

MOUND OCCUPATION IN THE SOUTH SAN FRANCISCO BAY AREA— THE YÑIGO MOUND IN HISTORICAL CONTEXT

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The Yñigo Mound (CA-SCL-12/H) is one of the few remaining prehistoric shellmounds along the southern edge of San Francisco Bay. The site also falls within Rancho Posolmi, which was granted to Ohlone Native American Lope Yñigo in 1844. Yñigo was one of a handful of Native Americans to receive a Mexican land grant, and is a well-known historical figure. Despite being located in a modern, urban setting, portions of the mound remain preserved at the junction of two major freeways. We review the unique history of the site, summarize prior archaeological investigations, and place the site within the broader context of South Bay area shellmounds.

INTRODUCTION

CA-SCL-12/H, also known as the Smaller Yñigo (or Iñigo) Mound, is located in the Santa Clara Valley along the southern edge of San Francisco Bay (Figure 1). The site is one of the area's few remaining prehistoric shellmounds. It is also of historical importance owing to its association with Lope Yñigo, a prominent Ohlone Native American who received a Mexican land grant for ancestral lands that included the Yñigo Mound. Despite being located

in a modern, urban setting, portions of the mound remain preserved today at the junction of two major freeways. We review the site's unique history, summarize prior archaeological investigations, and place the site within the broader context of South Bay area shellmounds.

HISTORICAL CONTEXT

Lope Yñigo was born in 1781, four years after the founding of nearby Mission Santa Clara de Asis (Shoup and Milliken 1999). A Costanoan or Ohlone Indian, he was a member of the tribelet that inhabited the land around the Yñigo Mounds. After obtaining his liberty from Mission Santa Clara in 1839, Yñigo returned to the place of his birth and settled near *El Posida de las Animas* (the "Little Well of the Souls"), building a traditional Ohlone house and planting fruit trees.

In 1840, Governor Alvarado ordered that Yñigo should receive farm animals and supplies, but he was not officially granted any land. Yñigo had constructed at least four structures, two of adobe and two of wood, on the land by this time. In 1843, Yñigo petitioned Governor Micheltorena, asking that the land be granted to him, and in February 1844, he was granted title to *Rancho Posolmi*, a 3,042-acre tract of land that included the Yñigo Mounds complex (Figure 2).

During the early 1850s, Yñigo lived in an adobe house and owned several corrals and 200 head of cattle, 300 sheep, and 25 horses. On his land he cultivated wheat, corn, beans, potatoes, pumpkins, and onions. Yñigo's fortunes declined over time and he owned very little, if any, of the original *rancho* at the time of his death on February 28, 1864 at the age of 83. According to Loud (1912), Yñigo was buried on the Smaller Yñigo Mound (SCL-12/H) at the southeast corner of *Rancho Posolmi* (however, see Shoup et al. 1995:125-131 for an alternative opinion).

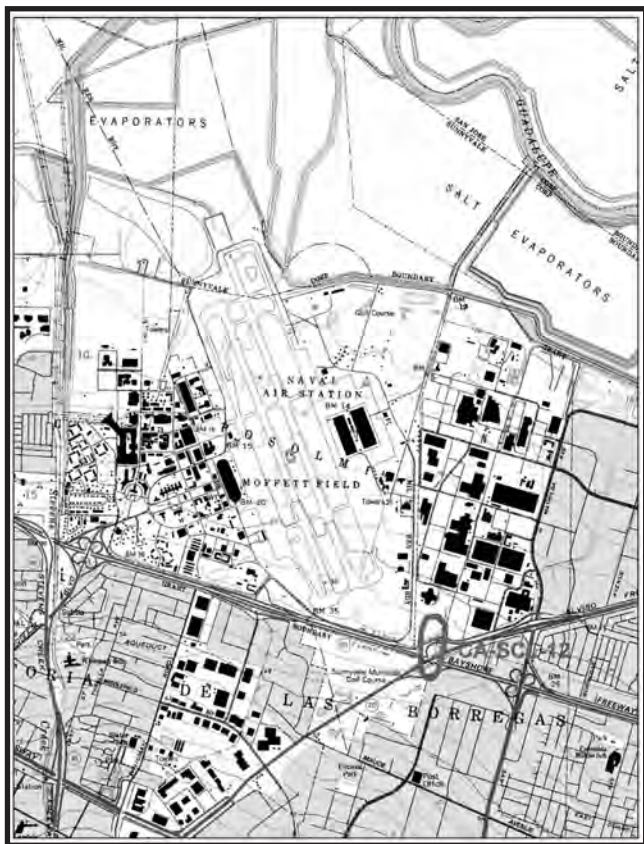


Figure 1. CA-SCL-12/H shown on U.S.G.S. Mountain View 7.5 Minute quadrangle.

