

SALVAGE OF THE RIO OSO SITE  
YUBA COUNTY, CALIFORNIA

By  
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## PREFACE

The destruction of archeological sites in California in the course of urban and rural land development has become an alarming thing. Such activities are loosely referred to as "Progress". This is not to deny the need for construction and land modification projects but, rather, to emphasize the weakness in our present system, and its concomitant governmental framework which does not more adequately provide for the protection of our nation's rich but rapidly vanishing prehistoric and historic resources.

The Rio Oso Site (Yub-14) was brought to the authors' attention on June 8, 1957, by the Army Corps of Engineers in Sacramento, who reported that in the course of levee repair work an Indian mound had been discovered.

Upon receipt of the news of the discovery of the site an archeologist in an unofficial capacity drove to the location to make preliminary investigations. Upon his arrival he made contact with the project contractor whose man had discovered the site while hauling earth from a designated borrow area. As the general region is a flood plain (see cover) the archeological site deposit was obscured by a mantle of water-deposited silt several inches thick (Plate 5). A bulldozer had been used to "test" the archeological site with the result that three large trenches were made in the deposit. At this time an estimated 25 to 30 burials were unearthed in this crude manner. The earth dislodged was not used for fill, but left in piles at the ends of the open trenches. The specimens unearthed were taken as souvenirs by the various men present according to witnesses interviewed at that time.

It was possible to salvage, in situ, only eight burials--all in a partially damaged condition. Burials obviously had been purposely vandalized for "treasure", and for "trophy" skulls. One man is said to have removed a burial which had 15 arrowpoints imbedded in the bones.

At the initial contact, the importance of preserving the remainder of the site was presented by the archeologist to the contractor and the inspection engineer, both of whom evinced a cooperative and friendly spirit. During the following week inquiries were made which determined that the site was located on land under the jurisdiction of the State Reclamation Board. Neither the Reclamation Board nor the Corps of Engineers, at any level, suggested the need for further engineering work at the site since earth could be obtained elsewhere. They indicated the site should be protected, and not further damaged.

Subsequently, one of the contractor's bulldozers was "stolen" and used to open another series of large trenches in the previously undisturbed portion of the midden deposit. This resulted in the total destruction of the site (see Map 2). It is true that other archeological sites have been completely destroyed by land development, but for sheer vandalism this example has, to the authors' knowledge, no known parallel.

Volunteer archeological crews made several more field trips to the site, the results of which form the basis of this report. The meagerness of the data presented here is a direct consequence of the needless destruction of the site. Despite the generous assistance of student archeologists, the damage was so great that a detailed reconstruction of the ancient village and the lives of its people is impossible.

While the Rio Oso Site has the unenviable position of being the most wantonly vandalized site in California, it is not unique in receiving the attention of the vandal, or "pothunter". It is safe to say that all known major archeological sites in this state have suffered vandalism or other severe damage. It has been estimated that several sites a day are completely destroyed by one means or another. One does not need a crystal ball to look into the future to see that our state's archeological resources will

be exhausted before many years, especially in the more populated regions. Archeological sites, being non-biological, do not reproduce themselves as have the once nearly extinct American bison and sea otter.

It is morally incumbent upon those who are developing the land in California to take adequate steps for the study, salvage, and protection of our archeological values. We, of this generation, are but the custodians of our nation's heritage, and must hold in trust for future generations those archeological resources of which the Rio Oso Site was a part.

We wish to acknowledge with thanks the assistance of a number of people in recording the destruction of this site. These people include Dr. Louis Payen, L. Arthur Payen, Michael Honadel, Charles Gebhardt, Norman Wilson and Joseph Hood. In addition, we would like to express our gratitude to Donald F. McGeein who made the line drawings for this report.

## INTRODUCTION

The Rio Oso Site (Yub-14) was first discovered in the early summer of 1957 by the Army Corps of Engineers during levee repairing operations. Its location was subsequently reported to the State Indian Museum, and the site was test excavated in the late summer and fall of that year. The specimens recovered are on deposit at the State Indian Museum, Sacramento, under Accession No. 141.

## SITE LOCATION

The site is located in the NE 1/4 of the SE 1/4 of Section 13, Township 13 North, Range 3 East (MDB&M) (Map 1). Close examination reveals that the deposit rests upon a sandy ridge which can be observed extending along the west bank of the old channel of the Feather River and thus some 600 to 800 yards east of the present channel. The site area and environs are heavily overgrown with cottonwoods and willows or with a rank growth of thistle, clover and other tall stemmed plants (see cover photo).

## THE MIDDEN DEPOSIT

The depth of the deposit was tested only in one location. Here a 5 x 10 foot test unit revealed a layer of water deposited silt two to four inches thick covering a disturbed 12 inch layer of sandy midden (see Plate 5A). This second stratum probably represents the plow zone. Homogenous dark, sandy midden extends from the 14-16 inch level to a depth of 48 to 60 inches. This material lacked the "greasy" texture noted frequently for Central Valley Late Horizon sites. The basal deposit consists of a light brownish unconsolidated sand. This old surface is quite irregular and appears to have been extensively disturbed through digging activities by the occupants of the

site. Within the midden, remnants of fire hearths were clearly in evidence in profile (see Plate 5A). These ancient fires take the form of reddish burnt areas overlain by white ash and charcoal deposit. One area, revealed in profile, measured 45 inches long and six inches thick at its maximum.

There was a remarkable paucity of specimens from the midden. Most frequently encountered were lumps of burnt clay, and infrequently animal bones, freshwater clam shells, and an occasional river cobble. No purposely shaped baked clay objects were recovered. The absence of baked clay objects has been previously noted for Colusa Province Late Horizon sites (Beardsley 1954: 77).

#### HUMAN REMAINS

A total of forty-two burials was recorded from the site. Of these only eight were recovered wholly or partially in situ. The remaining burial numbers were assigned to burials removed by vandals or by the totally unauthorized bulldozing activities. The majority of these "burials" consist primarily of miscellaneous skeletal material. In some instances artifactual material was recovered from the vandalized burials by screening the back dirt or the area from which the burial was removed.

#### BURIAL DATA

Depth data are on file for only sixteen of the forty-two burials. These burials range in depth from 18 to 44 inches from the original surface, with twelve of the sixteen ranging in depth from 25 to 36 inches. The depth range suggests a definite cemetery area, primarily in the center of the mound, but this hypotheses could not be tested due to the gross disturbance. The majority of the interments, however, were from the center of the mound.

