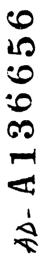


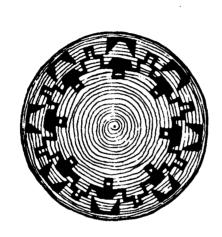
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LOS ANGELES-LONG BEACH HARBOR AREAS PREHISTORY AND EARLY HISTORY

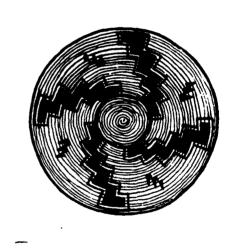
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U.S.ARMY CORPS OF ENGINEERS LOS ANGELES DISTRICT CALIFORNIA

April 1978

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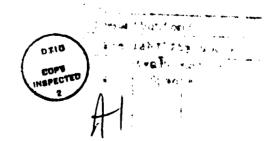
LOS ANGELES-LONG BEACH HARBOR AREAS PREHISTORY AND EARLY HISTORY

Prepared for: U.S. Army Engineer District

Los Angeles, California

Submitted by: Dr. E. Gary Stickel

April 1978



REGIONAL CULTURAL HISTORY

PREHISTORY AND EARLY HISTORY IN THE HARBOR AREA

Archeology today is a modern science that attempts to answer basic questions about people in the past. Artifacts are carefully studied in the hope of providing answers to cultural questions of who, where, when, how, and why things happened the way they did in the past. No longer are archeologists content with just collecting artifacts, describing them, and putting them on display in museums. Now they hope to reconstruct and explain past human behavior. There is evidence that human culture began at least 3 million years ago in Africa. With such a vast vista of time, archeologists should be able to obtain much information about how people lived in the past. Ancient man experienced food and fuel shortages, overcrowding, and conflicts with other groups of people, and knowing how he solved or coped with these problems may help us survive in the future. With this view in mind, archeologists consider every area in the world that has evidence of past human life to be scientifically important. The human prehistory of the Los Angeles area is certainly no exception to this modern approach.

When the Spanish conquered California they subjugated the various Indian inhabitants. The total disruption of native life and the introduction of European diseases led to the virtual extinction of local Indian populations. Long-established Indian villages were quickly abandoned. Today these villages are archeological sites. Unfortunately, the destruction of native culture did not stop with the Spanish.

Greater Los Angeles today is one of the major population centers of the world. The creation of this megalopolis, unfortunately, had severe impacts on the natural landscape as well as on archeological sites. Only mere vestiges of natural plants and a rapidly decreasing number of archeological sites survive. Archeologists are alarmed about this because the sites allow them to flesh out the bare bones of prehistory and produce more meaningful results. This is especially true

today because of increasingly sophisticated computer and other space age methods of analysis. Unfortunately, once an archeological site is destroyed by the construction of a housing tract or a street, it is lost forever to science and the public. Greater Los Angeles has obliterated most of the archeological sites of its once flourishing prehistoric cultures. There are not only scientific concerns for these losses but important humanistic ones as well:

This is not hyperbole. Anyone who examines the evidence will discover that there is a crisis, and that in America, ironically, just as serious popular interest in the Indian has developed, we are about to destroy Indian civilization a second time — this time with bulldozers.(ref.1)

Thus, a cultural inventory is a way to take stock of what resources (sites and artifacts) we still have. In a sense too, it allows us to take stock of ourselves in light of the spectrum of human achievement.

Because of the destruction of a great amount of archeological data, we have very scanty knowledge of cultural development here. New and refined studies are needed to piece together a reliable picture of cultural development, but such research will only be possible if we today save enough sites for future study. So little is presently known that there are even competing time sequences (chronologies) of local human occupation (ref. 2; ref. 4). The chronology of William Wallace (ref. 2), slightly modified, is used here to outline local prehistory (fig. 1).

The Early Systems Period (50,000? to 7,000 years ago)

All available evidence points to an Old World, probably African, origin for humankind; therefore, the New World had to be colonized from the Old World. Although there were transoceanic voyages before Columbus, it is almost a certainty that North and South America were settled by people who came over

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*BP - before present

Figure 1. Greater Los Angeles basin-coast cultural chronology

what is now called the Bering Strait between Russia and Alaska. How early they moved down to California has not been established, but there are some recent dates based on a new technique called amino acid dating. Using this system, archeologists determined that human bones found in the San Diego area were about 50,000 years old. Although it is reasonable to suggest a hypothetical beginning point for Los Angeles at about the same time, there is no conclusive evidence of this so far. The wellknown radiocarbon dating technique was used to measure the age of "Los Angeles Man." This human fossil was found along Ballona Creek (the ancient Los Angeles River) in a deposit in which imperial mammoth bones were also found. The bones were dated at the isotope

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laboratory of the University of California, Los Angeles, to 23,600 years ago, indicating local human occupation by that date. Also, the La Brea Tar Pits provide more evidence of early occupation. There is data which suggests that some of the saber-toothed cats, panthers, and ancient bison may have been butchered and thrown into the tar by early man. Human bones, called the "La Brea Woman," were dated by UCLA to 9,000± 80 years ago. These fossils are on display at the new George C. Page Museum for La Brea Discoveries in Hancock Park. Because there are many problems with accurate interpretation of these scanty early remains, the search for more substantial data continues. (Ref. George Miller, 1969.)

