PRELIMINARY REPORT ON THE ARCHAEOLOGICAL INVESTIGATIONS IN THE SUNOL VALLEY, ALAMEDA COUNTY, CALIFORNIA

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ABSTRACT

As part of the 1993 field school from San Francisco State University, I directed excavations at a newly identified site in the Sunol Valley, Alameda County. A goal of the project included investigating whether the site was a historic rancheria associated with the Sunol adobe complex, which was once situated nearby. The site was mapped, and a surface survey was conducted. Mechanical testing was carried out, and five 1 x 2 meters units were excavated. A phosphate study was completed, and a ground penetrating radar analysis was carried out. The project will be described and preliminary results outlined.

INTRODUCTION

Few investigations in the San Francisco Bay area have focused on both the Native American occupation of archaeological sites during the Protohistoric (A.D. 1500-1770) and early Historic (A.D. 1770-1846) periods, in part because of the difficulty in distinguishing material associated with these components from earlier occupations. Consequently, historic and ethnohistoric analyses provide the primary perspective on several aspects of Native society during the two time periods (Brown 1992; Hurtado 1988, Jackson 1984, 1992; Levy 1978, Milliken 1991). However, there are many unanswered questions about the social and economic integration of Native communities into the wider, colonial system which emerged in California. Open for interpretation, especially in "Costanoan" territory, for example, are diachronic issues such as the changing place of Natives in the system of socioeconomic differentiation, the effect of decentralizing Native economies on local household organization, and the emergence of new patterns and symbolic expressions in kinship, gender, and mortuary behavior.

As valuable as historical and ethnohistorical analyses are in interpreting the past, they are not the only relevant lines of evidence, nor do they provide an unbiased view of the past. Although archaeological analyses of Native occupation may be similarly biased, they can help address some of these issues, raise new questions, and supplement investigations based on archival material.

In the fall of 1992, I learned that an area in "Costanoan" territory adjacent to the former Sunol adobe complex in Sunol, California, was to be developed as a gravel quarry. The adobe itself--the last surviving building of the early Historic era complex--was leveled sometime in the 1930s. Although the former location of the adobe was not to be disturbed, the plan involved developing an area immediately to its east, up to a distance of approximately 1000 meters.

The Sunol adobe and its associated buildings were built around 1840 by the prominent Sunol family (Hendry and Bowman 1940). They formed a rancho where cattle, horse, and sheep were raised and where animal products such as wool
and tallow were processed for trade (Tays 1938). Historic sources suggested that Native Americans, often referred to as vaqueros, were associated with the Sunol family and may have worked at the rancho (Tays 1938). However, oral history and ethnohistoric analyses suggest that some of these Native Americans may have also lived either in dwellings immediately adjacent to the main adobe, or in a nearby, more socially autonomous and multi-ethnic settlement referred to as a rancheria in ethnohistoric sources (Levy 1978).

Because of the interesting historical background of the area, I conducted a field survey and immediately discovered a new site, ALA-565/H (P-01-00005), which appeared to contain both prehistoric and historic components (Figure 1). Situated where two major streams join one another on the valley floor, the site measured approximately 285 by 105 meters, and was located roughly 1000 meters south of the site of the former adobe. Portions of the site had recently been plowed, so that site visibility was excellent. The surface of the site was littered with river cobbles and groundstone artifacts. I thought that a more complete archaeological investigation of the site was warranted, and hoped it would offer an archaeological perspective of Native American life in a rancheria setting.

In 1993, I directed an archaeological field school at ALA-565/H with students from San Francisco State University. In this paper, I present the preliminary results of these archaeological investigations and discuss some areas for future research.

PROJECT BACKGROUND

The Sunol Valley is located approximately 50 kilometers southeast of Oakland. The valley is surrounded by hills with elevations ranging from 350 to 750 meters. The two main drainages in the area, the Alameda Creek and the Arroyo de la Laguna, meet in the valley and flow to the San Francisco Bay through Niles Canyon. Beginning in the 1870s, these watercourses were modified and eventually incorporated into the Hetch Hetchy aqueduct system. The valley is underlain by a rich mix of gravels which make it attractive for quarrying. Although portions of the valley are still used for agriculture, the pressure for development is mounting. Mission San Jose, which was founded in 1797, is located just 3 miles to the southwest of the valley over a series of hills.

