Reports of the

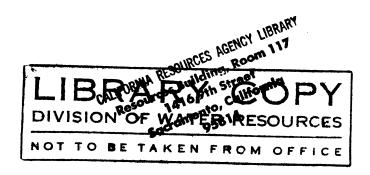
UNIVERSITY OF CALIFORNIA ARCHAEOLOGICAL SURVEY No. 26 Pepote

SALVAGE ARCHAEOLOGY IN NIMBUS AND

REDBANK RESERVOIR AREAS, CENTRAL CALIFORNIA

By Adan E. Treganza

Issued February 5, 1954



The University of California Archaeological Survey

Department of Anthropology University of California Berkeley 4, California

SALVAGE ARCHAEOLOGY IN NIMBUS AND REDBANK RESERVOIR AREAS, CENTRAL CALIFORNIA

Adan E. Treganza

Report on a joint archaeological project carried out under terms of a contract between the University of California Department of Anthropology and Archaeological Survey and the U.S. Department of Interior, National Park Service.

CONTENTS

Pa	ge
Preface	1 1 2
Part I. Nimbus Reservoir, Sacramento Valley Excavation of Site Sac-169	4
Excavation of Site Sac-169	555789999900111122
Slate "Awl" or Pencil Slate Pins "Charm Stones" Shell Artifacts. Clam Disc Beads. Whole Olivella Beads Olivella Half Shell Beads Glycymeris Beads. Abalone Whole Shells. Abalone Pendants. Bone Artifacts.	2224455555
Bone Awls Bone Flaker Gorge Fishhooks Needles Needles 17 Whistle Bone Dice 17 Bear Claws 17 Pigment Organic Materials Carbonized Acorns Cordage and other Remains	5 7 7 7 7 7 7 7 8

	Clay Pipes. Clay Marble. Button Knife Burials Mortuary Practices Data on 77 Burials	19 19 19 19 19 19 20
	Conclusions	36
	Bibliography	37
	Explanation of Plates	38
	ILLUSTRATIONS	
	Followi	ng page
Map 1. M	ap of Teh-58 showing excavation plan	ng page
Plate 1.	ap of Teh-58 showing excavation plan	4
Plate 1.	ap of Teh-58 showing excavation plan	4 39
Plate 1. Plate 2. Plate 3.	General views of site Sac-169 and site Teh-58	4 39 39
Plate 1. Plate 2. Plate 3. Plate 4.	ap of Teh-58 showing excavation plan	4 39 39 39

Page

FOREWORD

By R.F. Heizer and T.D. McCown

Nimbus and Redbank Reservoir areas were surveyed between August 1 and September 23, 1952 for archaeological sites in the summer of 1952 by a crew headed by Dr. Treganza, the working being done as part of the River Basin Survey program under terms of a contract between the Department of Interior, National Park Service, and the University of California, Department of Anthropology and the Archaeological Survey. The report entitled "The Archaeological Resources of Seven Reservoir Areas in Central and Northern California" detailed the information on 181 sites in the following reservoir areas: Nimbus (Sacramento County), Oroville (Butte County), Lost Creek (Butte County), Little Grass Valley (Plumas County), Redbank (Tehama County), Lewiston and Trinity (and Mooney Gulch alternate) (Trinity County). One site (Sac-169) was recommended for excavation, although construction activities at Nimbus dam had partly destroyed the deposits. At Redbank reservoir four sites were recommended for excavation.

On the basis of the 1952 reconnaissance the National Park Service again offered in February, 1953, a contract for salvage excavation of recommended sites in the Nimbus and Redbank reservoir areas, the work to be performed in the summer of 1953. This contract was accepted by the University of California, and the work whose results are presented by Dr. Treganza in this report, was carried out in June and July, 1953.

The Nimbus reservoir work turned out to be unproductive, but the Redbank excavation yielded a rich and important collection from a large cemetery. The Redbank data help to fill in the archaeological picture of the northern Sacramento Valley and will mark an important reference point for future investigations in Central California.

PREFACE

The author wishes to express his appreciation to Richard Brooks, Bernard Pierce, and Thomas Thorp for their suggestions and labor during the period of excavating.

Gratitude is also extended to Dr. R.F. Heizer and to other staff members of the Department of Anthropology, University of California who were helpful at all times; and to Mr. Louis Caywood, Archaeologist, for the National Park Service who paid us visits while in the field and was helpful in making decisions relating to excavations; and to the Vestal Meat Company of Red Bluff which granted permission to excavate on their property.

INTRODUCTION

The work carried out in the summer of 1953 during the months of June and July in the two reservoir areas of Nimbus and Red Bluff follows the recommendations made by the author from the 1952 summer's site survey conducted in these two regions as a joint project by the University of California Department of Anthropology and the National Park Service.

In the 1952 report ("An Archaeologic Survey of Seven Reservoir Areas in Central and Northern California") no recommendations were stressed for the Nimbus area as it was pointed out survey work was started far too late in this reservoir and the only two good sites present had already been destroyed. However, site Sac-169 was listed as possibly having some salvage value. It was decided some work be done on this site rather than consider the archaeology of the Nimbus reservoir area as a total loss. If nothing else it could serve as a prime example of how much loss can actually occur when preliminary survey and excavations are delayed.

No important finds were anticipated at Nimbus and the work undertaken was more in the nature of a positive check against earlier conclusions. After five days of excavation with near negative results, it was deemed advisable to terminate work in this area and move north into the Redbank reservoir area near Red Bluff.

In 1952 it was recommended that major excavation be carried out at what was thought to be a newly discovered site designated by us Teh-65 with additional small scale testing to be done in sites Teh-67, 68 and 69. There now exists some element of confusion as to site numbers. Just before going into the field it was discovered that our site Teh-65 had earlier been recorded as Teh-58 and rather than alter existing records we adopted the earlier site designation. Therefore, site Teh-58 in this report is the same as site Teh-65 which was originally recommended for excavation.

Once in the field with opportunity for detailed observations the small sites listed for limited excavation appeared less and less likely to produce artifact material. In the meantime a new site (Teh-80) was discovered and site Teh-66 directly across Blue Tent Creek from where we were camped looked more promising to us now than any of the other smaller sites which we had earlier recommended for digging.

When Mr. L. Caywood visited our excavations we made a resurvey of the archaeological resources and he was in agreement that we should substitute sites Teh-66 and 80 for the earlier recommended sites Teh-67, 68, and 69. A letter suggesting such a change was sent both to the Regional Director of Region 4, National Park Service and to Dr. T.D. McCown, Department of Anthropology, University of California.

In the case of Teh-58, we were most fortunate in discovering a large cemetery with burials rich in grave offerings though the human bones were in very poor condition and often much disturbed. As judged by the glass trade beads this village was occupied in the early to middle 19th century. With our records of 77 burials plus several thousand artifacts (663 catalog numbers) we are able to present a fairly detailed picture of aboriginal culture in early historic times.

In several places in this report, especially with reference to burials, there will be indicated a loss of records. This is due to an unfortunate collapse of some 25 feet of side wall on July 3, 1953. Fortunately no one was hurt though the accident could have been serious since not five minutes earlier the entire crew had been working at a depth of eight feet directly below this wall. In Du Bois' "Wintu Ethnography," she reports, "In recent years a Wintu was induced to dig up a grave at the behest of white relic hunters. He suffered paralysis as a punishment" (Du Bois, 1935, p. 67). A local Wintu living near our camp could not be induced to come near our diggings and he further told it about the town of Red Bluff that some disaster would befall us. At least we cooperated in adding conviction to native superstition.

PART I. NIMBUS RESERVOIR, SACRAMENTO COUNTY

Excavation of Site Sac-169

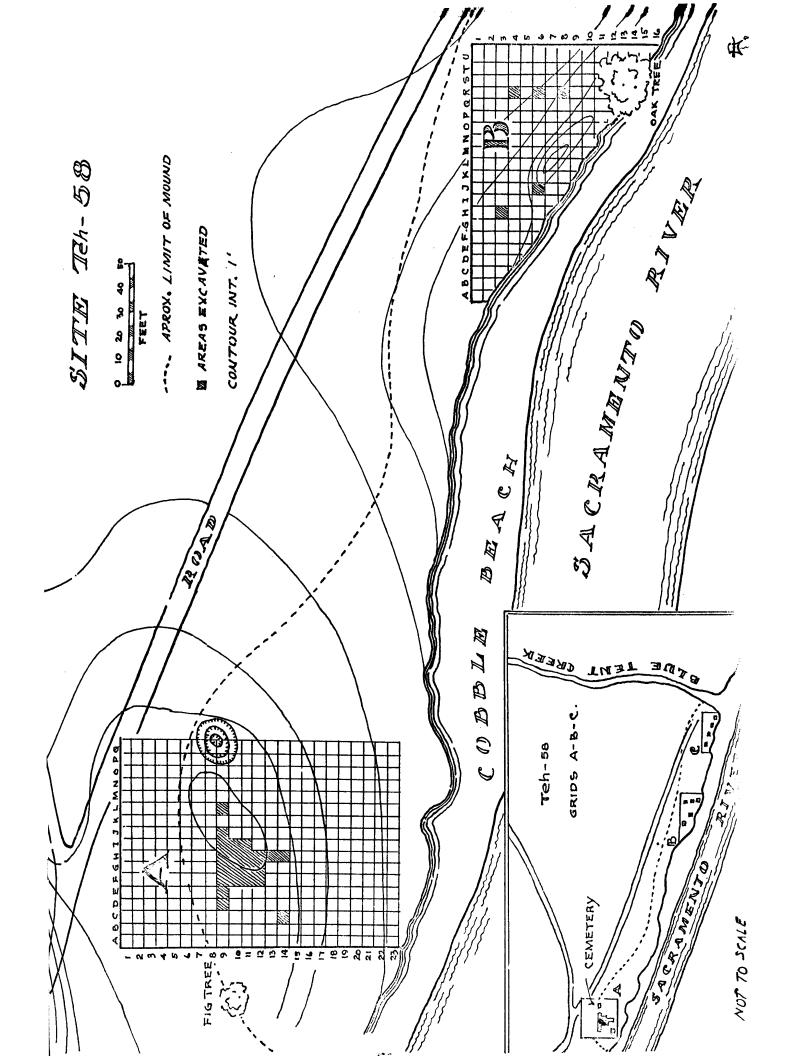
It was during the site survey of 1952 that it was realized that construction work on the dam was already far ahead of any salvage program in archaeology. The only two promising sites were located under the north and south axis of the dam fill and had already been destroyed. Site Sac-169 being located about a mile up river from where construction would take place was considered relatively secure. On arriving this year we were disturbed to find a heavy duty construction road cut into the bluff directly below the site Sac-169 and that site Sac-171 had been completely demolished. Heavy equipment was operating in this vicinity all during our stay (Pl. la).

A total of five test pits $5' \times 5' \times 6'$ deep were dug in the most promising section of this deposit (Pl. 1b) and with near negative results as far as cultural remains were concerned.

The color and texture of the midden soil were of average expectancy being perhaps a little granular or sandy as a result of increment from a weathered lava bluff above the site. Mammal bone was not common and only two pieces of human bone were encountered. Bits of river mussel shell were scattered about but never concentrated in a lens. Charcoal and wood ash hearths were not infrequent. Negative or non-preservable remains here suggest a population depending mainly on a fish-acorn diet. This may have been just a seasonal camp.

The artifacts are of such a type and so few they reveal little of importance relating to the cultural history of this site. A mano, cobble mortar, girdled sinker stone, and a small notched base basalt projectile point complete the artifact list. Mr. Caywood found a white glass bead on the surface of the type in use around 1850.

