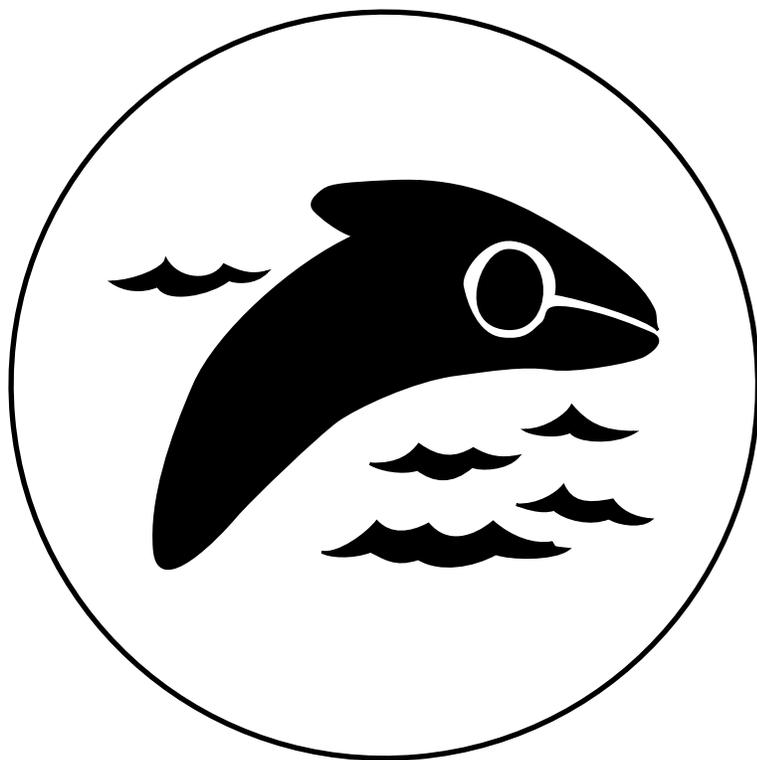


PACIFIC COAST  
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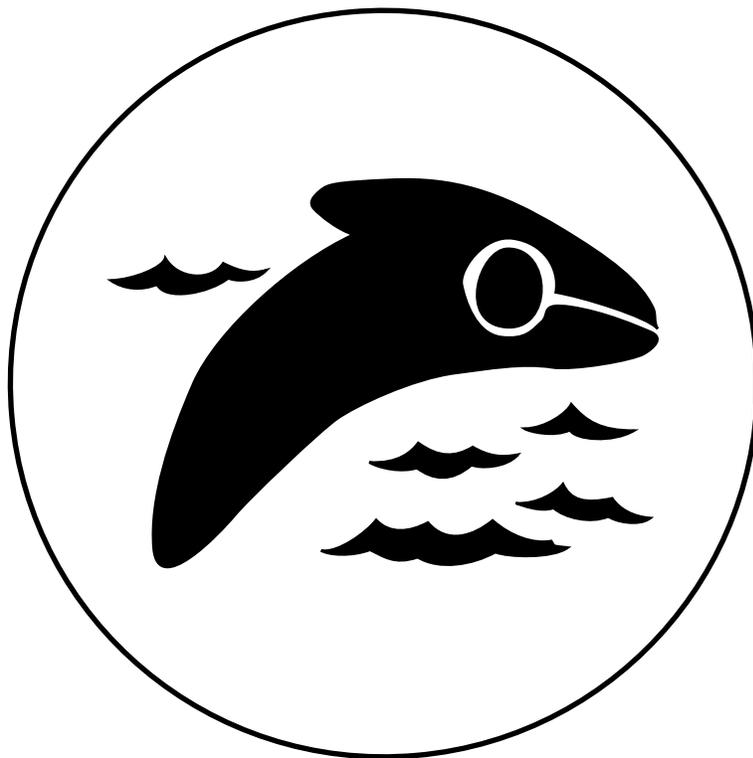
Volume 35, Number 1 Winter 1999



Cultural Dimensions  
of Time:  
New Perspectives  
on the Archaeology  
of Camp Pendleton,  
Southern California

# Pacific Coast Archaeological Society Quarterly

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## Pacific Coast Archaeological Society Quarterly

The *Pacific Coast Archaeological Society Quarterly* is a publication of the Pacific Coast Archaeological Society (PCAS), which was organized in 1961. PCAS is an avocational group formed to study and to preserve the anthropological and archaeological history of the original inhabitants of Orange County, California, and adjacent areas.

