

Hunter-gatherer archaeology in the missions of Alta and Baja California

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Abstract

The purpose of this paper is to contemplate the excellent potential for examining hunter-gatherer practices in the missions of Alta and Baja California. We begin the paper by considering the evidence for wild food harvesting and processing that has been unearthed in mission excavations and documented by historical accounts. We note that the ability of Indian neophytes to conduct hunting and gathering forays probably varied substantially among the Jesuit, Franciscan and Dominican missions. In recognizing the unique opportunity to examine Indian cultural practices within mission communities, we outline several issues for implementing such a research program in Alta and Baja California. We conclude our article with an on-going case study that is examining hunter-gatherer practices in the Dominican mission of Santa Catalina in Baja California.

Introduction

In the summer of 2005, archaeological work was initiated at the historic Dominican mission of Santa Catalina in Baja California (Figures 1 and 2). The project is a collaboration between the University of California at Berkeley, the Instituto Nacional de Antropología e Historia (INAH), the Native Cultures Institute of Baja California (CUNA) and the indigenous community of Santa Catarina. The purposes of this article are twofold. One is to consider a research program for examining hunter-gatherer practices in the missions of Alta and Baja California. The other is to discuss our on-going research that is serving as a test case for exploring issues concerning hunting and gathering among neophytes at mission Santa Catalina.

Our research program at Mission Santa Catalina is following in the pioneering footsteps of Malcolm Rogers. The archaeological legacy of Rogers offers a clear baseline for analyzing changes and enduring aspects of hunter-gatherer practices. Rogers's interests in the desert west on both sides of the international border were instrumental in creating or refining the basic archaeological cultural sequences and setting the research agenda for many years to come in southern Alta California and northern Baja California. Fundamental to Rogers's sequences was an acute understanding of hunter-gatherer seasonal subsistence and settlement patterns. Tracing prehistoric trails during much of his fieldwork, Rogers (1966:5) was quite aware of the "well established exchanges of information and goods along accepted trails connecting great areas of western United States and Mexico." Movement within this vast region and a sophisticated knowledge of the natural resources define hunter-gatherer subsistence and settlement strategies of the coastal and inland areas of Alta and Baja California and structure Rogers's San Dieguito, La Jolla and Yuman classificatory scheme.