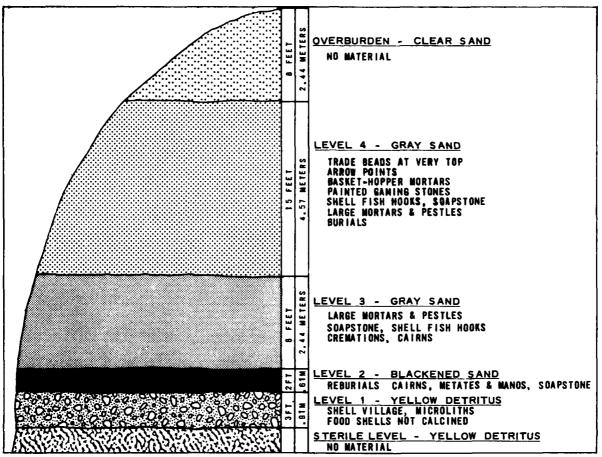


Figure 2. Stratified archeology of the Malaga Cove Site

More evidence, especially artifacts, comes from Edwin Walker's excavations at the Malaga Cove site at Redondo Beach. This site. now destroyed by development, is significant because of its outstanding stratigraphy. (Stratigraphy is concerned with the origin, composition, distribution, and succession of strata, or layers/levels of the earth's surface.) A total of 27 feet of cultural deposit was divided into four distinct cultural strata or levels (fig. 2). This is the deepest known archeological site in the greater basin and coast area. Because different cultural strata represent cultural change over sometimes thousands of years, archeologists are anxious to explore and understand the culture changes represented by such data. A number of artifacts, mostly small, crude chertstone flake tools called microliths (fig. 3) were found in level 1, the deepest and oldest one at Malaga Cove (ref. 2). Flake knives (fig. 4), flake scrapers (fig. 5), and

convex-based projectile points that probably served as spear or dart points for hunting (fig. 6) were also found in level 1. The stone flakes from which these tools were made were taken from chipped cores. Other artifacts included pebble hammerstones (fig. 7), abalone shells with their openings plugged with asphaltum (asphaltum could have been obtained from such places as the La Brea Tar Pits), and small disc beads of clamshell and the more abundant olive shell beads. The latter are called spirelopped (Olivella sp.) beads because the spire of the natural shell is ground off to create a hole for stringing the bead (fig. 8). Some incised stones and bone beads and tools were also recovered.

The people of the Early Period subsisted by shellfish gathering, supplemented by some hunting and fishing. Although they may have gathered plants for food, no firm evidence of this was found (ref. 2).

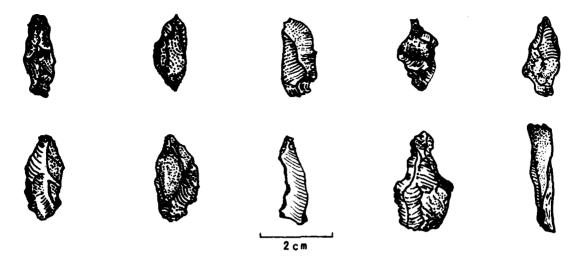


Figure 3. Stone microliths

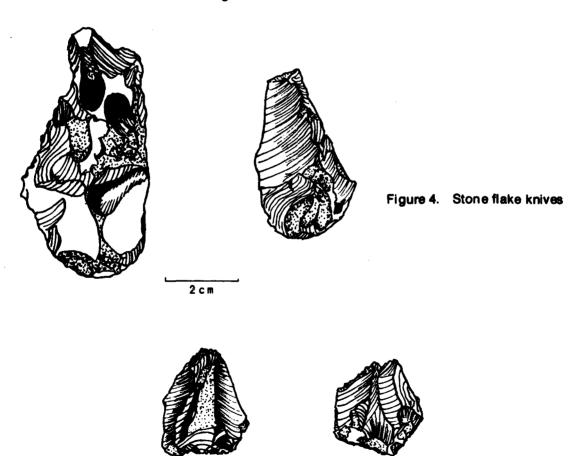


Figure 5. Stone flake scrapers

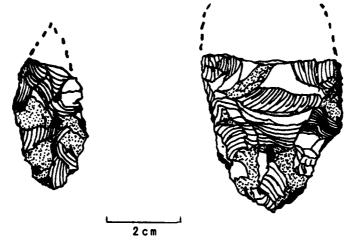
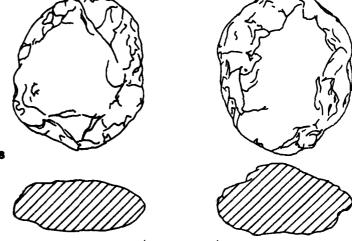


Figure 6. Chipped stone points



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Figure 7. Pebble hammerstones



Figure 8. Shell bead

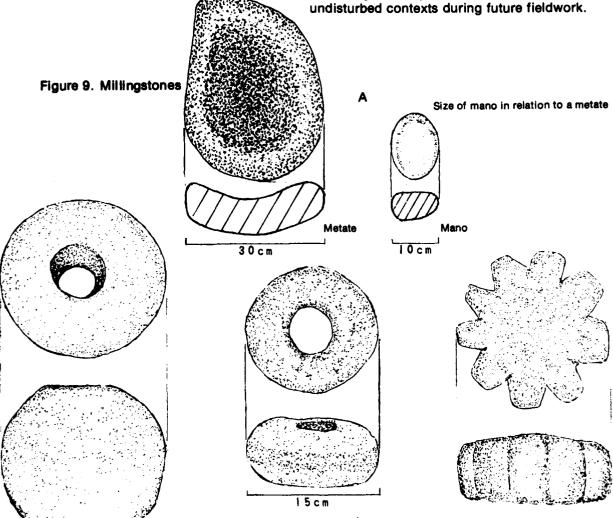
The Millingstone Period (7,000 - 3,500 years ago)

The Millingstone Horizon or cultural period artifacts were found in level 2 at Malaga Cove. A number of grinding tools were recovered, including large millingstones, which archeologists call metates via Mexican terminology and mullers called manos (fig. 9). Knife blades, some bone and shell ornaments, thick, disc-shaped stones called stone discoidals. some soapstone (steatite) objects, and a few stone mortars and pestles were also found. Some human burials, which had "cairns" (groups of rocks) placed on top of them as part of the ancient burial ceremony, were discovered in level 2 as well.

