

CALIFORNIA STATE UNIVERSITY, NORTHRIDGE

THE PREHISTORY OF THE LOWER PORTION OF THE  
PIRU CREEK DRAINAGE BASIN, VENTURA COUNTY, CALIFORNIA:

An Ethnohistorical and Archaeological Reconstruction

A graduate project submitted in partial  
satisfaction of the requirements for  
the degree of Master of Arts in

Anthropology

by

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The graduate project of Robert Lopez is approved:

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## INTRODUCTION

Anthropology has been one of the few academic disciplines which has always stressed the value to be gained from an interdisciplinary approach to research. This Graduate Project, therefore, will be an attempt to integrate archaeological and historical research in an effort to reconstruct a partial, if not complete, prehistory of an area of Southern California known as the Piru Creek Drainage Basin.

The research for this Graduate Project was begun in June of 1970 and was carried out in two distinct phases. The first phase will consist of an expanded version of the traditional archaeological survey in which the research area is to be covered by the most expedient method available. The object of this research phase is not only the location of archaeological sites but also the location and identification of the various resources in the area which could have been available to prehistoric occupants.

The second phase of the research will consist of an archival search for any early historic records pertaining to the area. It is hoped that any material gathered from early historical sources can be used either to interpret or add to the results of the archaeological phase of the research. Most of the materials to be used will be pri-

mary sources, many in unpublished form, and the information gained from local informants.



ABSTRACT

THE PREHISTORY OF THE LOWER PORTION OF  
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The Piru Creek Drainage Basin of Ventura County is a unique environmental zone which holds a relatively important place in the historical record of Southern California. However, the area has always posed a certain amount of question in the minds of archaeologists as to the exact nature of its prehistoric utilization but no attempt had ever been made to reconstruct its prehistory.

This Graduate Project, therefore, is an attempt to integrate two basic research techniques; an expanded version of the traditional archaeological site survey and an ethnohistoric archival inquiry, in an effort to reconstruct a partial, if not the complete, prehistory of the area.

The end result, while it did not reach the expected goal of reconstruction of the prehistory of the Piru Creek Drainage Basin, hopefully will be considered a worthwhile effort since it does present a fuller understanding of the nature of the peoples who occupied the area and their probable methods of resource utilization during prehistoric times.

## THE AREA

### Topography

The focus of this research was centered in the lower portion of an area of Southern California known as the "Piru Creek Drainage Basin." This basin encompasses portions of Los Angeles, Kern and Ventura Counties with the largest portion confined in the northeastern corner of Ventura County (Map 1). The basin is of particular interest because it constitutes an isolated environmental zone, somewhat transitional between the dry desert regions to the east and the moist coastal strip to the west, which appears to have supported an aboriginal population which was different during the precontact period from the Chumash so commonly associated with the rest of Ventura County.

The headwaters of the Piru Creek rise in a broad expanse of terrain located above the town of Gorman between the southernmost section of the Topatopa Mountains and Mount Pinos. This area, comprising most of the upper portion of the drainage basin, is actually thought to have been occupied by a different aboriginal population than that which occupied the lower portion of the drainage basin. However, the upper portion is included here merely to fill out the topographical and environmental

aspects of the total drainage basin. The uppermost portion of the drainage basin is actually located in the center of the Transverse Ranges, a group of mountains which trend east-west and include the San Gabriel Mountains, and are in opposition to the general northwest trend of the Coast Ranges (Carmen 1964).<sup>1</sup> From the uppermost section of its drainage basin the Piru Creek drains southward descending rapidly to meander across an area of gentle relief until it joins the Santa Clara River near the town of Piru in Ventura County. The Santa Clara River in turn drains westward entering the Pacific Ocean just south of the city of Ventura.

There is at present one reservoir on Piru Creek, the San Felicia Dam, located about five miles upstream from the confluence of the Piru Creek and the Santa Clara River. This dam impounds the runoff from about 425 square miles of the drainage basin, however, this area will be reduced once the Pyramid Rock Reservoir, which is presently under construction, becomes operational. This second reservoir located 6.5 miles upstream from the San Felicia Dam is expected to act as catchment for about 285 square miles of the upper sections of the lower portion of the drainage basin. A third reservoir is also being considered, this to be located at the southern end of the Hardluck Valley, about five miles above the Pyramid Rock Dam.

The physiography of the area about Pyramid Rock is

distinctly different from the rest of the Piru Creek Drainage Basin. The general flow of the streams in the upper portion of the basin is to the east while in the lower portion of the basin the streams tend to flow towards the south; also the topography of the upper portion is mountainous with very few valley flats while the lower portion is characterized by topography of gentle rolling hills with frequent wide valley flats adjacent to the creek's channel. These factors can in part be explained by the geological history of the area which shows that "... the Piru Creek Drainage Basin is included in that portion of the Transverse Ranges which make up a part of the eastern end of the Ventura stratigraphic basin. The Transverse Ranges are of a complex structural and stratigraphic province, they were formed by marine deposition throughout most of the Tertiary Period," (Hershey 1902:6) and since that period have been altered as a result of the extreme tectonic activity. The portion of the lower Piru Creek Drainage Area between the Pyramid Rock damsite and the San Felicia Dam appears to be formed in "... thick sedimentary sequences composed of moderately well consolidated sandstone and conglomerates with interbedded shale which are characteristic of the Tertiary Period. Basement rock for the sedimentary series is an assemblage of pre-cretaceous igneous and metamorphic rocks which underlies much of the high country in the upper portion of the

basin" (Hershey 1902:7). Recent tectonic activity appears to have created the present southward drainage of the upper portion of the basin; there is a strong indication that in the past the Piru Creek might have drained northeastward into the Mojave Desert. This same tectonic activity might also explain why there appears to be the same proportion of slopes facing north as those facing south. Another possible explanation for the southward drainage of the basin might be inferred as a result of faulting activities. The major portion of the basin is bisected by the northwest trending San Gabriel Fault, which is a major rift with a large well drained lateral separation and is further bound in the northeastern part by the San Andreas Fault, the major structural lineament of California (Cordova 1956).

Most of the valley flats along the lower portions of the Piru Creek are marked along their outtermost rims by steep mountain walls which give way to intermittenly gentle slopes and level open benches, these in turn drop down steep embankments to the floor of the Piru Creek's channel. The level areas of most of the benches and valley flats vary in size between the upper and lower portions of the basin, however, most are alike in that they are covered by shallow, irregular stony soils formed in place by residual weathering of the thick sedimentary sequences. Typical of these soils is an Altamont Loam,

identified by a 1920 soil survey, which is generally from 8 to 15 inches deep and contains shale fragments and caliche concentrations both of which occur locally in the formations of the upper portion of the basin. Soils along the creek's channel appear to be mostly young sporadically located alluvial soils, characteristic of these is Yolo Sandy Loam, but these soils generally only vary in thickness from 12 to 30 inches and are of a lighter textured nature than the standard Yolo Sandy Loam (Carter 1956; Edwards et al 1970; Nelson et al 1920; Storie and Weir 1941).

The mineral materials locally available for tool manufacture by prehistoric aboriginal inhabitants are quite limited. The most plentiful locally occurring mineral is quartzite, which can be found weathering from the banks of the Piru Creek's channel. Some chalcedony and felsite were noted in small quantities; but it could not be determined if these occurred locally or if they were imported. If they do occur locally the only possible quarrying source would have to be the old stream beds which make up the overlying deposits of most of the high benches in the upper portion of the drainage basin.

Imported materials range from Vasquez basalt, found 30 miles to the southeast in the Vasquez Rocks Area of Agua Dulce Canyon; Franciscan Chert, from the Santa Barbara area 60 miles to the northwest; and banded chert

from the Madela shale series in the Santa Monica Mountains. Obsidian is rare to the Piru Creek Drainage Basin, the closest known source being in the Little Lake and Coso Range regions of Inyo County some 200 miles to the northeast. Probably the most plentiful imported tool manufacturing material is Grimes Canyon fused shale, sometimes mistaken for obsidian; this occurs some 20 miles to the southwest of the Piru Creek's confluence with the Santa Clara River. This fused shale represents a rare occurrence of burnt shale mixing with oil seeps in a Monterey shale formation occurring in the canyon. The resulting fused shale comes in three color combinations; red, gray and black, all of which range in appearance from a deep, lustrous texture to a dull, glassy quality.

#### Climate

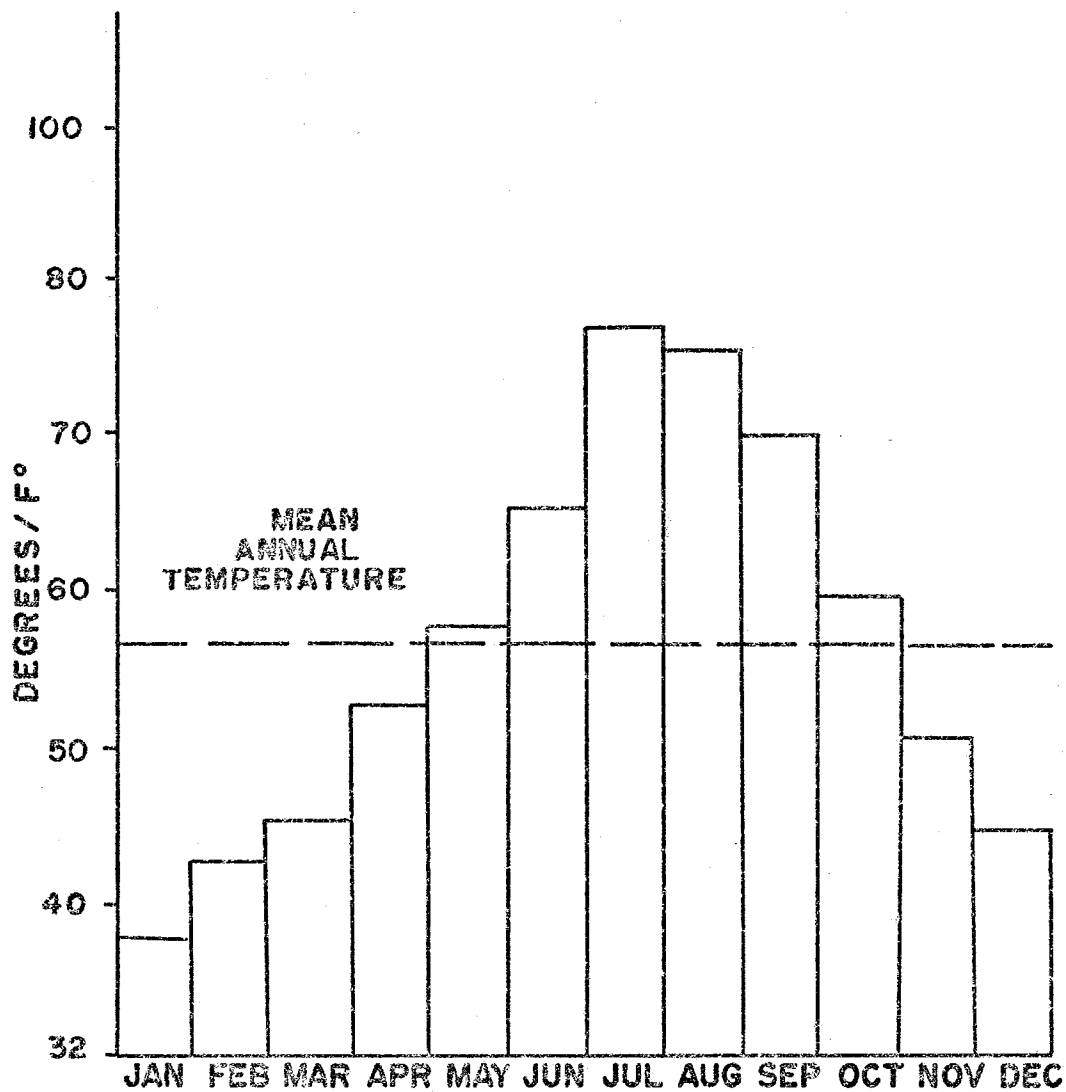
A climatic profile for the Piru Creek Drainage Basin is difficult to identify because of the regional and topographical variations between the basin's upper and lower portions, however, the basin's general climate can be identified as Medeterranean, or more properly if we accept the Koppen Scale of climatic conditions as Csa. This type of climatic condition is the result of two important factors: first, the location of the Piru Creek Drainage Basin between the dry climate of the Mojave Desert and the humid mesothermal climate of the Southern California



coast; and secondly by the fact that the Piru Creek Drainage Basin experiences drastic seasonal changes in temperature from warm, dry summers to damp, mild winters.

