

**PART III**

**PRIMARY RESEARCH CONDUCTED**

## CHAPTER 7

### ARCHAEOLOGICAL RESEARCH AND PRELIMINARY

### CULTURAL RESOURCE EVALUATIONS

#### Introduction

The archaeological field reconnaissance at the San Luis, Kesterson, and Merced National Wildlife Refuges conducted as a part of this project was limited to the location, verification, and preliminary evaluation of those sites known to exist on the three refuges. In addition to the documentation and evaluation of those sites which were formally recorded with the Regional Information Center of the California Archaeological Inventory, located at California State University, Stanislaus, we also dealt with sites known to refuge personnel, as well as areas mentioned as sensitive in the 1980 ESCA-Tech reconnaissance report for Kesterson Wildlife Refuge (Eggers 1980a, 1980b). In all, some 60 separate locations were inspected for evidence of cultural materials.

The methods used in the background research, field reconnaissance, and site evaluation are described in Chapter 2. Additional details on methods are also presented in the following sections.

#### Results of the Background Research

As is generally the case with any project of this size, the background research was begun immediately, and continued throughout the project. The archaeological site records and other information stored at the Regional Information Center of the California Archaeological Inventory were examined early in the project, but some of the other materials pertaining to the project were only found near the end of the project. In most cases, those individuals we contacted were prompt in sending us manuscripts and other information. Some materials, however, arrived late in the project, and in a very few cases, materials which had been promised never arrived at all.

#### San Luis National Wildlife Refuge

The background research found that on San Luis Refuge only one major archaeological reconnaissance report had been completed prior to the present project. This was prepared by Joe Pope in 1976, and was based upon field research in the San Luis Refuge from approximately 1972 to 1976. A second report prepared by Pope (1983) was also examined; however, no archaeological sites were located during that reconnaissance. Finally, on the basis of Pope's information, and Benson's recommendations (Benson 1978), a National Register of Historic Places nomination form (Heffernan 1978) was prepared by the Fish and Wildlife Service for the entire San Luis Refuge.

Just outside of the San Luis Refuge, but within the one mile study area boundary, is the site of the San Luis Adobe. Because this adobe was outside of our project area boundary it was not recorded as a site, but it was briefly examined, and information on

the adobe appears in Chapter 5. A National Register of Historic Places nomination form had been prepared for this structure (Strickland 1978), but it was apparently never submitted.

At the beginning of the project, 21 sites were officially recorded on the San Luis Refuge; all of these sites were recorded as the result of Joe Pope's interest in researching and recording the prehistory and archaeology of the refuge. Pope did not conduct an intensive survey of the refuge. His research strategy was oriented towards recording sites which were being exposed by some type of impact, and conducting random field reconnaissance. His research was conducted on a volunteer basis over a period of years, and was summarized in the 1976 draft report (Pope 1976). A copy of this report, borrowed from the Los Banos Office of the Fish and Wildlife Service, contained a USGS 7.5 minute San Luis Ranch Quadrangle map. The site locations contained on this map were often quite different from those provided to us by the Regional Information Center at California State University, Stanislaus. Although the locations given for sites on Joe Pope's map were not always precise, they invariably proved to be closer to the actual site locations than those provided to us by the Regional Information Center.

During the course of the archaeological background research and the historical research, little additional specific information on the locations of prehistoric resources was found. Most of the sources examined, if they discussed prehistoric resources at all, merely mentioned that skeletons (or mortars, pestles, and other materials) had been found when plowing (or road grading, performing canal maintenance, building levees, etc.), but provided no additional usable information. Given the number of such references, the existing Fish and Wildlife Service collections are extremely small, and cannot represent more than a fraction of the materials actually found.

#### Kesterson National Wildlife Refuge

On the Kesterson Refuge, a major archaeological survey (Eggers 1980a) and a minor presence/absence test excavation of a sensitive area (Eggers 1980b) have been completed by ESCA-Tech. G. James West of the Bureau of Reclamation followed with some additional field examinations, and prepared a National Register of Historic Places nomination form for the known sites. This form was submitted to the Office of Historic Preservation for comment, but no comments were received (West, personal communication 1984).

Based on the background research, there were 18 sites officially recorded as being on or immediately adjacent to the Kesterson Refuge at the time our project began. Of these, 17 were recorded by ESCA-Tech in 1980 as the result of the Bureau of Reclamation survey. Also, ESCA-Tech identified 17 additional areas which contained limited evidence of cultural activity. Three of these areas contained historic materials, and 14 contained possible prehistoric cultural materials. Although ESCA-Tech completed a site record for each of these occurrences, these areas were not officially recorded as sites.

The 18th officially recorded site on the Kesterson Refuge is CA-MER-6, which was recorded in 1956 by Grover S. Krantz. The Regional Information Center had two map locations for this site, one on or immediately adjacent to the project area, and the other some distance away. In actuality, the site is much larger than had been indicated in any previous work, and major portions of the site are within Kesterson Refuge. The site record for CA-MER-6 mentioned that this site had been test pitted in about 1940 by Charles Miles, but nowhere during the project could we find additional information on the location of the materials he recovered, or on any notes or records he may have made.

The present survey found that several of these previously recorded sites are actually portions of other, larger, sites. Hence, several of the previously recorded sites, and some of the unrecorded "sensitive" areas, have been combined within the boundaries of one or more larger sites. In the course of this field reevaluation, two new site records and one new isolate form have been filed with the Regional Information Center. Thus, while the total number of officially recorded sites for Kesterson refuge has decreased from 18 to 15, the total site area has significantly increased.

### Merced National Wildlife Refuge

The Merced Refuge had not previously been surveyed, nor were there any officially recorded sites on the refuge at the beginning of the project. The refuge headquarters, however, currently has a collection of artifacts which have been found on the refuge (see Appendix C and Plate 23). The specific source of most of these artifacts is unrecorded, but most appear to have been encountered around the Merced Refuge Headquarters. There are a number of rumors concerning skeletons or other finds being made during grading, plowing, and other earth moving activities in this area. At least some of these rumors were confirmed by Joe Pope, who told us that during 1976 he examined portions of the headquarters area and identified the remains of at least ten individuals and numerous artifacts. He recommended that archaeological testing be conducted (Joe Pope, personal communication 1984).

During the current project, the headquarters area was officially recorded as a site. Also during the current project, we completed a minor field reconnaissance of a small portion of the Merced Refuge (Haversat 1984), but no cultural resources were encountered during this reconnaissance.

### Results of the Archaeological Field Research

Using the methods described in Chapter 2, each of the previously recorded sites, and each of the areas specifically identified as containing cultural materials, was examined by a field crew. The results of this field research are discussed in the following sections and in Appendix G.

At this point we must add a note of caution. In these sections, and in the summary tables, attempts have been made to identify site type and temporal placement, but in many cases, the information needed to make these determinations is simply not available. The dense vegetation cover made it very difficult to locate site materials, and with very few site materials an accurate assessment of site function and temporal placement is extremely difficult.