<u>Infant</u>	<u>Child</u>	<u>Adolescent</u>	<u>Adult</u>	<u>Total</u>
4	4	7	23	38

Table 1. Age of Burials

As can be seen from the above table the majority of the burials recovered were adults. Significant numbers of younger individuals also were recovered but it is probable that many infant or child burials were not recognized by us as the skeletal material often was widely scattered and broken by the vandals.

<u>Position</u>	<u>Number</u>	<u>Orientation</u>			
		<u>NW</u>	<u>NE</u>	<u>N</u>	<u>W</u>
Tight flexure	3	1	2		
Semi-extended	2	1		1	
Extended	3		1		1
		2	3	1	2 (tot.)

Table 2. Orientation and Burial Position

Three burial positions were recorded among the eight interments recovered during our limited excavation of the site. These were tight flexure, semi-flexure, and fully extended on the back side. The three flexed burials include one dorsal flex, one ventral flex, and one flexed burial with position not determinable. All were tightly flexed and presumably wrapped in a garment, or tied with cordage (see Plate 2B). Semi-flexure occurred twice. Both burials were placed on their back with only the legs folded. All three of the fully extended burials were placed on their back with the arms along the sides or placed over the pelvic region (see Plate 2A). The occurrence of dorsally extended burials has been previously noted in this area (Colusa Province) in sites attributed to the Late Horizon Phase I period (Lillard, Heizer and Fenenga 1939: 65 and 69; Beardsley 1954: 77). Of the three burials which occurred in this position, two were adults and one was an infant. Only one burial (#15) was complete enough to show the position clearly (see Plate 2C).



Burial No.	<u>Olivella Bead Type</u>					<u>Haliotis Ornament Type</u>							
	1a	1b	2a1	2a2	3a2	A.1	B.1	B.1a	E.1	C.2	N6a1	MB.1	MB.3
1		3				1			1		1		
2	25	1											
4			3										
5		5	2	1			4				1		
6	1												
8										1			1
9													
10	2	1											
11							1						
15													
33			65										
34					22								
36					3								
40					1								
Salvage	28*	10**	71	1	26	4	8	1	21	2	2	1	2(41)

\* 20% side ground; 86% both ends ground

\*\* 50% side ground; 60% both ends ground

TABLE 3: Olivella and Abalone Bead and Ornament Types

## EVIDENCE OF CONFLICT

Burial #15 is notable in that a projectile point was lodged in the proximal end of the right clavicle. Warfare is also attested by the recovery of obsidian projectile point fragments lodged in two salvaged human bones, and by the recovery of a fragmentary skull with a pencil-sized hole through each parietal. This presumably was caused by a wooden arrow shaft. The circular holes suggest that the projectile lacked a stone point. Simple wooden points are known to have been used historically by the Valley groups.

## ARTIFACTS

Due to the lack of clear burial association in many instances, and the small number of artifacts recovered, it is difficult to present a complete record of the Rio Oso Site. From present evidence it appears, however, that the site represents a single phase settlement. All of the artifacts recovered are considered attributable to the Phase I Period of the Late Horizon in the Central California sequence (Lillard, Heizer and Fenenga 1939; Beardsley 1954: 76-79; Bennyhoff and Heizer 1958: 66-67).

## OLIVELLA BEADS

A total of eleven burials had five types of Olivella sp. shell beads included as burial complement. The typology utilized conforms to that established for Central California area by Lillard, Heizer and Fenenga (1939) and Bennyhoff and Heizer (1958). The recovered specimens include small and large spire-lopped Olivella beads (see Plate 3K, M and L), many of which exhibit side and orifice grinding (Types 1a and 1b); thin, flattened, rectangular Olivella beads (see Plate 3N, O, P and Q), (Types 2a1 and 2a2); and a rough half shell Olivella bead with punched perforation (Type 3a2).

The latter sometimes have rough edges, but on some specimens the edges and ends are ground smooth (see Plate 3J).

Study of the spire lopped Olivella beads from the Central Valley has shown that they may be separated into small, medium and large categories on the basis of diameter. The large, or Type 1b beads, referred to in this report measure from 8 to 10 mm. in diameter and therefore are to be placed into Bennyhoff's medium-size category (James Bennyhoff, personal communication). Large (over 10 mm. in diameter) spire lopped Olivella beads were not recovered from the Rio Oso Site, although the limited sample may account for this apparent lack. Small spire lopped beads are noted as predominant in Phase I times by Bennyhoff and Heizer (1958: 81; Footnote 14). The trait of orifice grinding noted as occurring on Phase I spire lopped beads by Bennyhoff and Heizer is common among the specimens recovered at Rio Oso. None exhibits a true "barrel" shape, however.

It is of interest to note that the split punched Olivella half shell beads (Type 3a2) measure from 11 to 14 mm. in width. All of the specimens then could be placed into the large (over 10 mm. in diameter) spire lopped type if complete. This added evidence to support the theory that the large Olivella shells were utilized in the manufacture of other bead types (2a1 and 3a2) during the Phase I Period, while the smaller shells were used with but little modification.<sup>1</sup> Split, punched Olivella beads, in quantity, are diagnostic of the earlier portion of the Late Horizon Phase I (Bennyhoff and Heizer 1958: 66-67). The Type 2a1 thin rectangular beads show some size variation, but the majority average 7 mm. long and 4 mm. wide. A single thin rectangular, end-perforated bead, Type 2a2, was recovered from the

1 One group of spire lopped beads from the Mustang Site (Yol-13) shows broken instead of ground spires. Several of these beads also seemed to have been partially split, probably with a sharp instrument.

site. The burial (Burial 5) from which this bead was recovered also produced two Type 2a1 rectangular beads and five of the ten large spire lopped beads. This burial complement may indicate a somewhat later occupation of the site than is suggested by the beads recovered from the remaining burials, since the end perforated bead occurs later than the centrally perforated type (Bennyhoff and Heizer 1958: 67).

#### SHELL ORNAMENTS

The Haliotis shell ornaments recovered from the Rio Oso site include a total of 41 specimens which are placed into nine recognizable types<sup>2</sup> (see Table 3). The majority of these ornaments are simple circular (Type G), (see Plate 3I and R), rectangular (Type B), (see Plate 4B, I, N, P, Q, R and S), or triangular (Type E) in form. Four rim strip ornaments (Type A), two modified "Banjo" (Type N6a1) ornaments with flat bases, and four sub-rectangular ornaments (Types MB.1 and MB.3) complete the sample.

