# Archaeological Investigations at Molpa, San Diego County, California

By

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## THE SETTING

In north-central San Diego County the Peninsular Range Province is dominated by the Agua Tibia Mountains. This range, with elevations in places of more than 6,000 feet, is best known perhaps as the platform supporting the 200-inch Hale telescope on Palomar Mountain, the mountain itself forming the southernmost anchor of the Agua Tibias (see map 1). Physiographically and structurally this range consists of an uplifted series of granitic batholiths. It appears to be a horst und graben type feature with the southwestern face delineated by the main Elsinore fault zone and the northeastern scarp marked by what is probably a branch of the same system (for references supporting these data see Larsen 1948, 1951; Mann 1955; Ellis and Lee 1919).

Along the southwestern flank of Palomar Mountain at an elevation of about 2,800 feet, the scarp is broken by a series of flats that mark the location of the Elsinore fault zone. At this point, the fault trends southeast to northwest from the Valle de Jose region (presently occupied by Lake Henshaw) toward the town of Pala near the northwestern end of the main Agua Tibia range.

This particular structural configuration is of concern here because many of the prehistoric settlements in the area are concentrated on the flats marking the fault zone (see pl. 1). Springs usually associated with a faulted topography provide water sources for several of these settlements including that of Molpa.

Vegetation on the flats differs somewhat from that of the adjacent terrain and is essentially oak parkland (savannah). Because of the differences in elevation, exposure, and parent rock, the terrain adjacent to the oak parkland regions supports a wide variety of vegetation. The steeper mountain sides and canyons along the southwestern boundary of the fault zone support a typical southern California chaparral. The flanks of Palomar Mountain above the flats support chaparral on the lower slopes and mixed broadleaf coniferous forests higher on the mountain. Small flats or benches on the mountain flanks are marked by oak groves. The canyons themselves contain gallery forest, oak groves and some

conifers as low as 3,000 feet elevation in favored locations.

Relatively high orographic precipitation along the southwestern rim of the mountain proper (up to 50 inches per year) supports a dense and quite lush mixed broadleaf and coniferous forest environment at an elevation of some 5,000 feet. This contrasts with rainfall in the lower elevations of less than 15 inches per year.

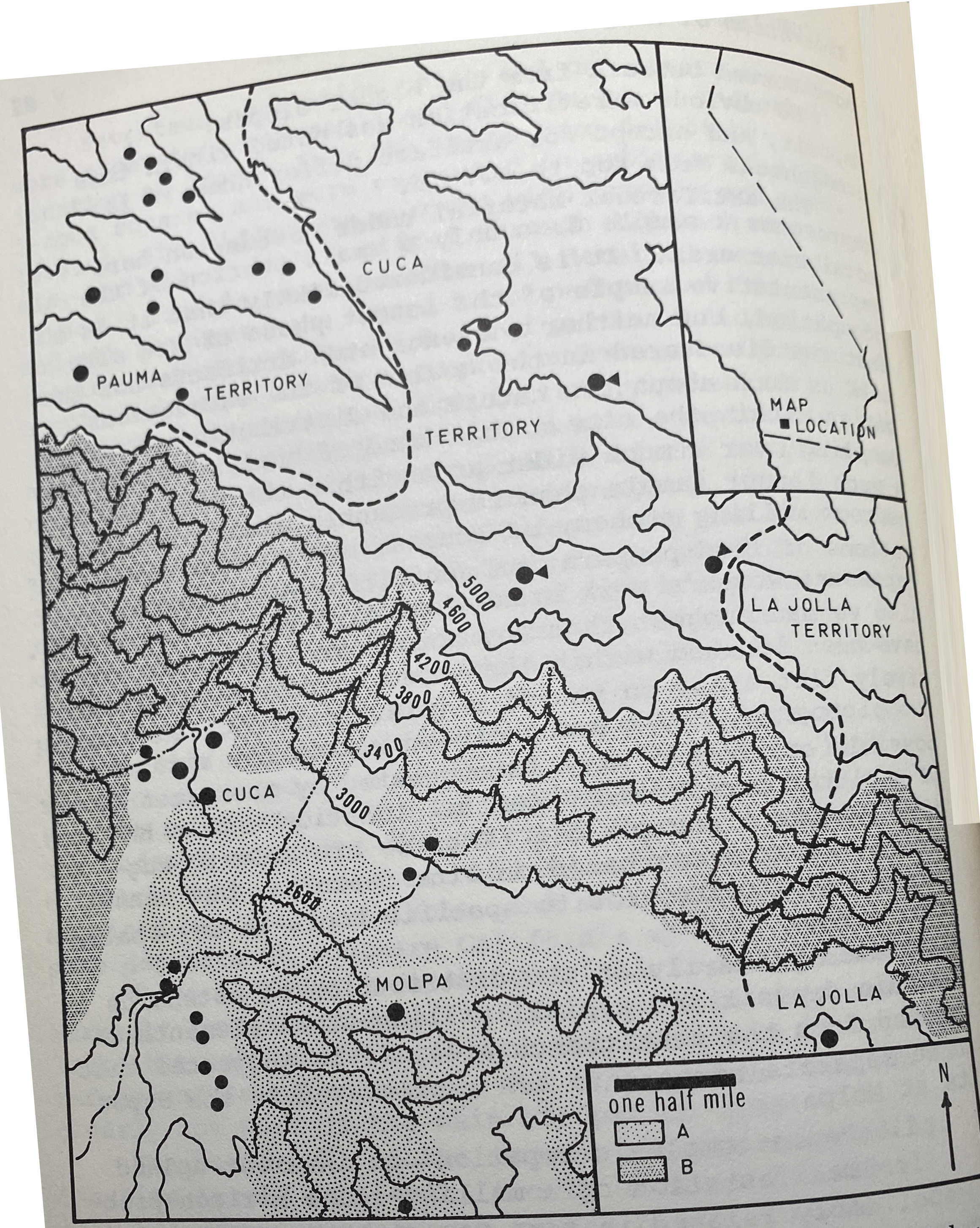
The wide range of vegetation extending through several environmental zones plus localized environmental conditions provided a broad and generally rich subsistence base for the prehistoric inhabitants of the area. Table 1 lists some of the more common plants found in this region. A substantial portion of this inventory contributed in one way or another to the aboriginal subsistence.

