice or rabbits, may not have been brought to the area of the site by man.

Faunal material was found in eight of the house pits and on the surface of the site.

TABLE 9

Identifiable Faunal Remains from Site NV-Pe-67

	Surface	E-2	E-3	E-4	E-6	E-8	E-12	E-13	E-16
Taxidea taxus (badger)	x	x							
Canis latrans (coyote)	x	x		x				x	x
Lepus sp. (jackrabbit)	x	x			x	x	x	x	
Microtus sp. (mouse)	x	x		x		x		x	
Antilocapra americana (antelope)	x		x						
Lynx rufus (lynx)						x			
Mustela vison (mink)									x
Odocoileus hemionus (mule deer)	x								

x = present

Explanation of Following Illustrations

[Accession numbers are those of the Lowie Museum of Anthropology]

Figure 1
- a. Bone awl (2-39484)
- b. Bone awl (2-39521)
- c. Bone bead (2-39472)
- d. Bone tube (2-39471)
- e. Bone tube (2-39535)
- f. Bone tube (2-40674)
- g. Bone tube (2-39544)
- h. Bone tube (2-39541)
- i. Bone tube (2-39544)
- j. Flaking implement (2-39512)
- k. Fishhook barb (2-39510)
- l. Flaking implement (2-40675)
- m. Net gauge (2-39519)

Figure 2
- a. Hammerstone (39487)
- b. Hammerstone (39488)
- c. Slate knife (2-39490)

Figure 3
- a. Slate knife (2-39480)
- b. Drill (2-39558)
- c. Drill (2-39516)
- d. Scraper (2-40601)
- e. Scraper (2-40602)
- f. Scraper (2-40618)
- g. Knife (2-39474)
- h. Knife (2-40603)
- i. Knife (2-40615)
- j. Knife (2-39499)
- k. Knife (2-40616)

Figure 4
- a. Carved red scoria horned toad, top view (actual size)
- b. Side view of 4a
- c. Carved white tuff horned toad, top view (actual size)
- d. Cross section view of 4c
- e. Carved red scoria horned toad, side view (½ actual size)
- f. Top view of 4e
- g. Rhyolite pestle with carved face on end

Plate 1 Desert Side-notched projectile points

a. 2-39507
b. 2-40593
c. 2-40594
d. 2-39557
e. 2-40597
f. 2-40612
g. 2-39476

Cottonwood triangular projectile points

h. 2-39502
i. 2-40613
j. 2-40614
k. 2-40595
l. 2-39475

Rose Spring corner-notched projectile points

m. 2-40610
n. 2-39473
o. 2-39530
p. 2-39539
q. 2-39553
r. 2-39515
s. 2-39538
t. 2-40611
u. 2-39540
v. 2-59554

Humboldt Concave Base B projectile points

w. 2-40596
x. 2-39525

Elko Eared projectile point

y. 2-39506

Elko Corner-notched projectile point

z. 2-39477

Plate 2

a. Paiute hut in Inyo County, California.
b. Northern Paiute huts at Pyramid Lake. Photograph by C. H. Merriam, 1903.

Plate 3

a. House pit E-3, showing circular soil stain. Trowels to left and at bottom point to post molds.
b. House pit E-3 after some excavation. Note upper floor in balk profile.

