

SHELL MOUNDS OF CHINA CAMP AND TOMALES BAY STATE PARKS, MARIN COUNTY

TSIM D. SCHNEIDER

This paper addresses ongoing research of shell mounds in China Camp State Park and Tomales Bay State Park, summarizing the first field season and future fieldwork at these parks. A cluster of three shell mounds in China Camp State Park—CA-MRN-114, CA-MRN-115, and CA-MRN-328—and two shellmounds in Tomales Bay State Park—CA-MRN-209 and CA-MRN-284—are discussed. Historic-period levels from these sites, especially the Thomas site (MRN-115), a large shell mound with the remains of multiple semi-subterranean house depressions, hold tantalizing information about colonial encounters in the San Francisco Bay area. I conclude with a discussion of MRN-115 and its importance to California hunter-gatherer studies.

INTRODUCTION

Large shell mounds and shell-bearing shallow middens are ubiquitous features of river, ocean, and bay shorelines the world over. In California, shell mounds have been the focus of archaeological study since the late-nineteenth century as they are, quite literally, long-term material records of the lives of coastal hunter-gatherers. The great shell mounds of the San Francisco Bay area, in particular, are sources of information for understanding Native Californian diet, population size, technological developments, exchange, and ceremonial practices, to say the least.

The complex stratigraphy of shell mounds in Marin County has received special attention for contributing to a central California chronology and for testing sampling methods. More popularly, some shell mounds in the San Francisco Bay area were studied for evidence of Francis Drake's visit to California in 1579 (Moratto 1984:269). Point Reyes and Tomales Bay received considerable archaeological interest in the 1940s and 1950s after sixteenth-century Chinese porcelain and other artifacts from that era were discovered within some coastal sites. Interestingly, however, excluding those excavations associated with the "Drake quest," historical components of San Francisco Bay shell mounds remain largely unstudied.

Nels Nelson commented in 1909 that "many informants have pointed out both some of the smaller sites between San Rafael and Petaluma and also some of the larger ones south of San Mateo as having been occupied by the Indians as late as 1870" (Nelson 1909:347). Nelson's scattered archaeological evidence for these late occupations included a Spanish-manufactured brick from a shell mound in Sausalito, red silk from mounds near San Mateo, a brass medal dating to 1768 recovered from a mound in Alameda, and a three-legged metate removed from the West Berkeley shell mound (Nelson 1909:347).

Aside from these findings, very little is known about the use of shell mounds in the San Francisco Bay area during the historic period, perhaps because of a culmination of trends prevalent during the Late Holocene (3350-0 B.P.). Environmental calamity, subsistence change, warfare and displacement, and community reorganization characterized the Late Holocene and also may have contributed to drastic changes in hunter-gatherer mobility and limited use of coastal shell mounds (Lightfoot and Luby 2002:276-77). Historic contact with European explorers would further devastate complex hunter-gather cultures and further confound our understanding of them.

In this paper I provide a brief overview of previous studies of shell mounds near present-day China Camp State Park and Tomales Bay State Park in Marin County. I then discuss the results of my analysis of lithic material from the Thomas site, or MRN-115, and a summary of my ongoing research at China Camp State Park. I conclude with a discussion of colonialism in the San Francisco Bay area and, more broadly, I employ a diachronic perspective to discuss late eighteenth and early nineteenth-century hunter-gatherer responses to colonialism as an extension of models that characterize Late Holocene hunter-gatherer settlement patterns.

CHINA CAMP STATE PARK AND TOMALES BAY STATE PARK

China Camp is a 1,512-acre state park located on the southwest shore of San Pablo Bay 3 miles from downtown San Rafael (Figure 1). The 2,000-acre Tomales Bay State Park is situated just east of Point Reyes National Seashore. Since the creation of China Camp State Park in 1977, most archaeological research has centered on the historic Chinese shrimp camp from which the park takes its name (see Brienes 1983; Schulz 1996). Surveys of the shoreline and inland ridges have located several additional archaeological sites



Figure 1. China Camp State Park (photograph by author).

in the park unit, including historical buildings and features associated with the shrimp fishing industry based on Point San Pedro between 1870 and 1911, as well as prehistoric sites.

MRN-115 is a large shell mound found in China Camp State Park. It is approximately 5 meters tall at its center, 30 meters E-W, and 45 meters N-S. Nels Nelson (1907) originally surveyed MRN-115, describing its location, size, features, and state of preservation. Nelson also surveyed the shores of Tomales Bay as part of a broader regional survey that extended from the Russian River to Bolinas (Nelson 1910). As part of the University of California Archaeological Survey, Clement Meighan excavated 12 5-by-5 ft. units and one house pit approximately 9 ft. in diameter at MRN-115 during a single field season in 1949 (Meighan 1953).