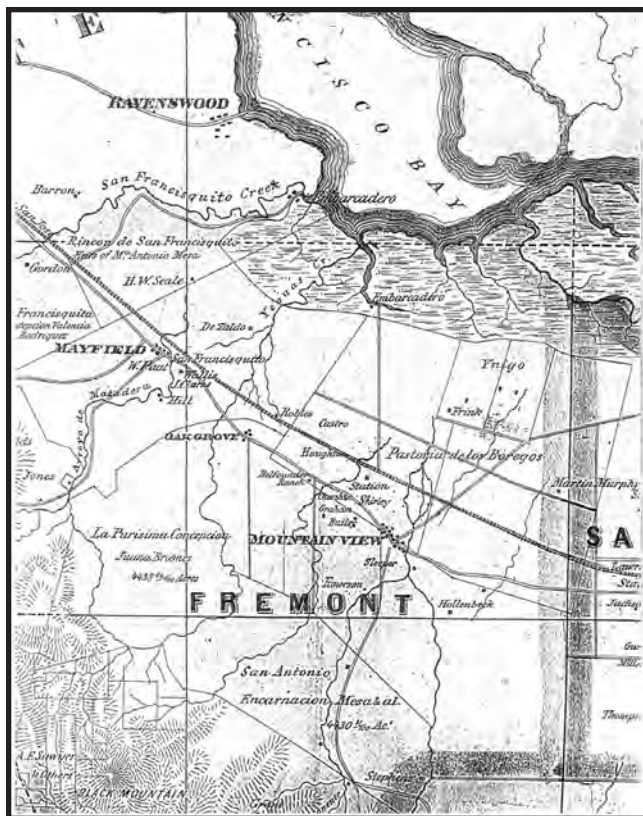


Figure 2. Yñigo's rancho shown on 1866 map of Santa Clara County.

During the 140-plus years since Yñigo died, rural and later urban development have destroyed most visible traces of the *rancho*, including buildings, shellmounds, and even his grave. Today, Moffett Field Naval Air Station, including the massive Hangar 1, covers most of *Rancho Posolmi*. Portions of the Smaller Yñigo Mound, however, remain preserved at the intersection of U.S. Highway 101 and State Route 237 (Hylkema 1995). The 1932 California Division of Highways as-built construction drawings provide insight into how the finished grade of U.S. 101 sheared off the top of the mound, while apparently distributing the upper portion of the mound as fill to the east and west (Figure 3).

ARCHAEOLOGICAL INVESTIGATIONS

During 1907-1908, Nels Nelson (1909) inventoried shellmounds of the Bay Area, recording several within and around *Rancho Posolmi* (Nelson's sites 346-355 are now SCL-12 through 21 and 23 through 25). Subsequently, archaeologist Llewellyn L. Loud (1912) described and mapped the *Rancho Posolmi* shellmounds in more detail (Figure 4). Loud (1912) described the Smaller Yñigo Mound (now recognized as SCL-12/H) as being "several hundred feet in diameter and probably five feet or more deep."