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The stone discoidals from Malaga Cove are part of a larger group of stone artifacts called doughnut stones and cogstones (fig. 10) that archeologists have found in sites of this period. These stones may have had a religious function, but this has not been proven, largely because most of the known specimens were irresponsibly removed by collectors (whom archeologists condemn as "pot hunters") rather than by scientists. Just as the context of the pattern of clues at the scene of a crime is often of critical importance in solving that crime, the relationships of an artifact to other data in a site can enable correct interpretations of the function of the artifact. Although cogstones have eluded such interpretation, archeologists hope to discover them in

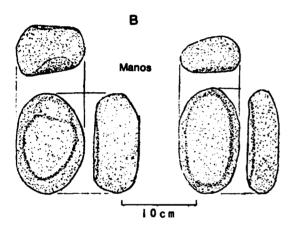
Figure 10. "Doughnut stones" and "cogstones"

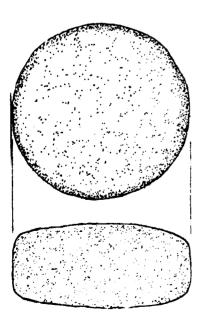


Bone tools were rare during this period but included awls, antier flakers (used to produce flaked-stone artifacts), beads, and hooks for a spear-throwing device called an atlati. Shell items were limited to beads, pendants, and some abalone dishes. Tarring pebbles. presumably used to coat baskets with tar to waterproof them, have also been encountered. Fragments of asphalt with basketry impressions in them have been found. For instance, impressions of a coiled basket, probably a water bottle (fig. 11), were found during recent excavations at Bolsa Chica (ref. 3). Human remains from this period have been found in loosely flexed, extended, or reburial positions.

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The people of the Millingstone Period were primarily plant food collectors (as evidenced by the manos and metates); hunting and fishing were secondary activities (ref. 2). The ecology of these people was not only oriented to collecting seeds, such as seeds of sages, but also to collecting shellfish. Hunting and fishing seem to have been less important, as evidenced by the few projectile points and fish and mammal bones (ref. 4). This pattern is reflected in the recent data obtained from Bolsa Chica in Orange County (ref. 3). The amount of broken shell recovered from this site indicated that the people relied mainly on shellfish. The shells from the site are the typical species used during this period and include scallops, cockles, oysters, and clams. Bones of the green winged teal and the snow goose provide evidence of hunting; other game identified include the Pacific pond turtle, cottontail rabbit, blacktailed jackrabbit, California ground squirrel, pocket gopher, deer mouse, and dog or coyote. However, the bones of angel shark, soupfin shark, bat ray, shovelnose guitarfish, surf perch, yellowfin croaker, bonito, and grunion suggest an ocean emphasis of that site's inhabitants.



Figure 11. Asphaltum-lined basketry water bottle

The Hunting Period (3,500 - 1,200 years ago)

The Intermediate Horizon, also known as the Hunting Period, lacks as much data as the periods before and after it (ref. 2). Wallace notes that "...the major cultural change during this period, aside from an increased dependence on hunting, was the shift in grinding implements from the milling and hand-stone combination to the mortar-pestle (fig. 12), though the former continued in use on a reduced scale". During the Hunting Period there was a change from the use of hardshelled seeds to the use of larger, fleshier foodstuffs such as the acorn. Of all the natural resources available at the time, the California oak provided a distinctive 'bread of life' to local inhabitants. Native use of this resource has led anthropologists and archeologists to speak of a California Culture area in North America. However, the use of this food item was contingent on the innovation of special processing techniques to remove the tannic acid poison in acorns to make them edible. The Indians developed special ways to harvest, hull, grind, and sitt the acorn flour as well as to leach in water to remove the tannic acid. They stored the flour for later use or cooked and prepared it for immediate consumption.

The native acorn is a highly nutritious food, much more so than our modern wheat. It is not hard to understand why native populations prized their acorn harvests once they had acquired the leaching technology. Acorns were mainly fall and winter foods, and the presence of shellfish hooks (fig. 13) and bone harpoon barbs in level 3 at Malaga Cove indicates that hunting was not neglected in their economy. Moreover, the presence of bones of whale, sea lion, Alaska fur seal, southern fur seal, sea otter, porpoise, deer, coyote, rabbit, albatross, ducks, gulls, loons, and many fish indicates that they were successful hunters.

Some basket fragments from finely woven baskets and the bone awls used for making the baskets attest to the technological progress of the period. Small projectile points, which are probably arrowheads rather than spear points, indicate that the bow and arrow may have come into use during this time (ref. 2).



Figure 12. Mortar and pestle

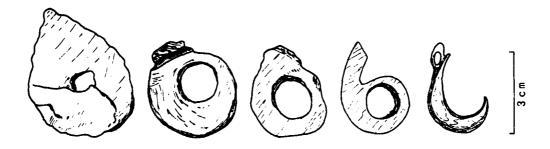


Figure 13. Process of making shell fishooks

The Late Prehistoric Period (1,200 - 434 years ago; A.D. 1542)

The Late Horizon period began around A.D. 1200 and lasted until European contact in California. The thickest cultural stratum at Malaga Cove was the topmost one. Level 4, which was 15 feet thick, was the only level in which true arrowheads were found. Most of these were leaf shaped, some were triangular with concave bases, and still fewer had stemmed bases (fig. 14). These points were made of chert and chalcedony and, rarely, of obsidian. Antler flakers were used to make arrows, and soapstone was used to straighten arrow shafts (fig. 15). A basket-hopper mortar (fig. 16) and many fragments of standard bowls, mortars and pestles were found. Shell fishhooks and ornaments, bone tools and ornaments, incised stones, possible harpoon points, and pounders were also found. The material in level 4 showed extensive use of asphaltum.