Five burials had 36 shell ornaments included as burial complement; of these, 25 were recovered with a single burial. Included among these were all but one of the triangular (Type E.1.) ornaments. The popularity of small rectangular (Type B.1.) ornaments at Rio Oso is also reflected in the shell ornament inventory at a Phase I Late Horizon site (Sut-23), a few miles to the northeast. At this site small, rectangular ornaments were the most frequent forms recovered (Olsen 1959).

While the ornaments, individually, are not essentially distinctive, they clearly are part of a late, pre-clamshell bead complex. The two small modified "Banjo" ornaments (Type N6a1) are clearly indicative of the Phase I Period, while the remaining forms are duplicated in the sample from a definite Phase I component at Yol-13 and clearly are part of the same complex. Bennyhoff and Heizer (1958: 57) note that ornament Type N6a1 is diagnostic

2 Typology follows Lillard, Heizer and Fenenga 1939, except for N6a1 which is after Gifford 1947.

of Middle Phase I times in Central California, and the flat based variant is specifically limited to the Colusa province. The lack of incised ornaments and the preference for small, squared end rim ornaments at present seems to be partially diagnostic of the Phase I Period in the area also.

#### FRESH WATER MOLLUSC REMAINS

The limited sample of fresh water mollusc shell retained from the site includes two species, Gonidea angulata and Margaretifera margaretifera.

The majority of the specimens collected occurred within a limited area suggesting a small refuse deposit, or possibly a steaming basin.

The single utilized fresh water mussel shell, Margaretifera margaretifera has been ground smooth along the edges (see Plate 3S). It probably served as a spoon.

#### BONE ARTIFACTS

Only nine bone artifacts were recovered from the site during the controlled excavation work. In addition, a single elk tooth was recovered with Burial 40, possibly as a grave offering.

Bone Awls: Three bone awls, one complete and two broken, were recovered from the site (see Plate 3A and C). None were in burial association. The complete specimen (Gifford's Type AlbII) (cf., Gifford 1940) measures 8.4 cm. long and is made from a split deer metapodial with the unmodified proximal end serving as the base. The remaining two specimens (distal and fragments) now measure 5.6 cm. and 3.0 cm. long. The smallest specimen is badly burnt and was probably broken and discarded by the Rio Oso villagers.

Gorge Hooks: Three essentially complete bi-pointed gorge hooks were recovered, all during salvage operations (see Plate 3B, D and F). The

two largest specimens measure 8.6 cm. and 6.5 cm. long and have oval cross sections along their entire length. The last specimen measures 4.9 cm. long and differs from the other two specimens in that it has a rectangular cross section in the central portion and a circular cross section at either end. The central area of this piece is thickened, producing a "belted" effect.

Miscellaneous: Other bone material includes a fragment of polished animal bone which is grooved, probably for cutting; a small polished fragment of what may be an awl (Burial 2); and a curiously polished sliver of bone 5.1 cm. long. The latter specimen has a triangular cross section at the large end and a needle point at the small end (Burial 40). It may be a needle or punch, but is not placeable in any recognized artifact type (see Plate 3E). Three unmodified artiodactyl metapodials, one with butchering marks, were also recovered. They are without provenience and evidently represent unused raw material.

#### STONE ARTIFACTS

The yield of stone of any sort was extremely poor from Rio Oso. The only artifacts recovered were two pestles, three projectile points, one worked obsidian flake, and several battered stream cobbles.

Pestles: Two cobble pestles were recovered from the Rio Oso Site, both salvage specimens (see Plate 5). The first specimen, made of greenish schist, measures 35.5 cm. long, 9.5 cm. to 12.0 cm. wide, and 7.0 cm. to 4.5 cm. thick, and has a flattened, oval cross section. Both ends have polish and striations extending a short distance back from each end. Little or no purposeful modification of the specimen was noted other than on the ends.

The second pestle, made of a fine-grained greyish metamorphic stone, measures 28.5 cm. long, 8.0 to 9.5 cm. wide, and 6.5 cm. thick. It has a

rectangular cross section other than on the wide end which shows evidence of shaping. As with the first piece, this one also has a conical pointed working end.

Both of these specimens show wear from use in a wooden mortar, a trait which has been noted for the Middle Horizon and for Phase I of the Late Horizon (Beardsley 1954: 77). Both of these specimens can probably be attributed to the Late Horizon Phase I Period.

Projectile Points: A single obsidian blade was recovered from the site without grave association. It measures 7.5 cm. long and 2.0 cm. wide, and exhibits an incipient serrated edge (see Plate 3H). It is identical to specimens recovered at another Phase I component in the same general area (Yol-13).

Two small, lightweight projectile points, probably arrow tips, were recovered. The first of these was recovered during salvage operations, and the second, previously mentioned, was lodged in the proximal end of the right clavicle of Burial 15\*. Both of these points are made of green chert, and are a variant of the "Gunther Barbed" type described by Treganza (1958: 13-15; Fig. 1b-1 and Fig. 2 i-m). The first specimen, fragmentary, is now 2.1 cm. long and 2.0 cm. wide at the barbs. The barbs are 5 mm. long, and the stem is 7 mm. long (see Plate 3G). The second specimen is somewhat smaller than the one described, but is of the same type.

The last artifact is a flake of obsidian which shows some pressure retouching and measures 2.5 cm. long and 1.5 cm. wide. Its recorded occurrence with a burial was probably fortuitous.

Battered Cobbles: Two smooth stream worn cobbles were recovered which show signs of use. The first is a small, flat, rounded pebble which exhibits

\*A burial containing fifteen arrow points imbedded in the bones was reportedly recovered from the site by the levee construction crew.

one battered edge. The second is a large fist-sized cobble which has been broken in half. The broken end exhibits some use wear, probably from use as a heavy duty scraping or smoothing tool. Two other fist-sized cobbles could have served as hammerstones, but show no obvious wear.

#### CONCLUSIONS

The Rio Oso Site exhibits clear manifestations of the Late Horizon Phase I Period and appears to be closely related to the Mustang site (Yol-13) located a short distance to the southwest across the Bear and Feather Rivers. It also appears to relate to the Sandhill Facies which has been defined from work done on sites (Col-1 and Col-3) in the area south of Colusa (Beardsley 1954).