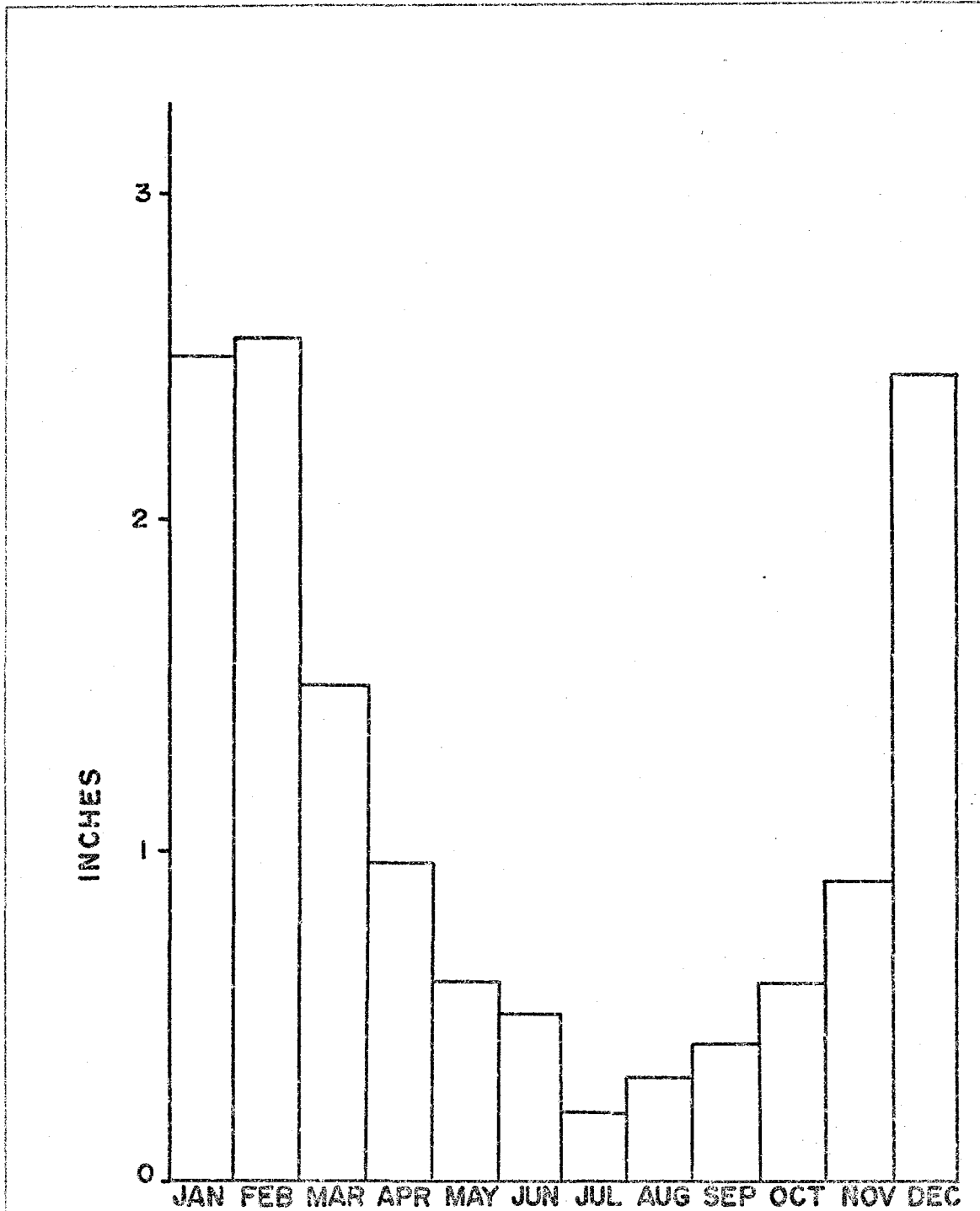
Generally, precipitation is moderate with 90% of the total annual rainfall occurring during the period between October to April. In the course of my research I was able to compile a table of precipitation relating the Piru Creek Drainage Basin for the period from 1769 to 1972. (Figure 1). This came mainly from early historical journals, the records of Fort Tejon, the records of Missions San Buenaventura and San Fernando and from the records of the various agricultural service agencies in the area. While not 100% accurate, this table does reveal some interesting facts; for instance the average annual rainfall since 1769 has been 17.01 inches. The Sandberg weather station, located in the northeastern quarter of the basin at an altitude of 4,517 feet or about 400 feet higher than the mean altitude for the whole basin, at present has the only known long term precipitation and temperature profiles for the area. (Figures 2 & 3).

At Sandberg, annual precipitation ranges from 12 inches at the station to about 24 inches at the Temescal station, in the southwestern portion of the basin. Mean annual rainfall for the entire basin based upon information collected since 1933 supports the previously stated figure of 17.01 inches. (Figure 4). The data collected



**FIGURE 2**

Mean monthly temperature, in degrees Fahrenheit, from data at the Sandberg Weather Station.



**FIGURE 3**

A typical monthly precipitation pattern, in inches, from data gathered at the Sandberg Weather Station.

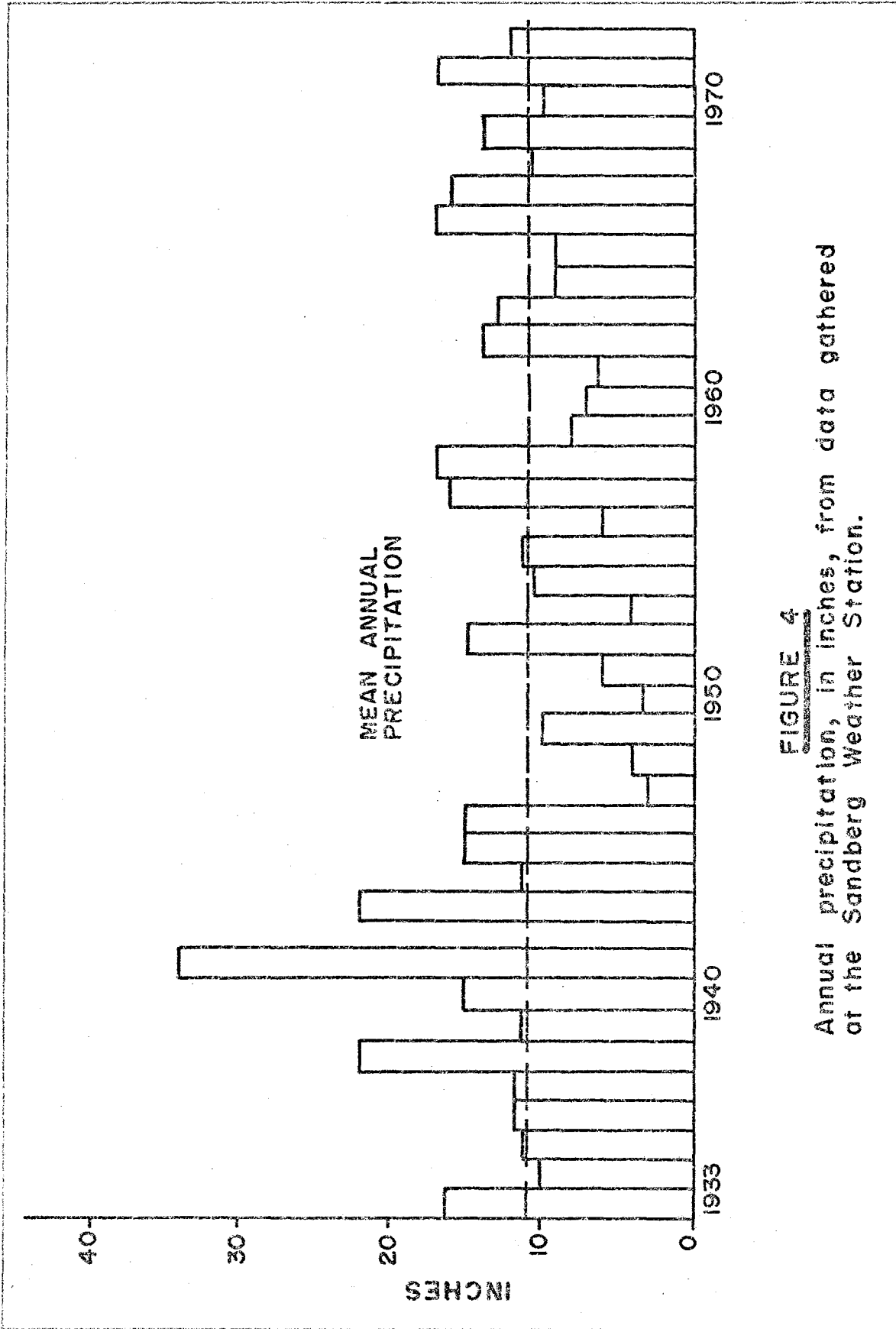


FIGURE 4  
Annual precipitation, in inches, from data gathered at the Sandberg Weather Station.

can also be used to explain certain climatic patterns such as a possible 6 to 8 year flood cycle.

In the light of over two hundred years of precipitation data it is interesting to note that the annual precipitation supports the contention of a Mediterranean type climate. Granted it tends to show extreme precipitation variability from year to year for a long period of time, but in turn this allows us to speculate that the climatic conditions of the Piru Creek Drainage Basin may have not changed greatly in the last 200 years.

#### Vegetation

The most common form of native vegetation occurring in the Piru Creek Drainage Basin is chaparral. Chamise (Adenostoma fasciculatum) is clearly dominant in this area, particularly on those canyon slopes which are underlain by sandstone and conglomerate formations. Interspaced in the open areas between stands of chamise can be found seasonal grasses such as California Brome Grass (Bromus carinatus v. californicus), Tufted Pine Grass (Calamagrostis Koelerioides), or Wildrye sometimes referred to as Reedgrass (Elymus condensatus). These grasses tend to be particularly dominant in soils formed of the finer grained sedimentary alluviums even if these soils occur within the chaparral zone. In the lower portion of the drainage basin Wild Buckwheat (Eriogonum Fasciculatum

v. foliolosum) appears to have replaced most of the seasonal grasses. Groves or thickets of Scrub Oak (Quercus dermosa) occupy a dominant position along the upper sections of most of the basin's foothill rims, while isolated stands of Coastal Live Oak (Quercus agrifolia) can be found in the side canyons of the lower portion of the drainage area. Similar stands of Canyon Live Oak (Quercus chrysolepis) can be found on the rocky slopes and in the canyons of the upper portion of the drainage basin. The channel of the Piru Creek is lined with cottonwoods (Populus trichocarpa) (Populus foliolosa), willows (Salix sessilifolia v. hindseana) and small stands of California Blackwalnut (Juglans californica) can also be found in or near the creek's channel zone. Throughout the area oak belts are transitional at altitudes of 2500 feet into areas of mixed pine (Pinus sabiniana), spruce (Pseudotsuga macrocarpa) and juniper (Juniperus californica). However, this generalized pattern does not hold true for all parts of the drainage basin, some areas support distinctive plant communities which are usually the result of the unique topographical or climatic conditions.

Today the lower portion of the Piru Creek Drainage Basin shows the evidence of critical overgrazing in that most of the native plant communities have either been replaced by introduced vegetation or have retreated into the inaccessible and marginal portions of the basin. This

overgrazing has given the region a definite "bad lands" appearance.

### Fauna

At present the animal population of the Piru Creek Drainage Basin is very disturbed, mostly because of the extremely heavy recreational use which the area presently experiences, and also because of the large herds of grazing animals introduced as a result of the cattle ranching activities. Mr. Dale King,<sup>2</sup> a resident of the basin since 1900, says that in the past the native animal population, while not extremely large, was very stable. The following list of fauna represents both those sighted by me during the periods of my field work in the area and also those indicated by Mr. King. The fauna preceded by an asterisk (\*) indicate species which Mr. King remembers as having once been present in the area but which no longer occur there:

#### 1. Mammals

California Mule Deer (Odoeileus hemionus v. californicus)

\*California Grizzly (Ursus horribilis magister)

Black Bear (Ursus americanus)

\*Bighorn Sheep (Ovis canadensis nelsoni)

Dog (Canis sp.)

Coyote (Canis latrans)

\*Wolf (Canis lupers)

Fox (Urocyon cinereoargenteus)

\*Puma (Felis concolor)  
 Bobcat (Lynx rufus californicus)  
 Spotted Skunk (Spilogale gracilis)  
 Striped Skunk (Mephitis mephitis)  
 Raccoon (Procyon lotor)  
 Broad-footed Mole (Scapanus latimanus)  
 Ground Squirrel (Citellus beecheyi beecheyi)  
 Pocket Gopher (Thomomys bottae neglectus)  
 California Field Mouse (Peromyscus californicus)  
 Gambel's Deer Mouse (Peromyscus maniculatus gambeli)  
 Bush Mouse (Peromyscus boylei)  
 Harvest Mouse (Reithrodontomys)  
 Woodrat (Neotoma lepida)  
 Jackrabbit (Lepus californicus)  
 Cottontail (Sylvilagus audubonii)  
 Badger (Taxidea taxus)

## 2. Birds

\*Mallard (Anas platyrhynchos)  
 Coot (Mudhen) (Fulica americana)  
 Turkey Vulture (Cathartes aura)  
 California Condor (Gymnogyps californianus)  
 Redtailed Hawk (Bufo jamaicensis)  
 Mountain Quail (Oreortyx picta)  
 California Quail (Lophortyx californica)  
 Mourning Dove (Zenaidura macroura)



Owl (Otus asio)

Raven (Corvus corax)

Black-chinned Hummingbird (Archilochus alexandi)

Anna's Hummingbird (Calypte anna)

Acorn Woodpecker (Balanosphyra formicivora)

Scrub Jay (Aphelocoma coerulescens)

California Thrasher (Toxostoma redivivum)

Western Meadowlark (Sturnella neglecta)

\*Bullock's Oriole (Icterus bullockii)

Brewer's Blackbird (Euphagus cyanocephalus)

Fox Sparrow (Passerella iliaca sp.)

Lincoln's Sparrow (Melospiza lincolni)

### 3. Reptiles and Amphibians

Western Fence Lizard (Sceloporus occidentalis)

Sagebrush Lizard (Sceloporus graciosus)

Gopher Snake (Petuophis catenifer)

Western Rattlesnake (Crotalus viridis)

California Mountain King Snake (Lampropeltis zonata parvirubra)

Western Spadefoot Frog (Scaphiopus hammondi)

Red-legged Frog (Rana aurora)

A consideration of the fauna available and used during the period of aboriginal occupation would have greatly aided in reaching a better understanding of the prehistory of the area. However, in the absence of his-

torical records this information can only be inferred through excavation. At present the limited excavations in the area have yielded only some fragments of deer bone, mostly in the form of broken bone awls, and also some tortoise shell, in all probability traded into the basin from the desert regions to the east since no tortoise presently occur in the area and it is very unlikely that they could have occurred during aboriginal times. The data derived from faunal studies could be used to determine any potential migration routes, cycles or patterns of large herd animals or flocks of fowl through the basin. If any routes occurred they could have been applied to locate sites which were probably used to exploit these migration routes. Thus faunal data could have been used to explain an aspect of land utilization, within a defined territory, not based solely upon the availability of plant resources or climatic conditions. It is unfortunate that this is one aspect of my inquiry into the prehistoric use of the Piru Creek Drainage Basin which I have been forced to shelve until such time as extensive excavations can be conducted at several key locations in the basin.