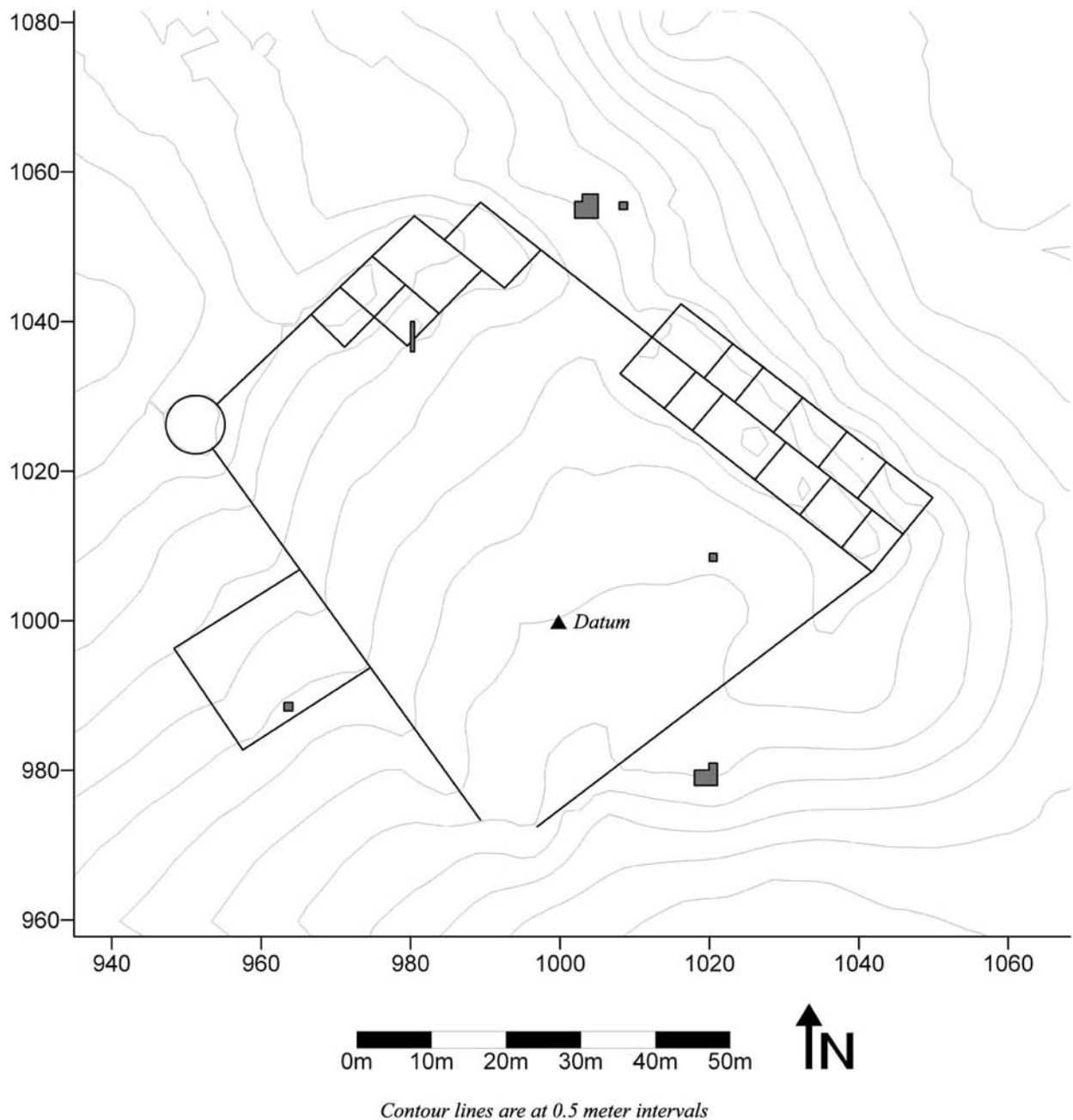


Figure 1. Mission Santa Catalina excavation units, 2005 and 2006.

Hunter-gatherer practices in Spanish missions

Rogers's pioneering work is stimulating a diverse range of research on California hunter-gatherers on both sides of the international border, as this conference demonstrates. This research is based on four types of information: prehistoric archaeological studies, European explorers' accounts of tribal people prior to colonization, ethnographic studies of native people in the twentieth century, and collaborative work with contemporary tribal groups. Yet a crucial piece is missing in constructing a foundation for understanding hunter-gatherer life ways in the three



Figure 2. Excavation.

Californias. Little is known about hunter-gatherer cultural practices in colonial institutions, particularly mission communities. When native people entered the Jesuit, Franciscan and Dominican missions of Baja California and Alta California, their hunter-gatherer practices became shrouded in darkness. We have minimal knowledge about the kinds of hunting, gathering and fishing activities that Indian neophytes deployed in the missions, nor do we know much about the technologies and social relationships employed in harvesting and processing wild foods in mission communities, and how these methods compared to those used in pre-colonial times.

It is understandable why the study of hunting and gathering has been downplayed in the missions of Alta and Baja California. Missionaries put into place a rigorous enculturation program for transforming their Indian wards into agrarian Catholics. Neophytes were indoctrinated into the Catholic faith, taught European crafts and trades, participated in all aspects of agrarian and ranching production, and were forced to alter their traditional work habits, subsistence practices, dress and menu (Lightfoot 2005:59-62). We might assume that this program of enculturation would have discouraged traditional hunter-gatherer practices in mission communities. Furthermore, the establishment of large-scale agrarian mission economies, which introduced a plethora of cattle, sheep and weeds to fragile coastal habitats, proved harmful to many indigenous game animals and plant foods. As a consequence, traditional Indian subsistence practices may have become increasingly difficult to pursue around missions, a factor that may have influenced some struggling native people to join the mission communities (Milliken 1995).

Yet there are two lines of evidence indicating that some kind of modified hunting gathering regime was practiced by neophytes in at least some of the California missions. One line of evidence is from recent archaeological excavations of neophyte quarters in Franciscan missions in Alta California, which have unearthed a diverse range of wild foods, including marine fish, shellfish, terrestrial game (such as deer, rabbits, squirrels), birds (such as quail, turkey, geese, ducks), occasional sea mammals, and plant remains (such as hazelnuts, black walnuts, wild grapes and acorns). In addition, there is good documentation of indigenous tools and material objects associated with these food remains, including lithic assemblages of flaked stone and ground stone objects, shell beads, bone artifacts, such as beads, whistles, awls, bird bone tubes (possibly used as shaman sucking tubes), gaming pieces, and basketry impressions of water bottles, storage baskets, and matting (Figure 3). (For summary of data, see Lightfoot 2005:96-98).