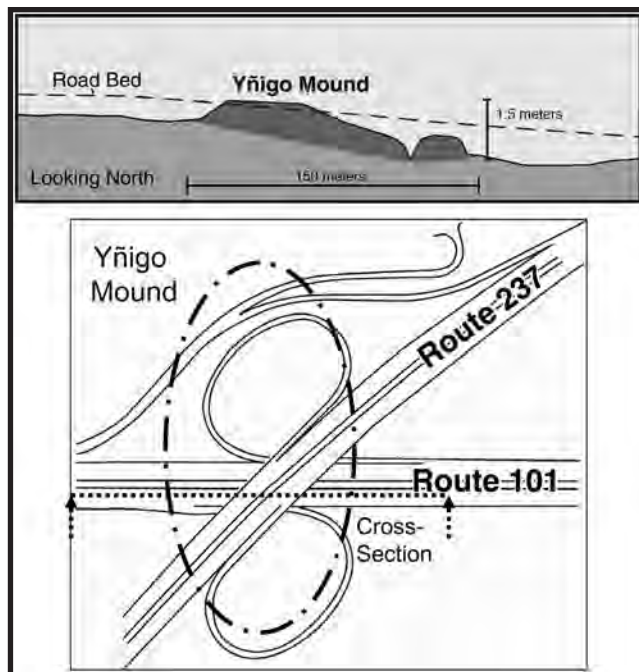


Figure 3. CA-SCL-12/H shown in plan and cross section (adapted from Caltrans as-built construction drawings).



Figure 4. Portion of L. L. Loud's 1912 Map of Indian Mounds in the vicinity of the Mountain View.

A series of archaeological investigations at SCL-12/H during the last quarter-century have contributed to our current understanding of the northern and western portions of the site (Bryne 2005; Byrd 2006). Initial survey by Salzman and Chavez (1984) documented prehistoric midden and historic-era debris of SCL-12/H north of the US Highway 101 and State Route 237 interchange. Shortly thereafter, Caltrans' first investigation of the site – a surface survey by Marcia Kelly (1987a) for proposed highway improvements – revealed the site extended into the highway intersection. Subsequent Extended Phase I investigations by Kelly (1987b:1) included auger borings, three 1-by-1-m test units, and a backhoe trench. This fieldwork revealed intact prehistoric deposits, including a possible pit feature, and recovered prehistoric materials including flaked stone artifacts, possible baked clay artifacts, *Olivella* shell beads, human bone, and a variety of estuarine and terrestrial faunal remains (Kelly 1987b:1). Based on this work, the site was listed on the National Register of Historic Places (Kelly 1988).

Since then several other archaeological investigations have taken place within SCL-12/H. Chavez and Ilic (1993) surveyed and augered along the northwestern edge of the site for the proposed H Street extension. A total of 145 4-in.-diameter auger holes were excavated, with almost one-quarter having subsurface cultural deposits including rich midden sediments, and a sub-midden burial was identified. Similarly, survey and auger testing by Morgan (1993) in the western portion of the site noted a variety of prehistoric cultural material and human bone. Caltrans also excavated two additional 1-by-1-m units within the site, documenting the most widespread intact archaeological deposits within the highway right-of-way (Hylkema 1995).

The most extensive fieldwork to date was conducted by Samuelson and Self (1995) within the Tasman Light Rail Corridor in the northern portion of the site. A total of 26 m³ was excavated, intact midden deposits (including a probable hearth feature) were recorded, and a rich assemblage of cultural material was recovered including obsidian and chert stone tools and debitage, milling tools, a charmstone, shell beads, faunal remains, and floral remains, as well as human bone. Finally, backhoe testing by Estes et al. (2006) north of the highway noted midden deposits and sub-midden burials.

In summary, a series of field projects has provided varied insight into SCL-12/H, particularly with respect to the site's horizontal and vertical extent, nature of disturbances, and range of associated cultural material. The fieldwork has documented the presence of a significant and once-substantial prehistoric shellmound. Evidence of subsequent historic-era occupation, including that associated with *Rancho Posolmi*, has been limited to historic-era material in disturbed contexts. The maximum site boundary, based on

combining all prior site boundary depictions, delineates an approximately 70.5-acre area centered on the U.S. Highway 101 and State Route 237 intersection.

RESULTS

In this section, we summarize the archaeological evidence from the site, concentrating on the intact midden deposits. Radiocarbon and obsidian hydration data from SCL-12/H reveal that the site was occupied for a considerable period of time, including portions of the Early, Middle, and Late periods. Seven radiocarbon dates obtained by Samuelson and Self (1995) from the northern portion of the site document Early and Middle period occupation (Figure 5). The Middle period occupation includes two dates clustered around 1,350 years ago from an intact thermal feature.