## HISTORICAL BACKGROUND

Ventura County<sup>3</sup> experienced its first European contact in 1542 when Juan Rodriguez Cabrillo stopped for three days at the coastal Chumash village of Shisholop (Ven-3), which was located at what is now part of the beach front east of the county fair grounds in the city of Ventura. It is questionable whether Cabrillo ventured inland during this brief stay; however, from his journal we know that he intended to send two members of his party into the interior, possibly to locate the Colorado River (Wheeler 1879:306). However, it is impossible to say whether he did this or not as no further mention is made, in the rest of his journal, of the outcome of this venture.

The second European contact of the area occurred sixty years later when in 1602 Sebastian Vizcaino stopped at what is presumed to be the same coastal Chumash village of Shisholop. Vizcaino does not appear to have disembarked or in fact to have spent more than one day in the area (Bolton 1925).

After these two early contacts Ventura County did not experience another direct European contact for one hundred and sixty-seven years when in 1769 a land expedition penetrated the eastern part of the county. This land expedition under the command of Gaspar de Portola had been

sent overland from San Diego to relocate and colonize Monterey Bay, which had been discovered by Vizcaino shortly after he had left the vicinity of Shisholop in 1602. The Portola Expedition was made up of seventy Spaniards and an undetermined number of Indian servants. We are fortunate in that this expedition contained four diarists: Gaspar de Portola, the commander; Fra Juan Crespi, one of the two Franciscans accompanying the expeditions; Miguel Costanzo, the expedition's engineer; and Pedro Fages, a soldier who was in charge of a company of Catalan volunteers (Bolton 1926; Englehardt 1915; Smith, N. 1910; Smith, D.E. and Teggart 1909; Priestly 1937). Generally these diarists agree in their various accounts of the expedition, mostly with regard to the locations that they visited. However, each diarist differs in the amount and types of local observations they made of the various locations that they visited. Fra Crespi, for instance, started the expedition making rather pleasant comments about the Indians which they met; however, later in his journal it can be noted that he had somewhat toned down his enthusiasm for them. Pedro Fages, whose journal was not discovered until the late 1930's, is by far the most observant of the diarists noting particular differences in the customs, dress and manner of living for each new group of Indians which the expedition encountered.

The Portola Expedition entered Ventura County by way

of the upper or eastern end of the Santa Clara River Valley, probably through the present location of Castaic Junction. Once it entered the valley the expedition traveled southwest down the river drainage towards the sea. On the first day (August 10, 1769) of the expedition's descent to the coast Fra Crespi reported in his journal that:

... following the valley west-southwest, and also the arroyo, which runs with a good stream of water, and has banks well grown with cottonwoods, live oaks, and willows. The land continues good, with plenty of grass, and is of large extent. The mountains on either side are very high and bare, but abundantly covered with grass. On the summits are seen some live oaks and pines. The range is very steep.

After three leagues' march we stopped in the same valley on the banks of the arroyo, and found ourselves here without any village. The place was given the same name mentioned yesterday, Canada de Santa Clara. On arriving we found that the arroyo was flowing with plenty of water, but a little while afterwards we observed that it had dried up with the heat of the sun, sinking into the sand, of which it has a great deal in the large bed, which resembles a river. This peculiarity struck us, and we observed afterwards that other arroyos ran at night and dried up by day. We noticed in this valley that the earth was very spongy, insecure, and whitish, and that the animals sank in at every step.

Friday, August 11.- At half-past six in the morning we set out from this arroyo, going west-southwest and following the valley. After traveling a little distance we observed that the arroyo broke off, sinking into the sand in its bed. We traveled about three leagues by the same valley, and stopped in the neighborhood of a very populous village on the bank of another arroyo with much running water, which comes out of the mountains through a narrow canyon and empties into this valley of Santa Clara, which in this place seems to have a greater width. The people of this village have no other protection than a large brush shelter inside a big corral.

In the afternoon seven chiefs came to visit us with a numerous following of Indians with bows and arrows, but carrying the bow-strings loose, which

is a sign of peace. They brought us an abundant present of seeds, acorns, walnuts, and pine-nuts, which they spread out before us. The chiefs, having learned who was in charge, offered to the commander, to us, and to the officers, several necklaces of little stones, white, black, and red, whose texture and material was similar to coral. There must have been more than five hundred of the heathen; the governor gave them some beads. The place was named Santa Clara, since the valley continues, and it is a very suitable site for a good mission, for it has all the requisites for it.... With the sage that the heathen gave us a mule was loaded with a good pack; the rest was divided among all the others. (Bolton 1926:142-144)

From the physical descriptions presented in these two journal entries it is safe to assume that on August the 10<sup>th</sup> the expedition very likely stopped near the vicinity of San Martinez Grande Canyon and then on August the 11<sup>th</sup> proceeded to the mouth of the Piru Creek. In this area of the Santa Clara Valley the lateral canyons tend to have wide mouths and their stream channels are almost always deeply cut, this would explain the confusing journal references to valleys and arroyos. After spending one night at the mouth of the Piru Creek the expedition proceeded westward down the Santa Clara River to the coast, and then from there proceeded northward to Monterey. The Portola Expedition returned to San Diego by much the same route as they had taken on their journey north, however, upon entering the Santa Clara River Valley rather than continue eastward towards Piru Creek they turned southeastward in the vicinity of Santa Paula and eventually entered the San Fernando Valley by way of

Calabazas Pass (Bolton 1926:144).

Between 1770 and 1776 there appears to have been no Spanish expeditions into the upper area of the Santa Clara River Valley (Forbes 1966:139). However, this does not discount the probability of isolated, unreported contacts by single individuals (Forbes 1966:140) and there is even some question as to whether or not Pedro Fages revisited the area when in 1772, while in pursuit of some Spanish deserters from San Diego, he is reported to have camped in the Lake Hughes area.

In 1776 the last of the important early European contacts occurred when Fra Francisco de Garces visited the area. Garces set out from San Gabriel Mission on April 9, 1776 accompanied only by his interpreter, Sevastian, an ex-San Gabriel Mission neophyte and by two Jamajabs (Mojave Indian traders) who acted as guides. It was Garces' intention on this journey to travel on a northwesterly course from San Gabriel Mission in an attempt to find a better and more direct route from Yuma to Monterey. It does not appear that it was his intention to visit the Piru Creek area, however, upon reaching the vicinity of Castaic Junction, on April 13, 1776, one of his Jamajabs took sick and as he notes in his journal he was forced to stay over in the area for ten days:

I passed over a sierra that comes off from the Sierra Nevada and runs to the west-northwest, and entered into the Valle de Santa Clara, having gone two leagues on a north course; in the afternoon, having

gone a league and a half northwest, I arrived at the Cienega de Santa Clara. One of the Jamajabs (Mojaves) having been taken sick, I tarried in this place until the 23d day; during which time I visited various rancherias (villages) that there are in these sierras, as also the caxones (canyons) and from whose inhabitants I experienced particular meekness and affability. I baptized one infirm old man, the father of the chief of these rancherias, having instructed him by means of Sevastian, though with difficulty. There came other Indians from the north-northeast and promised to conduct me to their land, as also they did with five more Jamajabs (Mojaves) who arrived these days to trade. (Coues 1900:267-268)

Upon leaving the Castaic Junction area Garces states that:

I went half a league northeast and found a laguna (Lake Hughes), and near thereto a rancheria where, according to the signs, had been Senor Capitan Faxes (Fages). The Indians were very affable, and the women cleanlier and neater than any I had seen before of this same Beneme<sup>4</sup> nation. In the evening there came two Indians from the north, known to the Jamajabs (Mojaves) by the name Cuabajay (Kitnaemuk). (Coues 1900:268-269)

In this second entry from Garces' journal it can be assumed that from Castaic Junction he proceeded northward through the Fort Tejon area and into the Southern part of the San Joaquin Valley.

Garces' expedition marked the end of what might be called the "contact period" and ushered in the "colonial period." The missions established by the Franciscan Fathers at San Buenaventura in 1782 and San Fernando in 1797 were the first important points of colonization to affect the vicinity of the Piru Creek Drainage Basin during this second historical phase. Forbes (1966:147) states that once a mission was established it began to



take converts from the Indian villages in its immediate vicinity. By this he is suggesting that the missions were actually carrying on an active program of depopulation and pacification, in that:

The kind of mission implemented in California was of the reduccion or congregacion (reduction or congregation) type, a variant of missionary activity developed in northcentral Mexico in the 1570's and utilized throughout Coahuila, Texas, Chihuahua, northwestern Sonora and Baja California. This type of mission was not erected in an already existing pueblo with sufficient population to support a church but was utilized as a device for gathering together (congregating) natives who were dispersed in small villages and for "reducing" them from their "free, undisciplined" way of life to that of a disciplined subject of Spain. (Forbes 1969:29)

In other words Forbes contends that the missions were established for some very specific purposes other than just the salvation of the Indian. Although he does not state it openly, others have and thus it is generally believed that the missions were mainly established to maintain a strong control over the aboriginal population while at the same time work towards the development of a basis for the economic support of the Spanish colonial establishments.

The exact methods of attracting Indians into the missions can never really be known, however, several possible techniques are alluded to in the literature of the period. One possible technique was to attract Indians by gifts of goods and food. Then after receiving some instruction in the Christian faith, they were baptized and

became neophytes. Another possible method was to baptize small children, without benefit of instruction in the faith, and then when they reached the age of seven, take them into the mission as neophytes, often separating them from their parents. As was to be expected whole families would more than likely move into the mission to be near the child. There is even the possibility that village chiefs were forced to send certain quotas of converts to the missions from time to time or that whole villages were brought into the mission by force. Whatever the case, once the Indian was baptized he came under the complete control of the missionaries. These controls were so strict, for instance, that the Indians could not leave the vicinity of the mission without written permission from the missionaries. I do not intend to judge these early missionaries for either their motives or methods. However, I would like to thank them not for what they did to the Indian but rather for the records they kept.

Each mission maintained among others three very important ledgers: one in which were recorded all baptisms, another for marriages and a third for deaths. By far the most important ledger is the "Baptismal Record" not only because it records the initial contact of an Indian with the mission but also because it's entries often contain other useful information. An example of a typical entry would be the following, translated from the Baptismal

Record of Mission San Fernando:

No. 2 And also on the sameday (August 14, 1802) in the church of this mission I baptized a child of about 2 years of age, (formerly) called Toya, the son of Aczayu, captain of the Rancheria of Piiru and a relative of Lugo, captain of the Rancheria of Piibit. I named him Casiano. Pablo Antonio Cota, Sergent of Escolta from San Buenaventura was his godfather. In testimony where of I have noted this and signed, Fra Francisco Dumetz

All entries were listed in sequential, numerical order and since each number was assigned only once these can, therefore, be used as the focal point of any analysis of the data contained in the Baptismal Record. Entries such as date of birth, age, place of baptism, and the convert's village can be used to interpret population movement. The listing of the convert's various relatives and their villages can in turn be used to reconstruct kinship and residence patterns. Entries in the Baptismal Record also often contained information as to the circumstances which prompted a baptism, whether conditions or sometimes just an anecdotal remark about the particular day's occurrences. However, as with any activity involving human behavior, discrepancies do occur, the most common appear to be misspelled proper names or the omission of some of the elements in the previously stated example of a typical entry.

While the records kept by the Franciscans at both Missions, San Buenaventura and San Fernando, are virtually untapped reservoirs of factual historical and ethno-

graphical data, they are, however, also capable of supporting Forbes' contentions about the real aims of the mission system. An analysis of these records reveals a very definite pattern of conversion in that large groups of Indians, often from a single village or from several closely related villages, are sometimes baptized together and their Baptismal Record entries will be found to usually contain all or most of the information outlined in the previously stated typical entry. Then by reading on in the records it will be noticed that mention of these newly baptized neophytes begins to appear in other entries, either as parents or sponsors of other converts. However, these subsequent entries no longer represent these Indians as residents of their originally stated villages but rather as residing in the village attached to the mission. There is a good example of the occurrence of this type of pattern represented in the Piru Creek Drainage Basin, when in 1803 fifty-two Indians were baptized at Mission San Fernando from the village of Piiru, which is thought to have been located at the confluence of the Piru Creek and the Santa Clara River. It may only have been a coincidence; however, these baptisms occurred just one year after Mission San Fernando had expanded its economic activities into the area by establishing an asistencia or granery in the vicinity of what is now Castaic Junction (Van Valkenburg 1935:8). These were not actually the

first converts to have been made or taken from the basin area, there were seven baptisms in 1801 and six in 1802, however, these thirteen baptisms were mostly older individuals, possibly baptized when they were in danger of death. After 1803 the record shows forty-one baptisms in 1804, five in 1805 and then none until two baptisms were recorded in 1811, which are the last entries to bear village names from the basin area.

In an attempt to locate other possible converts from the basin area a search was also made in the Baptismal Records of Mission San Buenaventura; but it revealed that no Indians were baptized into that mission from the villages within the lower portion of the Piru Creek Drainage Basin, or at least no entries appear with the names of these villages in the record. However, a search of the historical records of the period did reveal a rather interesting fact. It appears that the area and thus the aboriginal population rightly belonged to and were under the jurisdiction of Mission San Buenaventura and thus it appears strange that Indians from this region were being baptized into Mission San Fernando rather than Mission San Buenaventura.