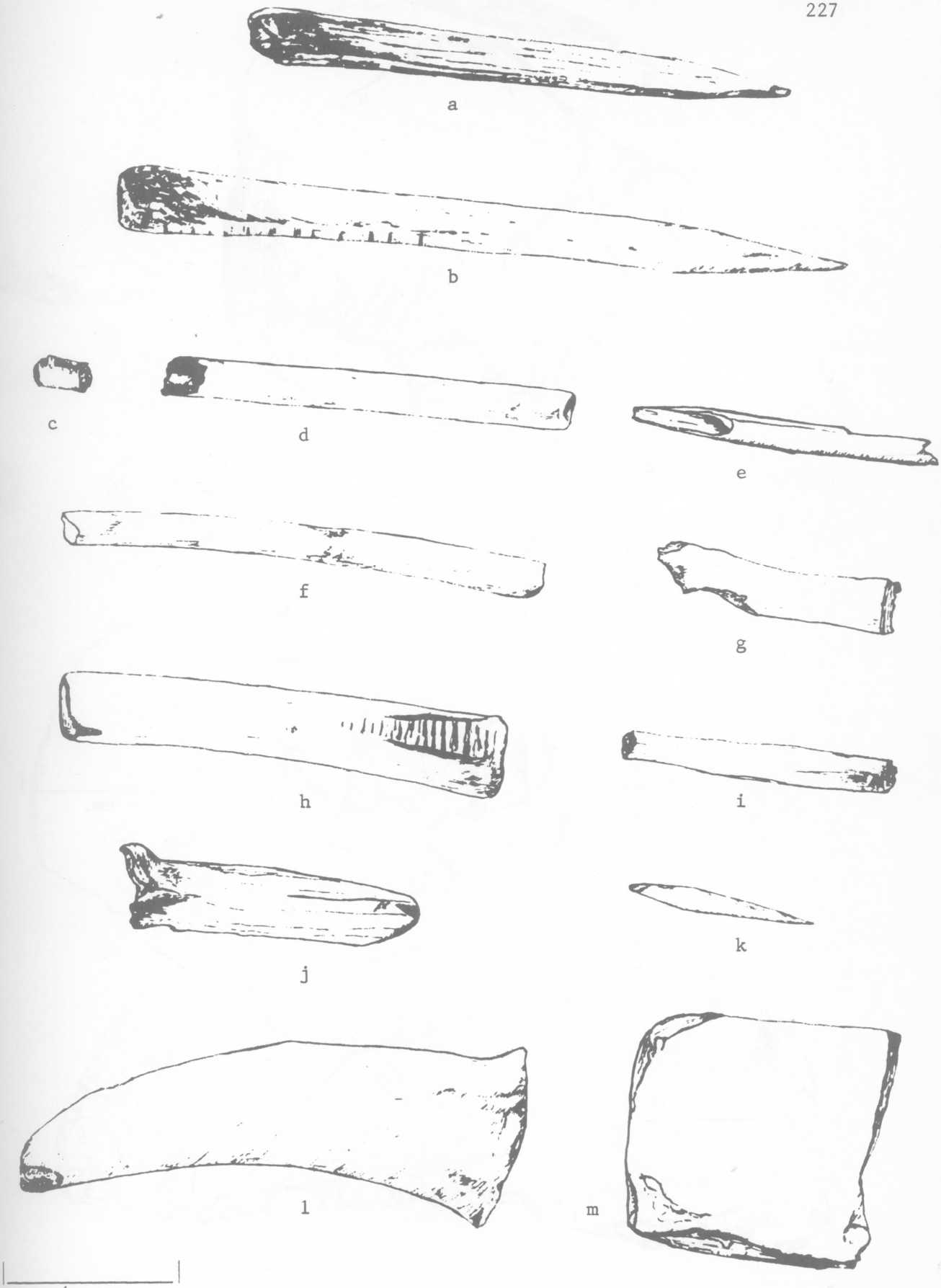


Figure 1