It can be concluded at least for this site and probably for the entire Nimbus reservoir area that there has been no great archaeological loss suffered so far nor will there be any when the entire area is flooded. However, it should be stressed that this is mainly due to the lack of good archaeological resources and not due to any planned archaeological salvage program.



PART II. REDBANK RESERVOIR, TEHAMA COUNTY

Excavation of Site Teh-58

The site designated as Teh-58 is located on the south bank of Blue Tent Creek where it enters the Sacramento River about three-quarters of a mile above Ide's Adobe. There is a broad river terrace at this point which terminates in a twenty foot bluff above the river. It is along this high bluff overlooking the water that the village site is mainly concentrated.

The archaeological testing of this site presented certain problems in terms of the great size of deposit and our small crew of four and the time limitation alloted to this project. However, in the survey of the previous summer we were fortunate in discovering a quantity of artifact material in ground squirrel diggings in what appeared to be a small auxiliary portion of the main mound. On the strength of these earlier finds, which indicated at least some evidence of burials, we arbitrarily started excavations in this general area. As it turned out later, but unknown at the time, this was the cemetery for the village, or at least the only one which we were to discover. To provide a fair sample of the deposit we dug nine 5' x 5' test pits in other places, finding very few artifacts and but a single burial. Realizing the potentialities of the cemetery area we returned to concentrate our work in that region. We have as a result considerable information on mortuary customs and material culture and scanty data on general living conditions.

The site is nowhere more than 75 yards wide but about 400 yards long. The difficulty in employing a single grid can be realized so as our excavations progressed we set up three separate grid areas designated as A, B, and C (See Map 1).

Grids B and C cover the main section of the mound used for purposes of habitation. Here the soil was very dark, full of fire fractured stone, and excessively light and dusty when dry. Mammal refuse bone was not common as compared to other Sacramento Valley sites. The historic Wintu of this area kept dogs and it may be they consumed most of the rejected bone. The bone we did find was generally carbonized. The river mussel shells were frequent as isolated fragments and in one instance (Grid C, section M-12) at a depth of 67 inches an 18 inch lens of shell, charcoal, and rocks were found suggesting a mussel steaming pit.

Grid A, where we originally started excavations, as judged by 76 burials and the nature of the soil, is strictly a cemetery area. The details of this section are discussed under burials.

Chipped Stone Artifacts

Projectile Points. As a group, small arrow points were the most common type of artifact occurring in this site. Here, as elsewhere, certain problems arise relative to a classification system based upon form, especially

if one attempts to further modify an existing modification of an original typology. For the McCloud area to the north, Smith and Weymouth have employed their own modification of W.D. Strong's projectile point typology first introduced in his "An Introduction to Nebraska Archeology" published in 1935. In the past others have done the same mainly in developing the archaeology of central California. It now comes to pass that if one traces out the various modifications of Strong's original typology he finds several different projectile point types all bearing the same type designation. For this reason only the broad type designations have been employed in this paper, hence relatively few main types occur. Within any one type there exists considerable variation.

The most frequent material used was obsidian in its various phases. Listed in the order of color frequency would be jet black, grey opaque, grey translucent, red and grey banded, and black and red banded. Basalt, jasper, and quartz were occasionally used.

In refined pressure techniques involving light ribbon-flaking, narrow basal notching, and near-perfect symmetry, it would be difficult to surpass the better made specimens from this site. There is represented here real technological achievement in pressure control, a feature frequently exhibited in the Late Horizon sites of central California.

The sources of obsidian are of interest as ultimately these will provide fuller data on aboriginal trade routes once a specific type of obsidian can be identified as occurring in a definite locality. Such identification, however, should rest on the basis of some of the larger blades, for river gravels frequently contain small pieces of float derived from several different geologic sources. This was noted in our area where small nodules could be found on the river's edge and in the site. Many of our small points were probably made from such float material.

The following types are represented as based on the broad outlines of the Strong classification (Strong, 1935, pp. 88-89). All point types are illustrated on Plate 2 and are drawn to natural scale.

Type NAa -- A single chert specimen 7.6 cm. long. Slight indentation on both sides 2.3 cm. up from base. Shows evidence of having been hafted and probably used as a small knife. It is very similar to a hafted specimen in the Museum of Anthropology of the University of California (1-1326) listed as a "Yurok man's knife."

Type NAbl -- A single quartz specimen 3 cm. long. Edges are serrated.

Type NAb2 -- A single specimen 5.5 cm. long. Poorly shaped from a slate pebble.

Type NBbl -- Fifty specimens ranging in length from 6.7 cm. to 1.9 cm. Considerable variation is present in this type. Half of the specimens have fine marginal serrations and the remainder are plain. Bases range from deep concave to straight. Side notches vary from slight indentations to deep narrow cuts.

In this group there were eight exceptionally well made points associated with Burial 44 and all had been "killed."

Type SAa -- Consists of four specimens which range from 4.6 cm. to 2.4 cm. in length. Three have slight serrations; the others are plain.

Type SAb -- This type is not only the most abundant but also shows the greatest range in variation. Stems vary from rectangular to pointed; tangs range from slight extensions to greatly extended barbs; and the sides range from straight to convex.

In this group 80 out of 85 specimens were serrated. Lengths range from 6.7 cm. to 1.2 cm.

Type SCbl -- 6 specimens, three serrated and three plain. Length 2.9 to 1.9 cm.

Type SCb2 -- 4 specimens; all serrated. Length 3 to 2.1 cm.

Type SCb3 -- 12 specimens; 11 serrated and one plain. Length 2.8 to 1.6 cm.

In addition to the above form some 19 point tips were recorded but could not be assigned to any specific type. They were saved for reason of their material.

Blades. Blades as here described cover specimens of obvious ceremonial usage to those whose historic counterparts have been identified as hafted fish knives. Forms are variants of the leaf shape and composed mainly of obsidian. Because of their large dimensions all blades are illustrated at one-half their natural size.

Of the 19 examples collected several require individual descriptions as they exhibit new and unique features. Specimen 1-151978 consists of a large obsidian blade which had been "killed" when placed with Burial 60. All but one section was recovered. Unusual is the size and weight of this specimen. The actual weight is 5 pounds and 6 ounces and reconstructed would be about 6 pounds and 7 ounces. The measurements are 55 cm. long by 17 cm. wide, and 4.3 cm. thick. This specimen, too big to illustrate, is probably the largest obsidian blade known from any archaeological site in California. A blade of this size is comparable only to ethnographic specimens possessed by the Klamath and Trinity River Indians. Some Yurok specimens are known to be even larger and in this general area such objects were displayed purely as items of wealth during ceremonial occasions. Overall this blade exhibits large percussion flaking with marginal pressure trimming.

Three additional specimens because of their size, weight, and general shape must have been items of ceremonial wealth rather than utilitarian in function. Specimen 1-151891 (Pl. 3a) measures 26.2 cm. long, 9.9 cm. wide, and 2.4 cm. thick. One end has a definite indentation which exhibits pressure retouching. Specimen 1-151890 is 29.7 cm. long, 9.3 cm. wide, and 2.1 cm. thick. Like the previous specimen it shows overall percussion flaking and marginal trimming. Specimen 1-151889, the smallest of the three, shows some attempt at overall pressure flaking. Measurements are 23.8 cm. long, 7.1 cm. wide, and 1.2 cm. thick. These blades all occurred in burial association and all had been "killed."

Specimen 1-152063, though classed here with the blades, is of dubious character because of its shape (Pl. 3b). It resembles more an Old World paleolithic chopper. It is oval to almond shaped, measuring 18.7 cm. by 11.7 cm. by 2.6 cm. thick. Flaking is of the broad percussion type except on the narrow end which shows considerable pressure work. It is possible that this specimen represents an attempt to salvage a broken blade.

One blade exhibits the greatest proficiency of technological skill in surface pressure flaking (Pl. 3c). This obsidian specimen measures 27.6 cm. long by 5.5 cm. wide and 1.6 cm. thick. A blade of this size and shape could have served in either a utilitarian or ceremonial capacity.

Blade 1-152065 (P1. 3g) is of grey, almost opaque, obsidian or glassy basalt measuring 19.3 cm. long. 5.0 cm. wide, and 1.1 thick. Of interest is that the specimen was made from either a thin piece of flute or taken from some quarry which produces this thin laminated source material. Both sides of the blade exhibit patinated non-flaked areas.

Specimen 1-152064 (P1. 3i) is a fine pressure flaked blade 20.2 cm. long. 5.7 cm. wide, and 1.2 cm. thick. On the blunt end are two shallow side notches 1.5 cm. from the base and probably served as part of the haft. Most significant was the attempt to grind smooth both surfaces of the blade. Occasionally in California there are instances of grinding slate into blades but this is the first known occurrence of obsidian.

A small blade, 1-151874 (Pl. 3e), 11 cm. long, 4.1 cm. wide and 1.3 cm. thick, has two shallow side notches 9 mm. from the base and was probably hafted as a knife.

Blade 1-152024 (P1. 3h) differs from all other blades in having an angular base and being composed of a curved piece of obsidian.

Two complete and two broken blades are composed of varicolored Franciscan chert. The two complete specimens (Pl. 3d-f) are nearly identical to the hafted fish knives known to the historic Yurok and Hupa. Similar archaeological specimens are known to northwestern California in general. In the case of the larger of these blades, a portion of the haft was still in position when discovered. Apparently the base of the blade was first covered with pitch, then to both sides were added thin pieces of wood to form the bulk of the handle. More pitch was added to the wood and the surface was bound with cordage or sinew.

Blade 1-152025 is of interest since it evidences two distinct histories of use. Originally this specimen was a crude percussion flaked basalt knife which subsequent to its original manufacture had developed a considerable amount of surface patina. Fresh dark flakes on the old surface indicates its more recent use by much later peoples. This would indicate the strong possibility that there exists here in the upper Sacramento Valley some fairly early evidence of man. Along lines of different evidence the author suggested a similar possibility in last year's survey report of this area.

Blade or Knife Blanks. In two cases caches of what might be termed blade blanks were found in association with burials. In both instances the types

of blanks differ and necessitate separate descriptions. Burial 61 contained twelve obsidian blanks (1-151989 to 152000). Seven are oval blunt ends ranging from 12 to 6.5 cm. in length and from 6.9 to 4 cm. in width, and none are over 7 mm. thick. Three others express about the same range in measurements but are more leaf-shaped in form. One specimen has a concave base and resembles a crude point blank, and the last specimen is made of a thin, sub-rectangular flakesmooth on the concave side but flaked over the entire curved back. With the exception of this last specimen all the rest exhibit only rough flaking. Any of these examples could be used just as they are for scrapers or flake knives or could be further worked down into refined tools.

Burial 40 contained seven large obsidian blanks all in a state of primary manufacture. Sizes range in length from 18.6 to 14 cm. long and 10.2 to 5.9 cm. wide, and none are over 4 cm. thick. All are planoconvex, the result of being formed by striking off large primary percussion flakes. Blanks such as these were probably traded elsewhere or worked down into blades of the ceremonial type.

<u>Drills or Reamers.</u> Nine drills were recovered, of which seven are composed of a fine grained tough basalt, one obsidian, and one of green chert. Eight specimens range in length from 7.6 to 3.2 cm. and are of the type which were probably held in the fingers (Pl. 2b). A single specimen 7.1 cm. long was probably hafted or possibly represents a unique projectile point (Pl. 2a).