Another line of evidence is the written accounts of missionaries who described the diverse range of wild foods eaten by Indian neophytes (see Lightfoot 2005:100-101). For example, the padres of Mission San Buenaventura in Alta California observed between 1813 and 1815:

The neophytes in their houses have plenty of fresh and dried meat. In addition in their homes they have quantities of acorns, chia and other seeds, fruits, edible plants and other nutritious plants which they do not forget and of which they are very fond. They also eat fish, mussels, ducks, wild geese, cranes, quail, hares, squirrels, rats, and other animals which exist in abundance. Owing to the variety of eatables which they keep in their homes and being children who eat at all hours it is not easy to compute the amount they daily consume [Geiger and Meighan 1976:86].

There is growing recognition among mission scholars that some missionaries exhibited considerable flexibility in providing opportunities for neophytes to hunt and gather wild foods.



Figure 3. Small side-notched obsidian projectile point.

This was partly pragmatic: during the formative years of agricultural development, occasional crop failures necessitated that Indian neophytes revert to traditional hunting and gathering practices to keep food on the table. But even in later years, when food production was well established, it appears some missionaries granted regular furloughs to neophytes to participate in acorn harvests or to visit their homelands and presumably gather wild foods (Guest 1983:45; Kelsey 1985:505; Timbrook et al. 1993:133-134). As John Johnson recently wrote,

Indeed, missionary reports from both Missions Santa Bárbara and La Purísima in the late eighteenth and early nineteenth centuries indicate that traditional islay and acorn harvests were annual events in which nearly the entire neophyte populations participated after the mission's crops had been gathered. Native fishermen appear to have continued in the professions to supply fresh seafood to people within in the missions. Even deer-hunting seems to have been encouraged, as is indicated by several Indians whose professions were recorded after long residence at the missions as “veranderos” [Johnson 2005:71].

Individual missions also exhibited considerable variation in the ability of neophytes to practice traditional hunting and gathering activities. Most of the Franciscan missions in Alta California followed the policy of *reducción*, which involved the massive movement of outlying Indian villages into a central mission community. The aggregation of many diverse groups of hunter-gatherers into a centralized settlement certainly facilitated the agrarian and enculturation programs of the missionaries, but would have made regular hunting and gathering forays much more difficult. But not all the Indians lived in the crowded neophyte mission villages; some neophytes staffed outlying ranchos and stations, where they had more opportunities to hunt and gather. Furthermore, the two southernmost Franciscan missions in Alta California (Mission San Luis Rey and Mission San Diego), as well as some of the Jesuit and Dominican missions in Baja California, instituted modified forms of *reducción*, in which only a portion of the neophyte population resided in the mission complexes at any one time, while the remainder lived in outlying Indian rancherías or villages (Jackson 1994:34, 80; Lightfoot 2005:65). This modified *reducción* program also provided many opportunities for native people to continue practicing

wild food gathering.

Developing a research program for mission archaeology

The growing recognition that hunter and gatherer practices were incorporated into some of the Jesuit, Franciscan, and Dominican missions, at least in some times and places, offers us a unique opportunity to examine Indian cultural practices within a colonial framework. We raise the following three issues for implementing such a research program in Alta and Baja California.

First, we need to address the kinds of hunter and gatherer practices that took place in the missions. We need to develop a better understanding of how the hunter and gatherer practices were organized, who participated in them, and what kinds of technologies were employed. We also need to address the degree to which missionaries supported or even tolerated hunting and gathering forays by their neophytes (Costello 2005; Johnson 2005; Lightfoot 2005:92-113). This probably varied within the Jesuit, Franciscan, and Dominican mission systems over time; some padres probably permitted it, while others did not. Thus, in some places, hunter-gatherer activities may have remained relatively clandestine operations, with tool manufacture and food processing taking place “behind closed doors”. Furthermore, there is a strong possibility in some cases that indigenous foods may have been procured by native people outside the missions and traded to neophytes.