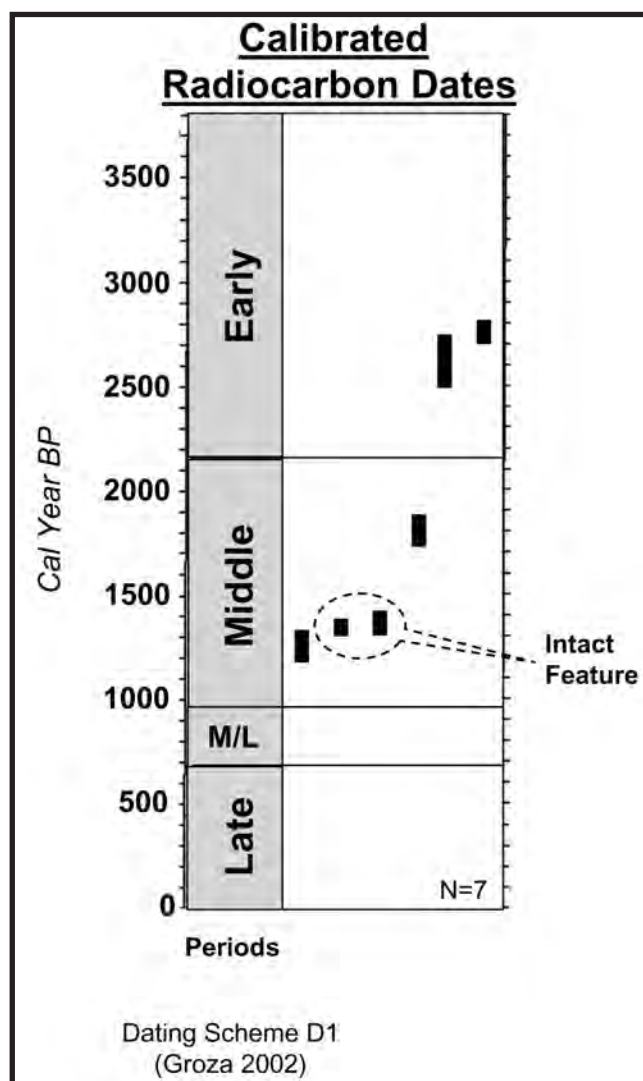


Figure 5. Calibrated radiocarbon dates from SCL-12/H.

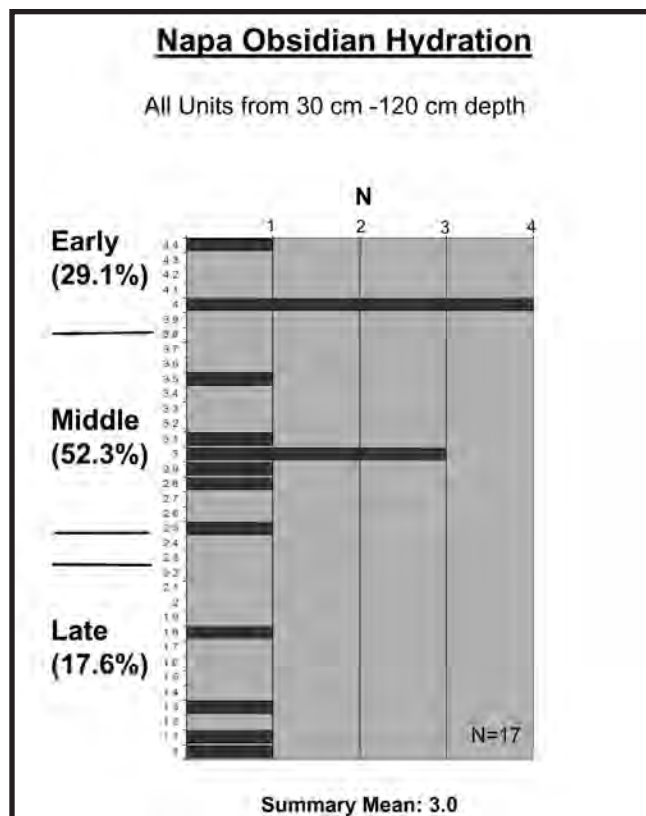


Figure 6. Napa obsidian hydration from SCL-12/H.