The Publications Committee invites the submittal of original contributions dealing with the history and prehistory of the area. Although PCAS is especially interested in reports which shed further light on the early inhabitants of Orange County, it is always interested in reports on the wider Pacific Coast region.

Subscription to the *Pacific Coast Archaeological Society Quarterly* costs \$35 for calendar year 2001. The PCAS also publishes a monthly newsletter, which costs \$15 for calendar year 2001. There is an additional postage charge for foreign subscriptions: \$9 for the *Pacific Coast Archaeological Society Quarterly* and \$4 for the *PCAS Newsletter*. Back issues of the *Pacific Coast Archaeological Society Quarterly* are available for \$12 per single issue (including postage and handling). A complete list of the articles in previous issues is included in the 25-year index published as Volume 25, Number 4, (1989) and the 5-year supplement published as Volume 32 Supplement (1996). Two *Occasional Papers*, on Catalina Island and on Mexican Majolica, also have been published by PCAS. To place an order, or to receive information about the Pacific Coast Archaeological Society, or to submit an article for publication, write to: Pacific Coast Archaeological Society, P.O. Box 10926, Costa Mesa, California, 92627, email: info@pcas.org. PCAS is not responsible for delivery of publications to subscribers who have not furnished a timely change of address. Articles appearing in the *Pacific Coast Archaeological Society Quarterly* are abstracted in *Historical Abstracts* and *America: History and Life*.

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# Introduction: Archaeology on Camp Pendleton

Stan Berryman

This introduction summarizes the cultural resource management studies that recently have been conducted on the Marine Corps Base, Camp Pendleton. This Marine base is located in San Diego County, California, and extends 28 km from San Clemente southward to Oceanside along the Pacific coast and reaches inland for a distance of approximately 32 km (Fig. 1). The Base exists to train Marines. Its land base facilitates the intensive training required to develop combat instincts, innovation, and leadership skills in a short period of time.

The Base's 125,000 acres are unique and irreplaceable to the Marine Corps. The developed areas are isolated from one another by the relatively undeveloped land areas devoted to training. Camp Pendleton offers a great variety of terrain, including beaches, bluffs, mesas, canyons, mountains, and southern California's only free-flowing river (Fig. 2). Its large land area and diverse terrain, together with a restricted airspace overhead, provide a unique physical resource in support of Camp Pendleton's training mission. This base provides the only setting available to the military where the full spectrum of Marine combat doctrine can be exercised: amphibious landings and all elements of the Marine Air Ground Task Force including aviation and support combat arms.

Camp Pendleton consists of several dispersed cantonment areas, firing ranges, maneuver areas, and impact areas comprising approximately 36,000 acres, which are zoned for bombing. The direct impact area consists of approximately 12,000 acres and is generally out of bounds for cultural resource studies due to safety concerns. Most developed areas are dispersed along Vandegrift, Basilone and San Mateo Roads.

## Geographic Setting

The varied terrain of Camp Pendleton includes sandy shore and seaside cliffs, coastal plains and low hills, canyons, and mountains rising to elevations of nearly 2,700 feet (Fig. 2). Camp Pendleton is within the Peninsular Ranges physiographic province and is characterized by a series of northwest-trending low hills and a narrow coastal plain consisting of a series of marine terraces. The terraces range from  $\frac{1}{4}$  to  $2\frac{1}{2}$  miles wide from north to south and reach elevations of up to about 200 feet. The drainage systems on the Base includes the Santa Margarita River, San Mateo Creek, San Onofre Creek and Las Flores Creek basins.

The coastal plain rises to the east in a series of low-lying coastal hills called the San Onofre Hills. These hills rise steeply to elevations averaging about 1,000 feet. At an elevation of 1,725 feet San Onofre Mountain is the highest peak in these hills. The Santa Margarita Mountains are located northeast of the coastal hills. They average between 1,500 and 1,700 feet in



Fig. 1. Regional Location of Camp Pendleton Marine Corps Base.

elevation. Maximum elevations are 3,000 feet at the Cleveland National Forest's southwest boundary of the Base.