Two shell mounds (MRN-114 and MRN-328) are situated roughly north and south, respectively, of MRN-115, and the three sites together form a shell mound cluster (Figure 2). This conspicuous grouping of a larger village site surrounded by smaller, satellite sites accords neatly with other settlement pattern studies for the Marin Peninsula (King 1970; Luby et al. 2006:210; Slaymaker 1974). They may represent a Late Holocene shell mound community that would have been occupied on a less frequent, ceremonial basis (Lightfoot and Luby 2002:267).

The thrust of Meighan's research at MRN-115 focused on site chronology using radiocarbon dating. Incidentally, these radiocarbon dates are the first recorded dates for California obtained by Willard Libby (Libby 1955). Of significance to my research, MRN-115 contains 12 house depressions. Meighan's house pit excavation revealed burned structural supports and burned basketry remains. Of particular interest, Meighan (1953:4) noted 12 in. of refuse on top of one house depression that contained artifacts, while a single "tanged projectile point" allowed Meighan to estimate abandonment of the site at approximately AD 1800. This date is significant in its correlation to Milliken's (1995) analysis of tribal disintegration on the Marin Peninsula from missionization in the first decade of the nineteenth century. However, Meighan's summary for MRN-115, along with rampant illicit escape from Spanish missions (Cook 1976), and the missionaries' efforts to placate neophyte Indians by allowing them to return periodically to their home villages, make it possible to postulate a reoccupation of MRN-115 by Native Californians after AD 1800.

Two shallow shell mounds in Tomales Bay State Park, MRN-284 and MRN-209, will be studied as comparative sites to help understand hunter-gatherer settlement patterns and possible use of shell mounds during the early nineteenth century. Clement Meighan and Aubry Neasham tested these sites in 1952, excavating a single pit at MRN-209 to a depth