The obsidian hydration results from subsurface contexts are comparable, dominated by the Middle period but also showing a Late period signature (Figure 6). In addition, samples from disturbed and surface contexts have higher frequencies of Late period hydration readings, indicating that the site had a substantial Late period occupation that has been largely truncated by modern development.

Overall, obsidian sourcing data indicate that primarily Napa area obsidian was traded and exchanged (Napa 84.3 percent, Annadel 5.8 percent, total N=131). Only small amounts of obsidian were from Sierra sources (Casa Diablo 5.8 percent, Bodie 3.3 percent, Mono 0.8 percent). This suggests that east-west trade and exchange only infrequently involved obsidian.

In the following discussion of subsistence patterns, we concentrate on *in situ* Middle period deposits recovered from a 2-x-2-m area containing an *in situ* thermal feature dated to 1300-1400 cal B.P. (Samuelson and Self 1995). With respect to faunal remains, vertebrate exploitation during the Middle period was concentrated on terrestrial mammals (77 percent, total NISP=3,289). Notably, large mammals were procured in considerable numbers, resulting in a high artiodactyl index (0.58). Bird remains were well-represented (19 percent), and included predominantly waterfowl such as ducks and geese. Fish were frequent (three percent), and canid and sea mammals scarce (each less than one percent).

In the Middle period deposit, shellfish remains were abundant, and procurement concentrated on oyster (*Ostrea lurida*; 48 percent, total shellfish weight =11.9 kg), followed by mussel (*Mytilus edulis*; 28 percent), and California horn shell (*Cerithidea californica*; 23 percent). The small horn shell is even more abundant in disturbed (presumably Late period) contexts (36 percent), suggesting increasing reliance on horn shell and also that resource intensification may have taken place between the Middle and Late periods.

Carbonized plant remains are well-preserved in Middle period contexts (data and indices based on data in Klug and Popper 1995). Small seeds are abundant (density of 9.5 seeds per liter), and wetland species, such as hairgrass, are more numerous than dryland species (ratio of 1.5:1). Small-seeded grasses are slightly more common than *Chenopodium* (ratio of 1.26:1), and much more frequent than legumes (ratio of 11.6:1). Notably, acorns were recovered in very high densities (212 mg/liter), resulting in a very high acorn-to-small-seed index (17.2). Other nuts are rare, or in the case of pine, absent entirely. Overall, the Middle period subsistence data indicate that the site was occupied for multiple seasons, and exploitation focused on a variety of terrestrial, wetland, and bayshore habitats.

Currently, the appropriate prehistoric shoreline and associated vegetation zones, unfortunately, are not well established. However, using an early 1800s drainage reconstruction and modern vegetation boundaries, SCL-12/H can be placed in its broader environmental context (Figure 7). The site is situated on an alluvial plain near the junction of several ecological zones, including tidal marshland, grassland prairie, and oak woodland. This ecotonal setting allowed for the exploitation of all the documented plant resources within the daily foraging range of the site. The same holds true for invertebrates and most vertebrate species. Large mammals are an apparent exception; they were probably acquired via logistical forays to the south outside the daily foraging range.

SUMMARY

In summary, previous investigations at SCL-12/H have documented Early through Late period occupations, with possibly a trace of historic-era activity. Due initially to happenstance (and now to state and federal cultural resources regulations) portions of the Early and Middle period occupation of the mound appear to be intact. Currently, the Middle period occupation, which includes intact features, is the best-documented one at the site. Analysis of the Middle period deposits reveals exploitation of a diverse set of resources from local and near-local settings, particularly with respect to plant remains. In addition, large terrestrial mammals were likely procured from extra-local upland environs, perhaps via logistical forays.