This vegetation, in addition to its direct contribution to aboriginal subsistence, also supported assorted fauna which in turn were exploited by the Indian inhabitants. Except for localized adjustments in response to short term wet and dry cycles there is no evidence that conditions here have altered much over the past 500 to 800 years.

## THE SITE

Molpa (SDi-308) is located within the Boucher Hill Quadrangle (USGS 7 1/2 minutes series) at an elevation of 2,500 feet in northern San Diego County, California (see maps 1 and 2; pl. 1).

The settlement covered portions of two low knolls along the edge of a low ridge, overlooking an open grassland area formed in part by fault controlled slumping. A small but reliable spring is located at the base of the slope below the site. The site is marked by conspicuous granitic bedrock exposures. The entire area seems to be covered with a well-developed midden although there is considerable variation in the depth of the deposit. The midden covers some 40,000 square yards; some if it may represent outwash from the higher slopes (see pls. 2 and 3 for views on the site proper).




Map 2. The site of Molpa in relation to the villages of Cuca and La Jolla. Shaded area A indicates the general boundaries of the oak parkland (savannah) vegetation. Shaded area B represents the approximate boundaries of the steep hillside and canyon chaparral communities. The unshaded territory *above* 4,600 foot elevation represents mixed broadleaf and coniferous forest. The heavy dashed lines mark the approximate boundaries of the Cuca/Molpa territory on the mountain. Archaeological sites are indicated by black circles. Important summer camps belonging to the villages of Cuca and Molpa are further marked with a black triangle.

TABLE 1

Common Plants Found in the Territory
Exploited by the Villages of Molpa and Cuca
(See map 1)

Chaparral—exposed slopes and hillsides: Only the more common genera are listed. The composition of this community varies from locale to locale.

| Plant | Luiseño name | Use (where known) |
|---|---|---|
| Adenostoma fasiculatum | ʔuʔu t | tools, gum |
| Eriogonum fasciculatum | wulaqla | medicine |
| Quercus dumosa | pa wis | food, medicine |
| Quercus chrysolepis | wiʔat | food and games |
| Garrya flavescens | not known | not stated |
| Ceanothus leucodermis | ʔuʔu sawat | not stated |
| Arctostaphylos species | ko lul | food |
| Zylococcus bicolor | not known | food (?) |

Canyons and areas marginal to heavy stands of chaparral: Often better watered and have more favorable soils than the slopes above. Includes small flats and benches adjacent to streams.

| | | |
|---|---|---|
| Quercus agrifolia | wiʔa sal | food |
| Quercus wislizeni | not known | food |
| Quercus engelmanni | to vasal | food and gum |
| Photinia arbutifolia | ʔa cawut | food |
| Prunas ilicifolia | ca mis | food |