The small projectile points are similar to some specimens recovered in certain Trinity County sites, the Shasta Dam area and in Tehama County (Treganza 1954 and 1958; Smith and Weymouth 1952; Baumhoff 1955 and 1957). These have been termed "Gunther barbed type" points in a recent publication (Treganza 1958). Variants of this type occur at two other sites in the vicinity of the Rio Oso Site (Yol-13 and Col-1). The wide barbed examples appear, at present, to be more frequent on the valley floor; but a few specimens are known from the foothills in the vicinity of Chico and Oroville. The Olivella sp. shell beads and Haliotis sp. shell ornaments show close relationships to those from Phase I components to the south (Cosummes Province) and also to those in the same area as Rio Oso. Especially diagnostic are Olivella bead types 2a1 and 3a2 along with the type N6a1 shell ornaments (cf. Bennyhoff and Heizer 1958).

The predominant burial positions, dorsal extension and semi-extension, are typical of Phase I of the Late Horizon in the Colusa Province (Sandhill Facies) (cf. Beardsley 1954). The occurrence of Phase I dorsally extended



burials has been noted at the Mustang Site (Yol-13) somewhat to the south of Rio Oso on the confluence of the Feather and Sacramento Rivers, and also in the Oroville area (site But-90), again in a Phase I context.

While the sample is poor, due in part to the disturbed nature of the site, it is also clear that the site was not rich when compared to other Phase I components in the same geographic areas. Our limited data do not present any logical explanation for this at the present time, but the evidence of conflict present at all Phase I Colusa Province sites recently tested suggests that the early portion of the Late Horizon may have been characterized by marked population shifts. The occurrence of the typically northern California "Gunther barbed" projectile points suggests movement along the rivers, which produced the unrest noted archeologically.

APPENDIX I

Olivella Bead Typology

<u>Type</u>	<u>Description</u>	<u>Size</u>
1a1	Small, spire ground - 28 specimens. Some are also ground on orifice end.	6 to 7 mm. in diameter
1b	Medium, spire ground - 10 specimens. Some are ground on orifice end.	8 mm. to 10 mm. in diameter
2a1	Thin, rectangular, central perforation.	5 mm. to 11 mm. long; 70% 6mm. or 7mm. long 3 mm. to 9 mm. wide; 78% 3mm. to 5mm. wide average size 7 mm. long by 4 mm. wide Perforation is 1 mm. in diameter Same as 2a1
2a2	Thin, rectangular, end perforation - 1 specimen	11 mm. long, 9 mm. wide; Perforation 3 mm. in diameter
3a2	Split half shell; punched perforation, both rough and ground edges	11 mm. to 14 mm. wide; perforation averages 5x5 mm., and is sub-rectangular in shape
1	Small - 4-7 mm. diameter; Medium - 8-10 mm. diameter; Large - 11-13 mm. diameter. (Personal communication, J. A. Bennyhoff)	

APPENDIX II

Shell Ornament Typology

<u>Type</u>	<u>Description</u>	
A.1.	Rim strip, largest specimen. One end perforation.	25 mm. to 95 mm. long. 7 mm. to 15 mm. wide.
B.1.	Rectangular to square. One edge perforation.	10x13 mm. to 23x32 mm.
C.2.	Circular, twin edge perforations on same side.	26 and 47 mm. diameter
E.1.	Triangular, one end perforation	20 mm. to 72 mm. long, 9 mm. to 21 mm. wide at top
MB.1.	Straight top, rounded bottom. Single top perforation.	20 mm. wide at top, 15 mm. wide at bottom, 25 mm. to 29 mm. long.
MB.3.	Straight top, rounded bottom. Three top perforations.	46 mm. long; 22 mm. wide.
N6a1	Rectangular with tab-like notched end. Single perforation at opposite end.	14 to 21 mm. long; 7 to 12 mm. wide.