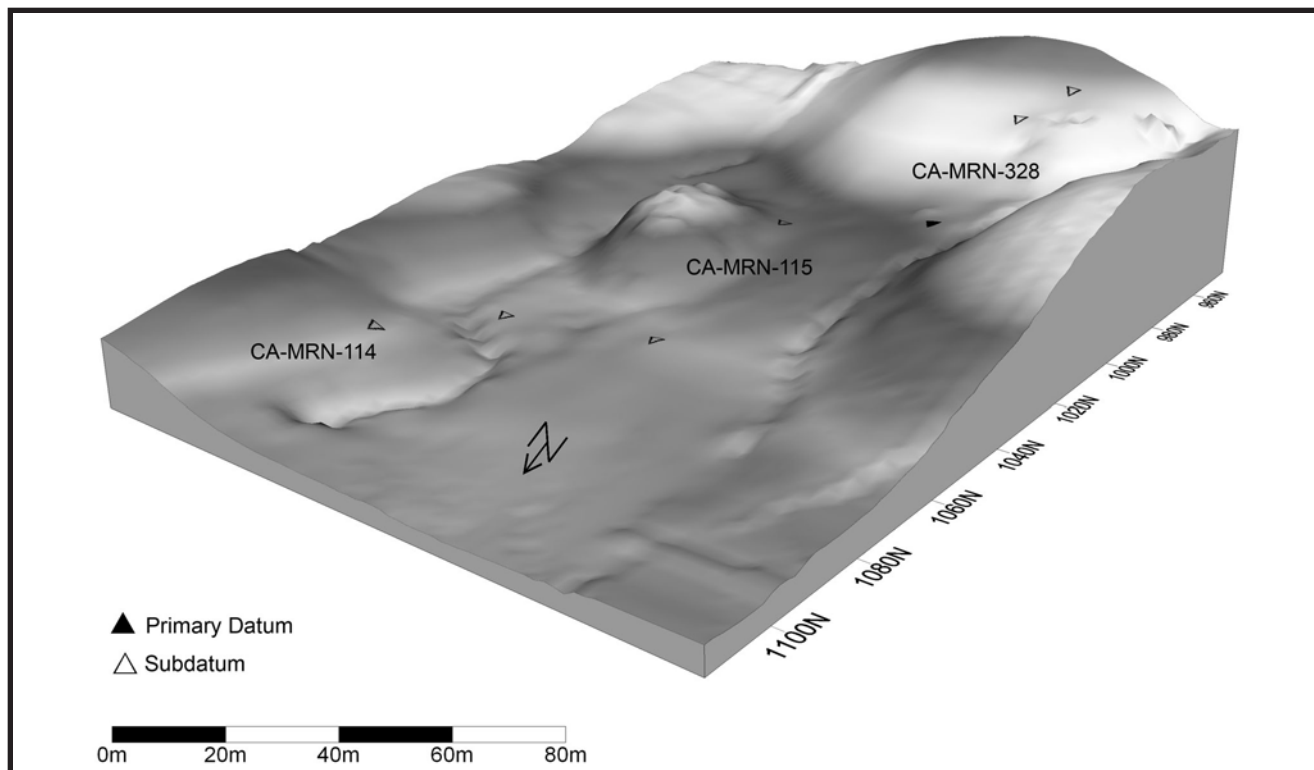


Figure 2. Surface map of the China Camp Archaeological Project study area.

of 6 in. (Meighan 1952, 1952b) and two pits at MRN-284 to depths of 24 and 30 in. In 1995, a single 1-by-1-m unit was excavated in each site under the direction of the California Department of Parks and Recreation (Wheeler 1996). In total, five sites in Tomales Bay State Park were excavated in this manner to examine the natural and human contributions to shell mound erosion (Wheeler 1996).

MRN-209 and MRN-284 are of particular interest to my research in two ways. First, artifacts identified by Meighan and Neasham include a mixture of prehistoric artifacts and historical glass and metal artifacts, while excavations in 1995 revealed worked bone and antler, flaked and ground stone implements, shell, as well as macroscopic and microscopic faunal and floral remains. Based on these assemblages alone, MRN-209 and MRN-284 are ideal sites for examining historical deposits of coastal shell mounds that may be related to Coast Miwok use.

Second, both shell mounds are located on the western shore of Tomales Bay across from the ethnographic Coast Miwok villages of *Eteakolum* and *Cotomkowi* (Barrett 1908). McNiven's (2000) "retreats" model for understanding certain offshore islands as retreats for native Australians escaping social unrest is especially germane. Although the Point Reyes peninsula is not an island, its geographic isolation and the relatively distant west shore of Tomales Bay may have offered needed seclusion during socially turbulent times. McNiven (2000) addresses site seasonality, as represented

by the sporadic and strategic use of offshore island sites, and social disarray resulting from the depopulation of Native Australians from disease, missionization, and European pastoral enterprises with their demand for cheap labor. These key examples are used to argue that archaeological sites on offshore Australian islands were important places of refuge and social cohesion. I argue that a similar process may have unfolded on the Marin Peninsula in the early nineteenth century.

ANALYSIS OF CA-MRN-115 LITHICS AND ONGOING RESEARCH

In the fall of 2006 I analyzed the lithic assemblage from MRN-115 to gauge the breadth of materials and artifact types represented at the site and as a guide for future research at the China Camp study area. Excavated materials from the University of California's 1949 field season at MRN-115, as well as materials from MRN-209 and MRN-284, are stored at the Phoebe Hearst Museum of Anthropology at the University of California, Berkeley.

As part of my analysis I conducted a metrical analysis of all lithic artifacts for MRN-115. The maximum length, maximum width, thickness, and weight were measured for ground stone and flaked stone artifacts, while axial length, neck width, and basal width of projectile points were measured, when present, following David Hurst Thomas

(1981) but with some modification. Artifact type, raw material, and the presence of edge modification, which was determined using a 100X dissecting microscope, were also recorded.

Ground stone artifacts from MRN-115 are synonymous with those excavated from other Bay Area shell mounds. The remains of basalt hand stones, mortars, and pestles suggest processing activities. Two charmstones of different materials may give insight into the antiquity of the site and its relationship to other sites in the region (Elsasser 1955).

Flaked stone artifacts from the collection include flakes, presumably from the manufacture of stone tools, eight projectile points and projectile point fragments, and four cores. All flakes are chert of various hues, with the exception of one obsidian flake. The color of two chert flakes collected from the surfaces of MRN-114 and MRN-328 this winter is visually similar to those excavated from MRN-115 in 1949, which may suggest contemporaneous occupations of both sites based on similar material choice.

All of the projectile points are obsidian. The relative scarcity of obsidian flakes compared to formal obsidian artifacts may be the result of sampling and screening methods, or may indicate the transportation of completed obsidian tools along extensive trade networks, a defining feature of the Late Holocene (Erlandson 1997:7). Conversely, the relative abundance of chert flakes, as well as the presence of house depressions, worked bone, and basketry, follow Lightfoot's mounded village model, whereby processing, domestic activities, and ceremonial practices unfolded on a daily basis at a single shell mound.