Also found in level 4 were unusual artifacts called gamestones (ref. 5). (However, we do not know if they were used as game pieces or not.) These gamestones are painted, flat, water-rounded pebbles about 2 to 2-1/4 inches (5 to 5.6 cm) long (fig. 17). The dark-brown geometric patterns painted on them are similar to the patterns on the famous Azilian painted pebbles from Mas d'Azil, Ariege, France (Azilian is a mesolithic culture complex of Europe that dates from 15,000 to about 6,000 B.C.). Also, like the earlier mesolithic hunterfishers of Europe, Late Period people had a diverse economy. Many kinds of local shellfish were exploited. Also, the presence of many bones in level 4 indicates the diverse hunting of new game animals, such as antelope, badger, skunk, birds (goose, brown pelican, loon, sea gull, murre, and ring-billed gull), and fish. All this evidence points to an intensive hunterfisher-gatherer ecology. The close of the prehistoric period is evidenced by the presence of Spanish glass trade beads found in this topmost level.

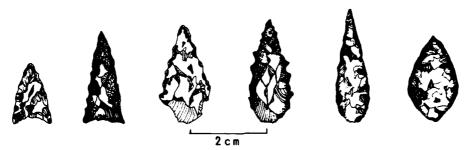


Figure 14. Arrowheads

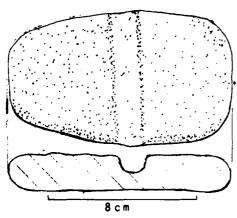
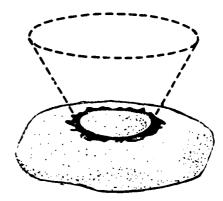


Figure 15. Soapstone arrowshaft straightener



(diameter of pounding surface, about 15cm)

Figure 16. Basket-hopper mortar

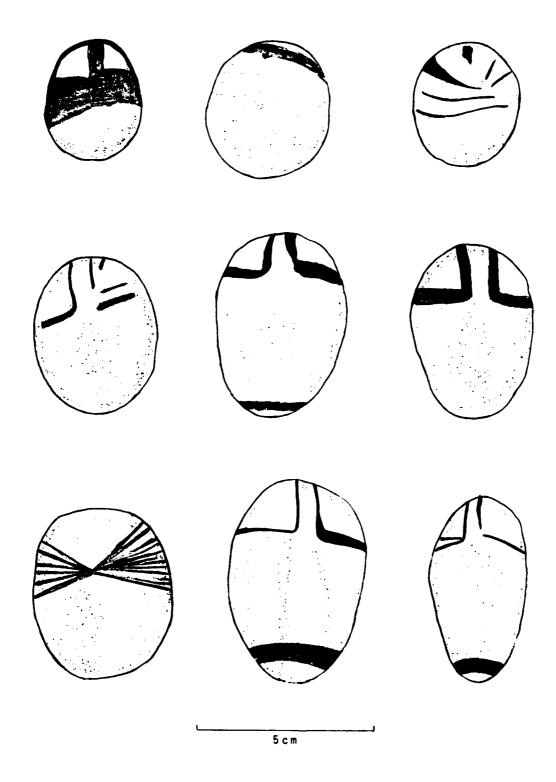


Figure 17. "Gamestones"

Other sites along the coast and on the islands provide additional evidence that numerous ornaments of shell, bone, and stone were made during this era. Model canoes made of soapstone (fig. 18) represent the use of large and efficient ocean canoes. Soapstone (steatite) from Catalina Island quarries was used to make large ollas and bowls (fig. 19); smoking pipes (fig. 20); tubes (fig. 21), which may have been suction tubes used by shamans for ceremonial cures; comals or frying pans (fig. 22); and pendants and beads (fig. 23). All of these items were traded throughout the area. Of special interest are the small carved figures of boats, sea mammals, and possible pelican effigies (fig. 24). Some of these artifacts have been found as grave goods at burial sites. Level 4 at Malaga Cove provides evidence of both flexed burials and cremations.

Most archeologists agree that the population increased during this period (more and larger village sites) and that skill of craftsmanship increased (more elaborate artifacts — e.g., finely made hafted knives) (fig. 25). Trade both on land and on the sea increased as the population grew; a greater variety of food resources, particularly marine resources, were more widely utilized. Local shells, found as ornaments in archeological sites as far away as Arizona and New Mexico, provide evidence of the expanding trade network. Undoubtedly, the psychological and closely related ideological (e.g., religious) aspects of the culture were flourishing during this period. The Late Period people developed into what anthropologists now call the Gabrielino Culture. This culture was soon cut short by the European invasion.

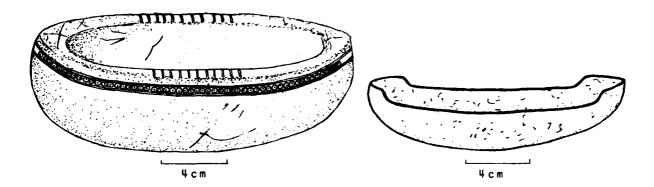


Figure 18. Model canoes

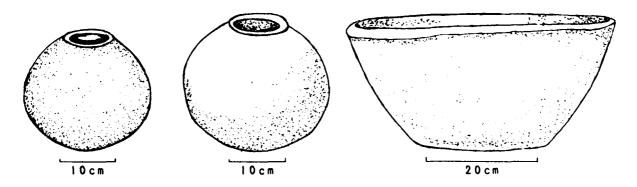


Figure 19. Ollas and bowl



Figure 20. Smoking pipe

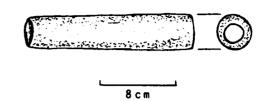


Figure 21. Soapstone tube

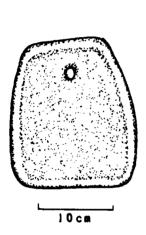


Figure 22. Comal

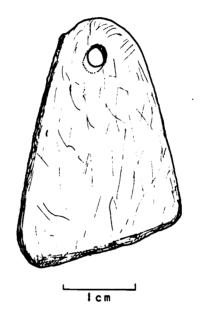
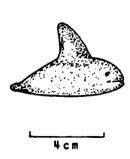