Many of the sites which were located have been described as base camps (following the directions and general definitions contained in our Scope of Work). A base camp is generally an archaeological site containing evidence of substantial occupation (seasonal or year-round). This occupation may be documented by evidence of multiple activities, including primary and secondary tools (i.e., tools used to make other tools), faunal or floral remains from subsistence activities, fire altered rock, whole or broken chipped stone tools, chipping waste, house structures, hearths, and occasionally burials.

As discussed elsewhere in this report, the base camp was the most frequently encountered site type within the refuges.

Finally, in the summary tables which follow, we have included our recommendations concerning the status of each site in terms of its significance and its eligibility for inclusion on the National Register of Historic Places (see also Appendix G).

In the tables below, the significance of each site has been tentatively estimated. These estimates are based on limited data and are subject to change as additional information is obtained. The general criteria used for the estimation of significance are as follows:

- A. These sites are estimated to have a high potential for yielding information important to history or prehistory. They are considered extremely important sites, and generally contain one or more of the following characteristics:
  - 1. The presence of a wide range of artifact types;
  - 2. The presence of burials;
  - 3. The presence of large quantities of cultural material;
  - 4. The presence of a significant temporal span and/or a unique cultural component; or
  - 5. The presence of a substantial cultural deposit which appears to be relatively intact.
- B. A site of moderate significance based on a more limited range of artifacts, smaller quantities of materials, narrower temporal or cultural span, or moderate to major amounts of disturbance or destruction. These sites are estimated to have a moderate potential to yield information important to history or prehistory. (It is possible that if additional information was available some of these sites would be eligible for the above category.)
- C. These sites have a relatively low potential for yielding information important to history or prehistory as a result of major destruction or the virtual lack of significant cultural materials. In order to be placed within this category, some subsurface testing or other form of documentation is generally required.
- O. A site which is significant, but whose significance is based on criteria other than the potential for yielding information important to history or prehistory. This category would include landmarks or sites associated with notable people or events, etc. (see the National Register of Historic Places evaluation criteria, below).
- X. The significance of these sites cannot be determined at this time because of limited data. These sites are potentially significant, but need to be tested to determine their placement on the above scale.

Table 1. San Luis Refuge Prehistoric Cultural Resource Summary Table

<u>Number</u>	<u>Other designations</u>	<u>Site type</u>	<u>Area sq. met.</u>	<u>Estimated Significance</u>	<u>NRHP Eligible?</u>
MER-102	Wisteria Meadow	Base camp?	1,590	X	Unknown, needs testing
MER-103	Ground Squirrel Haven	Base camp	19,000	A	Yes (district)
MER-104	Cotton Tail Rest	Base camp	18,525	A or B	Yes (district)
MER-105	Coot Point	Base camp	8,400	A	Yes (district)
MER-106	Rosemary's Estancia	Base camp	4,400	A	Yes (district)
MER-107	Crescent House	Unknown	218	X	Unknown, needs testing
MER-108	Coon Bone Site	Base camp	14,000	B?	Yes (district)
MER-109	Sheep Camp	Base camp?	8,000	A?	Yes (district)
MER-110	Neese Site	Unknown	6,000	X	Unknown, needs testing
MER-111	Twin Ponds Site	Unknown	1,260	X	Unknown, needs testing
MER-112	Don Francisco Site	Base camp	120,000	A	Yes (district)
MER-113	San Luis Village	Unknown	12,000	X	Unknown, needs testing
MER-114	Littlefield Mound	Unknown	7,500	X	Unknown, needs testing
MER-115	Long Ridge Site	Base camp	52,000	A?	Yes (district)
MER-116	Miller Knoll	Base camp	21,000	A?	Yes (district)
MER-118	Good News/Bad News; Mallard; MER-117	Base camp	35,000	A	Yes (district)
MER-216	Silver Kite Site; MER-146	Base camp	4,200	B?	Yes (district)
MER-217	Mud Flat Site; MER-147	Base camp	27,000	B?	Yes (district)
MER-218	Musk Rat Site; MER-148	Base camp	5,700	B?	Yes (district)
MER-262	AC-499-1	Base camp?	2,300	B?	Yes (district)
MER-264	AC-499-3	Base camp?	2,000	X	Unknown, needs testing
MER-266	AC-499-7	Base camp?	14,000	A or B	Yes (district)

Table 2. San Luis Refuge Historical Cultural Resource Summary Table

<u>Number</u>	<u>Other designations</u>	<u>Site type</u>	<u>Area sq. met.</u>	<u>Estimated Significance</u>	<u>NRHP Eligible?</u>
MER-219H	Dickenson Ferry Site; MER-145	Landing, bridge	200	0	Yes

Table 3. Kesterson Refuge Prehistoric Cultural Resource Summary Table

<u>Number</u>	<u>Other designations</u>	<u>Site type</u>	<u>Area sq. met.</u>	<u>Estimated Significance</u>	<u>NRHP Eligible?</u>
MER-6	None	Base camp	240,000	A	Yes (district)
MER-227	KR6A/KR5A	Cemetery	25,000	A	Yes (district)
MER-230	KR31AA	Base camp?	1,200	A?	Yes (district)
MER-231	KR31A, B, C; MER-232	Base camp	8,800	A	Yes (district)
MER-238	KR31H	Base camp	3,600	A?	Yes (district)
MER-239	KR31I, F; MER-236	Base camp	60,000	A	Yes (district)
MER-240	KR31J	Base camp	24,000	A?	Yes (district)
MER-243	MER-242	Base camp	>46,000	A?	Yes (district)
MER-246	KR36B	Base camp	16,000	A	Yes (district)
MER-248	KR36D	Base camp	70,000	A	Yes (district)
MER-249	KR36E, F; MER-250	Base camp	300,000	A	Yes (district)
MER-255	KR7A, B, C 80	Base camp	40,000	A?	Yes (district)
MER-256	KR6B 80, KR31K, MER-235	Base camp	200,000	A	Yes (district)
MER-265	AC-499-6	Unknown	177	X	Unknown, needs testing
MER-267	KR5-B	Base camp?	56,000	X	Unknown, needs testing

Table 4. Merced Refuge Prehistoric Cultural Resource Summary Table

<u>Number</u>	<u>Other designations</u>	<u>Site type</u>	<u>Area sq. met.</u>	<u>Estimated Significance</u>	<u>NRHP Eligible?</u>
MER-263	AC-499-2	Base camp	15,000	A?	Unknown, needs testing

Table 5. Summary of Site Significance and NRHP Eligibility Determinations

	San Luis	Kesterson	Merced
Significance Level A	5	8	0
Significance Level A?	3	5	1
Significance Level A or B	2	0	0
Significance Level B?	5	0	0
Significance Level 0	1	0	0
Significance Unknown (X)	7	2	0
	<hr/>	<hr/>	<hr/>
Total sites	23	15	1
	<hr/>	<hr/>	<hr/>
NRHP Eligible — District	15	13	0
NRHP Eligible — Individual	1	0	0
NRHP Eligibility Unknown	7	2	1
	<hr/>	<hr/>	<hr/>
Total sites	23	15	1

### Additional Discussion of the Cultural Resource Base

Included within the following sections are additional discussions of the types of prehistoric sites located within the study area, initial estimations of the temporal periods represented, and information on the artifacts found within the project area.