Five of the eight projectile points can be visually identified as Coastal Contracting Stem forms (Justice 2002). This stem cluster includes Houx Contracting Stem and Excelsior points, which are prevalent at sites in the North Coast Ranges and northern San Francisco Bay area (Justice 2002:267, 274). Houx Contracting Stem points range in age from ca. 4450 to 1450 B.P., while Excelsior points date to ca. 3950-1450 B.P. (Justice 2002). The radiocarbon date for lower deposits of MRN-115 (720 ± 130 uncalibrated B.P.) falls just outside the age range presented by Justice (2002). As part of my dissertation research, I will try to secure multiple radiocarbon dates for MRN-115 from upper and lower deposits, as this will have import to understanding site occupation. I also intend to study all of the artifacts from MRN-115 and reanalyze the lithic assemblage using refined analytical techniques, including energy dispersive X-ray fluorescence (EDXRF) sourcing of obsidian artifacts.

In January 2007, I began mapping MRN-114, MRN-115, MRN-328, and the area immediately surrounding these sites, with the help of a small crew of graduate student colleagues and volunteers (Figure 3). During the summer of

2007 I will conduct surface collection, geophysical survey, and a systematic auger sampling of the three shell mounds to evaluate their extent and content.

DISCUSSION AND CONCLUSION

A century ago Nels Nelson set out to survey the shell mounds of the greater San Francisco Bay area. Although some shell mounds mentioned in his survey already showed signs of deterioration, very few intact shell mounds exist just 100 years later. Even fewer retain historic deposits, attributed mostly to severe coastal erosion and human impact. Shell mounds in Tomales Bay and China Camp State Parks are unrivaled in their state of preservation and capacity to contribute to a diachronic understanding of coastal hunter-gatherers before and after contact with Europeans.

As discussed above, hunter-gatherer settlement patterns in the Late Holocene were characterized by multisite communities (Lightfoot and Luby 2002:267), or large shell mounds surrounded by smaller and broadly dispersed satellite communities (King 1970:281; Lightfoot 1997:139; Lightfoot and Luby 2002:267, 275-76). This pattern contrasts with the large mounded villages prevalent during the Middle Holocene (6650-3350 B.P.) that functioned as sociopolitical and ceremonial centers (Lightfoot 1997:139). As community populations increased during the Late Holocene, it is believed



Figure 3. Mapping CA-MRN-328 (photograph by author).

that some older mounds became increasingly resorted to as esteemed places for communal gatherings, decision-making, cremations, and ancestor veneration (Lightfoot and Luby 2002:267). At the time of Spanish settlement in the Bay Area, hunter-gatherers probably practiced seasonal settlement patterns and there is very little evidence that shell mounds were being occupied residentially (Lightfoot and Luby 2002:277; Milliken 1995).

However, the proximity of some prehistoric shell mound sites to known ethnographic villages along Tomales Bay and San Pablo Bay may indicate an extension of Late Holocene site clustering patterns whereby Native Californians aggregated periodically—perhaps even seasonally—in smaller settlements near older village sites to reaffirm ties to the landscape, to dance, and to remember their ancestors. McNiven’s “retreats” model for understanding infrequent use of offshore islands by native Australians is helpful for understanding shell mounds in Marin County as places that Native Californians visited and possibly escaped to during socially trying times. With the onset of colonialism in the San Francisco Bay Area and the proselytizing efforts of Spanish padres, subsistence and settlement patterns so familiar to the native inhabitants of the Marin peninsula would be irrevocably changed, and some may have had little choice but join a mission in order to survive (Milliken 1995). Yet, many chose not to forfeit their identities, and, as part of their identities, familiar traditions, dances, foods, and memories of home.

Max Uhle, well known for his early excavations at the Emeryville shell mound, suggested that the great depth of time visible in some shell mounds should not overshadow the uppermost layers, which may indeed demonstrate occupation up to the “threshold of modern times” (Uhle 1907:36). Historic-era deposits in shell mounds like MRN-115 in China Camp State Park and the shell mounds of Tomales Bay State Park may offer clues to understand how Native Californians retained, borrowed, and combined cultural practices during the violence and turmoil of the early nineteenth century and the subsequent wave of American settlement.