In 1772, Captain Pedro Fages of Spain, along with Father Crespi, a Spanish missionary and explorer, and a dozen Spanish soldiers, traveled through the Sunol Valley and camped several miles north of it on their way to Monterey (Crespi 1927). The group had been scouting for an area to place a new mission settlement. Fages noted the existence of a "good"-sized village in the valley on what was probably the Alameda Creek. According to analyses of mission records, this village was probably inhabited by a Native group called the Causen (Milliken 1991). "Good"-sized villages are said to have been inhabited by approximately 100 people who lived in many small, hemispherical huts composed of grass bundles, bulrushes, and sticks (Milliken 1991). Natives still lived in many villages in the East Bay in 1800, even though Mission San Jose had been established several years earlier. By 1805, however, ethnohistorical analyses suggest that almost all of the bayside and interior valley villages of the East Bay, including those in the Sunol area, had been depopulated (Milliken 1991). Based on geographic clues alone, it seemed possible that the village referred to in the Fages expedition could be ALA-565/H.

In 1834, the missions were secularized and grants of land were made to several Mexican families. One of them, the Sunol family, received land in what is now the Sunol Valley, and an adobe was built in the early 1840s. A palizada (stockade or pole structure) was built somewhere on the Sunol family holdings in 1839 (Hendry and Bowman 1940). Maps from the 1840s and 1850s do not indicate the presence of Native American dwellings or a rancheria in the Sunol Valley, but this does not mean that they were not present. Indeed, there are references that the well-known
Figure 1. ALA-SUN site survey, March 20, 1993.
landowner and merchant John Sutter sent Antonio Sunol 13 Indian workers from the Sacramento area in 1844; apparently, 30 more individuals were sent in 1845 (Tays 1938). Whether any of these Native Americans went to the Sunol rancho complex or if they lived there is not known. Oral history, however, suggests that a rancheria was located somewhere in the Sunol Valley (Levanthal et al. 1989; Calhoun 1975). Given the perceived need for Native labor at the ranchos, it seems likely that any Native settlement in the area would be located close to the adobe complex. Certainly, multi-ethnic settlements existed elsewhere in the immediate area, including in the town of Pleasanton to the north, where a Native American rancheria called Alisal was occupied until 1914 (Tays 1938; Levy 1978).

The preliminary archaeological survey and a review of historical literature led me to investigate two interrelated issues at ALA-5651H. First, I hoped to identify and characterize any evidence of Native American occupation of the site during the Protohistoric and Historic eras. The location of the site away from a mission center could offer a somewhat unique view of Native life, particularly during the Historic era. My aim was to begin the process of offering an archaeological view of Native lifeways during the two periods, especially from the perspective of change over time at a single site. Specifically, I wanted to investigate how Native American social and economic structures responded in the face of collapse: for example, how were Indian households affected by the shift to a Western economic system, especially with respect to material culture? Would it be possible to identify a shift in Native American food exploitation patterns, and determine whether Natives at ranchos or rancherias continued to hunt, gather, and collect, despite their incorporation into the colonial system? What elements of Native society remained little changed? Since it appeared that ALA-5651H was occupied prior to contact, I hoped its excavation could offer a long-term view of social and economic change.

The second issue I planned to investigate was the role of sites such as ALA-5651/H in regional settlement patterns. In the past 20 years, several large sites in the interior valleys of the East Bay have been investigated, primarily through the efforts of cultural resource managers. These interior sites clearly differ, both in their size and composition, from the classic shell midden sites which lined the shores of the San Francisco Bay. Despite this difference, much of the debate on regional settlement patterns remains fixed on the idea that bayshore sites were sedentary anchors for local populations; interior sites, on the other hand, are viewed as "secondary" since they were situated in more "marginal" environments. I hoped to contribute to this debate by offering a view from the interior on the issue of "marginality".

ARCHAEOLOGICAL INVESTIGATIONS: SURVEY AND MECHANICAL SUBSURFACE TESTS

The 1993 field season at ALA-5651/H consisted of three major phases: a survey of the site itself and the surrounding area, mechanical subsurface testing to define the boundaries of the site conclusively, and excavation of five, 1x2 m units within the site's boundaries. The last phase included a subsurface investigation using ground penetrating radar. Soil samples were collected to determine the phosphate content of the site and the area immediately surrounding it.

The purpose of the survey phase was to tentatively identify the boundaries of the site, and to characterize the nature of the archaeological remains. Slight changes in elevation, together with varying ground vegetation patterns and the differential distribution of cultural material across the surface, suggested that the site extended for roughly 100 by 300 meters. The southern edge of the site could not be determined because of prior disturbance, which was probably the result of efforts to channelize Alameda Creek. Originally, the site was undoubtedly larger and was most likely situated along the banks of the creek.

The survey revealed that the site was covered
with large pebbles and sandstone river cobbles, many of which had been worked or shaped into groundstone items, such mortars and pestles. Most of the groundstone items were fragmentary, perhaps because of the history of plowing and other agricultural activities in the area. Several obsidian points and small concentrations of ceramics and wood were also found. Differences in soil color and texture were noted, and a sense of intrasite variation was obtained. It was difficult to determine the eastern boundary of the site because a walnut orchard in the area reduced surface visibility.