### Archaeological Site Types within the Project Area

Given the dense vegetation and the siltation within the project area, it was difficult to examine the prehistoric archaeological sites in detail, and even more difficult to determine the precise site boundaries. As such, it was difficult to determine the characteristics of each site, the intrasite variability, and the range of variation of site types. The following discussion, therefore, must be considered preliminary and subject to revision on the basis of additional data.

The only site type which was specifically identified during the reconnaissance and site evaluation was the base camp. A number of sites, however, had to be listed as unknown, and could possibly represent additional site types.

As specified in our Scope of Work, a base camp is defined as follows:

Base Camp--a site occupied by several families or more on either a year round or seasonal basis. Identified archaeologically by primary and secondary tools (that is, tools used in the manufacture of other tools) and a variety of other artifacts as well as floral and faunal remains from subsistence activities. Characterized by extensive scatters and quantities of debris such as potsherds, fire-cracked rock, whole and broken flaked stone tools, chipping waste, charred bone, milling tools, house structures, hearths, rock rings, and sometimes rock art or burials. A well developed midden is usually a component of this type.

Most of the sites which we found were characterized by verified or reported housepits, a midden deposit (often buried by siltation), ground stone, fire altered or broken rock, shell, burned bone, and lithic materials. We believe that these sites document a seasonal occupation by a substantial number of people for a significant period of time. This also corroborates the findings of the archaeologists working in the San Luis Reservoir area.

Future research projects, especially detailed surface studies and subsurface excavations, should establish and test research questions in regard to site types and intersite variability within the project area.

### Temporal Periods Represented within the Study Area

As discussed in Chapter 4, the general study area appears to have been occupied for some 5,000 years. There are also hints of occupation going back perhaps as early as 10,000 years ago. There are, however, few radiocarbon dates available from western Merced County, and even fewer obsidian hydration dates. Most of the information for the temporal periods or cultural manifestations prior to about 2,000 years ago has been extrapolated from adjacent areas, and may or may not apply directly to the study area.

Within the study area, the obsidian hydration studies conducted as a part of this project give the only quantitative data available, and even this information is subject to interpretation because of the lack of comparative materials.

Most of the artifacts which were recovered are not very temporally diagnostic. There is, however, a single side-notched projectile point from CA-MER-239 (Eggers 1980a: Figure 5.5), and this artifact is considered diagnostic of the late period (cf. Figure 12). The wide-stemmed point from CA-MER-105 may be relatively early, but because we do not have examples of this point in well-dated comparative collections from the area, it is difficult to establish any temporal range for this artifact. The "flower-pot" mortars from Merced Refuge are probably relatively late, as the well-shaped mortars are generally later in time than the cobble mortars.

Until we can obtain systematic collections from well dated contexts from the project area or adjacent areas, the temporal periods represented within the project area will be little known. The obsidian analyses discussed below represent the first quantitative evidence from the project area, but there are problems with the extremely small sample size and the lack of comparative materials.

#### Obsidian Source and Hydration Analysis

In order to obtain some preliminary information on the age of project area archaeological sites without excavation or other major activities, permission was obtained from the Fish and Wildlife Service to conduct limited surface collection of obsidian for use in source and hydration analyses. In all, nine flakes of obsidian were collected, seven from San Luis Refuge (four from CA-MER-118, two from CA-MER-103, and one from CA-MER-218), and two from Kesterson Refuge (one each from CA-MER-246 and CA-MER-256).

The obsidian analyses were performed by the Archaeological Laboratory at Sonoma State University, in Rohnert Park, California. The source analysis was done by Richard E. Hughes, and the hydration analysis by Tom Origer. The results are summarized below and in Table 6.

Of the nine pieces of obsidian submitted for source and hydration analysis, three pieces were too small for source analysis. The six pieces of obsidian which were of sufficient size for source analysis were found to be from four separate sources: Casa Diablo and Bodie Hills on the eastern slopes of the Sierra Nevada, and Napa and Annadel, north of the San Francisco Bay area. The presence of four separate sources among only six samples suggests an extensive and active trade network both to the north or northwest and to the east.

The age suggested by the hydration analysis is much older than expected. The two specimens from Napa Glass Mountain exhibit hydration readings of 8.7 and 9.6 microns. This is difficult to translate into calendar years, as the hydration rate is known to vary with the source of the obsidian and the effective temperature of the area in which it is deposited. Experiments in western Nevada have shown that obsidian exposed to direct sunlight will have an increased rate of hydration, possibly by as much as 40 to 50 percent (Tom Layton, personal communication 1984).

Table 6. Results of the Obsidian Analyses

Site	Sample no.	Source	Hydration reading
CA-MER-103	103-1	Casa Diablo	dh (burned)
CA-MER-103	103-2	Bodie Hills	dh
CA-MER-118	118-1	---	*
CA-MER-118	118-2	Annadel	5.4 microns
CA-MER-118	118-3	Napa Glass Mountain	9.6 microns
CA-MER-118	118-4	Napa Glass Mountain	8.7 microns
CA-MER-218	218-1	---	*
CA-MER-246	246-1	Casa Diablo	5.4 microns
CA-MER-256	256-1	---	*

dh = difuse hydration (often the result of burning)

\* = sample too small for analysis

The project area, in which the obsidian was found, has a relatively high effective temperature, and the obsidian hydration rate can be expected to be moderately higher than adjacent areas on the coast and in the Sierra Nevada. Further, the specimens we collected were all found on the surface, and could have been subjected to intense sunlight, also raising the hydration rate. However, virtually all of the specimens, including the two with hydration readings over 8.6 microns, were found in bulldozer cuts made in the mid 1970s. We feel that the length of exposure to the sun will not be of the same order of magnitude as those within the sites in the Nevada desert which Layton sampled. For the samples we collected, we feel that surface exposure is most likely a relatively minor factor in the hydration readings.

There are no nearby sites which have adequate samples of analyzed obsidian with which to compare. Riddell and Olsen (1969:130) obtained a hydration reading of 7.4 microns for a single specimen from the Witt Site in Tulare County, and suggested an approximate age of 6,500 B.P. A single specimen from CA-MER-S94 was analyzed and found to have a hydration reading of 2.5 microns. This was interpreted to date to about 1,475 years B.P. (Olsen and Payen 1969:42). In neither case, however, was the source of the obsidian determined. Subsequent research has shown that each obsidian source has a different hydration rate. As such, the dates suggested for these two sites cannot necessarily be considered accurate by today's standards.

Even taking into consideration the variables associated with obsidian hydration dating, we feel that it is safe to conclude that the obsidian from the project area is surprisingly early. It is difficult to assign an exact calendar age to the obsidian samples on the basis of the limited comparative data, but an age of 4,000 to 5,000 years, or even older, is within the range of possibility for at least CA-MER-118.