Figure 23. Pendant and bead



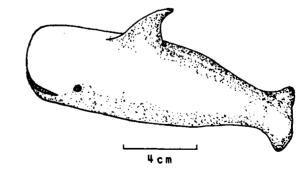


Figure 24. Soapstone carved figures

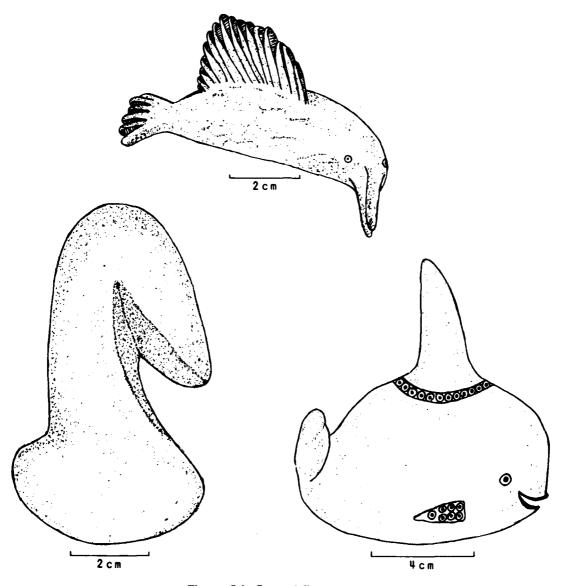


Figure 24. Carved figures



Figure 25. Knife

The Gabrielino Indians (Ethnohistoric Period)

They seem to have been the most advanced group south of Tehachapi, except perhaps the Chumash (ref. 6).

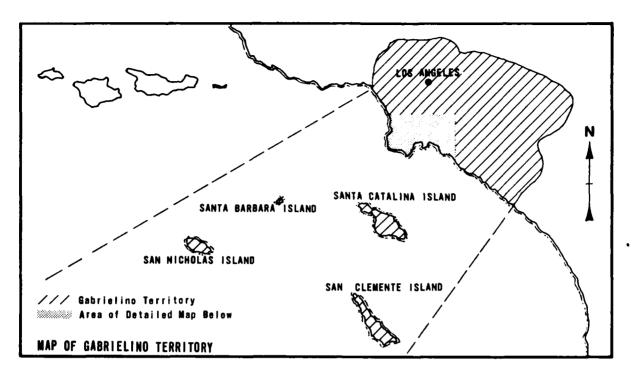
The Gabrielino first met the Europeans only 50 years after Columbus' initial voyage to America. The explorer Juan Cabrillo sailed along our coast in 1542 and saw these Indians on the islands. Later, the sea expedition of Vizcaino in 1602 and especially the land expedition of Portola' in 1769 led to the slow but increased occupation by the Spanish and later by the Mexicans and the Americans. Each invader brought his own plants, animals, missionaries, and alien lifeways. Most destructively, the invaders also brought diseases to which the local natives had no biological resistance. These diseases included poxes, pneumonia, tuberculosis, and venereal diseases. The cultural shock of the alien lifeways and the impact of fatal diseases quickly withered the highly adapted cultural system of the Gabrielino. To objective scientists, the destruction of the Gabrielino culture represents dominant cultural systems overcoming another system. The humanist, however, views what happened here as another chapter in man's inhumanity to man.

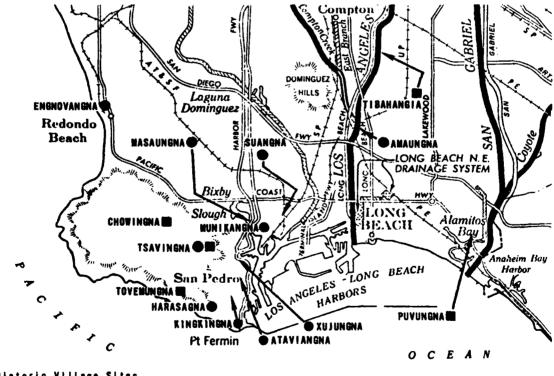
What good intentions the early missionaries may have had were overshadowed by the ways the Indians were actually treated. The gentle Gabrielino were exploited, degraded, raped, exterminated, and, during the American era, subjected to a form of slavery. Indians were sold liquor, then arrested and jailed as drunks. They were then auctioned off on a regular weekly basis with purchasers paying the Indians' fines in return for forced labor. In his classic book Cattle on a Thousand Hills, Robert Glass Cleland recounts that in 1852 the foreman of the Los Alamitos Ranch wrote Abel Stearns, the owner, "I wish you would deputize someone to attend the auction that usually takes place on Mondays and buy me five or six Indians." (ref. 7) Very little is known of this once dynamic Indian group because few settlers had any appreciation of the Gabrielino culture and they did not take the time to record Indian lifeways. There are two notable exceptions. Father Geronimo Boscana wrote the invaluable Historical Account of the San Juan Capistrano Indians of Southern California, which was based on his stay at the mission from 1812 to 1826. Information was also provided by Hugo Reid in his letters on Angeles County Indians printed in the 1800's by the Los Angeles Star. Reid's interest is partly due to the fact that he was married to a respected Gabrielino woman. The best ethnographic sources on the Gabrielino are few (Kroeber, 1925; Boscana, 1933; Johnston, 1962; and Reid, 1968).

Gabrielino Environment

Gabrielino populations occupied an area bounded on the west by the vicinity of Topanga Canyon on the coast. (Just further west is Malibu; the name derived from the Gabrielino's Chumash neighbors to the north.) From there the Gabrielino occupied the entire San Fernando Valley, the greater Los Angeles basin, the coastal strip down to Aliso Creek south of San Juan Capistrano, and the southern Channel Islands of Santa Catalina, San Clemente, and San Nicolas. (See map 1, ethnographic map of the study area.)