The question of the ownership of the Piru Creek Drainage Basin first arises, when in 1821 the Franciscan Fathers from Mission San Buenaventura openly objected to Governor Sola's attempts to grant the area to a Captain

De la Guerra. The Father's objection took the form of a series of letters between themselves and the Governor, in which they clearly stated their reasons as to how and why they came to have control over the land. The result of these protests was that Governor Sola did not grant Rancho Piru to De la Guerra (Englehardt 1930:56-59). It was interesting to note, that the fact that Mission San Buena-ventura was not taking converts from the area never entered into the correspondence but rather the fact that the mission had been using the area as a cattle station for the thirty years previous to 1821 appears to have been the argument which swayed the final decision in favor of the mission. If Governor Sola had waited but twelve more years he would not have encountered this opposition to his attempts to grant Rancho Piru to De la Guerra. In 1833 the California legislature passed a law "secularizing" all the California missions; with the passage of this law the mission lands and their Indian dependents moved from under the control of the Franciscan Fathers into the hands of civilian administrators. In effect the secularization of the missions was a great land grab since within ten years after secularization all mission lands were in private hands.

In 1841 the area of the Piru Creek Drainage Basin first went into private hands when Governor Pico created Rancho Camulos out of a portion of Mission San Fernando's

Rancho San Francisco and granted it to Antonio del Valle. The del Valle family did not, however, immediately take up residence in the area, rather the first Europeans to actually live in the area were Francisco Lopez and Jose Sullanes. These men were granted a large tract of land, within the area of the lower portion of the Piru Creek Drainage Basin, in 1843, by Governor Micheltoarena which they called Rancho Temescal.

Thus in the short period of 75 years between 1769 and 1844 the Piru Creek Drainage Basin experienced major political, social and economic changes and also established patterns of land utilization and exploitation which persist even today.

## ETHNOGRAPHIC BACKGROUND

It is generally felt that at the time of the first Spanish contact (1769) the lower portion of the Piru Creek Drainage Basin was part of a larger area inhabited by a Shoshonean-speaking group which have come to be known as the "Alliklik." Actually Alliklik is not the name used by this Shoshonean group to refer to themselves, rather, it is a name, meaning "the grunters or stammerers who live over the hill," which was applied to them by their western neighbors the Hokan-speaking Ventuerno Chumash. Their northern neighbors the Penutian-speaking Yokuts knew them as the "O'owiye'its," a name which also meant the "grunters." However, their closest Shoshonean-speaking neighbors, the Kitanemuk whose territory formed the Alliklik's eastern border, called them the "Tataviam" or "people of where the morning sun hits" (Harrington 1934:56; Kroeber 1925:614; Van Valkenburg 1935:4). It appears that these are not the only names associated with the group who once populated the lower portion of the Piru Creek Drainage Basin. Recent research into the history of the Fustero family, the last aboriginal occupants of the drainage basin, reveals that the older members of the family referred to themselves as the "Ataplili'ish," a completely different name for which unfortunately we have no trans-



lation.

Considering the rather scant ethnographic data for the Piru Creek Drainage Basin, it appears that in order to prevent confusion the presently accepted term of Alliklik is the most workable designation in referring to the aboriginal population who occupied the area at the time of Spanish contact. In fact a recent linguistic study (Lamb 1964) of Southern California Shoshonean-speakers has used the term Alliklik in referring to the prehistoric population of the Piru Creek Drainage Basin. This study goes even further in that it classifies Alliklik as one of the four Serrano languages of the Takic family of Uto-Aztecan stock. The other three Serrano languages were Kitanemuk, Vanyume, and Serrano proper.

In the absence of good, factual ethnographic and archaeological data it is difficult to reconstruct the culture of the Alliklik; however, based upon what we know about other Southern California Shoshonean groups we can make some rather safe general assumptions. The Alliklik were probably organized along the model of a small tribelet practicing a hunting and gathering subsistence pattern within a well defined territory. My research in the Baptismal Records of Mission San Fernando indicates that they were also probably patrilineal since the few kinship connections I was able to make invariably linked two or more males together; whereas similar research at Mission

Santa Barbara which involved the matrilineally oriented Chumash consistently linked female relatives together. There was also a strong indication in the records that, for the most part, the population was monogamous with a tendency towards village exogamy except that in one case reference is made to the fact that the village chieftain could have more than one wife if both came from the same village. However, with reference to the wives of village chieftains, at another point in the records mention is made of the fact that the most desirable marriage for a village chieftain was with a woman of his own village. This tendency towards marriages based upon a system of village exogamy may serve as an explanation of why I was only able to reconstruct nuclear families with the data I extracted from the Baptismal Records of Mission San Fernando. I was only collecting those entries in the Records of individuals who claimed a village located within the Piru Creek Drainage Basin as their place of origin and thus could very well have missed many possible marriages. However, if I had translated all of the Baptismal Record I would have very likely been able to reconstruct extended families very much like those reconstructed from the Santa Barbara Records. The tendency towards village exogamy is further supported by Forbes (1966:138) when he says that, "... undoubtedly many or most natives from Tujunga to Malibu and Piru to Topanga were bilingual and intermarriage was common..."

Other than a few general comments contained in the Mission San Fernando Records there is almost nothing in the way of early ethnographic information on this area. Even the journals of the early Spanish explorers who recorded many aspects of aboriginal culture as they encountered it on their way to the north prior to reaching the area of the Piru Creek Drainage Basin but upon reaching the basin area they make no specific comments about the Alliklik's way of life. I can only assume that the cultural adaptation of the Alliklik did not differ in any way from that of other Southern California Shoshonean-speaking populations of the time.

In 1811 the Spanish government made its only attempt at learning about the California Indians when it sent to each of the missions a list of thirty-six questions known as the Interrogation - the questions have been lost but the replies or Respuestas have survived. The following numbered statements<sup>6</sup> are answers submitted by the Fathers of Mission San Fernando followed by some of my own comments.

1. At this Mission we know of no other class of people but those de Razon and Indians.

Anyone who was not an Indian was considered to be Gente de Razon, people who reasoned. This was because the Spanish felt that they used their reason or intelligence while the Indian followed his instincts or appetites.

2. Those de Razon, some of them, came up from Lower California, while others came from the Province of Sonora.

In the Respuestas of other missions mention is made of the fact that the Indians do not know their original habitat or place of origin. In Mission San Fernando's Respuesta this fact does not even appear to have been considered, possibly because the mission was drawing converts from a dispersed population which outwardly appeared similar.

3. The people de Razon speak Spanish, the Indians speak three distinct idioms, but there are many who understand Spanish, although they speak it imperfectly.

The three languages were probably Gabrielino, Serrano and Hokan (Chumash). The first two are fairly certain; the third, however, is questionable mostly because no Chumash were baptised into Mission San Fernando and also the Chumash were known to the population around San Fernando as the "Pak'enoyak" or "far people" indicating that they probably did not mix with them very often. The only other possible language would be "Ham-inot", a confusing term which occurs in most of the published literature for this area - it appears to have been used for those groups living in the vicinity of Fort Tejon.

4. Speaking in general, the Indians are indifferent toward their wives, although there are not want-

ing those who entertain a true love for them. The parents give their children no education whatever. They possess only so much as the Mission Fathers give them.

As is to be expected Hunters and Gatherers do not tend to have formal educational institutions, rather the educational process is a part of everyday life.

- 5-6. At present there is not observed any aversion for either Europeans or Americans, rather only a supreme indifference.

Obviously even at this early date California was already beginning to experience settlement from other than Spanish colonists.

7. There is not known any inclination on their part for reading and writing, neither in their own idiom nor in that of the Spaniards, and they lack every kind of characters (letters).

The Fathers obviously knew nothing about or had never seen the numerous rock paintings which abound in the region; although in the records mention is made that the Indians did draw animals in the sand and on tree trunks. Probably the main reason the Fathers knew nothing about the region's rock art was that it was associated with the population's precontact religion and the Fathers did everything they could to discourage this previous form of worship.

8. The method (as we understand it) which the Indians should employ in order to speak and understand the Spanish language would be to increase the Spanish population: for experience teaches us that those Indians who live among the Span-

iards, or in their ranchos, speak and understand.

It appears that it was difficult to get the Indian to do anything he did not wish to, without the force of arms.

9. By nature the Indians are compassionate and generous without distinction as to sex.

Hospitality was the rule, even an enemy was granted three days rest.

10. The superstitions which we have observed are the following: In order that their faces may not be burnt, they paint themselves with ochre (almagre) of red and other colors. In order not to become tired climbing hills, they carry a stick or stone. For hunting deer they drink salt water and eat of a plant, the leaf of which is large and dark green, while the flower is white. The Spaniards call the flower Toluache, but in the Indian language it is Mani. With this they intoxicate themselves; and they take it in order to become strong in order not to fear anyone (tomar a nadie), that snakes may not bite them and that darts and arrows may not pierce their bodies.

Toluache is detura and by intoxication is meant a drug induced state not the result of any form of liquor. Also other information from the records shows that fishermen and hunters were not allowed to eat what they caught lest they loose the ability to catch more, fasting was common before important ceremonies and most competitive games, and there existed at least a one year postpartum sex taboo or until the child could stand alone.

11. There are Catechisms of the Christian Doctrine approved by the Bishops in Spanish and translated into the Indian language. These are used in the morning and evening.

To date I have been unable to locate a catechism in an Indian language which could have been used at Mission San Fernando.

12. No inclination to idolatry is observed in our neophytes; nor can it be said that in savagery they practiced any formal idolatry. In the vicinity of their rancherias and on the mountain, they used to have some places which they kept very clean, swept, and adorned with beautiful plumage put on poles. To these places they would go as to their sacred places. Here they would assemble in time of need and conduct a sort of pilgrimage. One of their number, in the name of all the rest, who observed profound silence, would pray for rain, offering an abundance of acorns, seeds, and wild fruits which constitute their daily sustenance. They would catch fish or kill deer in order that no bear might catch them or the bite of a rattlesnake might not afflict them. They would pray also for health and other good things. At the end of the supplication, they would, in their simplicity and crude veneration, offer beads, acorns, and various seeds, in order that they might be regarded with favor by the invisible one whom they pictured to themselves according to their rude notions, as the author and giver of rains, seeds, fruits, and other good things. The first part of this petition was always uniform. It was preceded by a salutation which in our language means as much as "Grand Captain or Captain or Captains, behold us and hear what we say."

Some old men, pretending to be doctors, but being only graduated from the school of their own ignorance, simplicity, and rudeness, tell a long series of ridiculous fables regarding the creation of the world and its government. The boys and young folk take great delight in them and will even pay an old fellow to get him to recite his stories. Nevertheless, some neophytes having good sense and possessing true Christian sentiments frequently told me that they knew the foolishness of these stories; and when they saw the boys in such circles, one or more would not be wanting to instruct them, reminding them of what is true and certain; namely, that there is One who created all things and gave all things. This much is sure, the pagan people of this vicinity are well disposed and they have listened to us

with attention or pleasure when we spoke to them of God, the Creator of heaven and earth and all things.

13. In moral as well as political affairs, notable improvement may be observed in this Mission, which was founded seventeen years ago.
14. The Indians make no compact or conditions in their matrimonial affairs. The suitor himself or through a substitute gives to the father of the bride two or three dollars in beads. The gentile gives to the bride a shawl similar to a cape, made of the skins of the rabbit or otter, or lamb as also a small basket. After they have presented themselves to the missionary and the examination, prescribed by the Council of Trent, proved that there is no impediment, the missionary marries them during a Nuptial Mass according to the Roman Ritual (los casa y vela segun el Rituale Romano). Also in paganism they are wont to offer a present to the pretendita, to her parents, though not always. Some, naturally of a good and faithful disposition, will keep their matrimonial contract inviolate; but, generally speaking, it is almost incredible how readily they take and divorce wives, and how the wives themselves, in not a few cases, divorce their husbands, not regarding or understanding the marriage bond. Such is their rudeness and ignorance in this.

The only known impediments were that one or both of the parties were not baptised or that they were married to someone else. Polygyny was not permitted by the Fathers although there are strong indications that the chiefs were allowed more than one wife; and that the Fathers allowed older polygynous marriages to terminate naturally.

15. All observe the same customs as regards curative methods. The best known are the following (Kroeber 1908:14): Pespibat (Ivespibat) - This is composed of wild tobacco, lime, yorines (iron),



mixed together and fermented. This they take to relieve pains in the stomach and to heal wounds. El Chuchupate (an umbelliferous plant), in their idiom called Cayat. This is an herb, each stem or stalk of which has three round leaves with a spike in the middle. The flower is white. They chew the root and rub themselves where they feel pain. They use this also for headache. With the Anisa plant they purge themselves. With the herb called Pasma (del Pasma - convulsion) they relieve pain in the molar and other teeth. When boiled, it is taken to sweat; and when ground, it is used like snuff (como polvo de tabaco) tobacco. The Chilicote (Echinocystis macrocarpa), called Yjaihix in Indian, is toasted and mixed with the powder of a crushed stone called bafa (pafa), in Indian pajeax (Paheasa?), and is then used to remove inflammation, to remove the film from the eyes (cataracts - nubes de los ojos), to bring on menstruation, to heal wounds, to cure urinary maladies; and when boiled it is taken to bring about perspiration (humederse). Those who suffer from venereal humors (syphilitic conve-  
erados), those who are poisoned or crippled, cleanse themselves with powdered alum stone and copperas (piedra alumbre y alcaparrosa) mixed. When they feel oppressed, they bleed themselves with a flint. When they are restless, they refresh themselves with the water derived from the bark of the ash-tree. When they suffer pains in the side, they put red ants in water and apply them alive, externally, at the same time striking themselves with nettles (counter irritants). They do not drink thermal waters, but they bathe in them. Among the more prominent diseases are the gallico (humor galico/French disease or syphilis), from which a considerable number die. Spring is the time when they more often take sick. The number of deaths exceeds that of births.