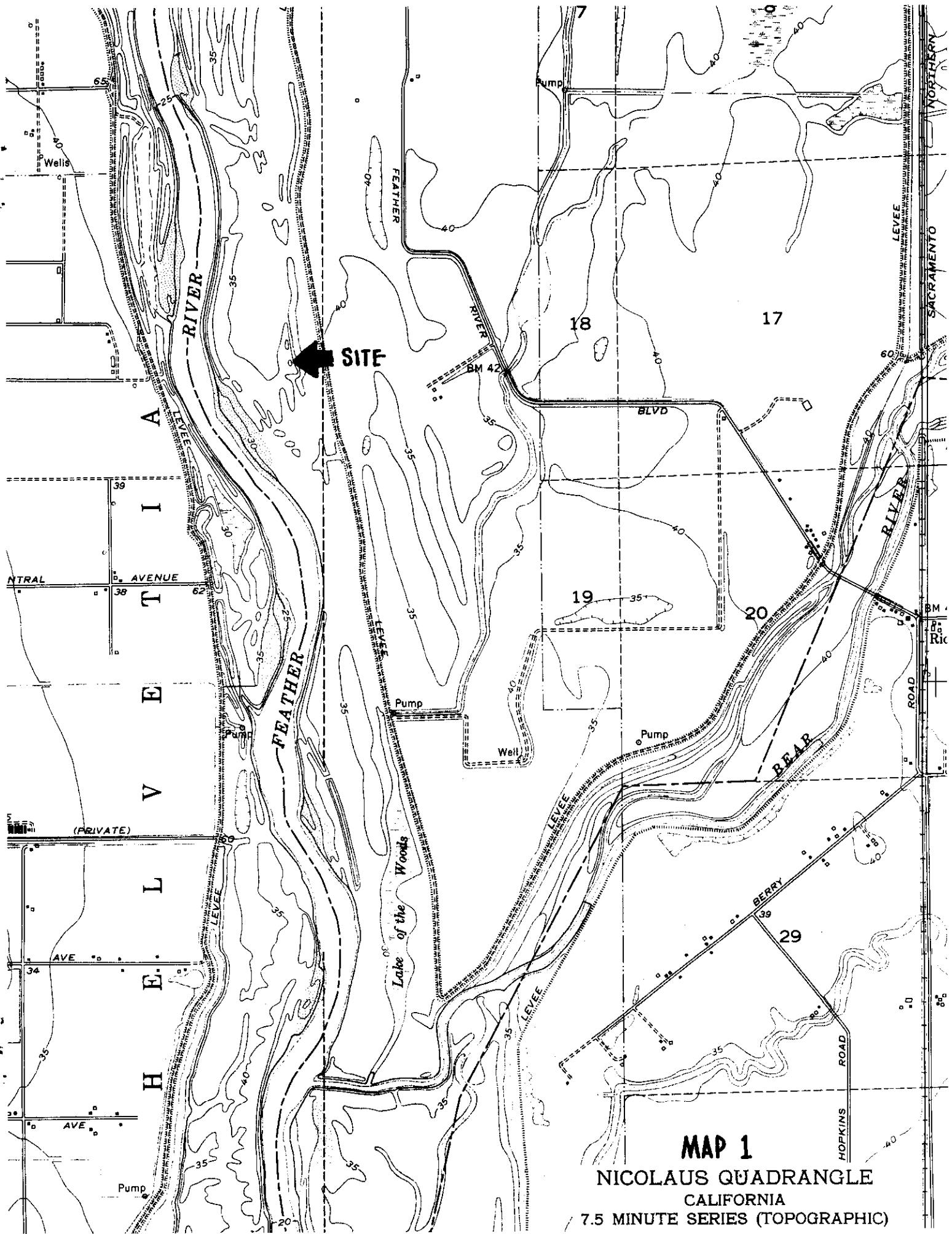


## EXPLANATION OF ILLUSTRATIONS

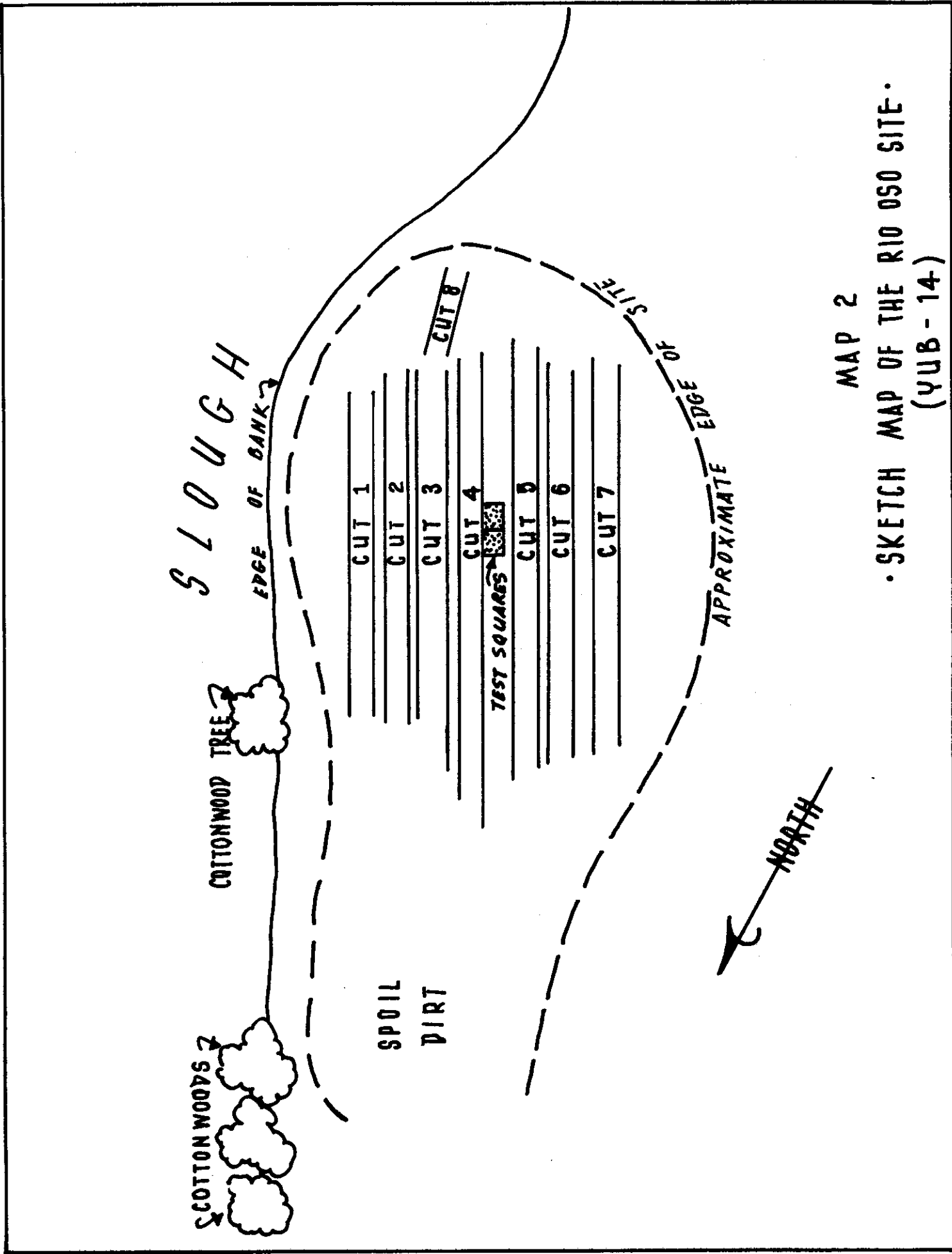
- Cover. View of environment at the Rio Oso site.
- Map 1. Section of topographic map of the Nicolaus Quadrangle showing location of the Rio Oso site.
- Map 2. Sketch map of the Rio Oso site.
- Plate 1. Views of the Rio Oso site after wanton destruction with bulldozer by vandals.
- Plate 2. a. Burial 7  
b. Burial 2  
c. Burial 15
- Plate 3. a. Awl (141/79)  
b. Gorge hook (?) (141/9)  
c. Awl (141/6)  
d. Gorge hook (141/12)  
e. Awl (141/170), Burial 40  
f. Gorge hook (141/11)  
g. Projectile point (141/5)  
h. Projectile point (141/7)  
i. Type C.2. Haliotis ornament (141/99), Burial 8  
j. Type 3a2 Olivella bead  
k. Type 1b Olivella bead  
l. Type 1b Olivella bead, orifice ground  
m. Type 1b Olivella bead, orifice ground  
n. Type 2a1 Olivella bead  
o. Type 2a2 Olivella bead  
p. Type 2a1 rough Olivella bead  
q. Type 2a1 Olivella bead  
r. Type C2 Haliotis ornament (141/8)  
s. Freshwater clam shell spoon (141/66)  
t. Type MB.3. Haliotis ornament (141/98), Burial 8
- Plate 4. a. Type A.1. Haliotis ornament (141/14)  
b. Type E.1. Haliotis ornament (141/191), Burial 40  
c. Type E.1. Haliotis ornament (141/175), Burial 40  
d. Type E.1. Haliotis ornament (141/173), Burial 40  
e. Type MB.3. Haliotis ornament  
f. Type A.1. Haliotis ornament (141/109), Burial 1  
g. Type B.1. Haliotis ornament (141/121), Burial 11  
h. Type A.1. Haliotis ornament (141/16)  
i. Type B.1. Haliotis ornament (141/187), Burial 40  
j. Type MB.1. Haliotis ornament (141/178), Burial 40  
k. Type E.1. Haliotis ornament (141/110), Burial 1  
l. Type N6a1 Haliotis ornament (141/111), Burial 1  
m. Type N6a1 Haliotis ornament (141/84), Burial 5  
n. Type B.1.a Haliotis ornament (141/17)  
o. Type B.1. Haliotis ornament (141/182), Burial 40 (made from rim section)