### Biological Setting

A series of major plant communities are present within Camp Pendleton including coastal sage scrub, fresh and salt water marsh, riparian, grasslands, and chaparral (Munz 1974). Coastal sage scrub plant species in the area include buckwheat (*Eriogonum fasciculatum*), black sage (*Salvia mellifera*), white sage (*Salvia apiana*), sugar bush (*Rhus ovata*), squaw bush (*Rhus trilobota*), and laurel sumac (*Malosma laurina*). The freshwater marsh species include cattail (*Typha*), spike-rush (*Eleocharis* sp.), and bulrush (*Scirpus* sp.), while common salt marsh plants include pickleweed (*Salicornia virginica*), salt grass (*Distichlis spicata*), and sea lavender (*Limonium californicum*). Willow (*Salix* sp.), cottonwood (*Populus fremontii*), and sycamore (*Platanus racemosa*) trees are common in the riparian habitat.

A wide range of small mammals, birds, and reptiles are indigenous faunal resources of the region. Some of the mammals that occur in the area include several species of mice and bats, desert cottontail (*Sylvilagus audubonii*), California ground squirrel (*Spermophilus beecheyi*),



Fig. 2. Camp Pendleton Topography.

desert wood rat (*Neotoma lepida*), bobcat (*Felis rufus*), coyote (*Canis latrans*), and mule deer (*Odocoileus hemionus*) among others. In early historic times, the area would have also supported a wide range of marine mammals, pronghorn, black bear and perhaps even grizzly.

### **Cultural Resource Program at Camp Pendleton**

The Camp Pendleton area was first described by members of the Portolá expedition over 230 years ago. Human activity within the area from the prehistoric period, to the Spanish mission rancho and estancia, to the Mexican period and American ranchos, and finally the American Marine Base has resulted in human activities that left unmistakable traces on the cultural landscape of Camp Pendleton.

There are over 500 recorded archaeological sites on Camp Pendleton. To date nearly 130 sites have been evaluated for their eligibility for inclusion to the *National Register of Historic Places*. As of the close of 1998 the Base has 50 sites determined eligible for the National Register (prehistoric sites), one National Register District (prehistoric village), two National Register Mexican and American Period Ranchos, one of which is a National Landmark, the Las Flores Estancia.

The aim of Camp Pendleton's cultural resources management program is to provide guidance for conduct of the military mission without compromising the integrity of nonrenewable cultural resources. This is achieved through having a program that evolves in close coordination with that mission.

The Cultural Resources Program at Camp Pendleton moved forward significantly in its management of cultural resources over the past three years. This has been achieved through high-quality archaeological research, development of innovative survey approaches to maximize data recovery, development of a Base-wide culture history and management program, development of a "turnkey" ARCINFO geographic information system that provides a database of all recorded sites, agreement with a local curation facility to curate and update all Camp Pendleton artifact collections, and preparation of an ethnohistoric study of the Base.



Fig. 3. Excavation of a coastal shell scatter on Camp Pendleton.

## Summary

This presentation of the articles in *Pacific Coast Archaeological Society Quarterly* is an example of the wide range of archaeological studies being conducted on the base. These articles relate to the base's research plan to develop a broad landscape approach to understanding the archaeology on the base. The articles included in these two volumes were originally presented in a symposium at the Society for California Archaeology annual meetings in 1998. They are illustrative of the high quality of archaeology being conducted at Camp Pendleton, both topically and in terms of technical applications. Topically, the articles in this issue range from prehistoric exploitation of small shellfish resource packages and modeling coastal settlement patterns (Byrd and Reddy) to investigations at large residential bases on the coast (Foster). Archaeological studies on the base have moved away from traditional approaches (Fig. 3), toward more highly technical applications since 1990 (Figs. 4 and 5). The articles in this issue highlight developments in GIS predictive modeling (Reddy and Brewster) and geomorphological mapping (Pearl and Waters). Mark Raab provides an overall review and summary of these articles in this issue. The base remains as one of the few areas in southern California where systematic scientific study of ancient lifeways is being conducted while facilitating the mission of the Marine Corps.



Fig. 4. GPS Mapping of a coastal shell scatter site on Camp Pendleton.



Fig. 5. Pollen profiling of Las Flores Creek, Camp Pendleton.