16. They have no calendar from which to tell the seasons of the year. They distinguish only winter and summer. Neither have they a particular time set apart for eating. Hence for the time they spend in eating and drinking they do not regulate the hours.

Their calendar was probably seasonal or locational since they had to be at certain places to

gather certain resources or else lose a vital part of their food supply. In the notes of J.P. Harrington only words for sunrise (morning), highest sun (noon), sunset (evening) and darkness (night) have been noted, but as yet, there have been no references to seasonal or calendaric periods of time. Because of the lack of "proper" concepts of time one of the first things all the missions did was install bells which were used to guide the Indians in everything they did.

17. It cannot be said how many times a day they eat, because they are eating every little while, and more so at night than in the daytime; for whenever they are so disposed, they eat. The food they partake of as Christians is the same as that of the Spaniards; but they at the same time do not despise the pinole and seeds which they were accustomed to use in their pagan state, and many even prefer them. The food they used in paganism are acorns, pine-nuts, sage (in their language called pasill - chia), islai (called in their idiom chamix), and numberless others, which they use besides. The meat they eat is obtained from the deer, coyote, antelope, jackrabbit, rabbit, squirrel, rat, dog, all birds, mole, snakes, and rattlesnakes; while those on the coast are fond of every species of fish, especially the whale.

It is interesting that the bear is not given in the list of animals eaten; Kroeber (1908:13ff) feels that many California Indians refrained from eating bear on account of its human resemblance.

18. It is not known whether in the savage state they used fermented drinks.
19. Nor is it known whether these gentiles adored the sun or the moon.

20. They still preserve the customs of their forefathers; but a great change is noticed in those who were born of Christian parents. Here they do not know from which direction or region their ancestors came to occupy this country.
21. If a pagan Indian dies, they dig a deep hole. In this they put a pot, a basket, an otter skin, and two or three dollars worth of beads. On this they place the corpse and then cover it with earth. Immediately they send notice to the rancherias of the district, so that all, old, young, and children, may paint themselves for the general feast, during which they serve all kinds of pinole, meat, etc. Thereupon the chief earnestly commends all present never to mention the name of the deceased, lest he come to haunt them (arras-trarlos). All must come weeping. Finally, they burn the hut and everything the deceased possessed.

Cremations appear to have been common among the Shoshonean groups prior to contact; after contact extended face up burials were common only for converts.

22. Commonly, they are not true to their agreements, nor do they keep their promises. Nevertheless, there are many who do observe fidelity.
23. All are very much inclined to lying; many even glory in knowing better than others how to deceive and not be detected. Some lie in the face of every evidence.
24. The most dominant vices are drunkenness, stealing, and fornication.

All virtues unknown before the coming of the Spanish to be sure!

25. They readily loan money, beads, seeds, and other effects; and they will in their pagan state likewise loan their own wives to one another.

It is reported by Harrington that loans bearing interest rates of 50 to 100% were common.

26. All work in community, and from its products they eat and dress.

There appears to have been more cooperation and a more equal distribution of wealth prior to contact because of the rules of reciprocity under which they once operated.

27. They are vindictive; and in their pagan state, they know no other chastisement than killing the evil-doer either by violence or poison. They had frequent wars to defend their wives and their collection of acorns and seeds.

It appears that the Alliklik had frequent problems with raiding Yokuts since while visiting them Garces mentions that he "... continued to counsel the captain that there should be no more war against those of Santa Clara, where they had killed another captain." (Coues 1900:302)

The cause of the warfare was probably the surplus food resources which the Alliklik gathered in the spring and stored against a less abundant season later in the year.

28. It is not known that they are inclined to immolate human victims to their gods.
29. It is not known whether the Indian savages offer human sacrifices to their gods. They no longer burn the corpses, as at the beginning of the conquest; but they still put seeds with them in the grave.
30. All are dressed alike and partake of the same food.
31. There are no Caciques or governors. The Indians respect only those who were the chiefs of their rancherias (villages) in paganism; and these do

not molest them at all, nor do they demand any service from them.

This answer appears to be dealing with social class - prior to contact villages came under one or more chieftains or captains as the Spanish chose to call them. There does not appear to have been one all-powerful chieftain but rather several chieftains, one for each of the important social activities of the group. These various chieftains probably functioned very much like the "Rabbit Chiefs" of the Desert Shoshone. Once the Indians were converted, however, there was a class order at the head of which was an elected alcalde (mayor) for each village and selected regidores (foremen and/or overseers).

32. Neither men nor women give any personal service.
33. The musical instruments which the gentiles use, and even many of the Christians, are the flute made of the elder, certain little sticks, and some whistles made of deer bones. Their music, like their chants, are more dismal than cheerful. They are fond of our instruments and they use them, string instruments as well as wind instruments.

The "little sticks" maybe rattles made of a partly split stick, like a clap stick; such instruments were used by many California Indians. It is thought that some form of dance was known since once in the marriage records one of the Fathers admonishes the couple not to partake of

the strange and ridiculous contortions of the body which the older people call dance.

34. No one is known to have distinguished himself in arms or letters; for, as said before, they lack all characters; and in this Mission no one as yet is known to be able to read and write.
35. The gentiles have no idea of eternity, of reward or punishment, of heaven, purgatory, and hell. The Christians say they believe these truths.
36. The clothing the Indians wore until now are the following: The men wear a shirt of wool, called Coton; a strip of woolen cloth, with which, instead of pants, they cover themselves and which is called Taparabo; and a blanket. The women wear the same shirt or Coton, a petticoat, and a blanket. All go barefoot. The means that could be employed to have the Indians clothed would be the encouragement and promotion of commerce. All dress themselves from the products of the Mission.-Fr. Pedro Munoz, Fr. Joaquin Pásqual Nuez.-Mission San Fernando Rey, February 3, 1814. (Santa Barbara Mission Archives)

## ARCHAEOLOGICAL BACKGROUND

Until recently there had never been an adequate archaeological inquiry of the lower portion of the Piru Creek Drainage Basin or for that matter of any part of the Upper Santa Clara River Valley. The only thing which could be said to have come anywhere near being called an inquiry was a brief series of surveys conducted in the 1930's by Richard Van Valkenburg for the Los Angeles County Museum of Natural History. In 1970 I began my research in the area and from 1971 to 1973 a series of surveys were conducted as part of the clearing operations for the Pyramid and Hardluck Reservoir Projects. My research and that of Richard Van Valkenburg was confined to the lower portion of the Piru Creek Drainage Basin while the work conducted as part of the Pyramid and Hardluck Projects was confined to the upper and middle portions of the Piru Creek Drainage Basin.

It appears that all Van Valkenburg did was collect the locations of village and cave sites (Map 2) from local informants but he did not undertake any major excavations other than "potting" around in a few caves with the intention of collecting artifacts for museum displays. My own research consisted of taking all published information both historic and ethnographic and attempt to relocate

the sites which had previously been reported and also to check the area for any other previously unreported sites. The results of my efforts is the following list of site descriptions (the numbers in parenthesis correspond to those on Map 2).

(8) Camulus (ka-mulus, Ka-moolus) meaning "The Cedar" was located two miles to the southeast of the confluence of the Piru Creek and the Santa Clara River. In the early 1800's Mission San Fernando established a cattle station at this site which was later refurbished by the Del Valle family as the headquarters for their Rancho Camulus. There is a strong indication that Camulus was not a pre-historic village site, but rather was created at the time Mission San Fernando established its cattle station there, since neither the Portola Expedition or Garces' report encountering any sites between Chaguya-vit (Castaic Junction) and the Piru. From the number of Indians baptized into Mission San Fernando from this site it is safe to assume that it was never a large major village site, also many of the baptisms after 1835 were of non-Allikliks. The site, however, because of its close association to the historic site of the Del Valle Rancho has always been mentioned in the literature. Kroeber in his Handbook of the California Indians (1925:plate 78) locates the site correctly; however, his spelling is in the modern Spanish form whereas everyother village on his map is in a phone-



tic form. The site no longer exists because first it was either washed away by the 1928 St. Francis Dam disaster or it was lost as a result of continuous cultivation since the Mission period.

(10) Piru (Pi'duah-vit, Pi'duhuku-bet, Piiru, Pii-bet) meaning "the place of the favored reeds" was supposed to have been located at the present site of the town of Piru. This was the largest and most important Alliklik village in the lower portion of the Piru Creek Drainage Basin. It was here that the Portola Expedition reports meeting what they estimated to be over 400 Indians. This size of a population appears too large, mostly considering the carrying capacity of the area; however, there are two possible explanations, both based upon a fact which all the diarists comment upon. Namely, that this village had no other protection other than a large brush shelter inside a big corral. It was a common practice of most Southern California Indians during periods of mild weather not to construct structures during a short encampment, most often if anything was put up it would be a ramada surrounded by a wind screen. The two possible explanations for the large population encountered at Piru could be that either the Alliklik had heard of the Portola Expedition's being in the vicinity and had gathered to meet them or the Expedition happened to have come upon the Alliklik when they had gathered for some type of ceremony.

Whatever the reason for the large population, from 1802 on virtually every Indian baptized claimed Piru as his place of origin, this also may hint that Piru was the major village of the Alliklik. Like Camulus, Piru also suffered the ravages of the St. Francis Dam Flood. I have spent many hours in the field either alone or accompanied by students from Moorpark College, for all of our efforts we were unable to relocate this village site. We were, however, able to center on one very probable location, the settling grounds of the United Conservation Water District just east of the present town of Piru. Van Valkenburg reports a cemetery for this village, however, to date no human remains have ever been reported for anywhere in the immediate area.

(11) Akavavi-Kashtii (Akawait Puhiu-a-te'kwit) meaning "the place of the road runners mortar" was actually two small villages located on both banks of Piru Creek three miles north of its mouth. This is reported to have been the last Alliklik village in the lower portion of the Piru Creek Drainage Basin to be abandoned. Mr. Hugh Warring one of the earliest American settlers of the Basin reports that as late as 1868 the site was still in use by members of the Fustero family. He reports that grandfather Juan (Lugo) and grandmother Sinfrosa used the site continually, mostly the temescal (sweat house) which was located on the second terrace of the creek, while the huts

which comprised the village were located on the flat which makes up the present bank of the creek. He reports that the temescal was built against the east bank of the creek with its roof only about two feet above the surface of the ground and was constructed of mud and willow brush. Mr. Warring stated that the fire was lighted inside and that the smoke poured out of the entrance way. Today the village site on the eastern side of the creek is under permanent pasture and has not been cultivated in the last 25 years, however, the site area on the western bank is all but lost as a result of continuous cultivation since the Spanish contact period. Mr. Morris King, the land's present tenant, reports finding several stone bowls and numerous examples of milling tools while plowing in the area. These, however, are artifacts of such an undifferentiated nature that it is impossible to formulate a typical Alliklik assemblage from them. The temescal was lost after the 1968 flood; however, prior to this all that remained was a circular depression about two m.<sup>7</sup> deep by five m. along its east west axis and four m. along its north south axis. The interior was full of brush and the entrance way had all but eroded away.

(12) Calera Ranch site - this was not a village site but rather was reported to have been a very productive cave in Lime Canyon which was "excavated" in 1908 by Tomas Dominguez, a vaquero of the Rancho Calera. Dominguez's

excavation is reported to have yielded three large whistles, a finely made storage basket, and a feathered headdress all of which were presented to the Ventura Pioneer Museum and have since been lost. There is also reported to have been a site associated with this cave; however, Lime Canyon has experienced extensive disturbance as a result of oil production activities. The materials described from this cave hint at some type of a ceremonial kit, most likely the cache of some Alliklik shamen. There is a precedent for such a cache in the region of the lower Piru Creek Drainage Basin at Pyle's San Martin Mountains Cave where a large collection of baskets, headdresses, whistles, bull roarers and other ceremonial objects were discovered and later all sold to the Rev. Stephen Bowers who in turn sold them to the Harvard Peabody Museum.

(13) Etseng for which there is no known translation was a large village and cemetery located not at the mouth of Reasoner Canyon as Van Valkenburg shows in his map of the region but rather it was located on Rancho Esperanza which was later called Temescal Flats and which is now part of Lake Piru. The village site occupied a small knoll at the northern extent of the Temescal Flats area, and today during periods of low water in Lake Piru people flock to "Indian Island" and hunt for relics, repeated attempts at posting the site have failed to keep people off. The extent of the midden represented indicates the

village may very well have dated from a period prior to Spanish contact; however, the cemetery probably does not go back beyond 1800. From what we have learned of other Southern California Shoshonean groups we know that prior to missionization cremation was the customary method of disposing of the dead and cemeteries were not used until cremating was stopped by the Fathers. At present it is not known exactly how many burials were made at this cemetery; however, the Records of Mission San Fernando do hint that it was consecrated by the Fathers sometime before 1805 with the last reported burial taking place in 1879.

(14) Reasoner Canyon - two sites were reported to have been located in this canyon - one at the mouth of the canyon and a second located two miles into the canyon. The fact that these sites were unnamed indicates that they may not have been important villages. The site at the mouth of the canyon was located where the present ranch buildings of the Dale King Ranch are located today. In 1860 it was reported that an Alliklik jacal (brush hut) was still standing on the site. Today although still unexcavated the site remains fairly intact although the midden appears to be irregular and very shallow. The site further into the canyon appears to have been a small quarry site - over 95% of this site was lost to an oil exploration road; however, the little that remained showed a

high percentage of chipping waste and broken uncompleted tools hinting at a possible quarry site. Mr. Dale King has several projectile points while it was still intact. All of these points; however, are made of Grimes Canyon fused shale while the most predominant raw material in the area is quartzite.