Core Tools. There remains a body of chipped stone which could be classed as core or heavy duty percussion tools such as choppers and large scrapers. Few of these occur in the cemetery area and it is assumed they were of little significance as tools. None of this group of artifacts are definite enough in form to set up a specific type.

Nodules. In eight cases burials contained caches of chipped nodules or large flakes of obsidian. Presumably these constitute a source material for future artifacts.

Ground and Pecked Stone Artifacts

Pestles. Of the thirty specimens collected twenty-one were complete. These latter ranged in length from 10 to 64.6 cm. No great diversity in types is represented. Whether it is a rough cobble or a polished specimen the form is that of tapered cylinder. Presumably in manufacture, a naturally elongated stone was selected and reduced to the desired shape by first pecking and then grinding. In most cases the proximal end comes to a definite but blunted point. The distal or pounding end generally tends to taper in slightly, however in several cases the pestle will terminate in an abrupt angle as in the base of a cone. The wear pattern on the distal end varies from flat to several degrees of convexity, but

in no instance is the tear drop form approximated. Generally the margins of the pounding surface exhibit battering as a result of use in the hoppered mortar stone. The more perfect specimens are typified as having a near circular cross-section, a highly polished surface, and straight sides. There are cases where the pestle body has a slight curve and the cross-section tends toward ovate. These features are the results of the original shape of the rock and do not represent creative qualities.

Two specimens of this long tapered type contain small pits (1.5 cm.) on the working point (pounding surface). The significance of such pits is not revealed by the specimens nor by reference to the published literature. Any wearing down of the pestle through use would eliminate such depressions unless they were constantly renewed. It is possible the small concavity served the function of the acorn anvil.

Seven specimens are little more than elongated, irregularly tapered cobblestones, but show a definite wear pattern on the distal end. Two exhibit some attempt at shaping through pecking.

A single sandstone specimen has a truncated proximal end, is only 10 cm. long, and probably served as a pigment pestle.

The materials used in the production of pestles are predominantly some fine grained rock. Basalt, diorite, or tuff being the most common. Sandstone was noted only in two instances.

The practice of "killing" the pestle when used as grave furniture followed a consistent pattern for this site especially in the very long and well shaped specimens. Examples 40 cm. and over were broken into four pieces so that no one section was long enough to reshape into a new pestle.

Pestles collected here are less diversified than those of the McCloud area (Smith and Weymouth, 1952, p. 15), but in neither region is any great elaboration expressed. Except for slight deviation all of our specimens are of the tapering cylinder or long cone type.

Hoppered Mortar Stones. Large flat ovoid stones which were used in conjunction with a bottomless basket and pestle for the production of acorn meal were of rare occurrence in the excavations, although in this general area it is not uncommon to find this type of artifact on the surface of the sites.

Only two specimens were recovered from the site and neither were in direct association with burials. It is possible more of these implements might have been recovered from the occupational or living area of the mound. Apparently the hoppered mortar was not much favored as grave furniture. A similar situation was noted by Smith and Weymouth for the McCloud region to the north.

Abrading Tools. Abraders are of several types and presumably experienced multiple usage. Four specimens could be termed "palettes" and are composed of irregular flat slabs of laminated, fine-grained sandstone.

Three were associated with Burial 58 and the largest of these measured $25 \times 25 \times 1.5$ cm. and had been "killed" when placed in the grave. All retain a hematite stain indicating use of pigment grinders. Alternatively they might have served the purpose of smoothing the large clam disk beads which appear unique for this area.

Other abraders are elongated pieces of sandstone of the texture just described and probably used in the hand to work down some object as in shaping a pestle or the back of an arrow shaft smoother. The largest is trapezoidal, measuring 28 cm. long and 6.6 cm. to 4.1 cm. on the ends. A single specimen (1-151739) made of a basalt pebble ($8.9 \times 4.5 \text{ cm}$) exhibits a concave area on one end as if it had been used to create the high polish noted on some pestles. The texture of the basalt and the curved wear pattern suggests a finishing tool for curved surfaces.

Arrow Shaft Smoothers (Pl. 6a,b). Of seventeen examples, seven are complete and all are composed of a fine grained light yellow to pink sandstone. Forms range from rectangular through sub-rectangular to oval. Lengths are from 12.6 to 9.3 cm., and widths from 5.5 to 3.6 cm. Longitudinal grooves average 5 mm. in width and range in depth from 2.5 to 4 mm. Groove cross sections vary from "U" in the well-worn specimens to parabolic curves in the less-used ones. In seven cases the grooves cut diagonally across the longitudinal face rather than parallel it. In all cases the exterior surface is worked down to fit the palm of the hand.

Our specimens are similar to those described by Smith and Weymouth (1952, p. 14), but with the exception that the current ones bear grooves on but a single surface and none are made of pumice. Both Du Bois (1935, p. 124) and Voegelin (1942, p. 72) report similar specimens among the ethnic groups of the area and a Yurok example (1-1216) may be found in the Museum of Anthropology of the University of California.

Aboriginal Beads and Ornaments

Stone Disc Beads. Apparently unique is the occurrence of large flat disc beads (Pl. 4n) composed of either a chalky calcareous material or a fine volcanic tuffaceous detritus. Diameters range from 4.1 to 3 cm. Also centered in this area are the excessively large clam disc beads to which these stone specimens bear a close resemblance in both color, size, and texture. They differ in that the stone specimens lack the natural curvature in any clam shell where a large section is utilized. Beads of this size were not encountered to the north in the McCloud river region.

Magnesite Beads. A single magnesite cylinder (Pl. 40) was found with Burial 52. It is salmon pink, biconical drilled, 3.1 cm. long, and 2.2 cm. in diameter. This general type of bead has come to be associated with the Pomo of Lake County where one of the few magnesite deposits is known to exist on Cache Creek. Archaeologically this bead type is frequently encountered in Late Horizon sites throughout central California.

Steatite Beads. Steatite beads are limited to two tubular examples (Pl. 4h) measuring 2 cm. long by 1 cm. diameter and 11 mm. long and 9 mm. diameter. Both are biconically drilled.

Obsidian Pendant. Of unusual occurrence is a large thin flake of obsidian, trapezoidal in form with two notches chipped into the small end for purposes of suspension. The naturally sharp edges of the flake have been dulled through pressure flaking to prevent cutting the wearer (Pl. 4q).

Slate Pendant. A single example, rectangular in form, and drilled at one end. Made from a thin piece of laminated slate by grinding the margins into the desired shape. Measures 6.1 cm. long, 3.9 cm. wide and 2 mm. thick.

Slate "Awl" or Pencil. A single example made by pointing a naturally long piece of water worn slate. The shape and wear on the pointed end suggests this specimen could have been used as an awl just as well as representing an ornament (Pl. 4k). Length 11 cm.

Slate Pins. These two incomplete specimens are in many respects similar to the bi-pointed gorge fishhooks which are made of bone. It is possible these specimens served in a similar capacity.

"Charm Stones"

Traditionally in California archaeology the term charm stone has been reserved for objects generally assumed to be of nonutilitarian use but definitely of human manufacture. In form they may vary from "cog" stones in southern California to the phallic, spindle, globular, girdled or perforated types characteristic of the central part of the State, where according to form and material they have significance in the chronological sequence of the Early, Middle, and Late cultural Horizons.

At this particular site (Teh-58) we find the traditional charm stone lacking as did Smith and Weymouth some forty miles to the north on the lower McCloud river. However, the ceremonial complex generally associated with such objects is present with merely a substitute series of objects being used as charms. Fortunately Du Bois' (1935, p. 82) careful notations makes such an identification possible, since she reports the following: "Strangely shaped stones found anywhere might be picked up and kept by the finders as a charm (xosi). Were the particular attributes of the charm not disclosed by its shape, a shaman might be asked to reveal them by consulting his spirits. Usually, however, the shape of the stone denoted the type of charm, and pragmatic evidence of its efficacy often revealed to the owner its attributes." Generally we think of "charms" as being possessed by a limited number of people, generally a shaman; here apparently they could become the property of any individual.

Because of the unique forms most of these specimens will be described and illustrated individually. Two specimens (Pl. 6p-q) are sandstone concretions not unlike mushroom buttons with an encircling groove on the upper surface. Concerning this general shape of object Du Bois reports (1935, p. 82): "Rattlesnake buttons or stones resembling them considered charms. Brought good luck but were laden with mana which would react with particular deleteriousness on persons who treated them carelessly." Our two specimens resemble very much the last rattle and button on the tail of a rattlesnake.

Three specimens (Pl. 6m, n, o) are cup-shaped sandstone concretions. The two thinner examples have artificial perforations at the base of the cup. All three resemble the cup from which an acorn has been removed. Du Bois notes (1935, p. 82): "Sucker charm (tcir xosi): nondescript pebble with a concavity on one surface. Brought luck to fishermen."

A somewhat similar but compound specimen consists of a limonite concretion in the form of a cup with the cup portion somewhat artificially enlarged so as to hold a nearly symmetrical jasper pebble (Pl. 6r). The two parts combined to look like an acorn and cup.

A single specimen is saddle-shaped with two depressions of finger tip size on the concave side (Pl. 6k). This also might be classed as a fish charm.

Three concretions, all a little different in form, have natural perforations. One specimen is limonite resembling a fossil root. Another looks like an oval stone bead, and the third is of a red jasper-like material shaped like a peanut. This specimen shows some scratches around the middle as if some attempt had been made at further shaping.

Two marble sized pebbles, one of yellow quartzite and the other opaque quartz, were found with Burial 67. There is no indication as to what these might represent.

Of interest is a natural elongated pebble (6 cm. x 2.2 cm.) (Pl. 6i) containing a longitudinal girdle. Stones of similar shape but larger have been reported for this general area and classed as charm stones of the traditional type since such forms do occur further to the south as one of the conventional varieties. The author was informed by Mr. Dale (age ca. 80 years) of Dale's Station, located some 20 miles northeast of Red Bluff, that as a boy he had observed the Indians using such girdled stones in pairs strung like a bola for hunting geese. Several of these specimens were in the present Dale collection of artifacts and had been found on the surface of the open lava plains containing shallow sumps or ponds. Both modern and Indian duck blinds are still present in the area, thus providing possible confirmation to the story. Such an object could still be possessed of mana and at the same time serve in a functional capacity. A somewhat similar relationship has been earlier suggested for charm stones and fish sinkers at the Peterson mound (Treganza 1948, p. 295).

Five additional objects, all different, have been included here as charms since they occur in burial associations. They are: a pencil-shaped piece of slate 11.7 cm. long by 1.2 cm. wide and showing no evidence of abrasion (Pl. 6g); a concretion composed of sandstone and quartz and, depending upon how viewed, resembles a fossil tooth or an ice cream cone;

-13-

a lump of Franciscan chert resembling the pericardium of the heart; a pair of fossil horse teeth probably obtained from some local paleontological deposit. Last, is the tooth of a peccary, the presence of which is difficult to explain since this is far beyond the known range of this mammal. It is assumed it arrived at Red Bluff via aboriginal transport from southwestern United States or Mexico.

In addition to what has been described, nine elongated and odd shaped stones occurred in burial association. Five specimens composed of elongated water-worn volcanics were found with burial 58. Stones of this general nature frequently occur in sites in central and northern California and where found in no particular reference to features, they are generally passed off with mild curiosity. Here because of the burial associations and emphasis in general on odd stones, we are inclined to consider them as an artifact type.

Shell Artifacts

Shell, like the bone material, was not well preserved in this site. Most of the small bead types though weathered, are identifiable, but abalone pendants made from a laminated shell, are badly eroded on the margins and perforations.