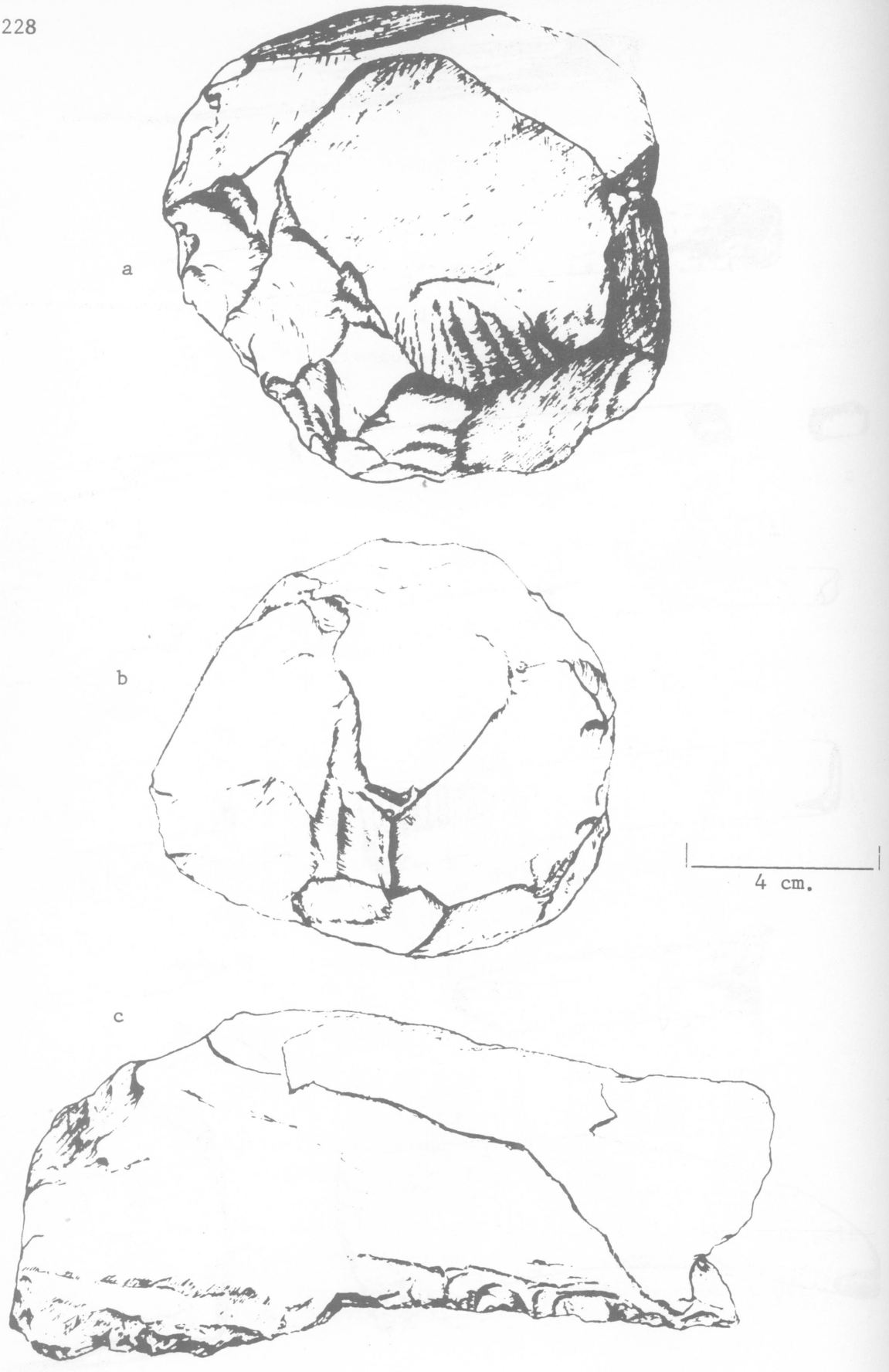
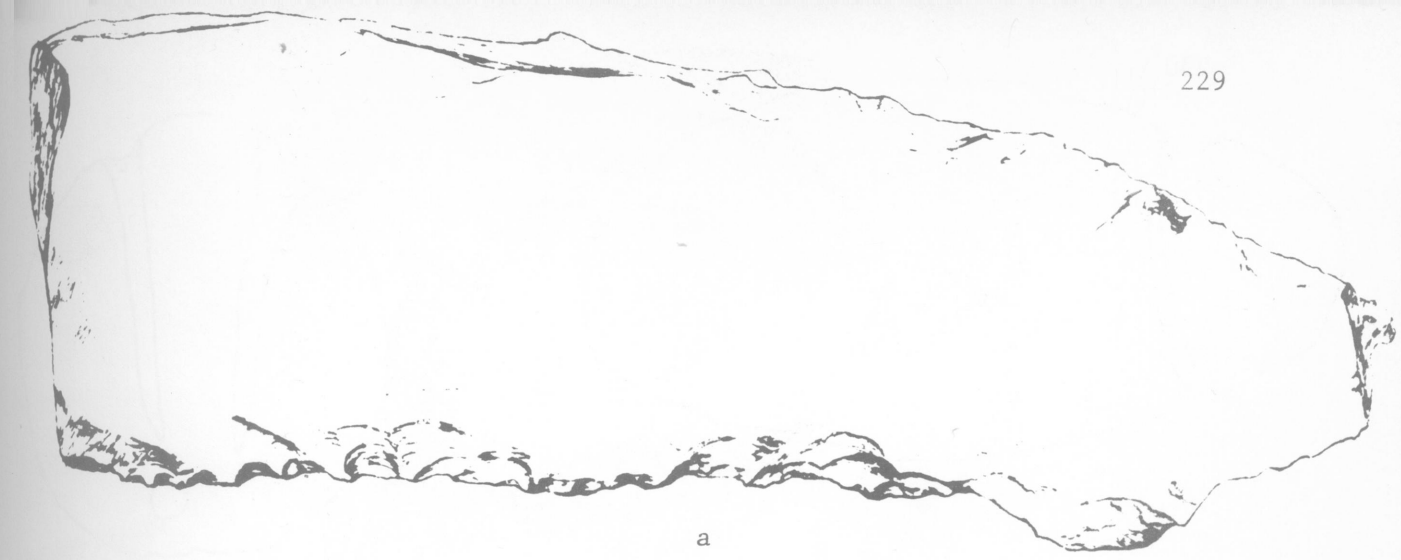
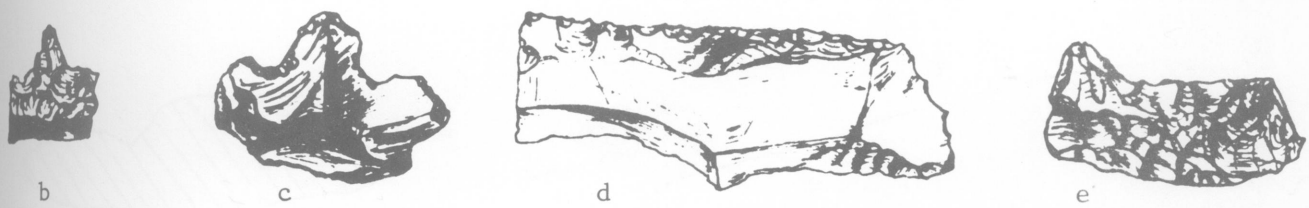