Given these tentative results, it would seem productive for subsequent projects in western Merced County to include significant amounts of obsidian hydration dating, especially on subsurface testing projects.

Obsidian source information was obtained as a part of the hydration process. This additional data may also be applied to trade route analysis. Although our sample is small, the variety of sources represented (four different sources from six samples) indicates that the peoples living within the project area were extensively involved in trading obsidian, and probably other materials as well.

## Artifacts from the Project Area

During the course of the project (or during previous work in the project area) a small number of artifacts have been collected. These are described briefly below. Additional details on artifacts from the project area appear in Appendix C.

### Projectile Points

Two projectile points, one of which was fragmentary, were collected during the current project. These appear as Plates 10 and 22, and are discussed below. Additionally one side-notched point was encountered by the 1980 Kesterson project crew at CA-MER-239 (Eggers 1980a: Figure 5.5). This appears to be similar to those shown in Figure 12, and most likely represents a relatively recent temporal period. The two points located during the current project are discussed below.

CA-MER-105 (Plate 10). This projectile point cannot be assigned to any specific type or cultural association. There are general resemblances to central California "Early Horizon" points (cf. Heizer 1949; Lillard, Heizer, and Fenenga 1939), some Sierran points, and striking resemblances to Borax Lake Points (Harrington 1948: Plate 19h). Unlike the latter, however, there is no evidence of basal grinding (Alan Leventhal, personal communication 1984). Fredrickson (1973:191) suggests that this point style in the North Coast Ranges dates to 6,000 - 8,000 years ago. These early points are generally of obsidian, while the Merced specimen is of light green chert.

CA-MER-118 (Plate 22). This serrated midsection is difficult to type as it is fragmentary. It appears generally to be a "middle" or "late" period point.

### Charmstones

Within the project area three charmstones have been collected to date, although charmstones appear to be relatively rare in western Merced County. These artifacts are illustrated in Plates 24, 30, and Figure 16, b. There are no clear-cut associations of these three artifacts with any other single pattern or culture. One charmstone, for example, has similarities with specimens found in the San Francisco Bay area and at Borax Lake, in the North Coast Ranges, while another appears to be more similar to artifacts found to the south. Some information on these artifacts is included below.

CA-MER-239 (Figure 16, b). This charmstone, collected during the 1980 ESCA-Tech survey at Kesterson, has general similarities with artifacts recovered at CA-ALA-328, in the Newark area (Moratto 1984:257), at CA-ALA-307, in the Berkeley area (Wallace and Lathrap 1975: Plate 4g), at Borax Lake in the North Coast Ranges (Harrington 1948: Plate 25c), and at CA-MER-66 (Wildesen 1969: Figure 1).

CA-MER-6 (Plate 30). This charmstone is quite similar to one illustrated from a possibly early context Buena Vista Lake (Wedel 1941: Plate 44c), but also exhibits general similarities to specimens from the Delta, San Francisco Bay, south coast, and other areas.

MER-263 (Plate 24). It is difficult to tell much about this specimen, which is a part of the Merced Refuge collection, as it is broken on both ends. Its shape is not highly distinctive, and generally similar artifacts are frequent in the literature.

### Ground Stone Artifacts

Ground stone is a general term describing artifacts such as mortars, pestles, manos, metates, and other items which are shaped through grinding and similar processes. These are the only materials represented in the existing Merced and San Luis Refuge collections (see Plates).

In addition to several shaped round end pestles (see Figure 5, b, c) represented in the collections, there are several "chisel shaped" pestles of the type commonly associated with the use of wooden mortars (see Plate 28). The use of wooden mortars among ethnographic Yokuts has been documented, however the time depth of this particular trait is uncertain. Gerow feels that the wooden mortars may have served as a prototype for the stone mortar in portions of the Central Valley (Bert Gerow, personal communication 1984). The mortars present represent at least three different styles. These include cobble mortars (similar to Figure 5, c), shaped cobble mortars (similar to Figure 10, b), and beveled rim mortars (see Plate 23).

The Merced Refuge collection contains two metates. One is an slab metate in a largely unshaped flat stone (Plate 23), while the other metate has been dressed to a flat-bottomed rectangular shape (Plate 25). Also represented in the collections are two types of manos, the unifacial (shaped on one side only; see Plate 29 and Figure 5, f), and the bifacial mano (which is worked on both faces and is generally rectangular; see Plate 29 and Figure 13, d).

For the most part, these existing collections of ground stone artifacts are of limited use in determining temporal or cultural affiliations. First, the artifacts in the collections lack provenience, so we lack information on what sites, or where in the sites, these artifacts were obtained. Secondly, we have no well documented collections from the study area with which to make comparisons. Finally, many of the ground stone artifacts are general utilitarian tools which persist through several cultural or temporal periods, and so are of limited use in determining temporal or cultural affiliations. Analysis of the ground stone artifacts and collections from the project area will have to await systematic archaeological research.

### National Register of Historic Places Evaluation

#### Criteria as Related to Project Area Resources

National Register criteria for historic properties are set forth in 36 CFR 60.6 as follows:

The quality of significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects of state and local importance that possess integrity of location, design, setting, materials, workmanship, feeling and association and:

- 1) That are associated with events that have made a significant contribution to the broad patterns of our history; or
- 2) That are associated with the lives of persons significant in our past; or

- 3) That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that have high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- (4) That have yielded, or may be likely to yield, information important in prehistory or history.

Of critical importance are interpretations of the words "significance" and "integrity." In practice, evaluators tend to interpret the criteria as measures of utility. Does the property being evaluated have some sort of useful function in terms of our understanding or appreciation of the past, or in terms of maintaining the quality of our existing and future environments? To meet the criteria, the property must arguably have at least a potential role in the maintenance of some group's sense of place and cultural values, or in the enhancement of human knowledge. A property lacks significance when it has no utility at all. Secondly, in order to possess integrity, the property must be in possession of its original or most important period's location, design, setting, materials, workmanship, feeling, and association (King, Hickman, and Berg 1977:96-97).

Examining the resources present in the project area for the above qualities relative to the four specific criteria for eligibility we find that there are several areas of good "fit" between the ideal National Register property and certain project area resources. These are discussed in the following sections.

- 1) Properties that are associated with events that have made a significant contribution to the broad patterns of our history.

The placement of the San Luis Camp Adobe at the disputed boundary between two Hispanic period ranchos, should it prove to date from that period, marks a significant period in the government and settlement of California. The building's integrity of workmanship, materials, and design, however, are somewhat compromised by later remodelings. Within this area there is also a tremendous potential for historical archaeological resources.

The site and course of Dickenson Ferry Road (see Map 15), for the most part in its original location, and the location of Dickenson (or Chester) Landing (see Figure 18), marks an important link in the settlement of Merced County during the Early American period. Its workmanship, design, and materials, however, have been altered. The significance of this site is based upon its role as the only east-west transportation route crossing the San Joaquin River in Merced County from the 1870s through 1915. This site is currently marked by piers exposed only during low water.