Today a vast cityscape covers former Gabrielino land. Most Angelenos have no accurate view of what the original landscape was like and probably picture it as largely lowland plains with only scattered trees and shrubs. The environmental impacts of the American ranching era produced such a landscape. One early traveler to Los Angeles described the 'thousands of ground squirrels' on the plains between San Pedro and Los Angeles: "...it looked as though I had landed on another planet." (ref. 8). But this original landscape was destroyed to create cattle ranches. Prior to the arrival of the ranchers, the land, except for clusters of hills, was forested. Impenetrable thickets were interspersed with pools and swamps that the Spanish called cienegas. For instance, Beverly Hills and most of the area to Santa Monica Bay was one vast swamp. Grizzly bears and other abundant game flourished in the jungles of sycamores, willows, alders, bramble bushes, and wild grape vines. Similar denudation has greatly changed the species of plants and animals on Santa Catalina and San Clemente Islands, the Gabrielino's main islands. Also, the





Historic Village Sites

Historic Village and Archeological Sites

Source: R. F. Heizer, 1968

Map 1. Former Native American village distribution on a modern map

development of the harbors at San Pedro completely destroyed the small Deadman's Island, and the construction of Terminal Island obliterated former Rattlesnake Island. These examples demonstrate that this area is one of the most severely human-changed environments in the world.

Gabrielino Population

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Our knowledge of these people is so poor that we do not even know what they called themselves. The term Gabrielino derives from their association with Mission San Gabriel Archangel, which was founded in 1771 (fig. 26). Gabrielino were also associated with the Missions of San Fernando and San Juan Capistrano, which were also established within the native territory. There are no accurate accounts of the Gabrielino's original population size. Total population was

estimated to be about 5,000 in A.D. 1770 (ref. 6). The best available map of their reconstructed village locations shows a total of 52 sites although others are indicated. Early Spanish accounts of individual village populations vary, but one chronicler mentioned a 'populous' village of 52 people. It is known that larger groups of people met at certain villages for special ceremonies.

To the early observers the Gabrielino were not tall, but were stocky, muscular, and well-built. The writer of the Vizcaino diary, Venegas, described Santa Catalina women as handsome, with lovely eyes and features, and the children as fair, friendly, and smiling. He remarked that the "...men had a talent for thievery in addition to their cleverness and first-rate intelligence". Men usually went nude, and women wore only aprons made of flexible strips of cottonwood or willow.



Figure 26. San Gabriel Mission with Gabrielino house in right foreground

Gabrielino Tools and Artifacts

All of the artifacts so far described under the Late Period were made and used by the Gabrielino. But ethnographic analysis of early observations provides data on many kinds of artifacts and other things that archeologists normally cannot dig up.

Few well documented examples of Gabrielino basketry survive, but those that do demonstrate the exceptional skill and artistry with which they were made. Twined and coiled baskets were fabricated for acorn harvesting, seed-beating, winnowing, parching, and cooking (fig. 27). Asphalt-coated water bottles (fig. 11) and special ceremonial baskets with much decoration were also made (fig. 28).

Stone mortars and pestles were still in use for processing plant foods. Also, special sacred mortars and pestles were finely made and used in ceremonies (fig. 29).

Bone awls, hide scrapers, rabbit throwing sticks, and war clubs were all commonly used. The Gabrielino also made split cane knives, bows and arrows, and stone knives asphalted to wooden handles (fig. 30).

Undoubtedly the Gabrielino knew how to make pottery, but they chose instead to manufacture pots and cooking implements from soapstone quarried on Catalina Island. Soapstone vessels, although difficult to make, nevertheless were excellent cooking pots. The Gabrielino also used soapstone to make shamans' suction tube pipes (fig. 21), beads, fine ceremonial bowls (fig. 31), carvings of whales, seals, and fish, and stylized pelican effigies (fig. 32).

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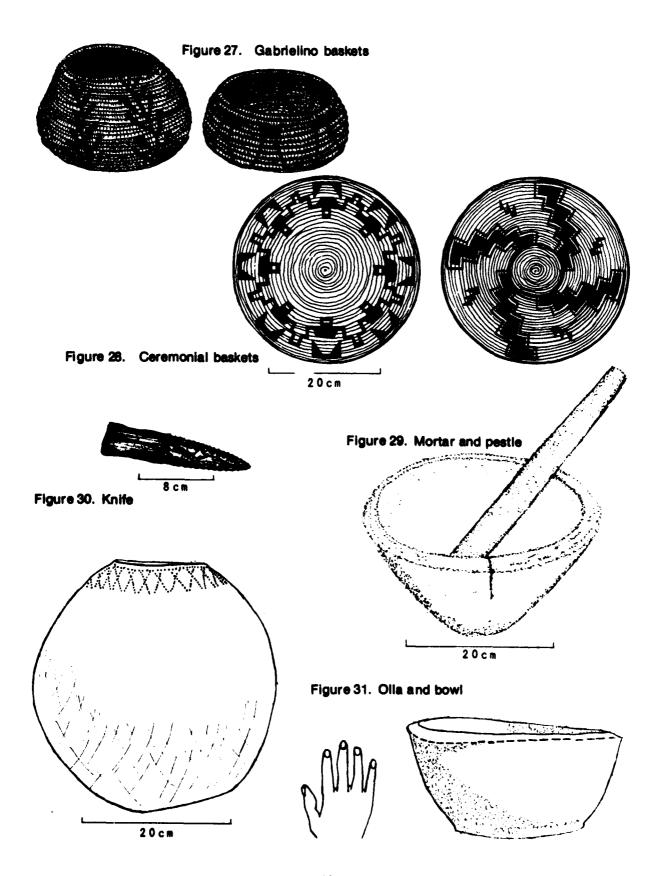
The Gabrielino constructed several types of structures. Houses were usually dome shaped, but some were also pointed (fig. 33; fig. 26). The framework of the nouses was made of willow, and the roofing material was reed tule thatching. The Spanish referred to these houses as jacales. The chief had the largest house in a village (ref. 6). These houses had central firepits and smoke was left to find its way out through the roof. Another structure was the men's sauna-like sweat house. These structures, which the Spanish called by the Aztec term temescal, were smaller than the

houses and were covered over by earth. A special ceremonial enclosure called a *yoba* or *yobangna*r was also made. One such enclosure was 50 feet in diameter. It was surrounded by a 3-foot-high fence made of stakes intertwined with willow twigs. The Spanish reported that an idol was set up inside such an enclosure on Catalina Island. Given their description, the idol may have been similar to a carving found on San Nicolas Island (fig. 34).

