CONSERVATION OF A SIGNIFICANT PREHISTORIC ARCHAEOLOGICAL SITE IN URBAN SAN DIEGO

ARLEEN GARCIA-HERBST
ASM AFFILIATES, INC.

ASM Affiliates, Inc. conducted archaeological monitoring of subsurface excavation for existing gas line replacement as part of the privatization of Admiral Hartman Family Housing, located in the Pacific Beach community of the city of San Diego. Prior archaeological studies completed on behalf of the Navy within the project area have identified CA-SDI-5017, a large Native American village, La Rinconada de Jamo, as being located within and adjacent to the Admiral Hartman Family Housing area. This site offers an important glimpse into Archaic and Late Prehistoric lifeways along the coast of southern California, much of which urban development has destroyed.

The Admiral Hartman Family Housing area is located in the San Diego metropolitan area (Figure 1). It was transferred to San Diego Family Housing, LLC (SDFH) as part of the U.S. Department of the Navy’s public/private venture privatization initiative for the purpose of SDFH maintaining, building, and improving Navy military family housing. The Admiral Hartman Family Housing area consists of a 121-acre neighborhood located in the Pacific Beach community, in the city of San Diego. The Navy retains title to the land and has leased the land to SDFH, which owns, operates, and maintains the housing for the term of the land lease. As part of the work undertaken by SDFH, the existing gas lines connected to the Admiral Hartman Family Housing were replaced. The existing gas lines were installed in trenches approximately 45 years ago.

RESEARCH ORIENTATION

Prior archaeological studies completed on behalf of the Navy within the Admiral Hartman Family Housing area have identified SDI-5017, a large Native American village, La Rinconada de Jamo, as being located within and adjacent to the Admiral Hartman Family Housing area leased to SDFH. SDI-5017 meets eligibility Criterion (d) of the National Register of Historic Places because previous research has demonstrated that the site has yielded and has the potential to yield important and significant information about the region’s history and prehistory. The site also contains important California Indian values, as it was occupied for approximately 3,000 years up to the time of Spanish settlement in the area. The archaeological site area of SDI-5017 should be managed to identify and preserve all remaining cultural deposits. Through the implementation of the monitoring program in this project, additional important information about the condition and location of cultural deposits was added to our knowledge about this resource.

ENVIRONMENT

The Admiral Hartman housing community is generally situated on a marine terrace in the San Diego Coastal Plain, while the lower elevations of the housing complex adjacent to Rose Creek lie on the sterile alluvium that are part of stream-derived terraces along the southern base of Mount Soledad. Mission Bay is located to the south, Mount Soledad is situated to the northwest, and San Clemente Canyon is to the northeast. San Clemente Creek and Rose Canyon Creek are the nearest drainages. Interstate 5 is located to the east.

The site would have been located on the edge of a large coastal wetland, which has now been dredged and filled to create Mission Bay.
COASTAL ARCHAIC PERIOD (8500 B.P. TO 1500 B.P.)

The Archaic (also referred to as the Early Milling period) extends back at least 7,200 years, possibly as early as 9000 B.P. (Moratto 1984; Rogers 1966; Warren et al. 1993). Archaic subsistence emphasized gathering activities, with shellfish and seed collecting of particular importance. Additionally,
milling technology, frequently employing portable ground stone slabs, was developed. A focus on mostly terrestrial resources is traditionally seen as characteristic of the Archaic period.

Early Archaic occupations in San Diego County are most apparent along the coast and the major drainage systems that extend inland from the coastal plains (Moratto 1984). Coastal Archaic sites are characterized by cobble tools, basin metates, manos, discoidals (disk-shaped grinding stones), a small number of Pinto- and Elko-series dart points, and flexed burials. Together, these elements typify what is termed the La Jolla complex in San Diego County, which appears as the early coastal manifestation of a more diversified way of life.