- p. Type B.1. Haliotis ornament (141/87), Burial 5  
(made from rim section)
- q. Type B.1. Haliotis ornament (141/85), Burial 5
- r. Type B.1. Haliotis ornament (141/88), Burial 5
- s. Type B.1. Haliotis ornament (141/86), Burial 5  
(made from rim section)

- Plate 5.
- a. Profile of west wall of Test Squares
  - b. Chisel pointed pestles (141/1 and 141/2), no location
  - c. Cobble chopper (141/3), no location



**MAP 1**  
**NICOLAUS QUADRANGLE**  
 CALIFORNIA  
 7.5 MINUTE SERIES (TOPOGRAPHIC)



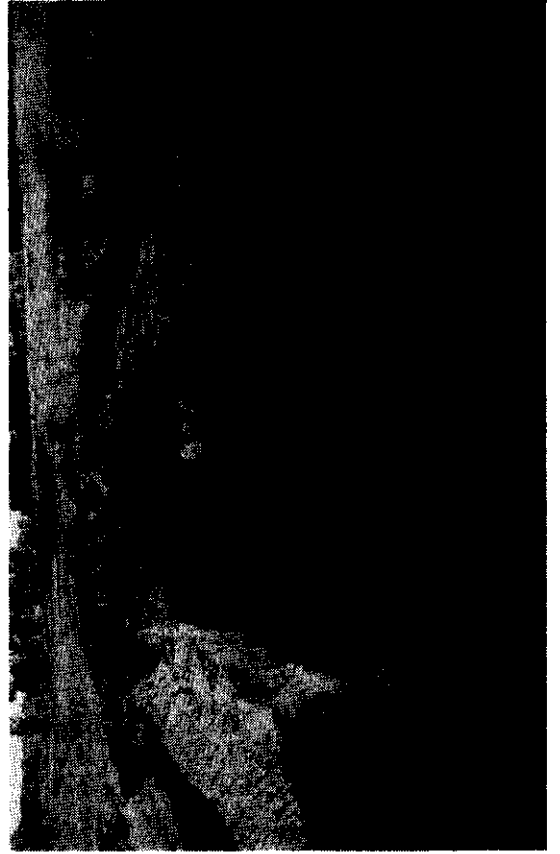
MAP 2

• SKETCH MAP OF THE RIO OSO SITE •  
(YUB - 14)





B.



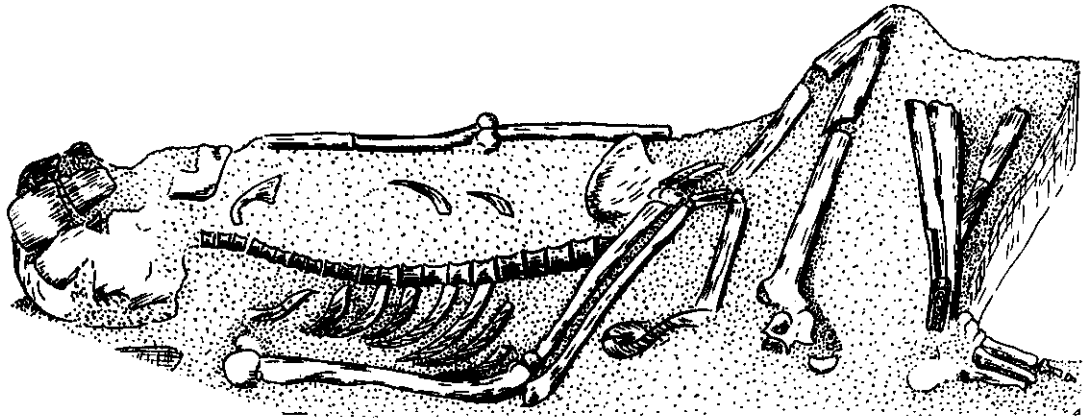
D.



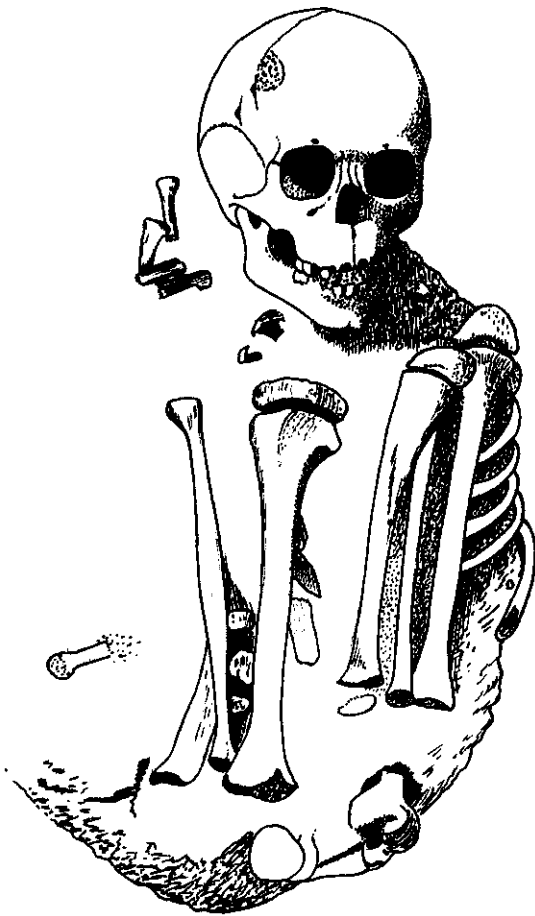
A.