In order to remove the site from future development plans, it was necessary to determine the site's boundaries unambiguously. Mechanical subsurface testing was carried out, and 22, 0.6x2.0 m trenches were placed primarily around the northern and eastern margins of the probable site boundary. As a result of these test trenches, the boundaries suggested by the survey were corroborated. Most of the trenches were devoid of cultural material. However, in the effort to locate the site's eastern boundary in the orchard, some archaeological deposits were encountered. In Trench 16 at 50-60 cm, for instance, an obsidian projectile point was discovered on a possible floor near several burned animal bones and areas of baked earth. Elsewhere, in Trench 2, a pit containing fine, gray ash, deer mandibles, a chert tool, and lumps of baked earth was encountered at approximately 50 cm (Figure 1).

As a result of the survey and test trench phases, I believed that I had isolated three parts of the site: a dark gray area of midden (near Trench 2); a mixed, light brown and gray area of midden (near Trench 16); and a less well-defined occupational area consisting of a mix of ceramics and Native artifacts (in the western third of the site). The cultural material associated with the first two areas of the site suggested an occupation during the Protohistoric (A.D. 1500-1700). The association of projectile points and bone tools with transfer-printed ceramics implied a possible Native presence in early historic contexts (pre-1850). One traditional marker of early Historic occupation, the glass trade bead, was not found at the site. However, because archaeologists have had difficulty identifying Native components at early historic sites, I believed that the absence of such beads should not preclude considering an early Historic era occupation for ALA-565/H. The absence of this marker could be due to intermittent use of the site during this period, or by the site's location away from the Mission center.

Excavation Units
Five 1x2 m excavation units were placed in the three areas identified at ALA-565/H. Units 1 and 2 were placed in the dark gray area, and Units 3 and 4 were placed in the mixed, light brown and gray area. Unit 5 was placed where the ceramics and Native artifacts had been found together.

Four students were assigned to each unit. The units were slowly and carefully excavated over a period of four months. Excavation proceeded in arbitrary 10 cm levels, and all removed soils were passed through one-eighth inch screens. At each level, detailed maps were made and photographs were taken. Artifacts and soil samples were collected; these now are housed at the Treganza Anthropology Museum, San Francisco State University. Andrew Galvan, a representative of the local Ohlone tribe, volunteered his time and was present throughout the excavations at ALA-565/H.

During the excavation phase, the site was completely mapped using a laser transit, and a ground penetrating radar analysis was conducted (Bjelajac et al. 1994a). A soil phosphate analysis was carried out, the results of which further confirmed the site boundaries identified in the survey and mechanical test units (Bjelajac et al. 1994b).

The results of the excavations revealed that Units 1-4 appeared to be stratigraphically and culturally similar to one another, although there were internal differences. A high percentage of the artifacts from these four units were of Native origin. Unit 5, on the other hand, differed from the others in that more historic-era material was found there than in almost all of the other four units combined. Some of this material was asso-
Stratigraphy

Units 1-4 were excavated to depths ranging from 60 to 80 cm, and Unit 5 was excavated to 50 cm. At the end of the season, augering in each unit indicated that the site reached a depth of approximately 130 cm. This confirmed information derived from the test trenches.

In Units 1-4, three strata could be differentiated by subtle differences in soil texture and color. The first, level I, ranged from 0 to 30 cm below the surface and was composed of disturbed material in a plow zone. The second, level II, was partially disturbed and ranged from 30 to 50 cm. The third, level III, was mostly undisturbed and apparently ranged from 50 to 130 cm, although only its 50 to 80 cm segment was excavated. Stratification in Unit 5 did not correspond to the profiles observed in the other four units, but disturbance caused by tree roots and gophers was more of an issue in interpreting Unit 5. A preliminary analysis of changes in artifact frequency is consistent with this stratigraphic profile.

Chronology

Sixteen obsidian specimens from ALA-565/H were analyzed by the hydration band method at the Sonoma State University Obsidian Hydration Lab, under the direction of Thomas M. Origer. Hydration bands were obtained for 15 specimens: two surface points; three point fragments or pieces of debitage from Unit 3; and ten samples of debitage from Unit 4. The samples were derived from each of the three levels at the site.

Band means measuring from 0.9 to 2.2 microns were obtained, and the samples were visually sourced to the Napa Valley. Dates clustered into three groups: a projectile point found on the surface and dated to approximately A.D. 1870; three samples ranging in date from A.D. 1200-1450; and nine samples ranging in date from A.D. 1600-1773.

Three of the hydration dates were obtained from level I, the disturbed plow zone, and ranged in date from A.D. 1441-1715. Seven of the eight specimens from level III of Unit 4 ranged in date from A.D. 1602-1735; the other was dated to A.D. 1252. The obsidian hydration data suggest that the lowest layer of the site, level III, was probably relatively undisturbed.