Exact numerical counts have little or no meaning as in many cases quantities of shells have been reduced to a white powdery mass. Also, in the cemetery area burials were frequently so close together and disturbed by rodents that where small beads were involved grave goods were often mixed. Numerically clam disc beads were the most frequent in occurrence with whole olivella with ground spires and glycymeris with perforated beads next. The association of certain bead types such as in burial 65 where clam disc, whole olivella, glycymeris, pine nut beads, and abalone pendants occur in quantity, there is suggested the former presence of a decorated skirt. Skirts belonging to people of great wealth and possessing the same type of beads are known from the Klamath River area in the ethnographic period.

Clam-disc Beads. Two classes are recognized, large and small, with a considerable size range within each type. Small discs (Pl. 4b) are from 4 mm. to 15 mm. and are made from the species Saxidomus nuttalli and S. giganteus. In Gifford's (1947) classification these would be types Vla2 and Vla3. In the large type (Pl. 4a) sizes range from 20 mm. to 44 mm. All of the large type appear to be made of S. nuttalli and Gifford has nothing that approximates this type, nor did Smith and Weymouth encounter similar specimens on the McCloud River. The large disc stone beads mentioned earlier approximate the shell forms in size and appearance. As far as is known this large shell disc is to be associated with only late prehistoric and early historic sites and its now known distribution would restrict it to this immediate area of Tehama County.

Whole Olivella Beads. Whole Olivella biplicata with ground off spires exhibit a range from 8 to 24 mm. of length (Pl. 4c). Of less frequent occurrence and confined to the large shells is the same type of bead only with the addition of a punched hole on the side (Pl. 4d).

Olivella Half Shell Beads. Actually this type of bead consists of some-what less than half a shell and occurs in three variant forms. One is made of that portion cut from the Olivella shell so that it shows no trace of either the lip or the whorl on the inside of the bead; a second type may exhibit either the lip or whorl, and a third may be like either of the former but differs in that the exterior portion of the shell is ground down so that the perforation appears as a punched hole rather than a drilled hole. These are small distinctions and it is doubtful if they have cultural significance.

Glycymeris Beads. Glycymeris migueliana is formed into a bead by merely grinding down the umbo until a perforation is created by horizontal abrasion (Pl. 4e). In two cases (burials 63 and 65) these shell beads occurred in quantity with other shell types and presumably once formed part of a dance skirt.

Abalone Whole Shells. Whole abalone shells were frequent as grave offerings especially being placed over or under the head. Shell sizes ranged from 12 to 20 cm. and all are of the species Haliotis rufescens. It is interesting to note that all of the specimens we collected were originally gathered as dead or beach worn shells. Possibly such inferior shells found some trade value in the interior, or parties going from the interior to the coast could find rejected water worn specimens which were ignored by the local inhabitants.

Abalone Pendants. Some 42 specimens were recovered of which 35 can be roughly classified. The types illustrated in Plate 5 make the specimens appear far better than they really are.

Elongated with no perforations. Forms here range from sub-rectangular to pear-shape. It is possible that in some cases perforations have been obliterated. Nine specimens range from 2.5 cm. long by 1.2 cm. wide to 5.7 cm. long by 3.4 cm. wide.

Oval with one perforation. Forms range from oval to pear-shape.

Of seven specimens six are rather small, measuring 5.3 cm. by 3.4 cm.

A single large example measures 12.1 cm. long by 8.3 cm. wide.

Oval with two perforations. A single specimen measuring 2.2 cm. long by 1.4 cm. wide.

Circular with central perforation. Forms vary from squares with rounded corners to irregular circles with none approximating a true disc. Largest specimen is 2.3 cm. diameter.

<u>Circular</u>, <u>central</u> <u>perforation</u>, <u>incised</u>. Two specimens 3.3 and 1.9 cm. in diameter.

Circular, edge perforations, punctate. A single specimen shows one large and two small marginal perforations. Punctate design cannot be traced in pattern form.

Rectangular, single perforation. Three specimens ranging from 8.5 cm. long by 3.2 cm. wide to 5.7 cm. long to 2.3 cm. wide.

Rectangular, single perforation, incised. Single specimen 4.2 cm. long by 3 cm. wide.

Rectangular, two perforations. Three specimens ranging from 6×4 cm. to 2.7 by 2.5 cm.

Rectangular, two perforations, incised. Single specimen 5.7 by 5.2 cm.

Rectangular, two perforations, punctate. Single specimen 4.8 by 4 cm.

Trapezoidal. Single specimen 5.8 cm. long by 2.4 cm. wide by 4.3 wide.

Bone Artifacts

Only in burial 65 at a depth of 7 feet 10 inches did we recover bone artifacts which were well preserved. As judged by the very poor condition of the human bone throughout the cemetery area, it is doubtful that many small bone artifacts, even though they had been present in quantity, would have been preserved. Though Smith and Weymouth also found relatively little bone in their excavations on the McCloud River this does not necessarily imply that bone tools are of little significance to this area. Wedel's excavations (Smith and Weymouth, 1952, p. 36) in 1935 in the Redding Mound 1 (Sha-47) produced bone artifacts in fair abundance. It is assumed that the lack of recoverable bone artifact material in the present mound is the result of some unusual circumstance peculiar to this particular site.

Bone Awls. Two specimens possibly made from bear ulnae were associated with burial 65 and measured in length 23.8 and 23.1 cm. (Pl. 4j). Two smaller ulna awls 11.4 cm. and 5.4 cm. in length are of the type associated with coiled basketry. Of three split cannon bone specimens, only one provides the complete length measurement (11.1 cm).

Four pointed fragments could represent either broken awl points or have served as part of the compound element in a fish spear. Short barbs of this type may be noted in fish spears possessed by the Yurok and used within historic times.

A single blunt specimen looks like a matting needle and a sharp but short artifact resembles the penis bone of a bear.

Bone Flaker. A single specimen not complete, 6.1 cm. long.

Gorge Fishhooks. Seven bi-pointed bone pieces between 3 and 4 cm. long could have functioned either as gorge hooks or barbs.

Needles. Five perforated bone needles (Pl. 41-m) made from the metapodial of a deer were found with burial 65. One differs in that it possesses five serrations along the thin edge.

Whistle. At 8 feet in depth, a single example was found with burial 63, 6.5 cm. long.

Bone Dice. Burial 27 contained nine eroded rectangular pieces of bone, which in the complete specimens ranged from 5 cm. long by 7.8 mm. wide to 3.8 cm. long by 1 cm. wide. These specimens have been interpreted as being either dice of the type used in the hand game or game counters.

Bear Claws. Six bear phalanges were found in two cases in burial association. This possibly could indicate the presence of bear shamans in which the animals' forepaws were used as part of the masquerade. Or, such bones may indicate the remnants of a burial shroud since Du Bois makes notes of such a practice (1935, p. 64): "While the old women were digging, the relatives of the same sex as the corpse dressed it in its finery, placed it on a deerskin or bear hide (if so great a treasure were available) . . ."

Pigment

Hematite, unrefined, but of good quality was the only type of pigment discovered. In general the occurrence is in lumps up to fist size and associated with burials. Lumps of over a half pound weight did not occur.

The natural source of this pigment is probably to the east and north in the adjacent lava beds where hematite occurs in small pockets. The writer observed such a deposit exposed in the road cut on Long Road just north of Dales. Raw hematite of this type was probably reduced to a powder form by grinding on the palettes described earlier.

A single piece of almost pure hematite bears deep longitudinal grooves created by "sawing" the pigment from the block so as to create a fine powder.

Organic Materials

Here are included those things that are generally of a perishable nature but occasionally are preserved in archaeological sites. At this particular site it is difficult to explain how any perishable material

could remain, unless carbonized, when compared to the deplorable condition of the human burials and bone artifact material. However, cordage was not rare nor was the deer hair from burial shrouds. Exposure to the air caused most of these vestiges to reduce to powder.

<u>Pine Nut Beads</u>. Pine nut beads are of a single type being ground or drilled on one side and having the top ground off (Pl. 4i). This variety when strung produces a herringbone pattern. None of the barrel-shaped type noted so frequently by Smith and Weymouth on the McCloud were present here.

The occurrence here, with datable material, adds further confirmation to Heizer's (1940, p. 126) earlier conclusions that this particular type is archaeologically late.

Carbonized Acorns. Carbonized acorns were noted all through the mound mass in the cemetery area but were especially abundant in the vicinity of burials. Wedel also observed a similar occurrence in his earlier excavations in this area. Such objects must have constituted a form of offering to the dead. In burial 76, among other things, there was a pocket of sand bonded with a charred material resembling ground acorn meal.

Cordage and other Remains. Cordage occurred in the burial areas and presumably represented shroud ties, nets, etc. Diameters vary from 1 to 3.5 mm. All specimens have the "S" twist.

Other materials are more apparent than real or preservable. Under almost every burial a yellowish stain or thin stratified layer could be detected. Careful observation revealed the presence of deer hair or a mouldy chamois-like substance. This has been interpreted as a burial wrapping of the sort noted by Du Bois. Burial 61 was wrapped in what appears to be a cottonwood bark skirt. The entire portion under the body had been carbonized which suggests pre-burial pit burning.

Nonaboriginal Artifacts

Of significance is the presence of nonaboriginal artifacts in the form of Caucasian trade items associated with burials. Some of these items occurred as deep as 64 inches along with abundant Indian artifacts. As noted earlier, the cemetery area has been subjected to considerable disturbance near the surface and was occupied by a Caucasian house, and though glass, metal, and porcelain objects were common in this upper six inch level, they were not indicated as belonging to the original Indian settlement. To avoid any problem only those Caucasian artifacts which occurred below 24 inches or as burial associations have been considered in this paper.

Glass Beads. Some eleven types of glass beads were recovered, none of which, according to Dr. C.W. Meighan (correspondence, 1953), were probably

introduced any earlier than 1850. Though both the Americans and Hudson Bay Company were distributing about the same type of materials, Dr. Meighan was more inclined to consider the group represented here as being of American origin. A terminal date of occupation around 1850 would appear about right, for had Indians lived on this spot at any later date, such occupation would be a matter of historic record.

Clay Pipes. Two pieces of clay pipes were recovered. One a stem section, the other a bowl and section of stem (Pl. 6c). The design on the bowl is not particularly distinctive and may best be observed in the drawing. The stem, though broken, has been ground smooth and shows the marks of having been extended with a tube, perhaps bird bone.

Clay Marble. Single example, 1.6 cm. in diameter, and with floral design and red circling bands.

Button. Metal band with porcelain center of the type used to decorate dresses, 2.8 cm. in diameter.

Knife. Bone handle pocket knife with two blades and leather punch. Lozenge shaped metal overlay on bone handle.

Burials

Mortuary Practices. It is clear that grid section A constitutes a cemetery separate from the living area of the village. The soil does not have the typical character of dark midden debris but is mixed as at times graves dug in the yellow soil were filled with dark midden dirt as observed in burial 75 (Pl. le). Until it was realized we were in a cemetery, it was difficult to explain the massive heterogeneous inclusions of yellow clay material mixed with equally large portions of dark mound soil.

The burials encountered were so concentrated it was evident that considerable disturbance had taken place as new burials were added from time to time (Pl. lf). This plus repeated squirrel activity over a long period of years made it difficult to keep grave lots separate, and even at times, whole burials.

Most of our burials were tightly flexed, a few had only a knee bend. No particular orientation was prevalent nor did we encounter any sitting burials, though the latter are reported by Du Bois (1935, p. 64) and similar information was repeatedly volunteered by local collectors. In almost every case where there was not much disturbance a well-defined circular burial pit could be noted (Pl. lc, e).