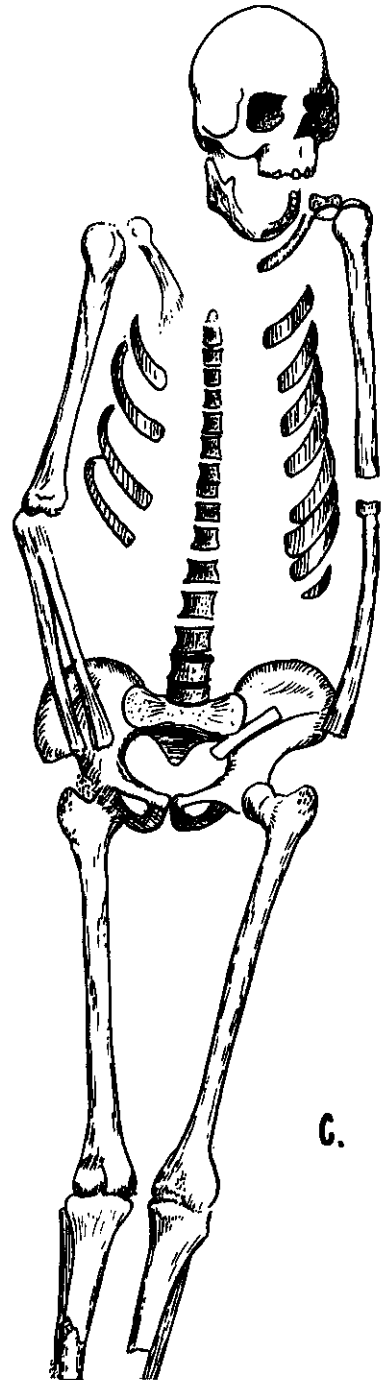
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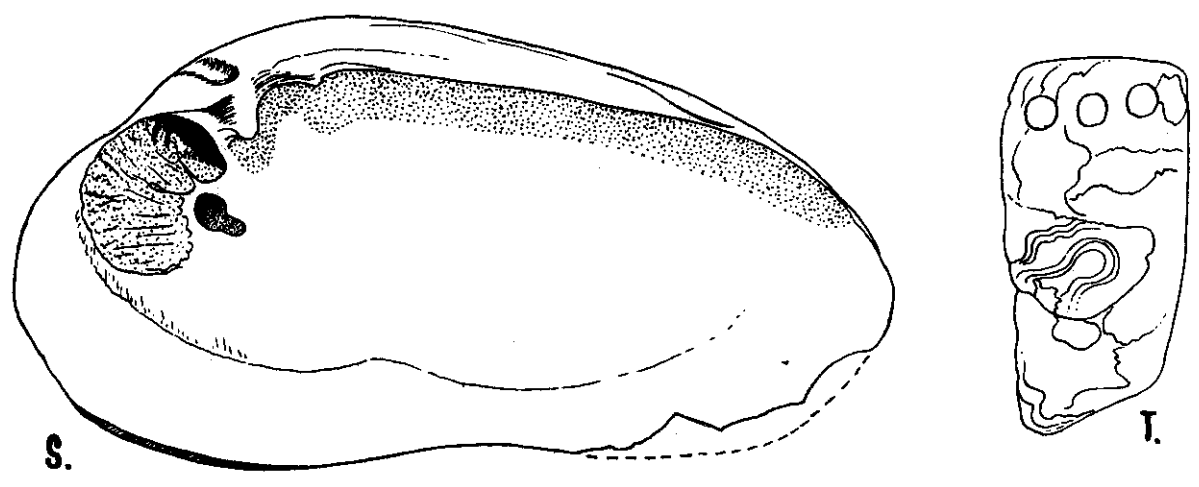
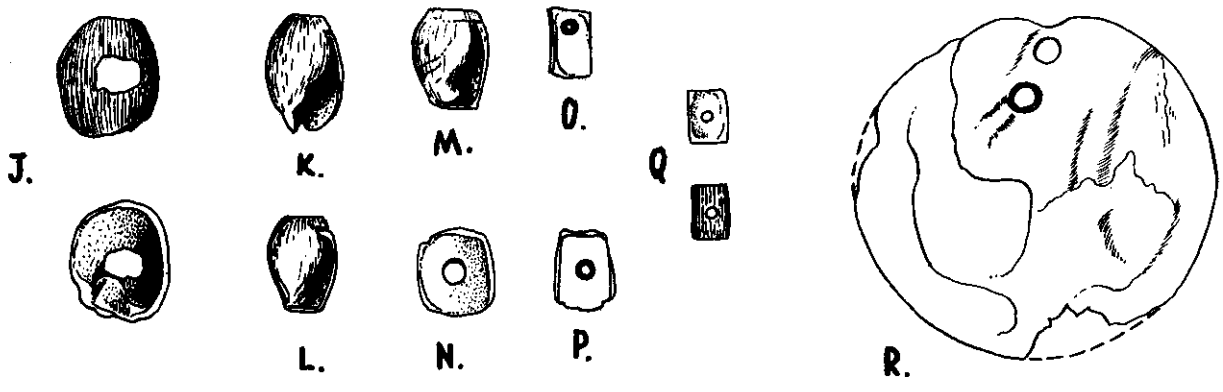
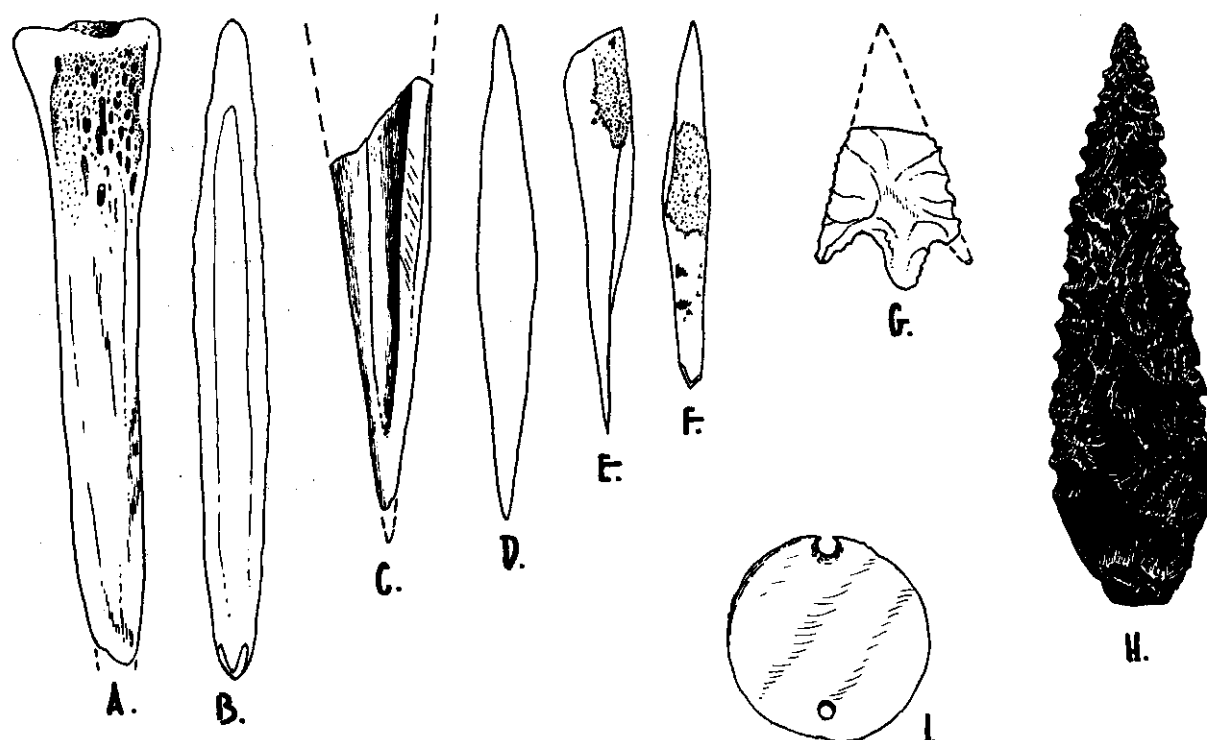
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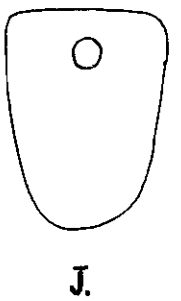
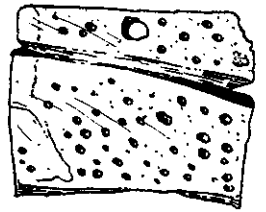
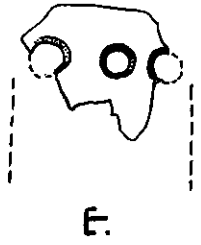
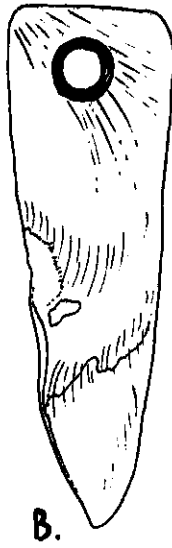
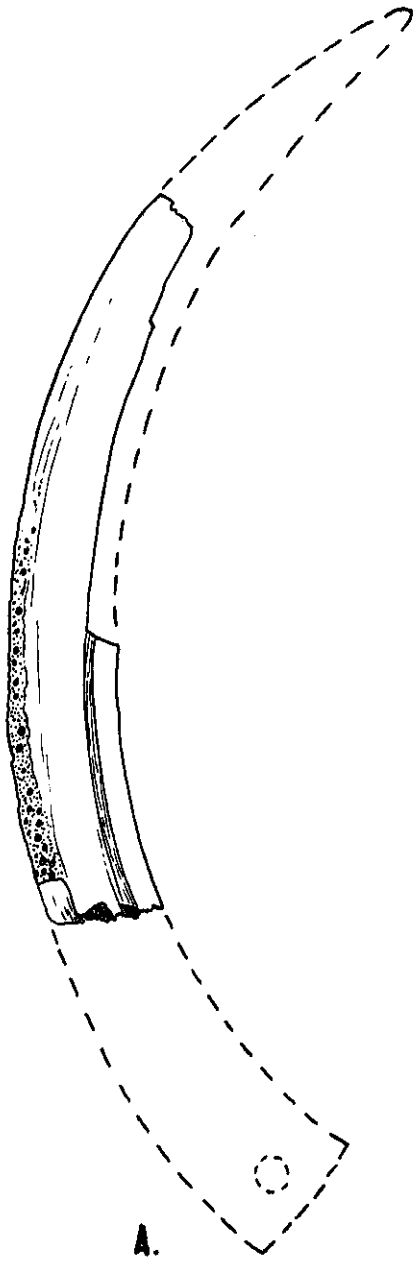