Of special interest are the soapstone quarries on Catalina Island which still exhibit the scars of the ollas that were hacked away from the native rock. The Gabrielino made paintings (pictographs) and carvings (petroglyphs) on rock outcroppings for ceremonial purposes. Most of the designs were geometric but some representational forms have been found (fig. 35).

Like their Chumash neighbors to the north, Gabrielino had the remarkable technological development of actual planked canoes. As opposed to the simple dugouts and reed rafts of most native groups in the United States, the planked canoes greatly impressed the Spanish. There are no early accounts of the Gabrielino canoes in action, but from the evidence it would appear that the Gabrielino cance was identical to the tomol, the Chumash planked canoe (fig. 36). These canoes, among the most advanced technological achievements of North American Indians. fascinated the early Spanish seafarers. Father Crespi of the 1769 Portolá expedition wrote of the Chumash and their canoes:

> They are of good figure and disposition, active, industrious and inventive. They have surprising skill and ability in the construction of their canoes, which are made of good pine planks, well-joined and of a graceful shape, with two prows. They handle them with equal skill. Three or four men go out into the open sea in them to fish, and they hold as many as 10 men. They use long oars with two blades, and row with indescribable lightness and speed.



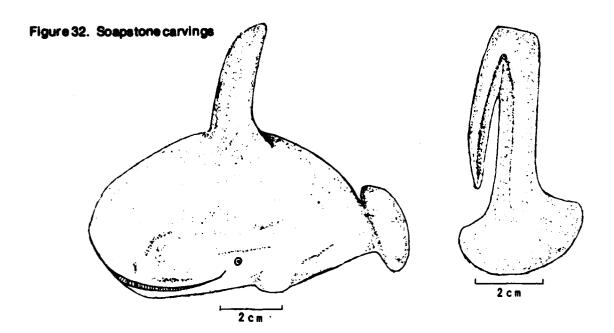


Figure 33. Dome-shaped house

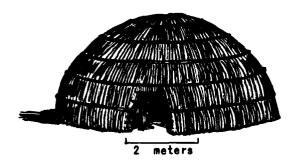


Figure 34. Carving from San Nicolas Island

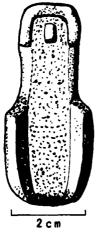
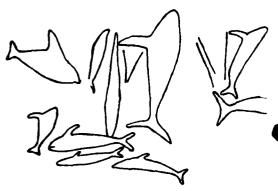


Figure 35. Petroglyphs from San Nicolas Island



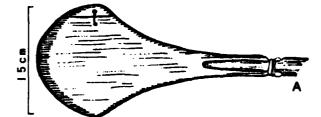
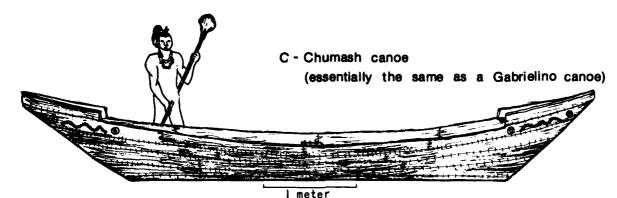


Figure 36. Canoe, paddle detail



Gabrielino Subsistence and Economy

California Indians did not utilize agriculture, not because they were unaware of it but because the long, dry California summers did not permit its successful introduction. More importantly, they didn't need agriculture because their developed hunter-gatherer economy was more than sufficient to provide for their basic economic needs. Gabrielino developed their exploitation of the acorn crop by using such artifacts as the basket-hopper mortar (fig. 16). They also made extensive use of sage seeds, which are called chia. Wild fruits such as plum, blackberry, and gooseberry, and prickly pear, which had to be removed from the cactus very carefully with tongs, were prized. Almost every small and large animal was eaten or used. Large rabbit drives, the use of deadfalls, and the smoking out of rodents were all practiced. Hunters used animal head disguises and rattlesnake-venom-tipped arrows to kill deer and antelope. The Gabrielino had a remarkable list of food items ranging from the great whales to delicacies of toasted yellow jacket larva and caterpillars. The large amount of shellfish remains at their sites indicates how important these resources were to their basic subsistence. No doubt the planked cance played an essential role in obtaining the fish and sea mammals they apparently prized so much.

Gabrielino Society

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The Gabrielino probably did not recognize a unified tribe. They generally recognized the village as the largest political unit. Within a village were two basic societal divisions that anthropologists call moieties. Gabrielino may have referred to them as Coyote and Wildcat.

Another social division was the clan. Individuals took their clan membership through the father's side of the family. This is referred to as a patrilineal clan system. It appears that the Gabrielino were also patrilocal, meaning that a woman would live with her husband's clan or village rather than with her own. Apparently, each village had one prominent man or chief whose successor was usually his son. These leaders had certain privileges, such as polygamy and management of resources. Their authority was normally restricted to one village; however, there is evidence that in the San Pedro area a number of populous settlements were ruled by one chief. Each village had other special-status persons, such as a religious cult chief called a Paha, a Takwa for dividing the food, and a Shaman who cured the sick and performed numerous ceremonies.