Figure 2

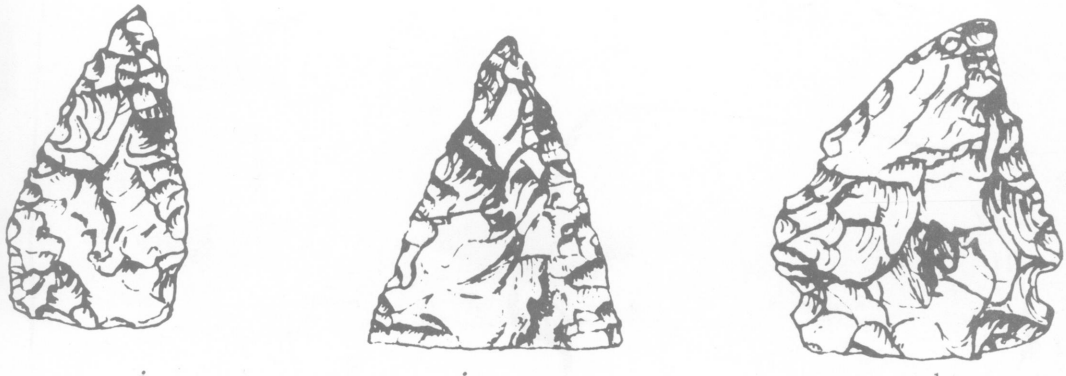


a



b c d e

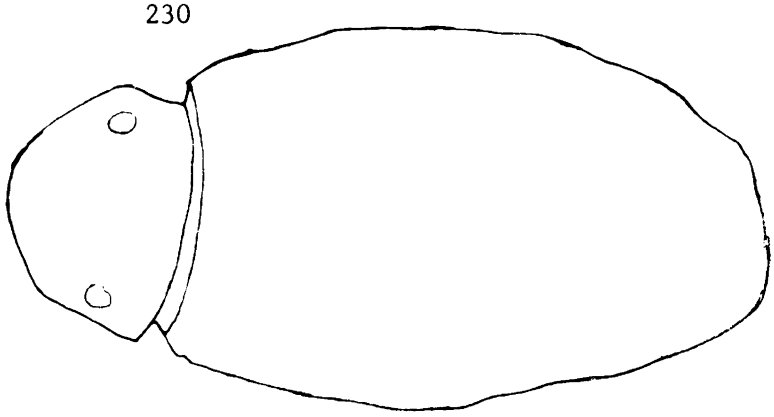
f g h



i j k

4 cm.

Figure 3



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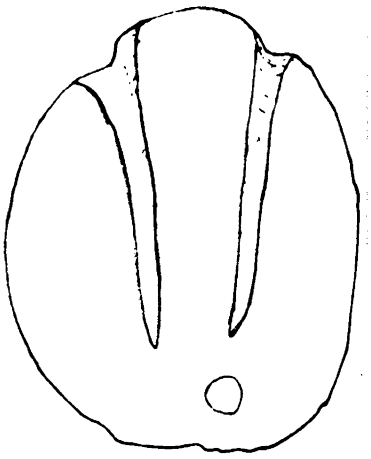

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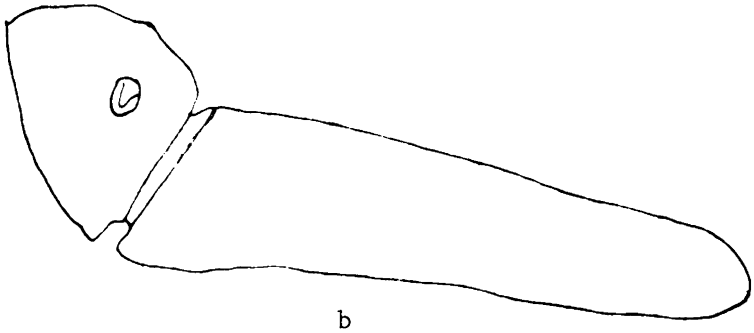

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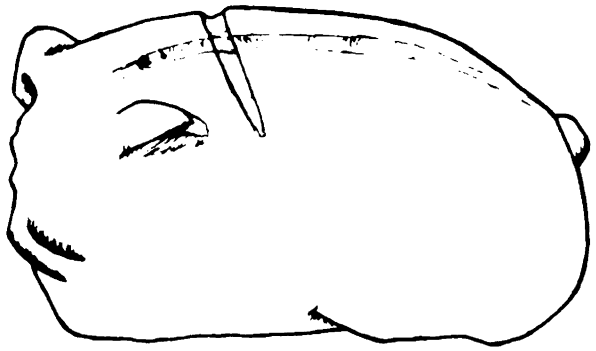
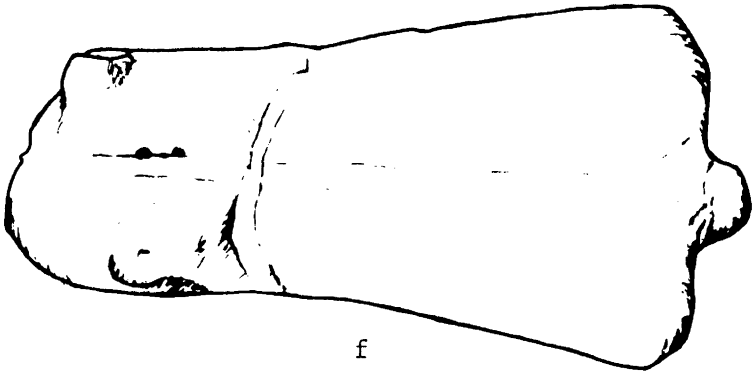
d