Of the 77 burials recorded, all but five contained artifacts in association. In most of the burials below four feet there still remained

fragments of a deerskin burial shroud. Common was the practice of "killing" artifacts by breaking them up (Pl. lc,d), especially in the case of well made points, blades and pestles.

Du Bois (1935, pp. 64-65) makes some general remarks on mortuary customs which find close parallels in our archaeological data. "Graveyards were located about 100 yards from dwellings . . . graves were dug by two or three old women, who passed the earth up out of a hole in carrying baskets. The depth of grave was approximately four feet. Should bones from a previous burial be discovered in the course of digging they were laid to one side, wrapped in a hide and redeposited with the corpse. Corpse dressed in its finery, placed on a deerskin or a bear hide . . . in a crouching position with the elbows inside the bent knees and the hands on the cheeks. The hide was then folded around the body and the bundle was very tightly and solidly wrapped with deer sinew or rope . . . body set upright in grave . . . the body was lowered into a round hole which constituted the grave . . . concerning the orientation of the body there was the greatest divergence of opinion. All four directions were named with equal frequency . . . probably no well established custom existed for it . . . the destruction of property at burials necessitated a constant refurnishing of artifacts . . . Anne Griffin buried with her son five of her ten ropes."

The condition of human bone in the cemetery was especially poor for some unexplained reason. Possibly because a Caucasian garden once occupied the immediate area and excessive water may have had a leaching effect, oxidation from ground squirrel burrows, at least, has not been of any aid in preservation.

In the burial tabulations where question marks occur (as in orientation?) it may be the result of one or several factors such as: reburial, burial disturbance through rodent activity, oxidation causing disintegration of bone, or the cave-in of the side wall noted for July 3.

Data on 77 Burials

Burial 1 (section 9E, 30" deep)

Age: infant

Position of body: ?

Orientation:

Remarks: rodent disturbed

Artifacts: small clam disc beads (1-151593), whole olivella beads (1-151594)

Burial 2 (section 9F, 40" deep)

Age: adult

Position of body: probably flexed

Orientation: west

Remarks: rock "cairn" near head

Artifacts: small clam disc beads (1-151595), abalone shell (1-151596),

abalone pendant (1-151597), bone awl (1-151598)

Burial 3 (section 9G, 60" deep) Age: adult Position of body: flexed Orientation: ? Remarks: evidence of a burial pit with blue clay lining and charred Artifacts: small clam disc beads (1-151599), large clam disc beads (1-151600), carbonized acorns (1-151601). Burial 4 (section 6G, 30" deep) Age: adult Position of body: ? Orientation: ? Remarks: Artifacts: large clam disc beads (1-151602), small clam disc beads (1-151603), carbonized acorns (1-151604), obsidian flakes (1-151605).Burial 5 (section 9F, 39" deep) Age: child Position: probably flexed with some evidence of a pit Orientation: ? Remarks: probably a pit burial Artifacts: small clam disc beads (1-151606), whole olivella beads (1-151607), obsidian flakes (1-151608). Burial 6 (section 9H, 46" deep) Age: adult Position: tight dorsal flex Orientation: east Remarks: fragments of another skull in association Artifacts: small clam disc beads (1-151609), abalone pendant (lost), abalone blanks (lost). Burial 7 (section 9G and 9H, 60" deep) Age: adult Position of body: flexed on back Orientation: east Remarks: Artifacts: pestle (1-151610), pestle (1-151611), pestle (1-151612), gorge fishhook (1-151613), olivella half shell beads (1-151614), small clam disc beads (1-151615), whole olivella beads (1-151616), worked obsidian nodule (1-151617).

Burial 8 (section 10G, 30" deep) Age: adult Position of body: ? Orientation: Remarks: disturbed by rodents Artifacts: pestle (1-151618), pestle (1-151619). Burial 9 (section 9H, 74" deep) Age: adult Position of body: dorsal tight flexed Orientation: north Remarks: discoloration around body suggests deer skin shroud Artifacts: shroud fragments (1-151620, 151621), whole olivella bead (1-151622), olivella lopped spire bead (1-151623), obsidian flake (1-151624), large clam disc bead (1-151625), small clam disc bead (1-151626), obsidian arrow point (1-151627). Burial 10 (section 9I, 48" deep) Age: adult Position of body: tight flexed Orientation: northwest Remarks: well defined burial pit Artifacts: perforated concretion (1-151628), hematite pigment (1-151629), abalone pendants (1-151630, 151631), large clam disc beads (1-151632), small clam disc beads (1-151633), whole olivella beads (1-151634), obsidian arrow points (1-151635, 151636). Burial 11 (section 12H, 21" deep) Age: adult Position of body: ? Orientation: ? Remarks: probably a secondary burial Artifacts: large clam disc beads (1-151637), abalone pendant (1-151638), whole olivella beads (1-151639), glycymeris bead (1-151640). Burial 12 (section 10H, 45" deep) Age: adult Position of body: flexed

Orientation: west Remarks: in side wall of unexcavated unit

Artifacts: obsidian points (1-151641 - 151646), obsidian drill (1-151647), obsidian lumps (1-151648), hematite pigment (1-151649).

```
Age: adult
Position of body: flexed
Orientation: northwest
Remarks: in side wall of unexcavated unit
Artifacts: none noted.
Burial 14 (section 9I and 8I, 65" deep)
Age: young adult
Position of body: flexed on left side
Orientation: north
Remarks: Good example of a round pit burial
Artifacts: obsidian points (1-151641 - 151646), obsidian drill (1-151647),
            obsidian lumps (1-151648), hematite pigment (1-151649), large clam disc beads (1-151650), small clam disc beads (1-151651),
            whole olivella beads (1-151652).
Burial 15 (section 9I, 5'6" deep)
Age: adult
Position of body: tight flexed
Orientation: east
Remarks: pit burial, disturbed by gophers
Artifacts: Hematite pigment (1-151653), abalone pendant (1-151654),
            small clam disc beads (1-151655), large clam disc beads
            (1-151656), whole olivella beads (1-151657), obsidian points
            (1-151658 - 151661), jasper point (1-151662), obsidian point
            fragment (1-151663), chert drill (1-151664).
Burial 16 (section 12H, 30" deep)
Age: child
Position of body:
Orientation:
Remarks: disturbed by rodents
Artifacts: small clam disc beads (1-151665), whole olivella beads (1-151666).
Burial 17 (section 12H, 42" deep)
Age: adult
Position of body: ?
Orientation: ?
Remarks: bones very fragile, rodent disturbed
Artifacts: grooved arrow shaft abrader (1-151667), slate pencil (1-151668),
            obsidian fragment (1-151669), whole olivella bead (1-151670),
            small clam disc beads (1-151671), gorge fishhook (1-151672),
            white glass beads (1-151673).
```

Burial 13 (section 10G, 30" deep)

Burial 18 (section 12H, 42" deep)

Age: adult

Position of body: ?

Orientation: ?

Remarks: rodent disturbed; on same level as burial 17

Artifacts: small clam disc beads (1-151674), large clam disc beads

(1-151675), abalone pendant (1-151676), whole olivella beads (1-151677), obsidian nodules (1-151679), steatite

bead (1-151678), obsidian flake (1-151680).

Burial 19 (section 13H, 56" deep)

Age: adult

Position of body: ?

Orientation: ?

Remarks: rodent disturbed

Artifacts: whole olivella beads (1-151681), small clam disc beads (1-151682).

Burial 20 (section 12H, 59" deep)

Age: adult

Position of body: flexed ?

Orientation: ?

Remarks: rodent disturbed

Artifacts: mammal ribs (1-151683), whole olivella beads (1-151684),

small clam disc beads (1-151685).

Burial 21 (section 12H, 59" deep)

Age: adult

Position of body: probably flexed

Orientation: east

Remarks: rodent disturbed, charcoal around some bones but no evidence

of burning

Artifacts: small clam disc beads (1-151686), whole olivella shell beads

(1-151687).

Burial 22 (section 12H, 54" deep)

Age: child

Position of body: tight flex on back

Orientation: north

Remarks: possibly associated with burial 23

Artifacts: whole olivella beads (1-151688), large clam disc beads

(1-151689), small clam disc beads (1-151690).

Burial 23 (section 12H, 52" deep)

Age: infant

Position of body: flexed on right side

Orientation: north

Remarks: rodent disturbed

Artifacts: none.

Burial 24 (section 12H, 56" deep)

Age: young adult

Position: probably flexed

Orientation: ?

Remarks: evidence of pit burial; badly disturbed

Artifacts: small clam disc beads (1-151691), large clam disc beads (1-151692), whole olivella beads (1-151693), obsidian

flakes (1-151694), pestle fragment (1-151695), sandstone abrader (1-151696), river pebble with abrasive marks (1-151697), elongated schist pebble (1-151698), basalt flake (1-151699).

Burial 25 (section 13H, 57" deep)

Age: adult

Position of body: tight flexed

Orientation: east

Remarks: well-defined burial pit, close association with burial 26 Artifacts: pestle (1-151700), obsidian point (1-151701), whole olivella

beads (1-151702), small clam disc bead (1-151703).

Burial 26 (section 13H, 57" deep)

Age: adult

Position of body: flexed Orientation: probably east

Remarks: in same pit as burial 25 or intrusive into burial 25 Artifacts: none could be positively associated with this burial.

Burial 27 (section 12H, 52" deep)

Age: adult

Position of body: ?

Orientation: ?

Remarks: rodent disturbed

Artifacts: small clam disc beads (1-151704), whole olivella beads (1-151705), obsidian points (1-151706 - 151720), chert point (1-151721), obsidian flakes (1-151722), basalt drills (1-151723 - 151725), bone dice (1-151726 - 151734), bone awls (1-151735 - 151737) basalt flake scraper (1-151738),

abrading stone (1-151739).

Burial 28 (grid C, section 4D, 48" deep)

Age: adult

Position of body: flexed on right side

Orientation: east

Remarks: this was the only burial recovered in living area of village;

large cobbles near body but did not constitute a cairn

Artifacts: gorge fishhook (1-151740).

Burial 29 (section 12F, 12" deep)

Age: adult

Position of body: ? Orientation: northeast Remarks: rodent disturbed

Artifacts: none.

Burial 30 (section 12F)

Age: adult

Position of body: ?

Orientation: ?

Remarks: rodent disturbed

Artifacts: none.

Burial 31 (section 10F, 33" deep)

Age: infant

Position of body: ? Orientation: north

Remarks: rodent disturbed

Artifacts: large clam disc beads (1-151741), small clam disc beads (1-151742), glycymeris beads (1-151743), obsidian point (1-151744).

Burial 32 (section 111, 30" deep)

Age: infant

Position of body: ?

Orientation: ?

Remarks: rodent disturbed

Artifacts: large clam disc beads (1-151745), pestle fragment (1-151746).

Burial 33 (section 10I, 30" deep)

Age: adult

Position of body: probably flexed

Orientation: ?