The location of the place "San Luis Island" marks an area well grounded in local history as an important waterfowl area for both hunting and preservation. It retains its integrity of place, feeling, and association unchanged from the Hispanic period to today.

The prehistoric archaeological sites cannot yet be documented to fit within this category, although it is possible, even likely, that some of the sites within the project area were those described in the early Spanish exploration documents. Detailed analysis of these sites would be necessary to determine more about this possibility.

- 2) Properties that are associated with the lives of persons significant in our past.

The undisputed association between Henry Miller and the San Luis Camp Adobe is one of utmost importance in the development of Merced County. Miller's bedroom in the adobe is said to be intact, although the integrity of the building as a whole has been disturbed through remodeling.

- 3) Properties that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that have high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

This criterion may apply to the San Luis Camp Adobe if it proves to have been constructed in a distinctive style in the 1860s - 1870s by Basques. Its integrity, however, may be somewhat compromised by later remodelings.

The course and placement of San Luis Canal/Salt Slough, if not torn of its integrity by continuous grading, marks a period of control of San Joaquin Valley waters by Henry Miller in the Early through Late American periods.

These criteria may apply to particular prehistoric archaeological sites, but the information to make these determinations is not yet available.

- (4) Properties that have yielded, or may be likely to yield, information important in prehistory or history.

There is no question that the prehistoric archaeological sites within the project area have yielded some information, and are likely to yield a great deal of information, important in prehistory or history. This significance can be documented on a number of bases, some of which will be discussed below.

The remaining prehistoric sites within the project area, particularly within San Luis and Kesterson Refuges, have become extraordinarily significant due to the massive destruction of archaeological sites within the San Joaquin Valley over the past 120 years at the hands of agriculturalists, stockmen, vandals, and heavy equipment operators. As discussed elsewhere in this report, the prehistoric archaeological sites within San Luis and Kesterson Refuges form an "archaeological preserve" whereby a substantial data base is (now) being protected from destruction.

There are many types of information that may be obtained from the prehistoric archaeological sites. Some of these types of information which are currently being used in prehistoric research have been discussed elsewhere in this report; a brief summary of some current research questions is also presented in the following section.

In the case of historic archaeological resources, these may be the only evidence remaining from certain time periods or activities which have taken place within the project area. As such, these resources can make a definite contribution to our knowledge of the past.

## Additional Documentation of the Significance of Study Area Cultural Resources

There are a number of methods by which the cultural resources of the study area can contribute to our knowledge of the past or in other ways meet the criteria cited above for inclusion on the National Register of Historic Places. These are briefly discussed in the following sections. These sections include a sample of the types of research questions which could be answered by prehistoric and historical resources, as well as a discussion of other factors which pertain to the significance of study area cultural resources.

### Research Questions, Prehistoric Resources

A sample of the types of specific research questions or topics that may be addressed by the prehistoric archaeological resources within the project area is presented below. It must be kept in mind, however, that new research questions and directions are constantly being identified. The questions listed below are only a partial and very incomplete list of current questions. Based upon the advances in archaeological research and methods which are being made daily, some of these research questions may be answered and new questions may take their places.

- 1) What is the sequence of cultural patterns within the project area? Which patterns are represented, and at which sites? Each of the prehistoric archaeological resources within the project area can contribute to this question. Within this framework, particular attention should be paid to CA-MER-118, which has both the early obsidian and the lower "early" layer described by Joe Pope following examination of the bulldozer cuts. Also there is a more recent upper layer at this site which should be critical in documenting the succession of cultures.
- 2) Does the sequence of patterns within the project area relate to the sequence in the Sacramento Delta, to the San Francisco Bay area, to the Monterey Bay area, or to the southern San Joaquin Valley and the south coast? If not to one of these other sequences, is the local sequence unique, or does it have relationships which changed direction or orientation through time? Once the sequence of cultures is established through testing of sites such as CA-MER-105 and CA-MER-118, it can be compared and contrasted with the sequences in adjacent areas.
- 3) What were the settlement and subsistence patterns within the project area during each of the temporal periods represented? What is the range of variation of each of the archaeological sites associated with each pattern during each temporal period? Through identification and analyses of faunal and floral materials, such as the fish bone observed at CA-MER-118 and the burned bird bone observed at CA-MER-103, the subsistence and settlement patterns within the study area can be documented. This information can then be compared with comparable information from adjacent sites, such as CA-MER-215, and from this, regional patterns can be developed.

- 4) Were the archaeological sites within the project area continuously occupied, or were they one stop along a seasonal round? By analysis and documentation of the types and seasonality of the faunal materials, and by research into the settlement patterns both within the study area and other parts of the western San Joaquin Valley, we should be able to determine where the Yokuts were concentrated at particular times of the year.
- 5) What were the health problems suffered by the prehistoric inhabitants of the study area? From the careful examination of skeletal material, such as that known from CA-MER-118 and CA-MER-231, a great deal can be learned about the demography, origins, and life style of the prehistoric inhabitants. For example, Schulz (1981) has studied Harris lines from skeletal material in the Sacramento Valley in an attempt to learn about patterns of food shortages. Other studies on skeletal remains have shown that multivariate discriminant function analysis is potentially our most powerful tool for discovering prehistoric population movements and populational relationships (Breschini and Haversat 1980b; Breschini 1983).
- 6) What can we learn from the archaeological resources of the project area concerning the changing environment and climate within western Merced County and the western San Joaquin Valley? Moratto, King, and Woolfenden suggest that there have been shifts in the climate of the San Joaquin Valley in prehistoric times. There should be information on these shifts within the sites of the study area, particularly within those sites which cover a long temporal span (such as CA-MER-118). Prediction of past long term trends from archaeological data is potentially a valuable tool in planning for future climatic changes.

#### Research Questions, Historical Resources

A sample of the types of specific research questions or topics that may be addressed by potential historical archaeological resources within the project area are presented below. Further refinement and development of these questions will also require a determination of what information is lacking in the archives that can be supplemented by or answered by archaeological research.

- 1) Are there historical deposits within the study area relating to post-mission Indian residence or use? What changes are documented in gathering patterns, technology, and social structure? Any high points of land within the project area are likely to have been used during this time period, and could potentially contain deposits which could address these questions. For example, glass projectile points were found three miles northwest of Kesterson Refuge during the excavations at CA-MER-215. Such resources could exist within virtually any or all of the prehistoric archaeological sites within the study area. Also, the Mexican settlement reported at San Luis Camp could have included Indians. These individuals could have been using the resources of the study area, and may have left evidence of the changes which had taken place in their culture.