e



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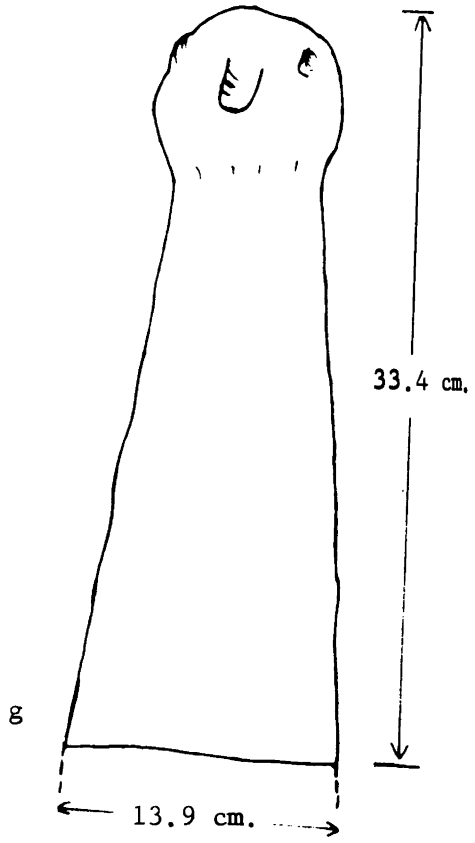