All of the identifiable obsidian points found at ALA-565/H resembled the Stockton serrated variety, which are found throughout the Protohistoric period, but tend to be more common in the earlier part of the period (King 1978). The analysis of the ceramics has not been completed yet, but most of the material appears to come from A.D. 1850-1870. Several pieces may be associated with the 1840s. None of the shell beads uncovered were temporally diagnostic.

At present, the chronological information available from ALA-565/H suggests three occupational periods are present: an early component, dating from A.D. 1200-1400; a protohistoric occupation, ranging from roughly A.D. 1600 to perhaps A.D. 1800; and a late historic-era occupation, ranging from approximately A.D. 1850-1870. It is unclear if an early historic-era occupation is present. One interesting chronological point that will require some more investigation is the absence of clam shell disk beads, which are usually markers of the post-A.D. 1500 period.

DISCUSSION

While only a general temporal framework has been established at ALA-565/H, it is likely that the Protohistoric period is represented by level III. Different activity areas are associated with this level, including likely food processing areas in Units 1 and 2, and probable stone and bone retooling workshops in Units 3 and 4. A pit perhaps associated with level III and containing likely household debris was also uncovered in one of the test trenches, and possible floors were excavated throughout level III. Although postholes or structural remains were not found in level III or elsewhere, the horizontal exposure in each unit was limited. It seems likely that information on Protohistoric households is indeed available at the site, but only large excavation units, such as 5 or 10 m
squares, will reveal this effectively. If Fages did indeed view ALA-565/H and its Causen inhabitants in 1772, it would be exciting to supplement his observations with archaeological data.

Once a clearer picture of the Protohistoric period emerges from the continued excavation of level III, the issue of subsequent Native occupation at the site can be addressed. While it is clear that the Sunol family later settled in the valley not far from the Native area, several questions concerning the Native population persist. What was the process of abandonment like at the site, and how did it affect household organization? Did the Native population leave the site as a result of direct mission influence in the early 1800s, or at a somewhat earlier time and for different reasons? How and when was ALA-565/H re-occupied by Natives, and what changes in lifeways can be detected? It has been estimated that over 2000 Indians left the former missions in the San Francisco Bay area during the 1830s to work "on rancherias or to return to a modified aboriginal life" (Jackson 1984:235). Whether or not Natives immediately returned to a site such as ALA-565/H in the 1830s, or arrived as part of the rancho system or its descendants around 1850, Native households, if present at the site, must have undergone significant economic and social change.

Finally, the size of ALA-565/H suggests that its assignment to a "marginal resource zone" which was visited intermittently be re-evaluated. The site is very shallow by bayshore midden standards, but the local population undoubtedly had access to a wide range of non-shellfish resources in the nearby hills, marshes, and streams. Although the faunal assemblage from the site has not yet been analyzed, several lines of evidence suggest that the site was visited on more than just a sporadic basis: an extensive Protohistoric occupation exists across the site; possible housefloors and pits are present; and food processing, tool-making, and burial activities are represented. ALA-565/H may have been the center of its own resource area, with a local population only loosely tied to seasonal movements involving the bayshore sites. Certainly, if ethnohistoric accounts are to be given full weight, "good"-sized villages supporting many people existed in the interior valleys around the time of contact.

In the next phase of the archaeological analysis at ALA-565/H, I plan to examine settlement patterns of the Sunol valley on a micro-level. There are nearly 20 recorded sites located within 5 miles of ALA-565/H, and portions of the valley have not yet been surveyed. Specialized studies of fauna and soil samples will undoubtedly supply additional insights into the issues of bayshore-interior site relationships and the possible marginality of the local resource base. I also plan to return to ALA-565/H to expose levels associated with the Protohistoric period. By excavating larger units to maximize horizontal exposure, I hope to identify Native households from the Protohistoric period. Through analyses of household organization, it will be possible to offer an archaeological perspective on change in Native social and economic structures during the Protohistoric and Historic eras.

ACKNOWLEDGMENTS

I would like to thank the following individuals whose support made the archaeological investigations at ALA-565/H possible: Mort Calvert of Mission Valley Rock; Leo Bauer and George Lester of the San Francisco Water Department; and Miley Holman of Holman and Associates. I am also indebted to the many industrious students enrolled in the Spring Anthropology 492 class. I am also grateful to staff members from Failure Analysis, Inc., including Victor Bjelajac, Donald Boothby, and Barbara Atkins. Thanks are also due to Dr. Richard Ambro and Rick Thompson of Holman and Associates, the Treganza Anthropology Museum, and Thomas Origer of Sonoma State University. Pamela A. Derish provided valuable editorial assistance. Finally, I am grateful to Andrew and Felipe Galvan of the Ohlone tribe for providing their invaluable perspective on Native life, which greatly benefited the education of some future archaeologists.
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