Remarks: rodent disturbed, burned area in grave pit but no burning of bones Artifacts: large clam disc beads (lost in cave-in of pit wall).

```
Burial 34 (section 10I, 55" deep)
Age: infant
Position of body: ?
Orientation:
Remarks: rodent disturbed
Artifacts: clam disc beads (lost in cave-in).
Burial 35 (section 10F, 48" deep)
Age: adult
Position of body: ?
Orientation: north
Remarks: rodent disturbed
Artifacts: abalone pendant fragment (1-151747), small clam disc bead
            (1-151748), blue glass bead (1-151749), white glass bead
            (1-151750).
Burial 36 (section 12F and G, 41" deep)
Age: adult
Position of body: ?
Orientation:
Remarks: badly disturbed, possible reburial
Artifacts: small clam disc beads (1-151751), obsidian point fragment
            (1-151752), obsidian point (1-151753), obsidian flakes
            (1-151754).
Burial 37 (sections 10I and 11I, 26" deep)
Age: adult
Position of body: flexed
Orientation: ?
Remarks: rodent disturbed
Artifacts: mano (1-151755).
Burial 38 (section 10G, 54" deep)
Age: young adult
Position of body:
Orientation: ?
Remarks: badly rodent disturbed
Artifacts: 1 abalone pendant, 32 dentalia, pine nut beads (lost in cave-in).
Burial 39 (section 12G and 12F, 66" deep)
Age: adult
Position of body: probably flexed
```

Remarks: rodent disturbed, shroud still visible as thin reddish layer

-27-

Orientation: north

under burial

pine nut bead (1-151756), abalone fragment (1-151757), medium clam disc bead (1-151759), large clam disc bead (1-151758), obsidian flakes (1-151760), whole olivella

beads (1-151761).

Burial 40 (section 12G, 48" deep)

Age: adult

Position of body: ?

Orientation: ?

Remarks: burial associated with over 100 pieces of obsidian; rodent

disturbed

Artifacts: bone awl fragment (1-151762), basalt drill (1-151763),

obsidian points (1-151764 - 151765), basalt flake scraper (1-151766), large obsidian blade blanks (1-151767 - 151773), obsidian flakes (1-151774), large clam disc beads (1-151775), small clam disc beads (1-151776), abalone shells (1-151777).

Burial 41 (section 11F, 56" deep)

Age: adult

Position of body: flexed

Orientation: north

Remarks: rodent disturbed

Artifacts: whole olivella beads (1-151778), clam disc beads small

(1-151779), abalone pendant (1-151780), abalone shell fragment (1-151781), pestle (1-151782), pestle fragment (1-151783).

Burial 42 (section 11F, 60" deep)

Age: adult

Position of body: tight flex on back

Orientation: south

Remarks: associated with charred acorns; rodent disturbed

(1-151784).Artifacts:

Burial 43 (section 11F, 68" deep)

Age: adult

Position of body: tight flex

Orientation: north

Remarks: rodent disturbed, charred acorns in abalone shell

Artifacts: bone awl (1-151785), bone awl (1-151786), small clam disc

beads (1-151787), whole olivella beads (1-151788), abalone shell fragments (1-151789).

Burial 44 (section 12F, 56" deep)

Age: adult

Position of body: probably flexed

Orientation: ? -28Remarks: rodent disturbed

Artifacts: obsidian points (1-151790 - 151801), jasper points

(1-151802 - 151803), chalcedony point (1-151804), basalt drill (1-151805), obsidian scraper (1-151806), grooved arrow smoother (1-151807 - 151811), obsidian pendant (1-151812),

pestle (1-151813), small clam disc bead (1-151814).

Burial 45 (section 12F, 55" deep)

Age: adolescent

Position of body: ? Orientation: ?

Remarks: rodent disturbed

Artifacts: large clam disc beads (1-151816), small clam disc beads

(1-151816), (glycymeris beads (1-151817), obsidian flakes

(1-151818).

Burial 46 (section 12G, 31" deep)

Age: adult

Position of body: tight flex on back

Orientation: east

Remarks: evidence of burial shroud, probably intruded into burial 47 Artifacts: clay pipe (European) (1-151819), burial shroud fragment

(1-151820).

Burial 47 (section 12H, 31" deep)

Age: adult

Position of body: probably flexed on right side

Orientation: east

Remarks: under burial 46

Artifacts: limonite concretion and jasper pebble (1-151821), fossil

horse teeth (1-151822), limonite concretion (1-151823),

burial shroud fragments (1-151824).

Burial 48 (section 10F, 48" deep)

Age: adult

Position of body: tight flex, left side

Orientation: east

Remarks: disturbed by rodents and cave-in Artifacts: two pestles (1-151825 - 151826).

Burial 49 (section 10F, 50" deep)

Age: young adult

Position of body: tight flex, left side

Orientation: west

Remarks: disturbed by cave-in

Artifacts: whole olivella beads (1-151827).

Burial 50 (section 11G, 37" deep)

Age: adult

Position of body: probably flexed

Orientation: southeast

Remarks: disturbed by cave-in

Artifacts: metal can fragments (1-151828), large clam disc beads (1-151829), whole olivella beads (1-151830), abalone shell fragments (1-151831), bone awl (1-151832), bone flaker (1-151833), basalt point (1-151834), chert point (1-151835), obsidian points (1-151836 - 151839), gorge hook (1-151840).

Burial 51 (section 10F, 44" deep)

Age: young adult Position of body: ? Orientation: ?

Remarks: disturbed in cave-in

Artifacts: obsidian points and fragments (1-151841 - 151857), chert point fragments (1-151858 - 151859), abalone pendants (1-151860 - 151866), large clam disc beads (1-151867), small clam disc beads (1-151868), stone disc beads (1-151869),

small clam disc beads (1-151868), stone disc beads (1-151869) carbonized acorns (1-151870), carbonized seeds (1-151871).

Burial 52 (section llF and l2F, 53" deep)

Age: adult

Position of body: flexed on left side

Orientation: north

Artifacts: knife haft (1-151872), chert knife (1-151873), obsidian blades (1-151874 - 151875), obsidian point (1-151876), abalone shell (1-151877), abalone pendant (1-151878), small clam disc beads (1-151879), large clam disc beads (1-151880), glass beads (1-151881 - 151884), magnesite cylinder (1-151885), cordage from burial shroud (1-151886), pine nut beads (1-151887), obsidian lumps (1-151888).

Burial 53 (section 10E, 60" deep)

Age: adult

Position of body: tight flexed on left side

Orientation: east

Remarks: rodent disturbed and cave-in area

Artifacts: olivella whole shells and carbonized acorns (lost in cave-in).

Burial 54 (section 10F, 70" deep)

Age: adult

Position of body: knee flex, on right side

Remarks: well defined burial pit

Artifacts: obsidian blades (1-151889 - 151891), obsidian points (1-151892 -151900), chert points (1-151901 - 151906), obsidian nodules (1-151907), abalone pendant (1-151908), hematite pigment (1-151909), stone disc beads (1-151910), whole olivellas with lopped spire (1-151911). Burial 55 (section 10F, 80" deep) Age: adult Position of body: tight flexed on back Orientation: southwest Remarks: abalone shell over back of skull Artifacts: small clam disc beads (1-151912), whole olivella beads (1-151913), small whole olivella beads (1-151914), abalone shell fragments (1-151915), abalone pendant (1-151916), obsidian nodule (1-151917), obsidian points (1-151918 - 151919), chert drill (1-151920), basalt cone (1-151921). Burial 56 (section 10F, 80" deep) Age: adult Position of body: tight flexed on left side Orientation: west Remarks: rodent disturbed Artifacts: small clam disc beads (1-151922), large whole olivella beads (1-151923), small whole olivella beads (1-151924), abalone pendant fragment (1-151925), smoother (1-151926), flake scraper (1-151927). Burial 57 (section 11G, 72" deep) Age: adult Position of body: flexed, possibly sitting Orientation: west

Remarks: none

Artifacts: grooved arrow abrader (1-151928), small clam disc beads (1-151929), concretion (1-151930), obsidian point (1-151931),

pestle (1-151932), pestle (1-151933).

Burial 58 (section 10F, 70" deep)

Age: adult

Position of body: reburial

Orientation: ?

Remarks: associated with bird skeleton -- probably eagle

Artifacts: elongated stones (1-151934 - 151938), sandstone grinding slabs (1-151939 - 151941), grooved arrow abraders (1-151942 - 151943), lump of Franciscan chert (1-151944), bird burial (1-151945),

whole olivella beads (1-151946), small clam disc beads

(1-151947), glycymeris beads (1-151948), chert blade fragment

(1-151949), obsidian point (1-151950), obsidian nodule (1-151951),

iron nail (1-151952)

Burial 59 (section 11H, 35" deep)

Age: adult

Position of body: tight flex, on left side

Orientation: east Remarks: none

Artifacts: metal knife with bone handle (1-151953), white glass beads (1-151954), small clam disc beads (1-151955), cordage fragments (1-151956), obsidian points (1-151957 - 151960), ground slate pencil (1-151961), flat pebble (1-151962), basalt flake knife (1-151963), basalt core (1-151964).

•

Burial 60 (section 11G, 50" deep)

Age: adult

Position of body: probably flexed

Orientation: west

Remarks: located in extreme S.E. corner of pit

Artifacts: obsidian points (1-151965 - 151977), large obsidian blade (1-151978), grooved arrow abrader (1-151979), grooved concretion (1-151980), cupped concretion (1-151981), cupped concretion perforated (1-151982), concretion (1-151983), obsidian nodules (1-151985 - 151987), small clam disc beads (1-151988).

Burial 61 (sections 9F and 10F, 80" deep)

Age: adult

Position of body: flexed

Orientation: ?

Remarks: under side wall, too dangerous to expose or fully remove

Artifacts: obsidian blades (1-151989 - 152000), hematite pigment (1-152001).

Burial 62 (section 10I and 11I, 64" deep)

Age: adult

Position of body: tight flex, left side

Orientation: southwest Remarks: rodent disturbed

Artifacts: burial shroud fragments (1-152002), obsidian point (1-152003),

chert points (1-152004 - 152005), chert drill (1-152006), white glass beads (1-152007), small abalone shell (1-152008).

Burial 63 (section 10F, 7'6" to 8' deep)

Age: adult male

Position of body: loose flex on right side

Orientation: east

Remarks: burial in yellow sub-soil at base of mound

Artifacts: small clam disc beads (1-152009), large whole olivella beads

(1-152010), small whole olivella beads (1-152011),

glycymeris beads (1-152012), olivella half shell beads (1-152013), serrated abalone pendant fragment (1-152014), abalone pendant fragment (1-152015 - 152017), abalone pendant (1-152018), abalone shell fragments (1-152019), pine nut beads (1-152020), bird bone whistle (1-152021), obsidian point (1-152022), worked bone (1-152023), obsidian blade (1-152024), basalt blade (1-152025), pestle (1-152026).

Burial 64 (section 10H, 54" deep)

Age: adult

Position of body: tight flex on left side

Orientation: south

Remarks: rodent disturbed

Artifacts: chert knife (1-152027), chert point (1-152028), obsidian points (1-152029-152031), abalone pendant (1-152032), small clam disc beads (1-152033), large clam disc beads (1-152034), white glass beads (1-152035), tooth-like concretion (1-152036).

Burial 65 (section 10F and 9F, 7'10" deep)

Age: adult

Position of body: loose flex on right side

Orientation: northeast

Remarks: none

Artifacts: pestle (1-152037), whole olivella beads (1-152038 - 152039), small clam disc beads (1-152040), glycymeris beads (1-152041), olivella half shell beads (1-152042), abalone pendants (1-152043 - 152047), pine nut beads (1-152048), obsidian points (1-152049 - 152050), obsidian knife (1-152051), basalt scraper (1-152052), bone awls (1-152053 - 152054), bone needles (1-152055 - 152059), concretion (1-152060), cordage (1-152061), hematite pigment (1-152062).