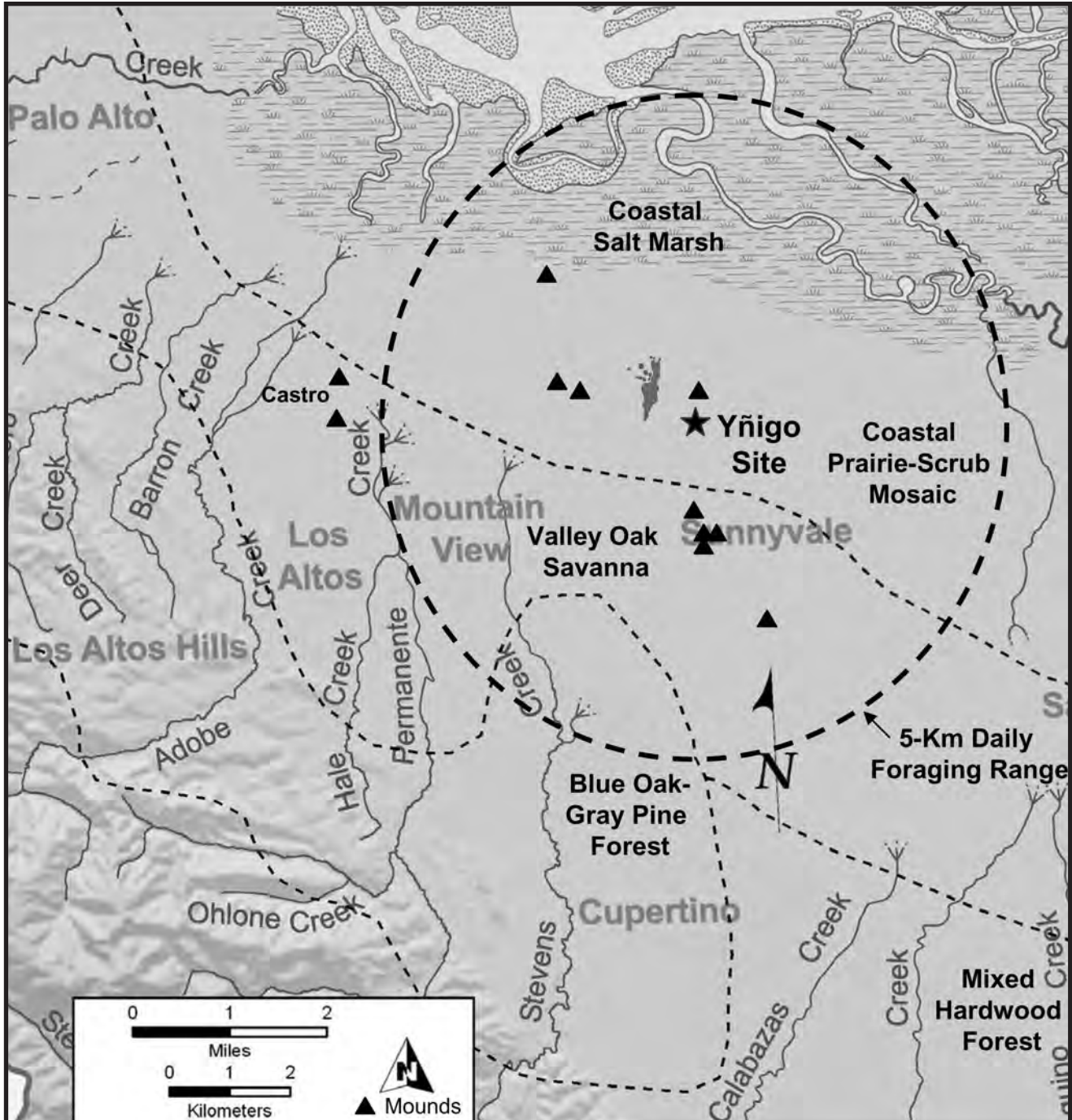


Figure 7. Spatial context of CA-SCL-12/H and nearby southern Bay Area shellmounds.

Overall, data from SCL-12/H complement the results of investigations in other portions of the South Bay, notably to the east along the Guadalupe River and to the west near San Francisquito Creek (Allen et al. 1999; Cartier et al. 1993; Fitzgerald 2005; Hylkema 2002; Wiberg 2002). Future research at the site, in concert with reconstructions of late Holocene paleo-landscape and paleo-vegetation,

will allow a more accurate model of the dynamic nature of settlement organization in this region. Such work also has the potential to contribute to ongoing research regarding late Holocene settlement pattern shifts, whether or not resource intensification took place, and the impact of the Meganos intrusion on population and settlement dynamics west of the Guadalupe River in the South Bay area.

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