LATE PREHISTORIC PERIOD

The onset of the Late Prehistoric period in San Diego County is generally considered to have occurred approximately 1,500 years ago (Moratto 1984; Rogers 1966; Warren et al. 1993). The timing of this period may vary within the region (potentially earlier in the east and later in the west). In general, the Late Prehistoric period is characterized by the appearance of small, pressure-flaked projectile points indicative of bow-and-arrow technology, the appearance of ceramics, the replacement of flexed inhumations with cremations, and an emphasis on inland plant food collection and processing -- especially of acorns (Meighan 1954; Rogers 1945; Warren 1964, 1968). Late Prehistoric village or base camp sites are relatively large, and contain internal activity areas attesting to the complexity of behavior of site occupants (Hector 1984). A notable feature of Late Prehistoric sites is the presence of pottery, an unusual trait for hunter-gatherers and one that differentiates the Indians of San Diego County from most other California Indians. Typically, Tizon Brown Ware ceramics are associated with coastal sites.

PREVIOUS RESEARCH

In August of 1929, Malcolm J. Rogers, from the San Diego Museum of Man, first studied the Admiral Hartman area. The area contained a Kumeyaay village (SDI-5017, formerly SDMM W-150 and SDMM W-152), which was about 1,800 m² in size and whose deposits were 90-100 cm in depth (Heuett 1979).

According to Rogers’s field notes and San Diego Museum of Man records, reprinted in Appendices 2 and 3 of Heuett (1979), W-150 contained cobbled hearths throughout the entire area. Three Yuman III (Late Prehistoric period) housepits were noted with fire-cracked rock ruins in the undisturbed northern portion of the site. The southern portions of the site were disturbed by agricultural activities.

Four trenches were excavated at W-150. The trenches indicated a site with occupational midden ranging in depth from 18 in. (45 cm) to 3 ft. (91 cm). Shell, Tizon brown ware sherds, milling implements, Cottonwood projectile points, obsidian flakes, broken and burned bone awls, and hearth stones were recovered from the test trenches. Rogers indicated that W-150 contained deposits dating to Littoral I and II (La Jolla I and II, or Archaic period), as well as Yuman III (Late Prehistoric period).

The smaller W-150 blends with the larger W-152, which contained midden soil ranging in depth from 12 in. (30 cm) to 3 ft. (91 cm). Cobble hearths were present in W-152, with many of the same type of artifacts as noted at W-150 (Gallegos et al. 1987; Heuett 1979; Rogers 1929a:120-126). Subsequent research has confirmed these initial observations, expanded the available dataset, and refined the site boundary (Alter 2002; Carrico 1993; Carter 1957; Chace 1979; Cooley and Toren 1992; Dalope and Ní Ghabhláin 2008; Garcia-Herbst 2008; Hector 2006; Heuett 1979; Kyle and Gallegos 1994; Kyle et al. 1997a, 1997b; Ní Ghabhláin and Moslak 2000; Olson et al. 1994; Pigniolo and Kwiatkowski 2005; Robbins-Wade 2002; Winterrowd and Cardenas 1987; Zepeda-Herman 2005).

MONITORING METHODS

An Archaeological Monitor was present during the excavation of gas line pits dug to determine the location of the gas lines and other utilities and during the enlargement of pits for the installation of the
directional drills used for the replacement of the main lines. The Archaeological Monitor was also present during the digging of gas line trenches for the installation of the replacement service lines. No monitoring of directional drilling was required because that aspect of the project occurred in previously disturbed soil or fill and did not impact any intact portions of SDI-5017. The Archaeological Monitor kept a record of the presence or absence of cultural material discovered during the project work and showed the results of the monitoring on a map, which also showed the locations monitored.

FINDINGS

A total of 263 lithic artifacts were recovered from SDI-5017 (Table 1). The assemblage includes three bifaces, two cores, 12 retouched flakes, one utilized flake, three percussing tools, 222 debitage, and 26 ground stone artifacts. Flaked stone tools include one biface, two Cottonwood projectile points, six retouched flakes, and one utilized flake. Metavolcanic materials comprise 49 percent (n = 129) of the recovered lithic assemblage from SDI-5017, with smaller amounts of quartzite (n = 91), quartz (n = 14), volcanics (n = 3), and chert (n = 2). Most ground stone artifacts were made of granite (n = 24).