Burial 66 (section 10G, 65" deep)

Age: adult

Position of body: probably flexed

Orientation: north

Remarks: rodent disturbed

Artifacts: obsidian blades (1-152063 - 152066), chert knife (1-152067), obsidian points (1-152068 - 152070), obsidian nodule (1-152071), pestle (1-152072), glass beads (1-152073 -152081), clam disc beads (1-152082), whole olivella beads (1-152083), hammer stone (1-152084), abalone pendant fragment (1-152085), concretion (1-152086).

Burial 67 (section 10G, 7'6" deep)

Age: adult

Position of body: tight flex, on right side

Orientation: north

-33-

Remarks: none olivella half shell beads (1-152087), whole olivella beads Artifacts: (1-152088), small clam disc beads (1-152089), glycymeris beads (1-152090), obsidian points (1-152091-152098), bear claws (1-152099), gorge hook (1-152100), quartz pebbles (1-152101), obsidian nodule (1-152102), arrow shaft abrader (1-152103).Burial 68 (section 10H, 65" deep) Age: adult Position of body: ? Orientation: ? Remarks: evidence of some sort of burial shroud Artifacts: large clam disc beads (1-152104), abalone pendant (1-152105), obsidian points (1-152106-152109), chert points (1-152110 -152111), basalt points (1-152112 - 152115), pestle (1-152116). Burial 69 (section 11I, 49" deep) Age: adult Position of body: ? Orientation: ? Remarks: burial disturbed by cave-in Artifacts: large stone bead (1-152117), small clam disc bead (1-152118), pestle (1-152119). Burial 70 (section 111, 58" deep) Age: adult Position of body: flexed on back Orientation: northeast Remarks: damaged by cave-in Artifacts: small clam disc bead (1-152120), whole olivella beads (1-152121), basalt scraper (1-152122), basalt flake (1-152123), abrader (1-152124), elongated natural pebble (1-152125). Burial 71 (section 11H, 64" deep) Age: adult Position of body: tight flex on right side Orientation: northwest Remarks: well defined pit Artifacts: pestle (1-152126). Burial 72 (section 10I, 80" deep) Age: adult Position of body: tight flex on left side

Orientation: east

Remarks: pit burial, rodent disturbed

Artifacts: large clam disc beads (1-152127).

Burial 73 (section 10I and 9I, 64" deep)

Age: adult

Position of body: ?

Orientation: ?

Remarks: too dangerous to remove on account of high earth pit wall

Artifacts: abalone pendant (1-152128), small clam disc beads (1-152129),

obsidian points (1-152130 - 152134), clam disc beads (1-152135).

Burial 74 (section 10H, 75" deep)

Age: adult

Position of body: ?

Orientation: ?

Remarks: disturbed in cave-in

Artifacts: lost in cave-in of July 3.

Burial 75 (section 10G and H, 70" deep)

Age: adult

Position of body: ?

Orientation: ?

Remarks: pit burial, rodent disturbed Artifacts: lost in cave-in of July 3.

Burial 76 (section 11I, 52" deep)

Age: adult

Position of body: flexed on back

Orientation: west

Remarks: none

Artifacts: pestles (1-152136 - 152137), small clam disc beads (1-152138), olivella half shell beads (1-152139), whole olivella beads (1-152140), bear claws (1-152141), carbonized bark skirt

(1-152142), limonite (1-152143), carbonized acorn meal (1-152144).

Burial 77 (sections 9G and 10G, 85" deep)

Age: adult

Position of body: loose flex on right side

Orientation: west

Remarks: pre-burial pit burning, carbonized bark skirt around body,

considerable burning of bones on skull and femora

Artifacts: obsidian points (1-152145 - 152147).

Conclusions

Some general conclusions can be made at the present time. The archaeological investigation of site Teh-58, with its rich artifact and burial data greatly aid in filling another gap in what was earlier considered aboriginal California.

It is obvious from the historic trade material that the Indian village is representative of the Late culture horizon for the upper Sacramento Valley. The glass heads would suggest the site was not occupied much after 1850 or before 1800, or at least that portion of the village which used the cemetery excavated by us. Because of the great size of the village, some parts may be far older than the cemetery which we discovered. Probably there exists another and earlier cemetery.

Artifacts such as magnesite cylinders, medium clam disc beads, abalone ornaments, and half shell olivella beads indicate a former contact with the central valley. Features such as arrow shaft smoothers, concretion "charm" stones, and arrow point types find parallels in the McCloud river area to the north. These last items plus pine nut and glycymeris beads, ceremonial blades, fish knives, and projectile points with extended barbs are all traits of the northwest coast of California.

Of local occurrence are large stone and shell disc beads, ground obsidian blades, and flaked obsidian pendants.

It is estimated we excavated about 25 per cent of the cemetery and it is recommended additional work be done at this site because of the unusually rich cultural returns for the time and money invested.

BIBLIOGRAPHY

- Du Bois, C.
 - 1935. Wintu Ethnography. Univ. Calif. Publs. in Amer. Archaeol. and Ethnol., Vol. 36, No. 1.
- Gifford, E.W.
 1947. California Shell Artifacts, UC-AR 9:1-114.
- Heizer, R.F.
 - 1940. Chaps. XV-XIX. In Cressman, L.S. "Archaeological Researches in the Northern Great Basin." Carnegie Inst. of Washington Publ. 538.
- Smith, C.E. and W.D. Weymouth
 1952. Archaeology of the Shasta Dam Area, California. University
 of California Archaeological Survey, Report No. 17.
- Strong, D.
 1935. An introduction to Nebraska Archaeology. Smithson. Inst.,
 Misc. Colls., Vol. 93, No. 10.
- Treganza, A.E. and S.F. Cook

 1948. The quantitative investigation of aboriginal sites: complete excavation with physical and archaeological analysis of a single mound. American Antiquity, Vol. 3, No. 4.
- Voegelin, E.W.
 1942. Culture Element Distributions: XX, Northeast California,
 UC-AR 7: 47-251.

Explanation of Plates

Plate 1

- a. Test pits in site Sac-169, Nimbus Reservoir.
- b. Looking down on site Sac-169 and showing current dam construction work and gold dredge, Nimbus, American River.
- c. Burial 7 at site Teh-58, shows burial pit in raised position and "killed" pestles.
- d. Burial 63 at site Teh-58, shows whole abalone shell, obsidian blade, and "killed" pestles.
- e. Burial 75 at site Teh-58, shows outline of circular burial pit and obsidian blade.
- f. General view of excavations at Teh-58, showing concentration and poor condition of burials in cemetery.
- Plate 2 Drills and arrow points from Teh-58. All specimens are of natural size and numbers refer to U.C.M.A. catalogue numbers.
 - a. Basalt drill, 1-151805.
 - b. Basalt drill, 1-151723.
 - c-x. projectile point types 1-152185, 1-152027, 1-151791, 1-151790, 1-151969, 1-152134, 1-151836, 1-151835, 1-152028, 1-151802, 1-152005, 1-152193, 1-151706, 1-152106, 1-152131, 1-151662, 1-151715, 1-151844, 1-151972, 1-151717, 1-151644, 1-152132.
- Plate 3 Blades from Teh-58. All specimens 1/2 natural size.
 - Dosidian ceremonial blade 1-151891.
 - b. Obsidian ceremonial blade 1-152083.
 - c. Obsidian ceremonial blade 1-151875.
 - d. Chert blade 1-152057.
 - e. Obsidian blade 1-151874.
 - f. Chert knife 1-151873.
 - g. Obsidian blade showing original patina 1-152065.
 - h. Obsidian blade 1-152024.
 - i. Obsidian blade showing ground surface 1-152064.
- Plate 4 Artifacts from Teh-58. All natural size.
 - a. Large clam disc bead 1-152045.
 - b. Small clam disc bead 1-152105.
 - c. Whole olivella with lopped spire 1-151676.
 - d. Whole olivella with lopped spire and punched hole 1-151866.
 - e. Glycymeris bead 1-152046.
 - f. Olivella bead with ground back and punched hole 1-152032.
 - g. Olivella bead with punched hole 1-152206.
 - h. Steatite bead 1-152245.
 - i. Pine nut bead.
 - j. Bone awl 1-152053.
 - k. Slate "awl" or pencil 1-151961.
 - 1. Serrated bone needle 1-152055.
 - m. Bone needle 1-152056.
 - n. Stone disc bead 1-151910.
 - o. Magnesite bead 1-151885.
 - p. Slate pendant 1-152191.
 - q. Obsidian pendant 1-151812.

- Plate 5 Shell artifacts from Teh-58. All are natural size.
 - a-m. Abalone pendants 1-152045, 1-152105, 1-151676, 1-151866, 1-152046, 1-152032, 1-151631, 1-152165, 1-152018, 1-152206, 1-152040, 1-152047, 1-151597.
- Plate 6 Artifacts from Teh-58.
 - a. Arrow shaft smoother 1-151811.
 - b. Arrow shaft smoother 1-151808.
 - c. Clay pipe.
 - d-r. Various types of odd shaped stones and concretions classed as "charms."