There is also the question about how mission policies influenced the ability of neophytes to practice hunting and gathering. For example, in 1793 Governor Arrillaga of Alta California commanded that all Indian people (both neophytes and gentiles) terminate their age-old practice of burning grassland and forested habitats to enhance wild food productivity (Lightfoot 2005:86-87). We need to assess the impact that this policy had on neophytes in the Franciscan missions in Alta California compared to the contemporaneous Dominican missions in Baja California. We also need to evaluate whether a broader range of hunting, gathering, and fishing tasks took place in those Baja and Alta California missions that employed the modified *reducción* program, which allowed neophytes to spend more time outside the centralized mission complexes.

Second, what role did hunting and gathering play in the mission communities? Most scholars of the Franciscan missions of Alta California argue that indigenous foods played a relatively small part in the overall diet of neophytes, possibly providing treats, luxury items or a small augmentation to mission-grown beef, wheat, barley, corn and other domesticated crops (Cook 1976:46-47; Skowronek 1998:697). Can a similar argument be made for the Jesuit and Dominican missions of Baja California? Furthermore, even if the dietary contribution of wild foods was small, they may have served an important symbolic value for those neophytes who maintained strong Indian identities in the mission communities. Occasional feasts and ceremonies in the neophyte quarters, which featured Indian foods and objects, may have furthered social cohesion for those people still adhering to Indian cultural values and beliefs (Lightfoot 2005:112-113).

Third, how did hunter-gatherer practices in the missions influence native economies in the post-mission period of the later 1800s and early 1900s, when anthropologists initiated many of the classic ethnographies that we still rely on today? The cultural knowledge of some kinds of traditional hunter and gatherer practices, which were either not allowed or not feasible in some missions, may not have been passed on to later generations of California Indian descendants. A classic example is that of the Chumash Indians along the Santa Barbara Channel of Alta California, who, based on early explorers’ accounts, integrated prescribed burning into their

seasonal round to increase the productivity of seed and nut crops. With the suppression of burning in the Alta California missions by Spanish officials, it appears that this practice “had long faded from cultural memory” when ethnographic data were collected by anthropologists in the early twentieth century (Timbrook et al. 1993:118). Thus, unless a careful analysis is undertaken in both pre-colonial and mission contexts, it may be difficult to evaluate the degree of change that took place in native economies over time. These changes may have resulted from the loss of traditional cultural practices or the creation of new hunter and gatherer methods ingeniously forged in the multiethnic setting of the missions.

The Santa Catalina archaeological project

To begin to address such issues, we have initiated archaeological fieldwork at the site of Mission Santa Catalina in northern Baja California, Mexico. Mission Santa Catalina was located on the northeastern frontier of the Dominican mission system in Baja California and was in operation from 1797 until 1840, when it was destroyed in a native uprising. The mission’s neophyte population was made up of seasonally mobile hunter-gatherer groups, including the Paipai, Kiliwa, and Kumeyaay, whose territories originally stretched from the Pacific coast to the Gulf of California and the Colorado River delta area. Today, the descendants of these native groups continue to live on the western slopes of the Peninsular Ranges, and the ruins of Mission Santa Catalina are located in the indigenous Paipai community of Santa Catarina. Indeed, the Paipai and their neighbors are among the only indigenous groups in Baja California to survive the colonial period with their distinct tribal identities intact, and in this remote region, the mission period appears to have had less impact on native communities than in other parts of Alta and Baja California. Given the long-term indigenous occupation of the area around the mission site, Santa Catalina provides a unique opportunity to examine the continuation of traditional subsistence practices and related technologies in the face of great social and biological change.

A preliminary examination of secondary historical sources sheds light on the economic and political structure of neophyte life at Mission Santa Catalina. In his seminal work on the missions of the Dominican frontier in Baja California, Peveril Meigs estimated that 146 acres of wheat and corn were cultivated at Mission Santa Catalina using an irrigation system consisting of dams and canals. Another 150 acres appear to have been dry-farmed, and the mission was home to herds of cattle, sheep, goats, mules and horses (Meigs 1935:123-125). Yet agricultural yields were highly variable, and the numbers of livestock kept at the mission were dramatically diminished by the final years of the mission (Meigs 1935:120-167). In general, the mission’s neophyte population appears to have been relatively stable, with between 150 and 250 neophytes attached to the mission in any given year (Jackson 1994:169-171). Despite these numbers, a report from 1835 claims that there were roughly 2,000 gentile Indians living in the area surrounding Mission Santa Catalina (Rodríguez 2002:250).