B.



C.





N.

O.

P.

Q.

R.

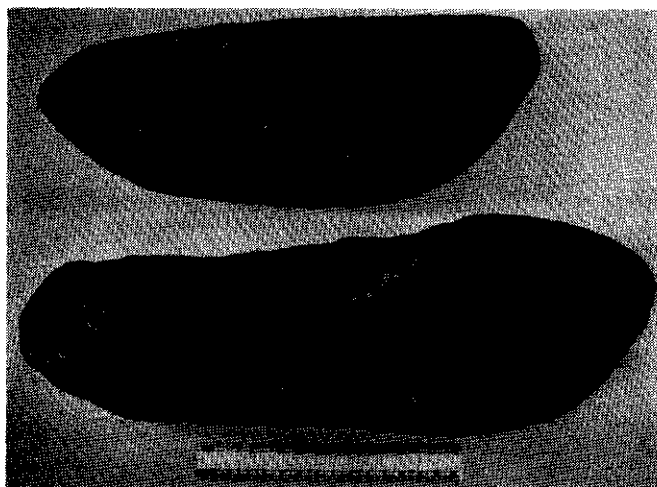
S.

PLATE 5

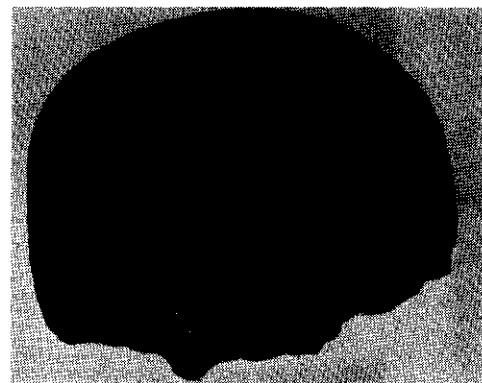


MIDDEN

A.



B.



C.