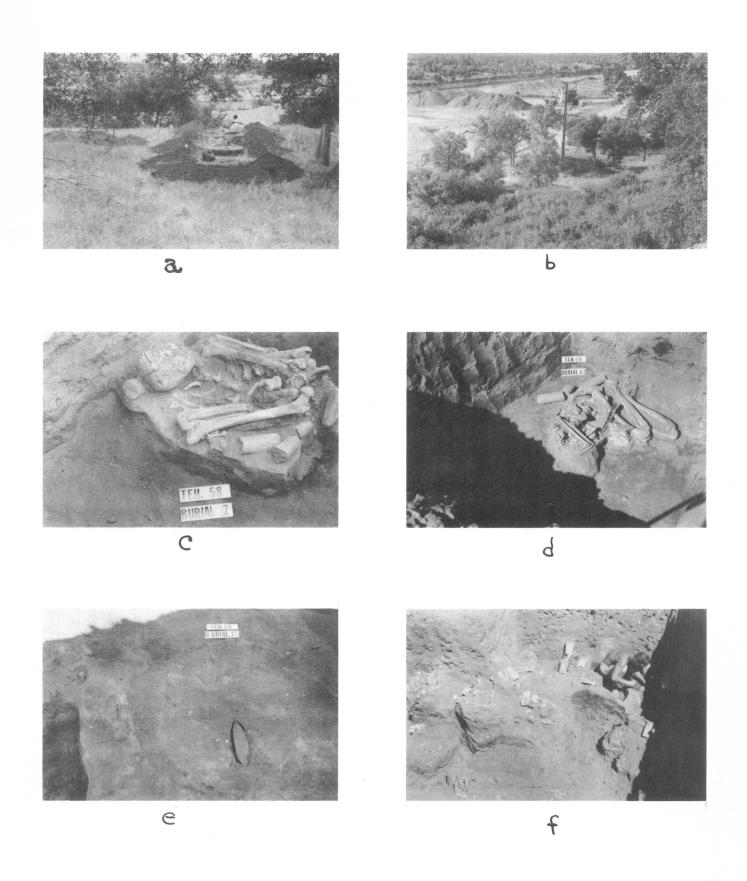


PLATE I

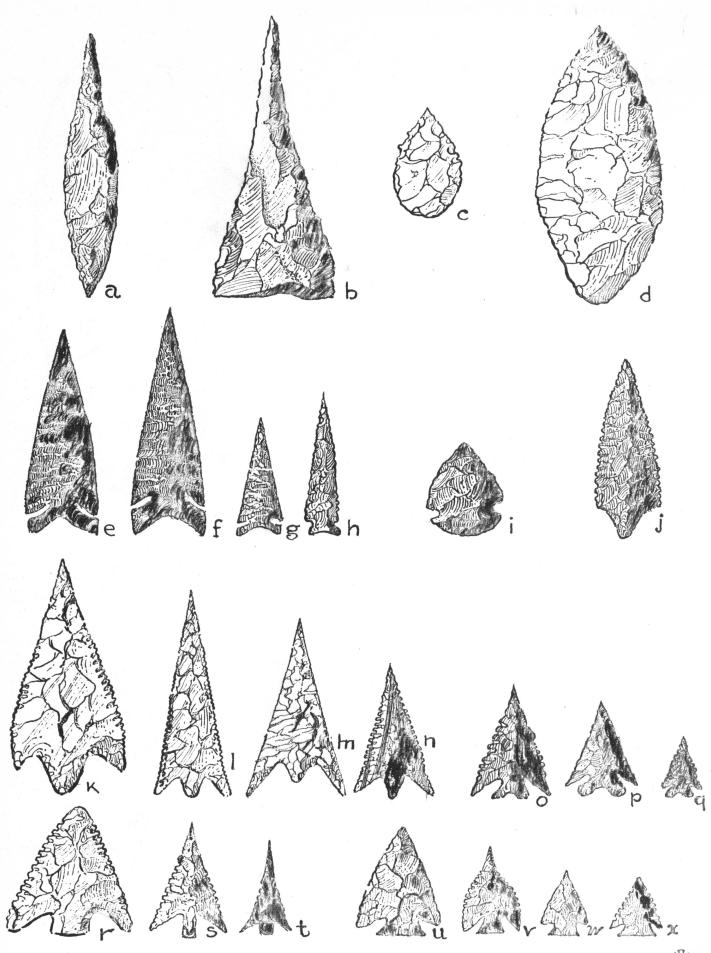


PLATE 2

形。

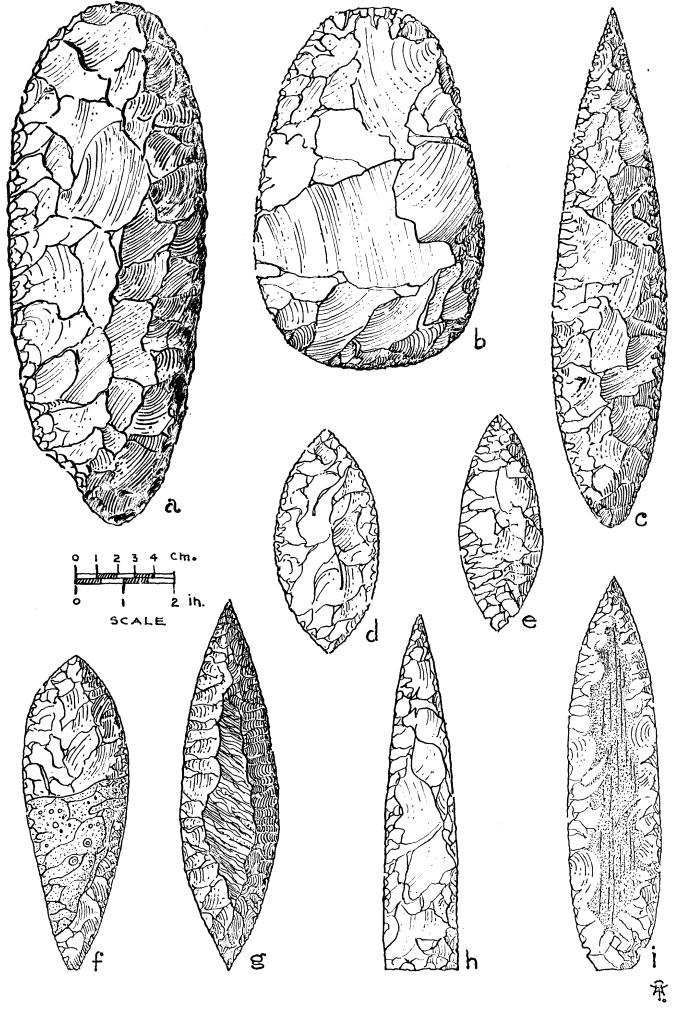


PLATE 3

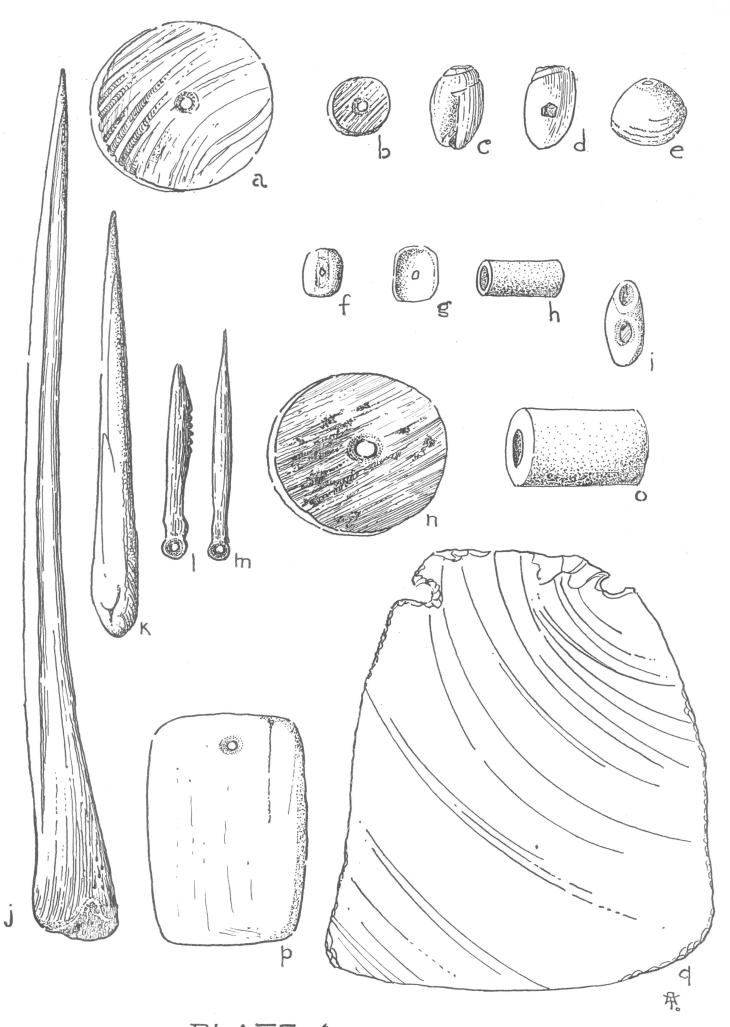


PLATE 4

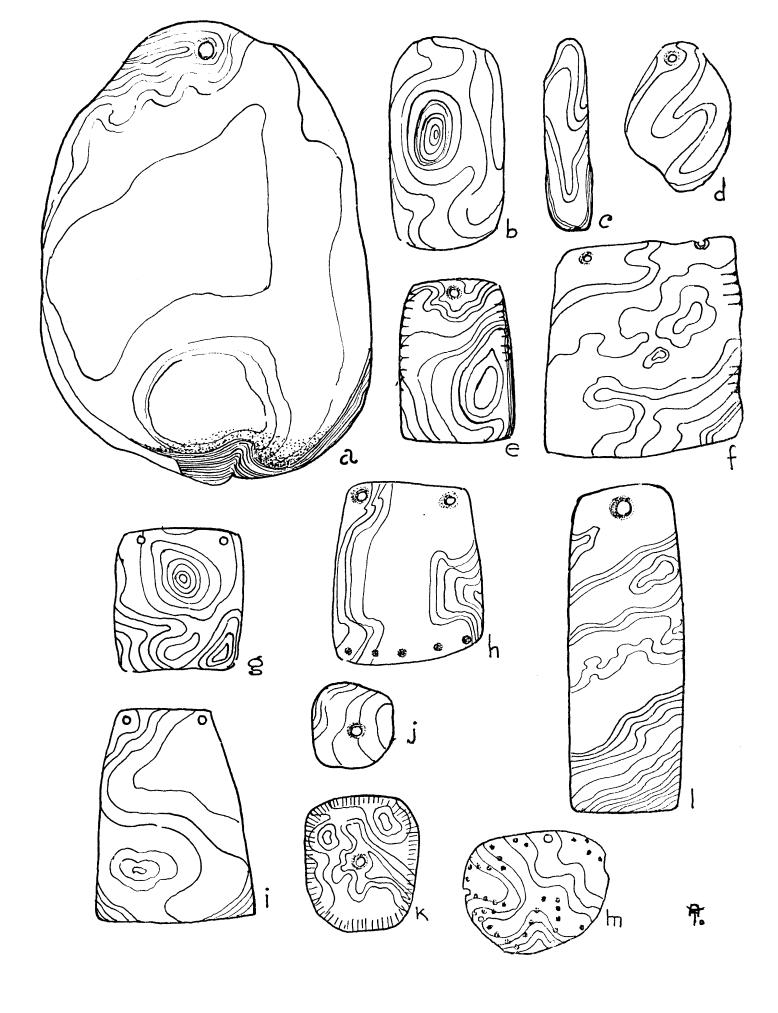


PLATE 5

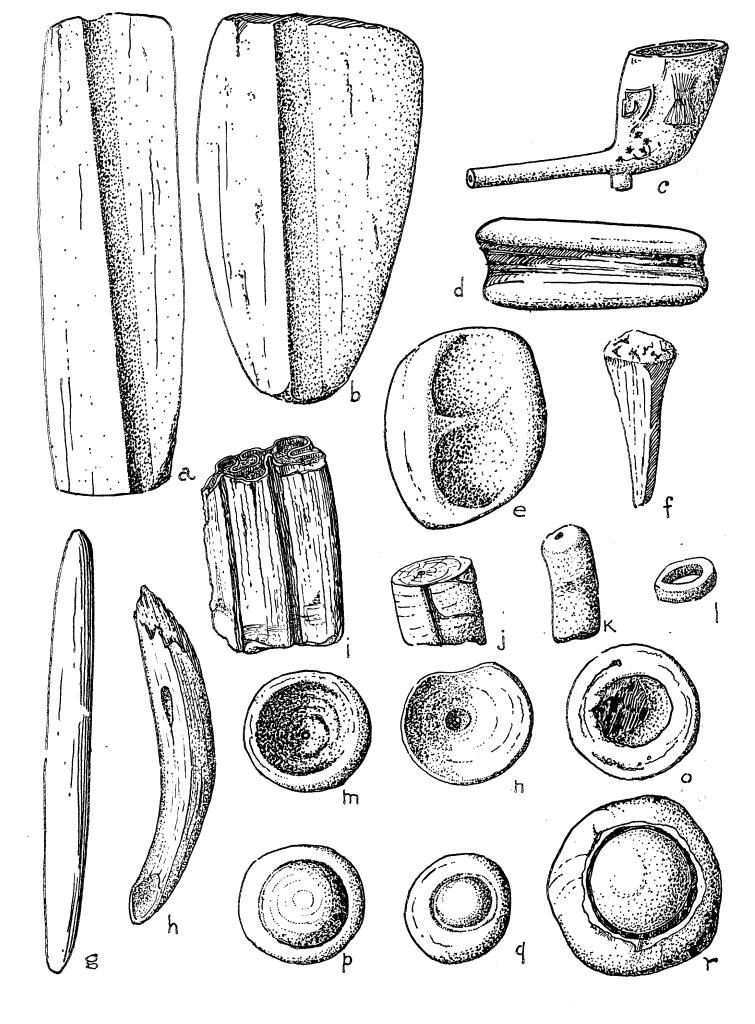


PLATE 6