This scenario likely reflects the waning importance of Mission Santa Catalina to the Spanish colonial system in Baja California. From 1812 onwards, for example, Santa Catalina did not have a missionary of its own, as the padre in charge of the mission shared his duties first with Mission San Vicente and later with Mission San Miguel. By the 1820s, the Dominicans had only three missionaries in the entire frontier region, and by the time of its destruction in 1840, Santa Catalina was one of four missions administered by a single missionary (Nieser 1960:280). Given the unpredictable food supply at the mission itself, along with the irregular presence of Dominican missionaries, native people had both motive and opportunity to continue their

traditional subsistence practices, settlement patterns and social relationships. Indeed, both historical and ethnographic accounts suggest that the Paipai and their neighbors actively engaged in many aspects of hunter-gatherer lifeways during and after the mission period (Engelhardt 1929; Joël 1976; Meigs 1935; Owen 1962).

Archaeological evidence also contributes to this emerging picture of native life at Mission Santa Catalina. Our research at the site suggests that at least some of the indigenous people who lived and worked at the mission continued to participate in seasonal movements, as well as regional social and trade relationships. Abalone, cockle, clam, and olivella shells found at the site suggest ties to both the Pacific coast and the Gulf of California (Morris 1966). EDXRF provenance analysis conducted at the Berkeley Archaeological XRF Laboratory on eight obsidian flakes links material found at Mission Santa Catalina to the San Felipe obsidian source, which is more than 100 km to the southeast of the mission (M. Steven Shackley 2005, personal communication). This indicates that mission neophytes obtained obsidian from the lowland desert near the Gulf of California during the mission period, either through direct procurement or through trade. Additionally, EDXRF analysis conducted on a sample of indigenous pottery sherds collected at the site indicates that as much as 15% of the indigenous ceramic assemblage from the mission was made from nonlocal clays. Initial examination of the faunal assemblage collected from the site reveals the presence of domesticated animals such as cattle, sheep and goats, as well as wild game animals including rabbits and birds. Final results of faunal and botanical analysis are still pending, but these materials will also help us to more clearly understand the importance of wild and domesticated plants and animals to the neophyte diet, as well as to aid in our ability to determine what types of hunting and gathering activities mission neophytes were engaged in.

Our research also demonstrates that neophytes employed many traditional technologies during the mission period. Items of European and colonial manufacture are rare at the site, and of the glass and porcelain artifacts we collected, roughly half show intentional flaking for use as expedient tools. We also collected relatively large amounts of flaked stone from in and around the mission quadrangle. Not surprisingly, indigenous ceramics make up the majority of artifact assemblage, and they show strong continuities with the prehistoric vessel forms common in northern Baja California and southern Alta California (McKusick and Gilman 1959; Rogers 1945). The presence of high numbers of artifacts related to native technologies supports the notion that mission neophytes at Santa Catalina continued to engage in many traditional practices, even within the walls of the mission compound. Combined with the archaeological evidence for long distance trade and residential mobility, the use of traditional technologies among the mission's neophyte population suggests that the native residents of Mission Santa Catalina likely participated in some aspects of a hunting and gathering economy, albeit in a potentially modified form.

Conclusion

The question of hunter-gatherer practices in mission settings has important implications for our understandings of indigenous culture change during and after the colonial period. It is likely that the continuation of traditional practices among mission neophytes varied greatly between missions as well as between the different mission systems of the three Californias. In northern Baja California, this issue is made all the more relevant by the cultural persistence of the Paipai community of Santa Catarina, where in the twenty-first century native people continue

to engage in traditional practices including pottery-making, basketry, and the collecting of wild foods. We are hopeful that future archaeological and archival research will enable us to examine more carefully the extent of hunter-gatherer economies at Mission Santa Catalina that will provide an anchor for initiating comparative work with other Alta and Baja California missions.

As Rogers emphasized in his own research on prehistoric hunter-gatherers, strong social networks were key to survival in the arid lands of western North America. We suspect that neophytes forged similar relationships with people both within and outside the missions that allowed them access to traditional foods and resources. Understanding how these cultural practices and technologies were maintained in colonial and postcolonial contexts is an important topic for scholars on both sides of the International border.

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