- 2) Is there information buried within the project area which can supplement our meager knowledge concerning the final disappearance of the Yokuts during the Mexican and Early American periods? The presence of gun flints, musket balls, or other items of military paraphernalia within archaeological sites could document battles between resident Yokuts and Spanish or Mexican raiding parties.
- 3) In terms of historical property types, the study area was anomalous within Merced County. Because of the Miller and Lux holdings the study area was sparsely settled, and had no population centers except San Luis Camp and Chester at the boundaries. The general criteria for historic survey for other portions of Merced County do not necessarily apply. We do not know much about the specific patterns of historic land use within the project area, and how these patterns might have affected the location of historical archaeological resources. There may, however, be additional material relating to the historic land use of the study area residing in the uncatalogued archives of the Milliken Museum.
- 4) What were the changes in material culture utilization and discard prior to and following the expansion of the railroad to Merced County? The archaeological deposits likely present at San Luis Ranch, Chester, and other historic sites should contain this information.
- 5) To what degree were the Basques or Chinese present within the study area? Can their presence be documented through archaeological research within historical deposits? Will there be patterns in butchering, food selection, or discards which can be differentiated from the Hispanic and Anglo patterns? Archaeological site deposits with information relating to these questions may be present at the San Luis adobe, the Salt Slough adobe, the Salt Slough warehouse, Chester, or other locations within the study area.
- 6) Other than the non-professional excavation of a river barge (currently in the Milliken Museum) three miles southeast of the study area, there has been no recovery of historical objects relating to river transportation in an archaeological context in western Merced County. There is a potential for locating such resources in those portions of the project area which border the San Joaquin River. These materials could answer numerous questions relating to early transportation within the western San Joaquin Valley.
- 7) How did the effects of Henry Miller's paternal care of his employees alter the normal discard patterns of the late 19th century rural farm settlement within his domain? The San Luis adobe and smaller outlying campsites within the study area may be compared with similar settlements in neighboring areas.
- 8) Were the technological changes which took place in hydrology preserved in the water control structures, pumps, or other industrial vestiges within the project area? Is there a record of historical engineering within the water control technology present? Water control has played a major role in the historical development of the study area, and the changes which have taken place in water management technology are

significant in terms of the broad patterns of history within the study area.

Significance of the Archaeological Data  
from the Project Area

As stated throughout this report, and as documented by Pope (1976), the archaeological resources within the project area, particularly within the San Luis and Kesterson Refuges, constitute an extremely valuable and significant preserve of relatively intact sites within an area of the San Joaquin Valley which has been characterized by wholesale site destruction.

This massive site destruction is illustrated by two of the oral histories obtained by Ralph Milliken:

One time Chance Waggoner was in charge of a bunch of Italians working for Miller & Lux. They were building a dam on the Poso Slough on the east side of the river just below the Turner Ranch. It was near the old Asberry house. They had to tear down a knoll to get dirt to make this dam. They unearthed several hundred skulls and skeletons buried in this knoll. The skulls would go rolling around as the scraper teams would drag the dirt away to the dam. The Italians became afraid and didn't want to work any more. There was no other place except this knoll that Miller & Lux could get the dirt for filling up this dam and it took a great deal of talking to get the Italians to go on working. It was explained to them that these Indians were dead and it wasn't doing them any harm and finally they went back to work. But they didn't like to work around where skulls were rolling every which way over the ground. They didn't like to hear those skulls rattling [Milliken various dates (a)].

Mr. Dye says that there is a Portuguese dairyman down near Dos Palos by the name of Mancebo who told him that when he was leveling down a knoll of some two acres of his ranch he unearthed perhaps a thousand Indian skeletons. They are buried in layers. There would be about two and a half feet of soil above one layer and then the next layer. Mancebo was afraid he would be stopped and so he never told anybody about finding all these Indian skeletons ([Milliken various dates (a)]).

These oral histories recount both the level of site destruction and the tremendous potential which may be expected of some of the archaeological resources within the study area. Unfortunately, site destruction on the scale cited above was all too common for over a hundred years throughout most of the San Joaquin Valley.

Finds of archaeological materials have also been made within the project area, but the amount of destruction which has taken place within the project area appears to be an order of magnitude less than in surrounding areas. This is probably due to the length of time that the project area was "tied up" within Miller and Lux holdings, which forestalled major development or farming activities.

It appears, however, that there has been more damage documented at Merced Refuge than within the rest of the study area. For example, an undated newspaper clipping in the Milliken Museum discusses "Indian relics" located on the Merced Refuge during the 10 years prior to the article. The article begins:

Officials at the Merced Wildlife Management Area will probably have to open a museum on the refuge property before long if Indian artifacts keep popping up they way they have been.

During the past decade the U.S. Department of Interior employes [sic] have unearthed over 25 stone "kitchen implements" belonging to the former Indian inhabitants of the area west of Merced on Athlone Sandy Mush Road (Albright n.d.).

However, at the time of this project, the entire Merced Refuge collection consisted of only 23 ground stone tools. We learned from Ray Fuller, a long time employee of the Fish and Wildlife Service, and a resident of the headquarters building on Merced Refuge, that temporary employees may have taken some of the other bowls (Ray Fuller, personal communication 1984). Roy Shearer, an employee of the Fish and Wildlife Service at the San Luis Refuge, related to us a similar tale concerning missing artifacts at San Luis Refuge (Roy Shearer, personal communication 1984).

Most of the recorded cultural resources within the San Luis and Kesterson Refuges appear to be substantially intact. Most have been damaged by road construction, canal building, or other such impacts, but when compared with the massive destruction, which has included wholesale land leveling of much of the Central Valley, the surviving archaeological resources, both historic and prehistoric, within these refuges constitute a valuable remnant of our past.

We concur that the cultural resources of both the Kesterson and San Luis Refuges warrant nomination to the National Register of Historic Places as districts.