Invertebrate remains recovered from SDI-5017 totaled 14,248.10 g. A total of 15 shell species and nine genera, as well as one crab element, were identified from the site. *Argopecten aequisulcatus*, comprising 45 percent (5,736.5 g) of the weight and 61.5 percent (n = 1,324) of the hinge count, and *Chione* spp., comprising 43.2 percent (5,504.7 g) of the weight and 27.2 percent (n = 586) of the hinge count, dominate the assemblage. These species and *Ostrea lurida* typically occupy exposed rocky shores, bays, or estuaries. *Tivela* are associated with exposed non-rocky shores.

A total of 60 bones, weighing 100.30 g, were recovered from subsurface contexts from SDI-5017. 34 were mammal, 23 fish, and three were bird. Of these, 47 specimens (78 percent) were identified to order or higher and seven (12 percent) are burned. At least 13 species are represented in the assemblage, including 11 mammal species, one fish species, and one bird species.

Identified mammal species include black-tailed jackrabbit; Botta’s pocket gopher; cow; deer, sheep, or pig; Desert cottontail rabbit; cow-sized mammal; dog-sized mammal; rabbit-sized mammal; sheep-sized mammal; mule deer; and rabbit. Twenty-three fish bones, weighing 12.67 g, were recovered from subsurface contexts at SDI-5017. Six were identifiable to species (*Semicossyphus pulcher*, California sheephead), nine fragments were from unidentifiable cartilaginous fishes (sharks, skates, and rays), and eight were from unidentifiable bony fishes. California sheephead is territorial and inhabits kelp forests and rocky reefs. Finally, subsurface deposits at SDI-5017 produced three bird bones, weighing 3.6g.

CONCLUSIONS

The different types of artifacts and ecofacts recovered during this project point towards a broad exploitation strategy. First, a variety of tools were recovered, such as bifaces, cores, retouched flakes, a utilized flake, percussing tools, debitage, and ground stone artifacts. This variation is typical at coastal sites (Becker and Iversen 2006), and when the total assemblage of artifacts that have been recovered from SDI-5017 is assessed, a virtually complete tool kit is present. This tool kit consists of knives (e.g., utilized flakes, bifaces), projectile points, scrapers, wedges, drill/perforators, and flake cores to produce these tools. This basic tool kit seems to be present from the Early Archaic to the Late Prehistoric periods (Becker and Iversen 2006).

Assessing the faunal assemblage, marine invertebrates indicate exploitation of species from non-rocky tide flats as well as rocky shores, particularly *Argopecten aequisulcatus* and *Chione* spp. The invertebrates do not show a focus on any particular species, and probably represent an exploitation of the most commonly available resources within the local environment at that time. Similarly, the vertebrates do not show a focus on any particular species, but instead, a broad-based exploitation strategy that
Table 1. Recovery Comparison.

<table>
<thead>
<tr>
<th>REPORT</th>
<th>CHIPPED STONE</th>
<th>CORES</th>
<th>BIFACES</th>
<th>PROJECTILE POINTS</th>
<th>GROUND STONE</th>
<th>TIZON BROWNWARE CERAMICS</th>
<th>CERAMIC PIPE</th>
<th>FAUNAL BONE (G)</th>
<th>BONE TOOLS</th>
<th>BONE ORNAMENTS</th>
<th>SHELL (G)</th>
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<td>Cooley and Toren 1992</td>
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includes small to large mammals, both terrestrial and marine, as well as fish and birds, a strategy also observed at other coastal sites.

In addition to the intact midden deposits encountered during this monitoring program, intact midden deposits have also been encountered at several other locations within the Area of Potential Effects (APE). As a result of the findings of this project, as well as previous studies, ASM has delineated three distinct zones within the APE: 1) areas that have been tested or monitored and intact midden deposits are present; 2) areas that have been tested or monitored and no intact midden deposits were present; and 3) areas that have not been tested or monitored and no subsurface information is available. ASM recommends that future subsurface excavation require the presence of an archaeological monitor in areas that have been tested or monitored and intact midden deposits are present, as well as areas that have not been tested or monitored and no subsurface information is available.