Gabrielino Ideology, Psychology, and Ceremonial Life

Only very few fragments of the rich Gabrielino ideology have survived. What did survive indicates "...rather an evidence of subtle refinement of emotion, of decorative over-elaboration of some literary quality to such a degree that the ordinary rules of satisfaction and balance and moral proportion become inconsequential..." (ref. 9). The Gabrielino developed a rich mythology that was acted out in many ceremonies: birth rites, initiation rites for pubescent boys and girls, and mourning ceremonies for the dead. According to Kroeber (ref. 6) they had a "mythic-ritual-social six god pantheon". The principal god, Chungichnish, delegated powers and responsibilities such as rain



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Figure 37. A Gabrielino ceremonial dance as visualized by Donna Preble in her book Yamino-Kwiti.

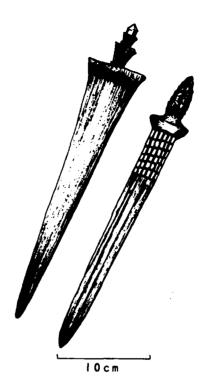


Figure 38. Ceremonial wands

making and producing good weather to other and to persons. Chungichnish. deities according to Gabrielino religion, was born at the great village of Puvunga. It was there that he revealed himself as a lawgiver and god (Puvunga was located on the grounds of the present Rancho Los Alamitos in Long Beach) (ref. 10). Men and children, adorned with eagle and hawk feathers and with their bodies generously painted in brilliant colors, danced at numerous ceremonies celebrating this god (fig. 37). One such ceremony was a yearly bird feast in commemoration of a girl who went away into the mountains where she met Chungichnish who then transformed her into the Panes or White-headed Eagle Maiden.

Ceremonies were accompanied by songs. These expressions had "...a richness of the song-texts and the capacity for contemplation of deeply inward images" (ref. 10). Special paviut sticks or wands (fig. 38) of wood inlaid

with abalone shell and tipped with a stone chert knife or rock crystal were used in important ceremonies, such as the toloache ritual. The Spanish borrowed this term from the Aztec toloatzin. The ceremony was a cult of initiation for young males. Each initiate had to undergo an elaborate rite which involved taking a drink made from the deadly plant Datura meteloides. This drink was prepared with a sacred mortar and pestle (fig. 29). The narcotic ingredient in the plant produced severe hallucinations that must have had great psychological impact on the young boys. As if drugging wasn't enough, young men were tested by being whipped with nettles and stung by red ants while the adult hunters danced to deerbone flute music. Intriguing sand paintings were also made during these ceremonies. The Gabrielino beliefs had profound effects on other native cultures; there is evidence that the Chungichnish religion was spreading to other groups when the Spanish first arrived.

Gabrielino Language

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Although the various village populations of Gabrielino would not consider themselves all members of one tribe, the fact that they all shared that very important aspect of culture, language, helps anthropologists and archeologists define their sphere of activity. As with the other aspects of their culture, only bits of their once rich language survive. We know how they referred to their islands (Catalina, San Clemente, San Nicolas): Wexaj momte asunga wow, or the mountain ranges that are in the sea! But some place name translations are not exactly understood. One source stated Topanga meant the "whole world" (ref. 6), whereas another believed the word comes from Topanana which meant "place where mountains run out into the sea" (ref. 11). It is known that the "gna" endings meant" the place of", and some of these Gabrielino names are still used. Present greater Los Angeles names such as Tujunga, Cahuenga Pass, Cucamonga, Azusa (from Asuksangna) as well as identified former sites such as Yangna (the village where the downtown Pueblo de Los Angeles now stands) and Puvunga (at Rancho Los Alamitos) indicate the Gabrielino's heritage.

These bits of language have been studied by linguistic anthropologists. Linguists tell us that the English language, along with the German, Dutch, and Swedish, is part of the Germanic tamily of languages, which in turn is part of the ancient Indo-European stock of languages. In a similar way, linguists classify the Gabrielino language, along with that spoken by the buffalo-hunting Comanche of the Great Plains and the peaceful Hopi pueblo farmers of the Arizona mesas, in the Shoshonean family of languages, and this family in turn is part of the greater ancient Uto-Aztecan linguistic stock. The study of such language relationships can help to shed light on how ancient America was settled.

Archeologists interested in local California prehistory are often asked about the digger Indians. This derogatory term, which came into use here during the early historic period, implied that the Gabrielino and other native groups were "lazy, degenerate, filthy, and loutish", and the term quickly became a

devastating stereotype. Today we can imagine that the early "rough and ready" frontier settlers who used this term with so much contempt and indifference probably conformed more to their own stereotype than the Gabrielino who among other things at least took a mandatory daily bath. Today we should all have a more realistic and respectful view of this extinct culture. Hopefully, future research will help us better understand the Gabrielino and their unique contributions.

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Fig. 9 (fig. A) King, C., T. Blackburn, and E. Chandonet. The Archaeological Investigations of Three Sites on the Century Ranch, Western Los Angeles County, California. UCLA Archaeological Survey Annual Report. Vol. 10, 1968.

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Fig. 10 King, et al, 1968.

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Figs. 12-13 Johnston, B. E. California's Gabrielino Indians. Southwest Museum, Los Angeles, 1962.

Fig. 14 King. et al, 1968

Figs. 15-16 Grant, 1965

Fig. 17 Walker, 1951

Fig. 18 Johnston, 1962

Fig. 19 Grant, 1965

Fig. 20 Johnston, 1962

Fig. 21 Stickel, 1968

Fig. 22 Grant, 1965

Fig. 23 Leonard, 1973

Fig. 24 Johnston, 1962

Fig. 25 Grant, 1965

Fig. 26 From a painting at San Gabriel Museum

Figs. 27-30 Johnston, 1962

Fig. 31 Leonard, 1973

Fig. 32 Johnston, 1962

Figs. 33-35 Grant, 1965

Fig. 36 (fig. A) Grant, 1965; (fig. B) Johnston, 1962; (fig. C) Grant, 1965

Figs. 37-38 Johnston, 1962

Map 1. Heizer, R. F. (ed.) The Indians of Los Angeles County: Hugo Reid's Letters of 1852. Southwest Museum Papers, No. 21. Los Angeles, 1968.

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