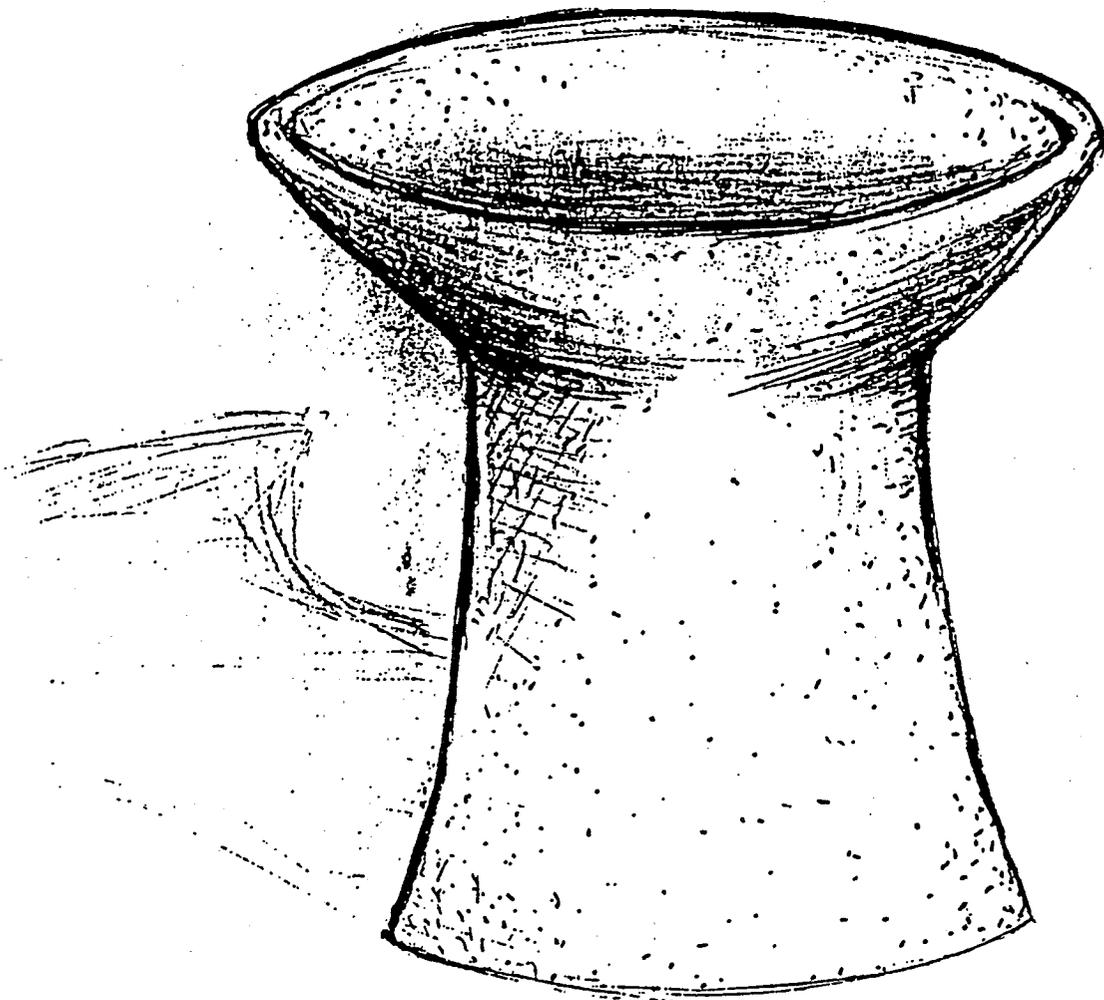


Figure 19. "Ceremonial" Mortar Formerly in the Merced Refuge Collection (drawing by Joe Pope).

Scale uncertain. Mortar is probably some 40-50 cm high.



## CHAPTER 8

### ETHNOGRAPHIC RESEARCH

Two of the objectives of the current study were: 1) to identify tribal and/or religious leaders of each indigenous Native American tribal group that occupied the study area; and 2) to conduct interviews with those leaders, as well as other knowledgeable native peoples (such as tribal elders), having expertise in the traditional beliefs, values, and practices of the tribal group(s) within the study area. Unfortunately, these objectives could not be realized.

The single overriding fact which emerged from the archival sources, the published sources, and our interviews with Native Californians is that there are no surviving direct descendants of the Native Americans from the study area. This is not to say that their genes have been completely removed from the gene pool; it is highly probable that their genes, albeit in a reduced quantity, are still very much present. But there are no persons living today, either in the study area or among those Native California peoples contacted, who claim descent from the native peoples of the study area. Neither are there any Native Americans who have specific ties (religious, economic, social, or otherwise) to the study area, although many of the native peoples contacted did express a general interest in the study area, particularly with reference to any activities which would adversely impact those archaeological sites which contain burials.

#### Results of Ethnographic Field Work

##### Relative to Project Goals

One of the objectives of the current study has been to identify and contact appropriate Native Californians descended from the protohistoric and historic Indian groups within the study area. 'Appropriate' in this particular case was spelled out in the Scope of Work provided by the U.S. Fish and Wildlife Service for this project. We were directed: 1) to consult with knowledgeable local Native Americans and Native Americans who had ancestors who resided in the study area; and 2) to conduct interviews with Native American religious leaders and elders having expertise in the traditional beliefs, values, and practices of the tribal groups within the study area.

#### Overall Results of the Ethnographic Field Research

Based upon the archival and published data sources, and the interviews with Native Californians, we have found that there are no surviving direct descendants of the Native Americans who once resided in the study area. In this and all previous projects it has been consistently found that there are no persons living today, either in the study area or among those Native California peoples contacted, who claim descent from the native peoples of the study area. Neither are there any Native Americans who have specific ties (religious, economic, social, or otherwise) to the study area.

## Results of the Ethnographic Interviews

Of the many Chukchansi and Tachi Yokuts interviewed, none knew of any people whose ancestors came from the study area. Furthermore, though some are familiar with the general historical processes involved in the reduction of the Valley's Indian population, few had any ideas about what had happened to those Yokuts who survived the various cataclysmic events of the nineteenth century. As Ms. Dixie Jackson, a Chukchansi from Auberry, California, noted:

History didn't record what was happening to the Indians. Many of them wanted to loose themselves, so those from Chowchilla went into the mountains. No, I don't known where, but maybe up near Coarsegold or Ahwahnee. You could ask Marion Ramirez.

Others also suggested that Ms. Ramirez be contacted, noting that if anyone would know of Valley people living in the Sierran Foothills, she would. For example, Ms. Karen Morris, a Chukchansi from Coarsegold, California, stated:

I don't think there are any descendants. All of my people are from Coarsegold; they're all Chukchansi and Mono. I've never heard of anybody from that area [i.e., the study area - ed.].

However, Ms. Morris felt that if anyone in the local Indian community would know about the study area and its native peoples, it would be Ms. M. Ramirez: "You should talk to her, she knows a lot. Or Rosalee Bethel." [Ms. Bethel is a Mono ceremonialist from North Fork, near Auberry, California.]

Other Chukchansi and Mono also suggested talking with Ms. Bethel and Ms. Ramirez, noting of both women that they knew a lot about Indian history.

But Ms. Bethel, while she does know some things about Mono history and the interaction of the Mono with the Chukchansi and Paiute, stated:

I can't give you much information [about the Yokuts from the study area - ed.].

Ms. Bethel has never heard of any Indian people from that area, though she is familiar with the region. During her youth, she, her family, and other Monos would regularly visit the San Joaquin Valley on their way to the coast to fish and collect marine resources. She does not remember there ever being any Indians in the central portion of the Valley, only those living on the coast. This is almost exactly the same information as Ms. Ramirez provided.

According to Ms. Ramirez (a Chukchansi Yokuts) she knows:

... of no one from there [i.e., the study area - ed.],

and to the best of her knowledge, no Yokuts other than Chukchansi presently live in the North Fork, Auberry, Coarsegold, Bass Lake, or Table Mountain regions. She, like both her parents before her, has lived her entire life, more than 65 years, in Picayune and the Coarsegold area. She felt that if there had been anyone from the study area living in Picayune she or her parents would have known them. Furthermore, she noted that as a child she and her family and tribe would visit the San Joaquin River and environs to collect food stuffs and basketry materials. They would stay at various places near the river, but especially near present-day Madera. According to her, many Indian groups made similar trips down from the mountains to the San Joaquin Valley. But in all that

time there were only Indians from the hills in the Valley: Chukchansi Yokuts, Mono, and Miwok.