**FINAL CONSIDERATIONS**

The incremental and cumulative research on sites in urbanized areas, such as SDI-5017, La Rinconada de Jamo, has provided an important reconstruction of the site based on both extensive and exhaustive research on previous investigations and collections as well as the finding of the monitoring project itself. This site offers an important glimpse into Archaic and Late Prehistoric lifeways along the coast and riverine environments of southern California. Urban development has destroyed much of the coast, and analyses of the few remaining sites using current methods and theories are necessary to gain a fuller understanding of prehistoric hunter-gatherers in this area, and hunter-gatherer variation in similar environments. The site is an ideal example of why monitoring and investigations should be done at sites in very developed areas: preserved portions still may remain, and the results of previous research over decades of time can yield significant information about prehistory once someone puts it all together.

The variety of faunal and lithic remains from this monitoring project indicates the site still has much potential to yield information that can help address important regional problems and contribute to more significant issues. The artifact variety encountered also suggests this site was used as a seasonal or multiseasonal residential camp, based on regional data that shows that sites with similar variability were used in that way. In most cases, such sites have higher potential to yield significant data than more specialized sites. Most importantly, the site contains evidence for cultural continuity from the Archaic to Late Prehistoric periods. This research issue is of critical importance in understanding San Diego's cultural chronology.

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**REFERENCES CITED**

Alter, Ruth C.
2002 *Section 106 Historical Significance Assessment of the Admiral Hartman Housing Development Feasibility Study*. Archaeos.
Becker, Mark, and David R. Iversen  
2006 Lithic Techno-typology and Function in the Las Pulgas Corridor, Camp Pendleton, and the Implications for Prehistoric Occupation of Coastal Southern California. In From the Coast to the Inland: Prehistoric Settlement Systems along the Las Pulgas Corridor, Camp Pendleton, California, edited by Micah J. Hale and Mark Becker, pp. 459-497. ASM Affiliates, Carlsbad, California.

Bissell, Ronald M.  

Carrico, Richard L.  

Carter, George F.  

Chace, Paul G  

Cooley, Theodore G., and A. George Toren  

Dalope, Michelle, and Sinéad Ní Ghabhláin  
2008 Cultural Resource Study for the Mission Bay Golf Course Project, City of San Diego, San Diego County, California. ASM Affiliates, Carlsbad, California.

Gallegos, Dennis R., Susan M. Hector, and Stephen R. Van Wormer  

Garcia-Herbst, Arleen E.  
2008 Report on Archaeological Monitoring of Site CA-SDI-5017, the Village of La Rinconada de Jamo, during the Gas Line Replacement Project at Admiral Hartman Family Housing, City of San Diego, San Diego County, California. ASM Affiliates, Carlsbad, California.

Hector, Susan M.  
2006 Investigation of Gas Line Pits, Admiral Hartman Housing Units. ASM Affiliates, Carlsbad, California.

Heuett, Mary Lou  

Kyle, Carolyn E., and Dennis R. Gallegos  
Kyle, Carolyn E., Sinéad Ni Ghabhláin, and Dennis R. Gallegos


Meighan, Clement W.

Moratto, Michael J.

Ni Ghabhláin, Sinéad, and Ken Moslak
2000 A Cultural Resources Survey for the De Anza Harbor Resort and Golf Development Project, Pacific Beach. ASM Affiliates, Carlsbad, California.

Olson, Richard, Tirzo Gonzalez, Rory Goodwin, and Judy Berryman

Pigniolo, Andrew, and Heather Kwiatkowski

Robbins-Wade, Mary
2002 Admiral Hartman Navy Family Housing–Archaeology. Affinis Environmental Services, El Cajon, California.

Rogers, Malcolm J.
1929 Field Notes and Maps of SDMM W-150 from the Field Log of Malcolm J. Rogers, Curator of Archaeology, San Diego Museum of Man.


Warren, Claude N.


Warren, Claude N., Gretchen Siegler, and Frank Dittmer

Winterrowd, Cathy L., and D. Sean Cardenas

Zepeda-Herman, Carmen
2005 Results of Test Excavations of Site CA-SDI-5017, San Diego, California. RECON Environmental, San Diego.