(16) Huvung (Huyung, Taquish-vit) meaning "the place of ball lightning" obviously referring to a natural phenomenon is a site complex consisting of an open grinding station, three storage caves and a natural spring all contained within an ecozone of rich oak parklands. In fact, Huvung was reputed to have been one of the Alliklik's favorite locations during the acorn gathering season and also it was probably used at least once more during the year because of the possibility of using the storage caves for any surplus acorns and also a year-around supply of water from Arabian Springs, both particularly desirable assets during the period from the end of the month of June to the beginning of the month of August - when there were few plant food resources and little water available in the region. All three caves were excavated in 1933, two by Iral Alcock and one by Richard Van Valkenburg while both men were conducting archaeological surveys in the area for the Los Angeles County Museum of Natural History; however, no publication resulted from

the excavations and the only field notes which have survived are a few pages of Van Valkenburg's activities. No indication is given in these notes of what was recovered, however, Van Valkenburg does mention uncovering two distinct levels of occupation. He speculates that the upper of Alliklik level was superimposed upon an earlier and more archaic level which he attributes to the Ventureno Chumash. This supposition creates somewhat of a problem - from the small amount of artifactual material either retrieved or attributed to the lower portion of the Piru Creek Drainage Basin I have never come across an artifact which could be said to be typically or uniquely Alliklik. In fact, if anything can be said of the artifacts attributed to this region it is that they are undifferentiated from those artifacts occurring in surrounding regions. The only possible explanation for Van Valkenburg's statement is that he found something in the lower level which he felt was atypical for the Alliklik but which was typical for the Ventureno Chumash. Besides the grinding station associated with the cave sites it was expected that the region would contain other small gathering type sites; however, no others were located. The area of these sites has been under the ownership of the Lechler family since before 1900 and they are reputed to have a very impressive collection of artifacts from the area; however, I was never able to gain access to his

collection. The Lechler's also at one time hired female members of the Fustero family as housemaids but they could never get them as live-in domestics because they would not spend the night in the area. The fear of the Fustero women stemmed from the fact that sometime between 1840 and 1870 a large group of Allikliks died of measles at this site and were never properly buried, as a result their ghosts haunted the area and supposedly the phenomenon of ball lightning was first noticed after these deaths. Huvung is also of interest because the canyons within which it is located form a natural corridor through the San Martin Mountains between Piru and Castaic Creeks.

(17) Kuvung (Koovung) meaning "the place of the yellow flowers" was completely destroyed as a result of the activities connected with the construction of Lake Piru. It was never reputed to have been a large or important village site, however, its importance lies in the fact that this was the home of the Fusteros, the last aboriginal occupants of the Piru Creek Drainage Basin. And it was at this site that Juan Jose Fustero, the last full-blooded Alliklik, was laid to rest in 1921.

(19) Poipin, the last named location of the lower portion of the Piru Creek Drainage Basin, was a small village and two associated storage caves which Van Valkenburg has mislocated on Map 2. They actually should be on the eastern bank of Piru Creek facing Agua Blanca



Canyon. There is no known translation for Poipin, however, the Fustero family knew this site and reported that it contained several rock rings. The site was lost sometime between 1880 and 1910 as the result of hydrologic mining, which deposited two to three m. of sedimentary gravels over the total site area. While checking the creek bank a small section of midden was noted; however, considering the amount of overburden upon the site any excavation is out of the question. The fact that the site contained rock rings is of the greatest interest. J.P. Harrington mentions the fact that rocks were used to anchor the dome shaped brush huts of the Kitanemuk which in turn may have been a practice of the Alliklik also. If this was the case then Poipin was the last major village site of the lower portion of the Piru Creek Drainage Basin.

(28) Devils Pot Holes - Richard Van Valkenburg reported that in 1934 a U.S. Forest employee, William Whitcare, informed him that there was a village and cemetery site at the Devils Pot Holes. The Devils Pot Holes are a unique area above the western rim of Piru Canyon, one Pot Hole is actually a natural sink while the second Pot Hole is a spring and two meadows. Members of the Fustero family and many longtime residences of the Piru Creek Drainage Area all report that the Pot Holes were used by the Alliklik as a stronghold mostly in time of troubles with

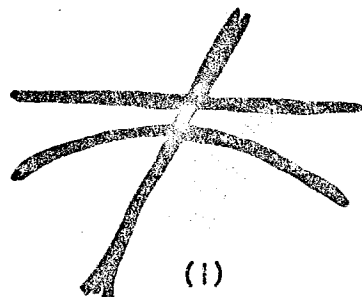
the Yokuts. It is not known whether or not Van Valkenburg ever checked out Whitcare's information, however, for eight days I crawled over every inch of Pot Holes. There was little in the way of evidence of a site location, however, a very probable location was located in the area of the natural sink but at the time of my survey the location was under about five m. of water. The Pot Hole does have certain advantages which support it's desirability as a stronghold, for one thing its almost inaccessible, there was no trail into the area and it took almost eight hours to cut one. Also the area of the Pot Holes was rich in food resources, fresh water and shelter.

Besides the village locations discussed here, the lower portion of the Piru Creek Drainage Basin is also characterized by numerous caves and rock shelters. Some of these caves have already been mentioned in association with named village sites; however, there are many more caves which were used during the area's pre-contact and protocontact periods. Cave sites appear to have been used as either habitation or storage sites if not as both. Unlike the village sites no cave sites were named so that it will be necessary to refer to them by their location.

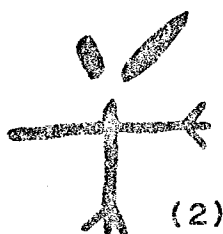
Devils Canyon - two small rock shelters are located in this canyon each in association with a spring; however, the shelters are so small that they could have served for no other purpose than as storage locations. Also if there

was an open site in association with these locations it has been lost since the Black Ranch house is presently located on the only possible area near the shelters.

Canton Canyon formerly known as Janes Flats, has two very interesting caves located near its entrance. The field notes of the Los Angeles County Museum of Natural History show that these caves were worked twice, once during the 1932 field season and during the 1934 field season. But as with so many other museum projects which were undertaken before 1940 the field notes are not complete and very few publications resulted from the research efforts. The fact that we do not know what was recovered from these caves is truly unfortunate since these contain the last remaining petroglyphs (Figure 5) in the lower portion of the Piru Creek Drainage Basin. One of the caves is so small that it could serve only as a storage unit, however, the other cave is large enough to serve as a habitation site except that it is located three m. up the side of the inside wall of an arroyo and there is no open ground at the entrance, in fact the nearest level ground is 300 m. away at Janes Flats. The petroglyphs consist of several groups of small pecked holes either in a circular pattern around a pecked depression or in random clusters. There are also several groups of scratched lines as if someone had been tallying something. The rest of the petroglyphs consist of a series of what



LEFTSIDE



SMALL SIDE POCKET

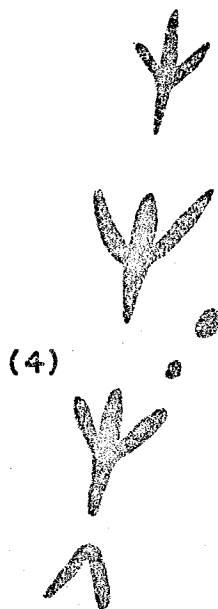


FIGURE 5

Examples of the most recognizable petroglyphs from the Canton Canyon Caves.

appear to be bird tracks, a leaf and two figures one in the form of a flying insect and the other an apparent representation of a human form. No explanation is available for these petroglyphs but since the cave in which they occur was a habitation site it is safe to assume that their explanation is not religious.

Blue Point is a large, heavily wooded valley flat which is bisected by Piru Creek and is surrounded by steep sandstone ridges. Its location at almost the center of the lower portion of the Piru Creek Drainage Basin as well as the close proximity of many deep and complex canyons appears to have made it an ideal location for a "base camp." As is to be expected with most food collecting societies one of the most pressing problems is the elderly. Since food collectors are nomadic, they could not always be expected to keep up with the band, mostly if bands were moving frequently over rough terrain. The canyons in this central part of the Drainage Basin are rich in food resources, however, the terrain is rough and it will not support a large population nor will it sustain a small population for any length of time. As a result the most economic method of exploiting such an area is to establish a base camp from which gathering parties could go out into the surrounding country while the elderly and very young remained at a centrally located base. This method of land and resource exploitation lends itself towards the

efficient use of what is available, the amassing of a surplus, thus most base camps were also storage points from which the resources were later portaged to winter villages. Blue Point turns out to be an ideal camp location because of its central location and the fact that the valley flat with its wooded shelter and good water supply is surrounded by sandstone ridges which are honey-combed with small caves and crevices, ideal as storage units. We have already mentioned the fact that the Alliklik were often raided for their surplus resources and Blue Point with its capacity as a storage depot tends to support the assumption that the Allikliks stored surplus resources and thus encouraged raiding. Most of the caves at Blue Point are difficult to get to, fairly secure against the elements and most animals and also some are even hidden from view, all favorable factors in the selection of storage units. In all I located ten good possible storage locations and about fifteen more which are so small it is not really worth mentioning them. Rather than list and record each as a possible archaeological site I have listed them merely as components of one large complex. In reviewing Van Valkenburg's maps and notes I determined that the ten caves I located were also worked by him.

Blue Point Cave 1 - the first cave located on the eastern bank of the valley flat is on a sandstone ledge

some seven m. above the bed of Piru Creek. It is a small cave whose triangular shaped entrance (3 m. by 75 cm.<sup>8</sup>) leads into a low three m. deep chamber. In 1935 Van Valkenburg and others from the Los Angeles County Museum of Natural History excavated this cave and removed a large amount of material from it, in fact the nuclei of the museum's collection for this region comes from this and the other caves at Blue Point and in particular from Van Valkenburg's "potting" activities for the 1933 to 1935 field seasons. Since the interior of the cave was so badly disturbed I excavated a small test trench (30x20x90 cm.) into the center of the cave's entrance ledge. The midden was of a very poor quality, as was to be expected since the cave was probably used as a storage unit and not a habitation site. The lower levels of the trench were made up almost entirely of pack rat materials, indicating that at some previous date the cave had been cleared out, probably during Van Valkenburg's excavations. The only material of an artifactual nature which I recovered was a small section of basketry consisting of a three by two cm. piece made by twilled twining over double rods.

Blue Point Cave 2 - is a very small cave, roughly one m. square, or just large enough to contain two large storage baskets. This cave is located five m. above Cave 1 and is hidden from view by a large boulder

near its entrance. There was no entrance ledge and nothing inside of the cave to positively confirm that this cave was ever used by anyone, however, there are several small holes, which might have been cut as hand or foot holds, cut around the boulder near the entrance.

Blue Point Cave 3 - is a rock shelter (Figure 6) located about in the center of the eastern half of the valley flat; it is the only location at Blue Point that points directly towards human habitation. This rock shelter is so heavily used today that it is impossible for us to look critically at it. This shelter itself is contained in a large boulder and its interior is two by two and a half m. square, although it only averages one and a half m. in height. It has a very adequate entrance ledge which is located only five m. above the creek bed. In association with Cave 3 are two large boulders, in one, is located two rather deep bedrock mortars. No testing was conducted at this cave, since it has experienced heavy disturbance from activities at the campground.

Blue Point Caves 4, 5 and 6 - are all small possible storage caves located, in the northwestern portion of the valley flat, in a sandstone cliff face with access limited to one small ledge. In searching these caves no indications of use could be determined although these maybe the three caves in which Van Valkenburg reports finding remnants of basketry during his 1934 field season's