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REFERENCES CITED

- Barrett, S. A.
1908 The Ethno-geography of the Pomo and Neighboring Indians. *University of California Publications in American Archaeology and Ethnology* 6:1-332.
- Brienes, M.
1983 *China Camp and the San Francisco Bay Shrimp Fishery*. Report on file, Resource Management Division, California Department of Parks and Recreation.
- Cook, S. F.
1976 *The Conflict between the California Indian and White Civilization*. University of California Press, Berkeley.
- Elsasser, A. B.
1955 A Charmstone Site in Sonoma County, California. *University of California Archaeological Survey Reports* 28:29-33. Berkeley.
- Erlandson, J. M.
1997 The Middle Holocene along the California Coast. In *Archaeology of the California Coast during the Middle Holocene*, edited by J.M. Erlandson and M.A. Glassow, pp. 1-10. Perspectives in California Archaeology, Vol. 4. Cotsen Institute of Archaeology, University of California, Los Angeles.
- Justice, N. D.
2002 *Stone Age Spear and Arrow Points of California and the Great Basin*. University of Indiana Press, Bloomington.
- King, T. F.
1970 Archaeology of the Coast Miwok to 1970. In *Contributions to the Archaeology of Point Reyes National Seashore: A Compendium in Honor of Adan E. Treganza*, edited by R.E. Schenk, pp. 275-287. Treganza Museum Papers No. 6. San Francisco State College.
- Libby, W. F.
1955 *Radiocarbon Dating*. 2nd ed. University of Chicago Press, Chicago.
- Lightfoot, K. G.
1997 Cultural Construction of Coastal Landscapes: A Middle Holocene Perspective from San Francisco Bay. In *Archaeology of the California Coast during the Middle*

- Holocene*, edited by J.M. Erlandson and M.A. Glassow, pp. 129-142. Perspectives in California Archaeology, Vol. 4. Cotsen Institute of Archaeology, University of California, Los Angeles.
- Lightfoot, K. G., and E. M. Luby
2002 Late Holocene in the San Francisco Bay Area: Temporal Trends in the Use and Abandonment of Shell Mounds in the East Bay. In *Catalysts to Complexity: Late Holocene Societies of the California Coast*, edited by J.M. Erlandson and T.L. Jones, pp. 263-281. Perspectives in California Archaeology, Vol. 6. Cotsen Institute of Archaeology, University of California, Los Angeles.
- Luby, E. M., C. D. Drescher, and K. G. Lightfoot
2006 Shell Mounds and Mounded Landscapes in the San Francisco Bay Area: An Integrated Approach. *Journal of Island and Coastal Archaeology* 1(2):191-214.
- McNiven, I. J.
2000 Treats or Retreats? Aboriginal Island Use along the Gippsland Coast. *The Artefact* 23:22-34.
- Meighan, C. W.
1952 Archaeological Site Survey Record for CA-MRN-284. University of California Archaeological Survey Records. Phoebe Apperson Hearst Museum of Anthropology, University of California, Berkeley.
1952b Archaeological Site Survey Record for CA-MRN-209. University of California Archaeological Survey Records. Phoebe Apperson Hearst Museum of Anthropology, University of California, Berkeley.
1953 Preliminary Excavation at the Thomas Site, Marin County. *Reports of the University of California Archaeological Survey* 19:1-16. Berkeley.
- Milliken, R.
1995 *A Time of Little Choice: The Disintegration of Tribal Culture in the San Francisco Bay Area, 1769-1810*. Ballena Press, Menlo Park.
- Moratto, M. J.
1984 *California Archaeology*. Academic Press, New York.
- Nelson, N. C.
1907 *San Francisco Bay Mounds*. University of California Archaeological Survey Manuscripts No. 349. Berkeley.
1909 Shellmounds of the San Francisco Bay Region. *University of California Publications in American Archaeology and Ethnology* 7:309-356.
- 1910 *Site Surveys from the Russian River to the Golden Gate Mounds*. University of California Archaeological Survey Manuscripts 350. Berkeley.
- Schulz, P. D.
1996 Work Camps or Ethnic Villages? The Chinese Shrimp Camps of San Francisco Bay. *Proceedings of the Society for California Archaeology* 9:170-178.
- Slaymaker, C.
1974 *Fidemo, the Twilight, and Before: A Study of Coast Miwok Political Organization*. Unpublished Masters thesis, San Francisco State University.
- Thomas, D. H.
1981 How to Classify the Projectile Points from Monitor Valley, Nevada. *Journal of California and Great Basin Anthropology* 3:7-43.
- Uhle, M.
1907 The Emeryville Shellmound. *University of California Publications in American Archaeology and Ethnology* 7:1-107.
- Wheeler, T.
1996 *Archaeological Assessment of Bay Miwok Occupation in Tomales Bay State Park*. Report on file, Resource Management Division, California Department of Parks and Recreation.