According to Ms. Maude Hancock, an 88 year old Mono from Cold Springs Reservation, there have never been any Indians from the west side of the San Joaquin Valley living in the foothills near her reservation. Like Ms. Bethel and Ms. Ramirez, she visited the San Joaquin Valley when she was a young girl, but the only Indians she remembers meeting were other Sierran Foothill dwellers who had come to the westside to shear sheep, or Tachi from the southern part of the Valley.

These opinions are mirrored by Mr. Dick Johnson, a Mono-Potowatami from Fresno, California. According to Mr. Johnson, "there are no descendants" of the study area's native peoples. He continued:

There haven't been for maybe, perhaps a hundred years or more . . . . I'm on the Los Banos Heritage Commission and I've been working with Indian kids for years. I've never heard of any Indians from there [i.e., the study area - ed.]. There just aren't any.

Mr. Johnson also told us that a small group of out-of-state Indians residing in Los Banos, California, has been diligently searching for descendants of the Valley's Westsiders, but has to date (July, 1984) had no luck.

This same group contacted Mr. Uhle Goode (Mono), curator of the Sierra Mono Museum, in North Fork, California, and Mr. Jay Johnson (Miwok-Paiute), spokesperson for the Mariposa Indian Council and past member of California's Native American Heritage Commission. According to Mr. Goode, he was unable to help this group, although he spoke with "quite a few Monos and Chukchansi" about it. Mr. Jay Johnson told our field investigator the same thing. He has never heard of any Indians who claim descent from the study area's native peoples. Furthermore, while he was a member of the Native American Heritage Commission:

. . . a lot of things were happening in the Valley. And a lot of Indians and archaeologists were involved. And we've never heard of any people in the area. They're all gone, or they don't want to get involved.

A statement by Mr. Raymond Barnes, a Chukchansi Yokuts from Table Mountain Rancheria, sums up the various statements gathered during the ethnographic field work. As Mr. Barnes put it:

"You're too late. You should have come 50 years ago. A lot of the old people knew it [that is, the study area and its history - ed.], but they're all gone. History stops when old people die.

The people who might have had the information we were seeking are gone. And from all accounts they have been gone a long time.

#### Concerns Expressed by Native Americans During Interviews

While the Native Americans contacted could not trace their ancestry to the study area, many did express a general interest in the study area, particularly with reference to any activities which would in any way adversely impact those archaeological sites

which do, or may, contain burials. Additionally, many of the native peoples interviewed expressed a sadness, even an anger, over the continuing loss of power vis-a-vis resource management. Although it is not strictly germane to the current project, a few statements on this issue of 'powerlessness' as it relates to issues of land management and resource control, for and by the Indians, are appropriate.

The feelings most frequently expressed by the Indians interviewed (which ranged from apathy to rage to disgust to racism) must be viewed against a background of more than 200 years of oppression, deceit, and deprivation, resulting in strong feelings of resignation, hostility, powerlessness, and/or aggression toward any programs or proposals originating in the non-Indian world. Many of the Indians interviewed felt that while both their identity and the historical events which led to their loss of autonomy and control over their persons, their lives, and their lands are well established facts, the powerlessness and poverty into which they were plunged and which are still with them today, has been all too frequently overlooked, or simply ignored. For many of them, the socio-economic, political, and psychological consequences of European occupation remain a continuing, and for some, an ugly, reality.

To understand the concerns and attitudes of the native peoples it is necessary to understand the philosophical assumptions which underlie them, and how these assumptions structure their world view. Paramount among these assumptions is the belief that everything in the world, from a rock by the streamside to butterflies to coyotes, is sacred. To tamper with anything is to tamper with sacred or religious matters, and risk the possibility of upsetting the carefully structured balance of the world and the Indians' relationship to themselves and the sacredness of the universe. As Horne has pointed out, "Indian religion is traditionally both the basis for social organization of Indian communities and the basis for the relationship of Indians to their environment" (Horne 1980).

Given this, it is easy to understand that, to the native peoples, the physical evidence of their ancestry, regardless of the precise geographical location where found, is important and significant from both a culture history viewpoint and a socio-religious viewpoint. This applies equally to chert flakes, broken tools, village sites, rock paintings, cemeteries, springs, and 'sacred' geographical loci. These 'things' provide a visible, tangible link to their roots, just as the entire earth does. Understanding these assumptions allows a clearer understanding, then, of the native peoples' frequently voiced belief that "all the land is sacred, everything is sacred," and the oft-times associated corollary concern, "don't do anything to cultural resources."

Despite the fact that we were unable to locate any specific genetic and/or direct cultural descendants of the study area's native peoples, many of the Indian people we contacted expressed the opinion that they were heir to the 'general cultural tradition' associated with the study area, and that cultural resources located in the study area are frequently regarded as heritage resources by peoples not directly tied to the study area. This is analogous to Euro-Americans viewing the past cultures of Egypt, Mesopotamia, Europe, or Israel as their heritage resources and being concerned about their 'management.' However, to Euro-Americans issues of cultural resource management (as well as natural resource management) are secular considerations. Not so with Native Americans; resource management engenders religious considerations since resources (cultural and natural) are by their very nature, sacred. Where the non-Indian views sites and geographical loci as secular 'things' to be managed, without any religious overtones (with the exception of known loci of religious activities or cemeteries), the Native American views these same resources as sacred, and issues involving them are religious issues.

When an Indian refers to something as being 'part of our religion,' or states that a certain spot has 'religious significance,' or that certain objects or places are 'sacred,' the referent is to world view, not necessarily to particular activities or persons associated with the place, thing, or idea, although these will obviously be part of the world view. For example, where a non-Indian might argue that rechannelization of a stream is economically unfeasible, the Indian might argue that rechannelization is an irreligious act since it upsets the order of their universe—which is, by definition, a religious universe. It is this systematic, functional difference between the Native Californians and their non-native counterparts which affects all interactions between them, and which in the past has led to confrontations, misunderstandings, and occasionally, to violence.

Finally, during the course of interviews, formal and informal, with more than 50 Native Americans, it was possible to gain some insights that were not stated in words. For example, virtually all of the Indians whom we contacted have been contacted over and over in the past, and have again and again told the same story. But still the researchers keep coming. The people with whom we have dealt do not mind answering questions about their past. Many enjoy discussing their history, and are willing to talk with researchers who approach them respectfully and who are genuinely interested.

But in the course of the interviews, we have noted the presence of a subtle undercurrent — of an unstated feeling — among many people. There does not seem to be any one cause for this vague disquiet, but it seems to stem from the nature of the interview process currently being conducted for most cultural resource management projects. Many of the Indian people talk to one researcher after another, but see little of what they give ever come back to them. They understand that the information may be useful, somewhere, and may help to save parts of their culture or some sites, but these goals often seem distant.

So many researchers have come and gone, but there is a feeling among some Indians that, no matter what they say, it won't change anything . . . that nobody's really listening. Also, many Native Americans feel protective of their elders and religious leaders, and feel uneasy about letting strangers disturb their peace, no matter how sincere they may be, just to ask the questions that have been asked so often before.

These are some of the feelings which appear among Native Americans we have interviewed, feelings which lie just below the courtesy and respect with which we were always received.