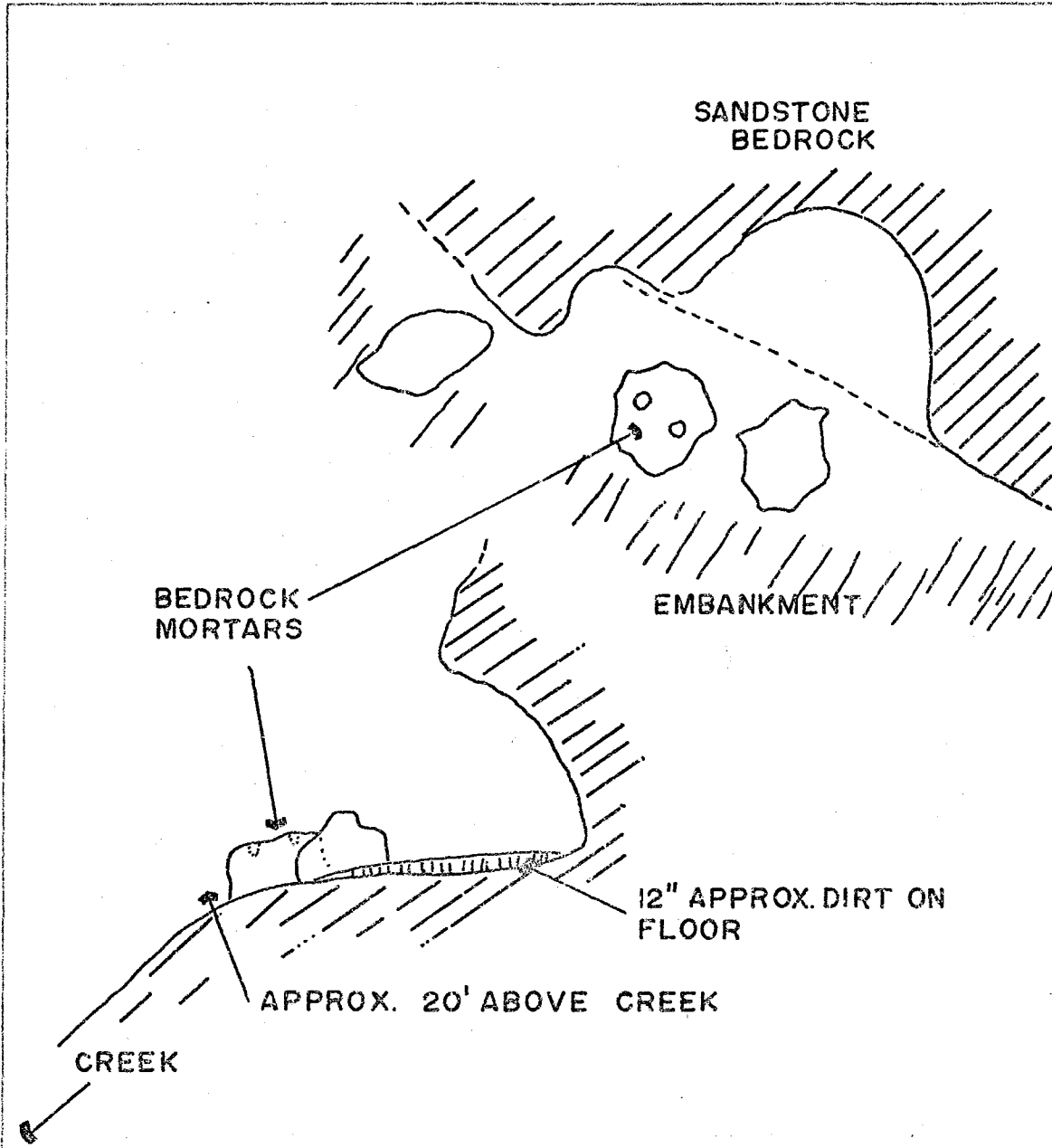


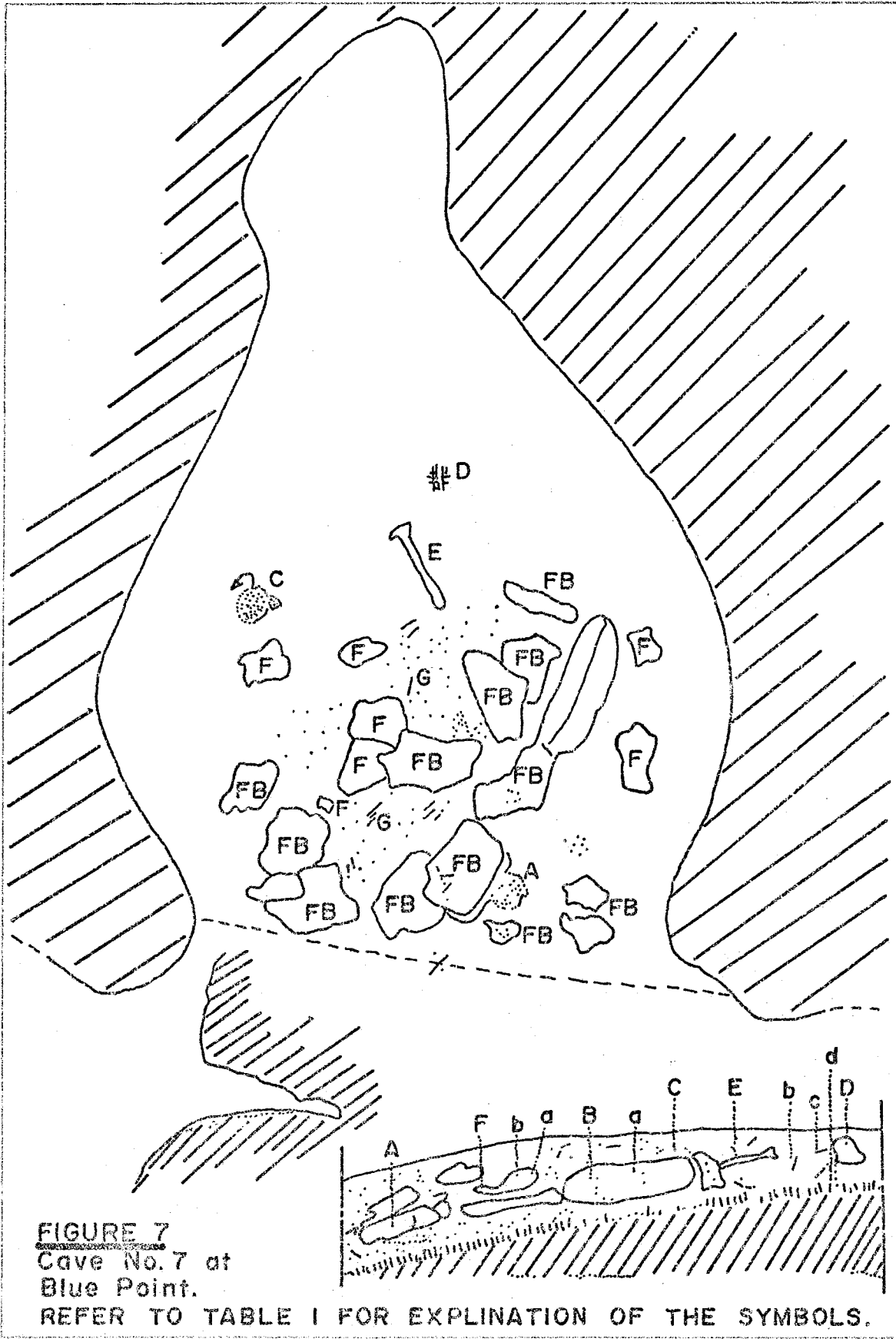
FIGURE 6

Cave No. 3 at Blue Point.

activities.

Blue Point Cave 7 - is a large cave located twenty m. above the creek bed on a sandstone cliff face in the middle of the western portion of the valley flat. The entrance to this cave is rather circular (2 by 2 m.) and leads into a chamber whose ceiling descends from two m. at the entrance to thirty cm. at the back wall. (Figure 7). An interesting feature of this cave is the slope of the floor which slants inwards rather than outwards. Inward slanting floors are sometimes used as indicators of a habitation cave rather than as a storage cave; however, Van Valkenburg excavated this cave during the 1934 and 1935 field seasons and the material he recovered is listed in Table 1, indicating it as a storage cave not a habitation site. It is unfortunate that his notes on the interpretation of the excavation and a complex list of the materials recovered have been lost. And with them has been lost an important item of data since considering the nature of the field notes for these excavations only Van Valkenburg could accurately evaluate the nature and relationship of this and other caves which he worked.

Blue Point Cave 8 - no longer exists. Van Valkenburg's notes indicate that it was located at the extreme southwestern end of the valley flat. Van Valkenburg indicates that it was more of a rock shelter than a cave.



**FIGURE 7**  
Cave No. 7 at  
Blue Point.

REFER TO TABLE I FOR EXPLANATION OF THE SYMBOLS.

TABLE 1

## Explanation of the Symbols in Figure 7

Physical Features:

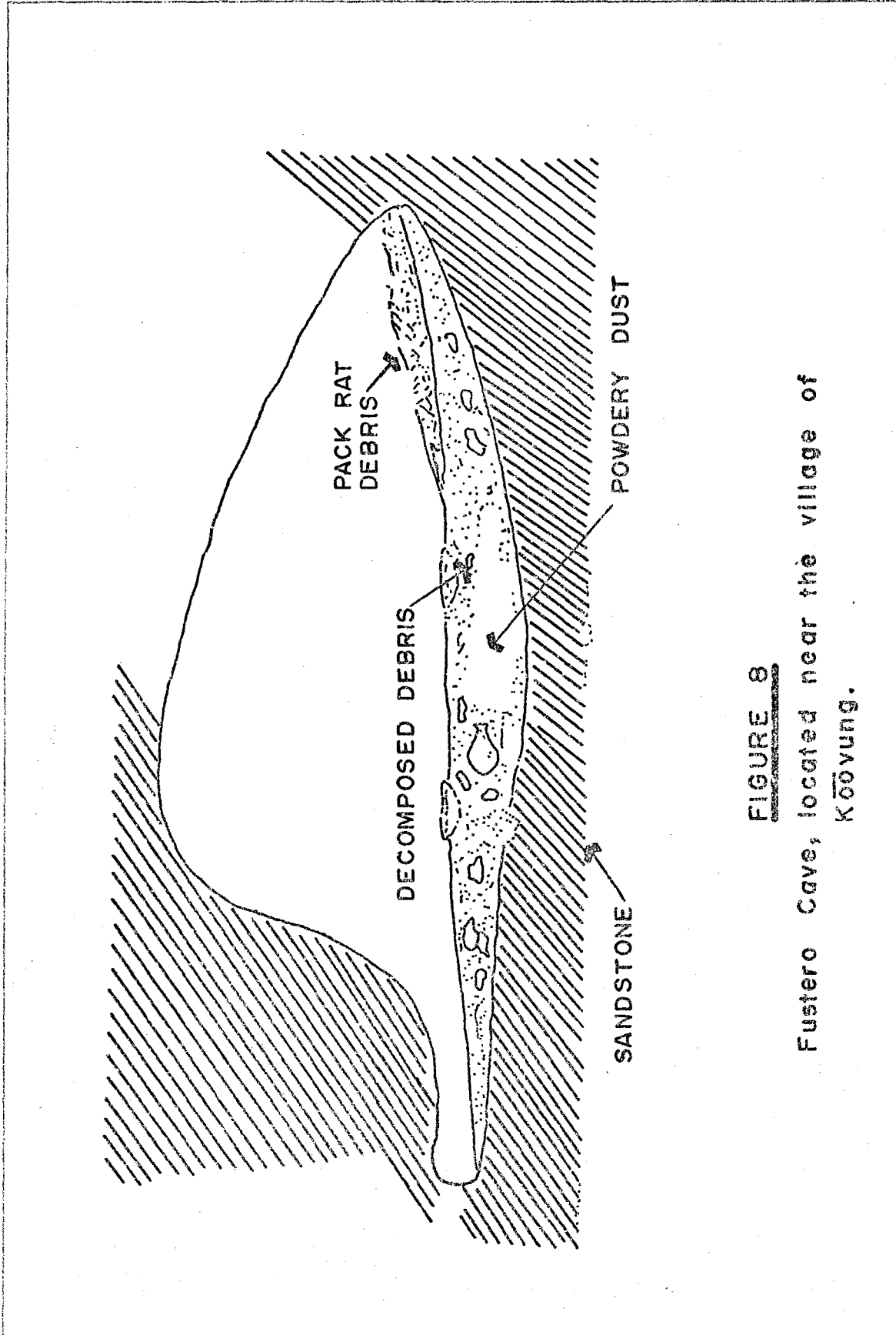
- a. Stones in debris
- b. Fill consisting of dry sand and dust, fallen sandstone roof particles, small burned and unburned sticks and twigs and pack rat nest debris
- c. Virgin sand
- d. Bedrock

Artifacts

- A. Coiled, asphalted basket bottom, 8" dia., depth 8"
- B. Coiled, asphalted basket fragments, depth 8"
- C. Coiled, asphalted basket bottom, 6" dia., depth 3"
- D. Twined basketry fragment, depth 4"
- E. Split bone, deer tibia, one joint hacked off, and stump heated. Asphalt present on stump, depth 5"
- F. Small pads of asphalt, depth 6"
- G. Scattered ash  
(no definite layer)

but he does not list any dimensions so it is hard to check as to what it was exactly, cave or rock shelter? Van Valkenburg's notes do not mention conducting any excavations at this location for it seems that the primary attraction was not excavation, but rather was a series of pictographs located against the back wall of the shelter. The notes describing these pictographs are among the materials missing from Van Valkenburg's files, however, local residents of the basin report that they were in three colors, red, white and black, and that a bullseye or sunburst was the predominant element. This cave was last reported intact in 1950; then sometime between 1950 and 1955 someone tried to remove the pictographs with dynamite and as a result blew the whole shelter and a substantial section of the overhanging cliff to "kingdom come."

Blue Point Cave 9 - or Fustero Cave (Figure 8) is not actually located at Blue Point proper but rather at a point seven miles from the mouth of Piru Creek. The cave is thought to be associated with the village of Kuvung and may have served the village as a storage unit. This cave was first revealed in 1933 by Joe Fustero, the eldest son of Juan Jose Fustero. It was not worked, however, until the 1935 field season thus explaining the reason why it was given a Blue Point designator. The cave entrance is over seven and a half m. wide which in



**FIGURE 8**  
Fustero Cave, located near the village of  
KooYung.

turn leads into a chamber of three and a half m. in depth by two and a half m. in height. The cave is located in a rather friable sandstone ledge sixty-eight m. above the creek level and only has one hazardous entrance requiring a 10 m. sheer drop from the top of the cliff; however, along the northern face of the cliff there is a tallus slide which could be covering the prehistoric entrance route to the cave. The excavation of this cave yielded the following impressive list of materials:

1. Basketry

Item 1. - Bottom of a small coiled basket or the cover for a storage basket. 6 rod bundle foundation. 5 coils to the inch. Piece is  $5\frac{1}{4}$ " in diameter. Active element is  $\frac{3}{32}$ " wide split bark. 7 stitches to the inch. Coil to left, clockwise, stitches interlock.

Item 2. - Bottom of a fine weave coiled basket. Fine grass bundle foundation. 12 coils to the inch. Active element is  $\frac{1}{16}$ " wide bark. 13 stitches to the inch. Reddish stain on one side of fragment. Coil to right, counterclockwise. Non-interlocking stitches. Piece is  $2\frac{1}{2}$ " in diameter.

Item 3. - Fragment of coiled basketry. 7 rod bundle foundation.  $\frac{1}{4}$ " in diameter. Active element is  $\frac{3}{32}$ " wide split bark. 7 stitches per inch. Asphalt on one side,  $3\frac{3}{4}$ " in diameter.

Item 4. - Fragment of coiled basketry. Same basket as #3. Piece is  $2\frac{1}{2}$ " in diameter.

Item 5. - Fragment of coiled basketry. Same basket as #3. Piece is  $2\frac{1}{2}$ " in diameter.