TABLE 1 (continued)

| Plant | Luiseño name | Use (where known) |
|---|---|---|
| Rhus laurina | naqwut | food (?) |
| Rhus ovata | pa naqwut | food (drinks) |
| Rhus trilobata | so val | baskets, food, religion, medicine |
| Rhus integrifolia | not known | food (drinks) |
| Rhus diversiloba | ʔiya l | poison oak (use?) |
| Turricola parryi | ʔato vaykat | medicine, pottery |
| Salvia apiana | qa sil | food, medicine, religion |
| Salvia munzii (mellifera) | qa navut | food (?) |
| Salvia carduacea | pa lit | food, medicine |
| Salvia columbariae | pa sal | food, medicine |
| Sambucus coerulea | ku tpat | tools, medicine, food, religion |
| Artemisia dracunucula | wa cis | medicine |
| Lupinus longifolius | not known | food (?) |
| Pickeringia montana | not known | food (?) |
| Lotus scoparius | ki wat | ? |
| Solanum xanti (species?) | takavsis | dye, medicine, possible food |

TABLE 1 (continued)

| Plant | Luiseño name | Use (where known) |
|---|---|---|
| Datura meteloides | nagtumus | religion |
| Mimulus species | not known | ? |
| Penstemon anterrhinoides | sexla and pi mal | ? |
| Baccharis douglasii (?) | morwaxpis | tools, medicine |
| Ephedra species (Californica) | not known | drink, medicine (?) |
| Epicampes rigens | yulalas | basket foundation |
| Echinocystis macrocarpa | ?enwis | medicine, games paint base |
| Yucca whipplei | pana l | food |
| Yucca mohavensis | hunu vat | food, fiber |
| Opuntia species | na vut | food, tools |
| Gallery forest: Wet locations along streams considerable overlap with species listed above. | | |
| Populus fremontii (cottonwood) | ?ava xat | ? |
| Salix species | wat Saxa naxat | ? |
| Salix lasiolepsis | saxat | tools |
| Quercus species (Sycamore) | sive la | ? |

TABLE 1 (continued)

| Plant | Luiseño name | Use (where known) |
|---|---|---|
| Sambucus species | not known | food, etc. |
| Rosa californica | ʔusla | medicine, gum, religion |
| Rhus diversiloba | Piya 1 | poison oak(use?) |
| Rubus vitifolius | Pikwla | food, dye (?) |
| Vitis girdiana | makwit | food |
| Urtica gracilis | sakisla | religion, fiber medicine |
| Scirpus microcarpus | pacxayal | tools, religion, basket-making, mats, food? |
| Juncus acutus | soyla | basket-making, mats, food? |
| Montia perfoliata | not known | food |
| Mountain regions: Locally above 4,000 foot elevation usually near 5,000 in this area. | | |
| Pinus species | pawxit | ? |
| Pinus coulteri | wixenivisla | |
| Librocedrus decurrens | tuvot | shelter(?) |
| Pseudotsuga macrocarpa | yuyla | ? |
| Abies concolor | ʔuʔu mal | ? |
| Quercus kellogii | kwi la | food |
| Quercus chrysolepis | wiʔat | food |

TABLE 1 (continued)

| Plant | Luiseño name | Use (where known) |
|---|---|---|
| Quercus englemanni | to vasal | food |
| Prunus virginiana (demissa) | ʔaʔtut | food |
| | not known | food(?) |
| Berberis pinnata | not known | food |
| Ribes nevadense | wusocis | food |
| Ribes speciosum | not known | ? |
| Rosa woodsii | not known | food(?) |
| Rhamnus crocea | not known | medicine(?) |
| Rhamnus californica | not known | |
| Rhamnus purshiana (buckthorn) | not known | medicine |

Other plants from the general locality.

| | | |
|---|---|---|
| Brodiaea pulchella | to kapis | food, religion |
| Chenopodium californicum | qaxa wut | food, soap |
| Asclepias eriocarpa | tokmat | fiber, gum |
| Trifolium gracilentum | queʔquis | food |
| Bloomeria species | qawicxal | food, religion |
| Euphrobia polycarpa | qenxamal | medicine |
| Anemopsis californica | cevnis | medicine |

TABLE 1 (continued)

| Plant | Luiseno name | Use (where known) |
|---|---|---|
| Psoralea macrostachya | piʔmukvul | fiber, medicine, dye, religion, thatching |
| Croton californicus var. | suʔi kawut | medicine |
| Centaurium venustum | zasoskit | medicine |
| Cucurbita foetidissima | ne xis | soap |

This list is not intended to be complete and there are hundreds more species of plants within the area. It does indicate the range of material, and the nature of the plant utilization by the Luiseno. The Luiseño names and uses of these plants were provided by Max Peters, Herman Calac, and Henry Rodriquez. The Luiseño terminology was checked and corrected by William Bright, Department of Anthropology, University of California, Los Angeles.