g

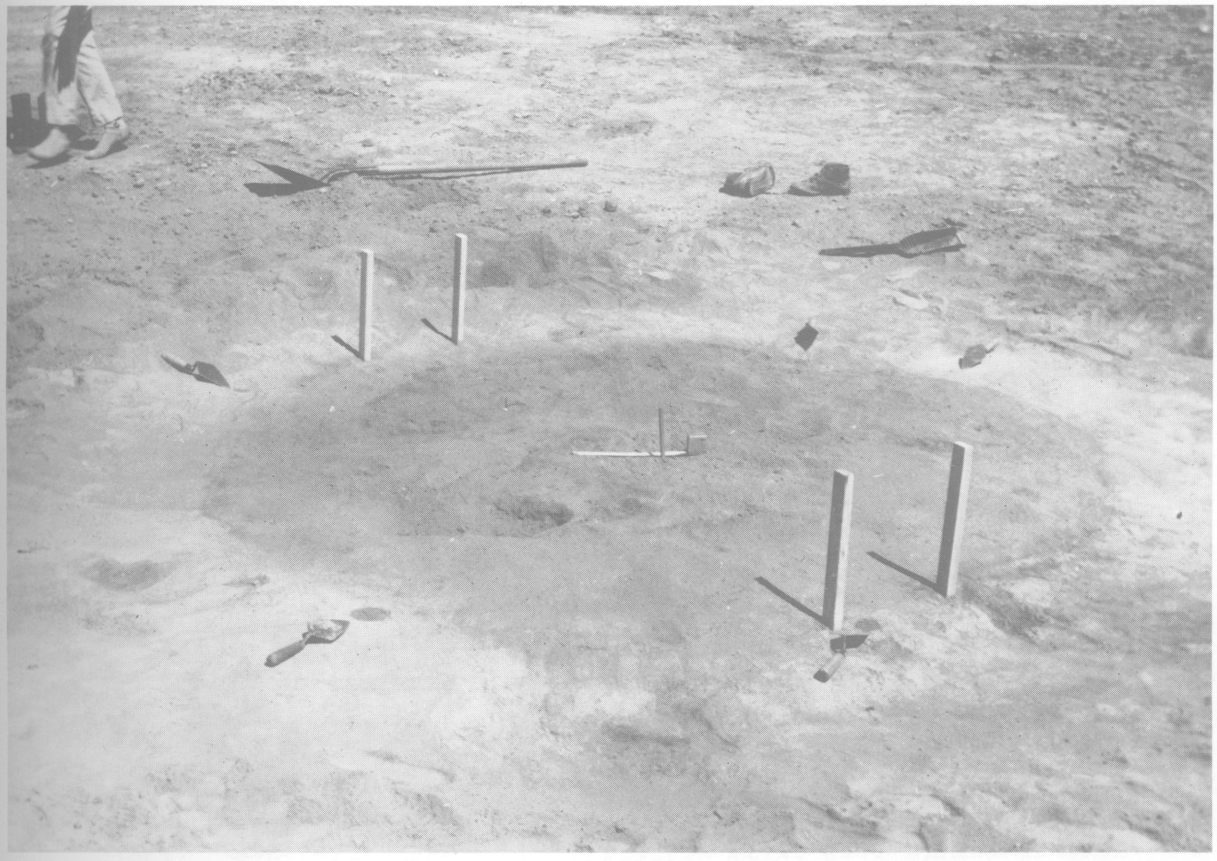
Figure 4

Plate 1

a

b

Plate 2



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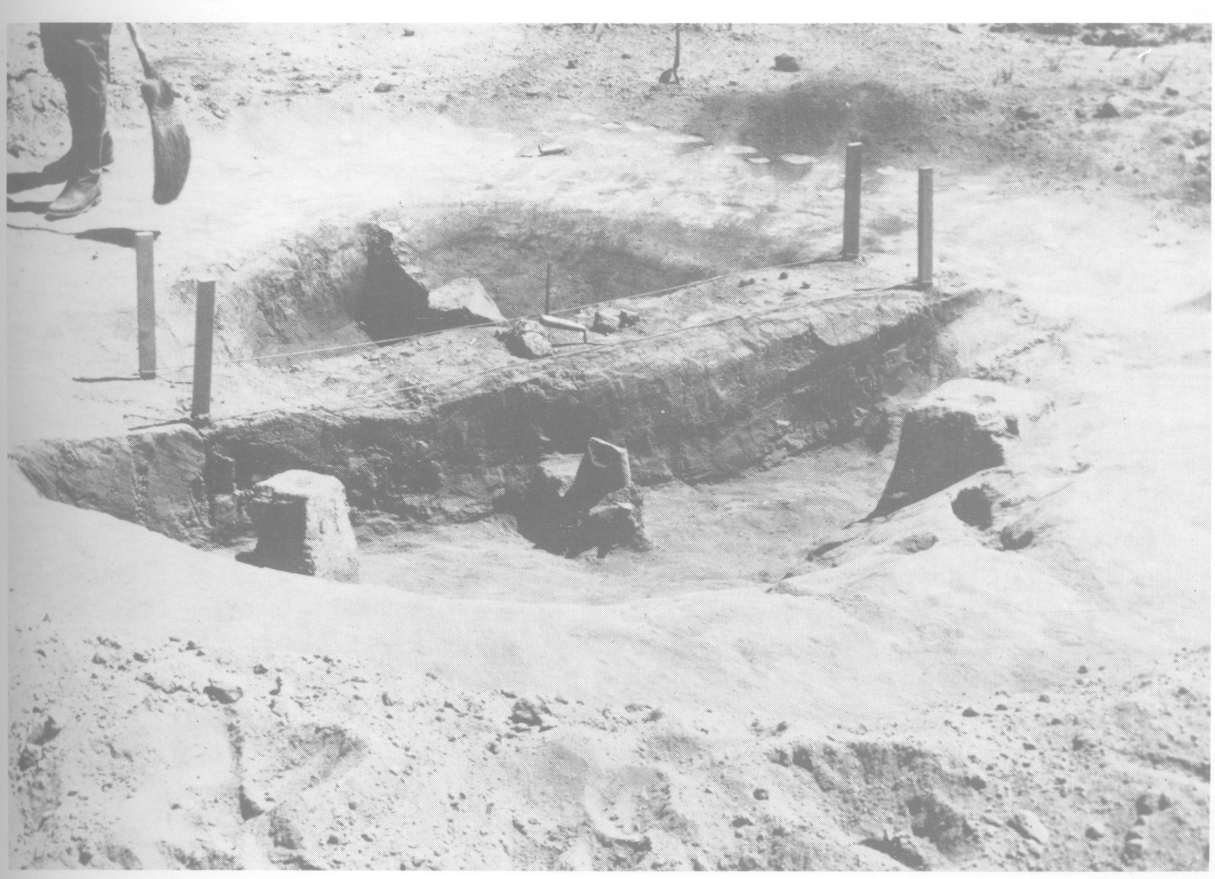

b

Plate 3

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Abbreviations Used

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-AR	Anthropological Records
-ASR	Archaeological Survey Report
-PAAE	Publications in American Archaeology and Ethnology

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