Item 6. - Fragment of coiled basketry. Same basket as #3. Piece is  $1\frac{1}{4}$ "x $\frac{3}{8}$ " in diameter.

- Item 7. - Fragment of coiled basketry. Same basket as #3. Piece is  $1\frac{1}{2}$ "x $\frac{3}{8}$ " in diameter.
- Item 8. - Fragment of asphalt covered basket. Weave - twilled twining. 8 vertical elements to the inch. 8 pairs of active elements to the inch. Decorative note on edge. Active element crosses over 3 passive elements instead of 2 and in one case crosses 4 passive elements. Active element split bark  $\frac{3}{32}$ " wide. Vertical rods  $\frac{3}{32}$ " diameter. Piece is  $1\frac{1}{4}$ "x2" in diameter.
- Item 9. - Rim fragment of heavy coiled basketry. Grass and split bark bundle foundation. Active element is split bark  $\frac{1}{8}$ " wide. Asphalt on one side. Stitches non-interlocking. Bundle  $\frac{3}{8}$ " diameter. Possible diameter of mouth of basket -  $12\frac{1}{2}$ ". Piece is  $7\frac{1}{4}$ "x $1\frac{1}{4}$ " in diameter.
- Item 10. - Rim fragment of heavy coiled basket. Bundle foundation. Piece was where coil ended to finish the rim. Coiling was to the right. Asphalt on what was the outside. Possible large storage basket. Bundle foundation  $\frac{7}{16}$ " diameter. Active element split bark  $\frac{1}{8}$ " wide. Non-interlocking stitches. 4 stitches per inch. Piece is  $10\frac{1}{2}$ "x $1\frac{1}{4}$ " in diameter.
- Item 11. - Fragment of heavy coiled basket. Grass bundle foundation.  $\frac{7}{16}$ " diameter. Active element is split bark  $\frac{1}{8}$ " diameter. 4 stitches to the inch. Non-interlocking stitches. Piece is  $5\frac{1}{4}$ "x2" in diameter.
- Item 12. - Fragment of storage basket. Bundle foundation.  $\frac{3}{8}$ " diameter. Large bundle  $\frac{3}{4}$ " diameter. Many different sizes of grass used in foundation. 1 piece of split bark in the grass of the large bundle. Active element split bark  $\frac{1}{8}$ " wide. Active element on large  $\frac{3}{16}$ " bundle. Non-interlocking stitches. Asphalt on one side. Piece is  $3\frac{1}{4}$ "x2" in diameter.
- Item 13. - Small fragment of coiled basket. Diameter of bundle foundation  $\frac{1}{2}$ ". Foundation is grass. Grass in bundle is quite uniform in size. Active element is  $\frac{1}{8}$ "



wide of split bark. Piece is  $2\frac{1}{4}$ "x $\frac{5}{8}$ " in diameter.

Item 14. - Large fragment of coiled basket. Grass bundle foundation is  $\frac{1}{2}$ " diameter. Active element is split bark  $\frac{1}{8}$ " wide. 5 stitches per inch. Stitches non-interlocking. Piece is  $10\frac{1}{2}$ "x $3\frac{1}{2}$ " in diameter.

2. Cordage (Indian hemp. All not fragments. Two strand left spiral twist.)

Item 15. - Fragment of net. Cord left spiral twist.  $\frac{1}{16}$ " diameter. 2" long.

Item 16. - Fragment of net. Cord 2 strand, left spiral twist  $\frac{1}{16}$ " diameter.  $1\frac{1}{2}$ " long.

Item 17. - Fragment of net. Cord 2 strand, left spiral twist,  $\frac{1}{16}$ " diameter. 2" long.

Item 18. - Piece of cord 2" long, 2 strand left spiral twist  $\frac{1}{16}$ " diameter.  $1\frac{1}{4}$ " long.

Item 19. - Fragment of net. Cord 2 strand, left spiral twist. Mesh is  $\frac{3}{8}$ ". 3"x2".

Item 20. - Fragment of net. 2 strand left spiral twist  $\frac{1}{16}$ " diameter. Mesh is  $1\frac{1}{4}$ ".  $1\frac{1}{2}$ " long.

Item 21. - Fragment of net. Cord 2 strand left spiral twist  $\frac{3}{32}$ " diameter. Mesh  $\frac{13}{8}$ " (?)

Item 22. - Fragment of net. Cord 2 strand left spiral twist  $\frac{1}{16}$ " diameter.  $2\frac{1}{2}$ " long.

(Specimens 17, 18, 20, and 22 are very brittle which was caused by asphalt or rat dung.)

3. Human Hair Cordage

Item 23. - Piece  $3\frac{1}{2}$ " long,  $\frac{7}{64}$ " diameter, 2 strand left spiral twist.  $3\frac{1}{4}$ " long.

Items 24-31. - Cordage 1/16" to 3/32" in diameter, 2 strand left spiral twist. 2" long.

Items 32-36. - Small pieces of hair cord. 1" long.

Item 37. - Bundle of hair cord braided. 12 strands. 3 groups of 4 strands each. 2 strand cords, left spiral twist 3/32" in diameter. Diameter of braid 3/8".

Item 38. - Small mass of hair. 1"x1".

Item 39. - Tassel of hair. 3 5/16" long. 1/4" diameter. 3" long.

Item 40. - Cord knotted on a feather. Black feather may be crow. Cord of Indian hemp, 2 strand left spiral twist, 1/16" diameter. Knot same as in above with quill of feather forming the "n" strand. 3 1/2" long.

#### 4. Bone

Item 41. - Bone awl. Cannon bone split lengthwise, leaving condyle to form handle. No doubt it is deer cannon. Length 4 7/8". Point is well shaped. Point starts to taper 1 1/4" from the point tip on one side and 1 1/2" on the other side.

Item 42. - Fragment of deer scapula. One edge has been rounded off. Shows evidence of having been rubbed to form a point at one end. 4 7/8" long, 1 3/8" at widest point.

Item 43. - Deer scapula. Unworked. 7 5/8" long. 4 3/4" wide at one end and 1 5/8" at the other.

Item 44. - Split bone, 6 3/8" long, unworked.

#### 5. Other Material

Item 45. - Split antler arrowflaker. 4" long, both ends rounded. One end quite smooth.

Item 46. - Fragment of antler. 2 prong, 6 1/4" long. 1 prong is 2 1/4" long, the other

is 2" long. One side has been shattered.  
Found shattered side up.

Item 47. - Fragment of wood. Use unknown.  
2 7/16" long; 2" wide and tapers to 1 1/2"  
wide, 3/8" thick and thins off at the  
edges.

Item 48. - Fragment of arrow cane 3 5/8"  
long, 3/8" in diameter, unworked.

Item 49. - Fragment of fibrous grass.  
4 3/4" long, fibers have been separated at  
one end.

Item 50. - Rock oyster shell. 2 1/2" diameter,  
is stained inside with iron oxide - red.

Item 51. - Small hammerstone. 1 3/4" long,  
1 1/8" in diameter. Very hard rock.

Items 52-55. - Three pieces of Grimes Canyon  
false obsidian. 2 blackish pieces, 1 gray.

Item 56. - Fragment of red rock. Grimes  
Canyon false obsidian.

Items 57-61. - Five fragments of desert tur-  
tle shell. 2" to 1 1/2".

Item 62. - Piece of fibrous grass. 7" long.

At the time of Van Valkenburg's excavation the midden  
on the floor of the cave averaged between twelve to twenty  
inches in depth and was composed of loose sandstone dust,  
pack rat nest materials and oak leaves and oak twigs.  
From the materials recovered it is safe to assume that the  
chief functions of this cave was storage; then considering  
the lack of European trade materials it is also safe to  
assume that its period of usage was in the prehistoric  
and not the historic past. Although, there was no mention  
of the method of excavation, it is safe to assume that

Van Valkenburg approached the cave from a stratigraphic point of view. However, the list of materials recovered does not mention at what depth and at what location these materials were found, so that it is impossible to formulate a sequence of cordage or basket weaving styles which could later be worked into some sort of time sequence.

The presence of flakes and awl points in the cave seems to indicate that storage baskets were probably repaired there at the beginning of each storage season most likely from the damage of rodent activity. Today this cave is seldom disturbed mostly because of its hazardous access; however, the pack rats have returned and they presently have a deposit of sixty to seventy-five cm. in depth in the back part of the cave.

The Ellis Apiary forms the southern extent of what is known as the Piru Creek Gorge. The Gorge is a twisting, steep-walled channel about five miles in length - it lacks any valley flats suitable for campsites so that if it was used its only function would have been as either an effective border or as a portage between the middle and lower portions of the Piru Creek Drainage Basin. At the northern entrance of the Piru Creek Gorge is an open valley flat known as Frenchmen's Flats. The ecozone of the Frenchmen's Flats region indicates an excellent early spring gathering area. There are also reports that a large village site was once located here, however, there were no

baptisms in the records of Mission San Fernando attributed to it. Today the site no longer exists, having been lost first to the construction of U.S. Highway 99 and more recently to U.S. Interstate 5.

Three miles north of the entrance to the Piru Creek Gorge are Bridgeport Flats and the Pyramid Rock Reservoir. Properly speaking Bridgeport Flats is a part of the middle portion of the Piru Creek Drainage Basin and thus outside of the area of concern for this Project; however, since it was the only undisturbed site locality encountered, I have included here in an attempt to clear up some of the questions which the site locations of the lower portion can not answer.

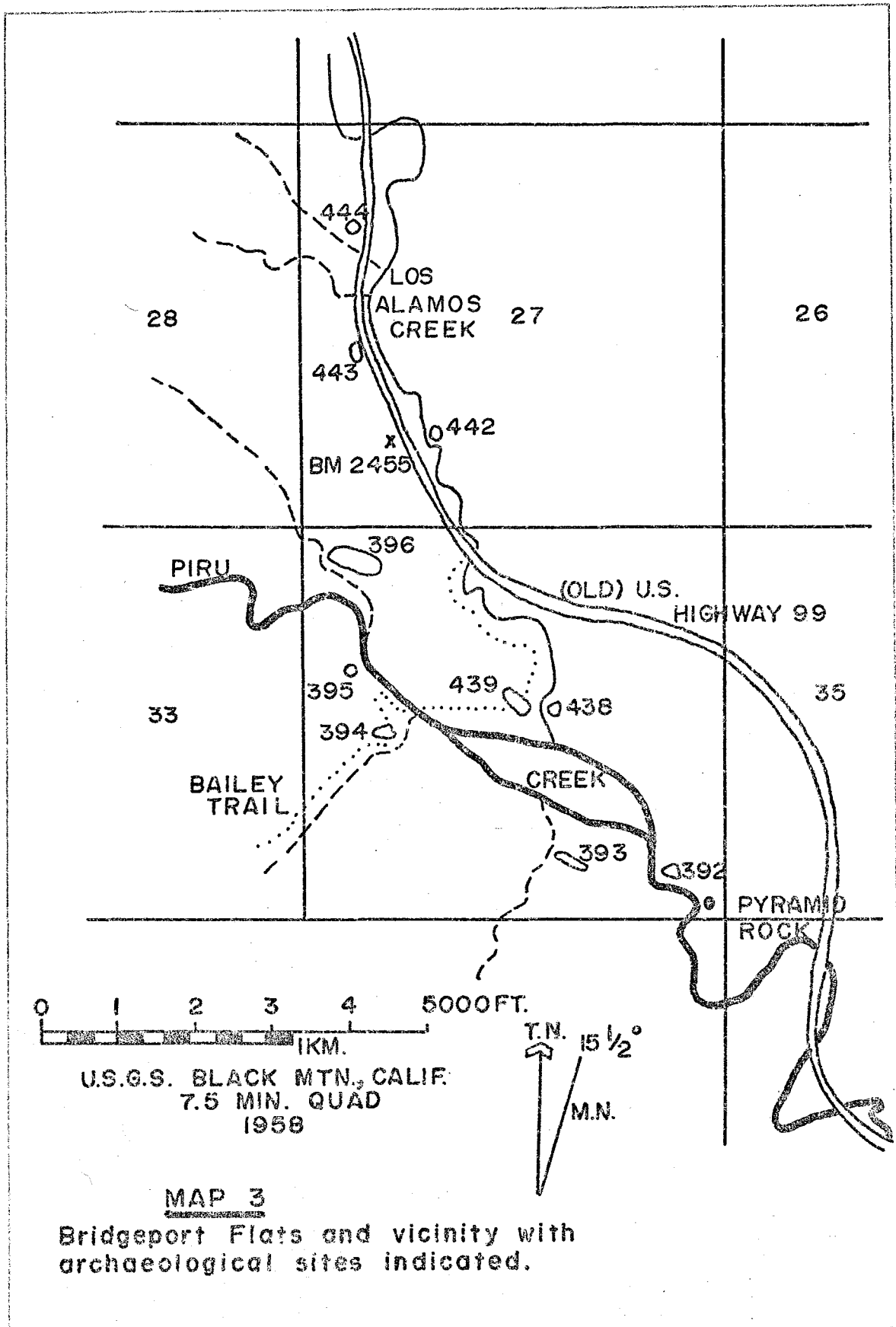
Bridgeport Flats can be located on Piru Creek at a point about sixty miles northeast of Los Angeles proper. It is a small valley flat which comprises a land area of approximately three-quarters of a mile (east-west) by one and one-quarter miles (north-south) at its widest and longest extensions, and may be defined as that area bound on the south by Pyramid Rock, the existing Interstate 5 on the east, the mouths of Canada Los Alamos and Charlie Canyon on the north and by the mouth of Beartrap Canyon on the west.

Field work at Bridgeport Flats was conducted during the late fall of 1971 and early spring of 1972 by a team of archaeologists working under contract for the State of

California, Department of Parks and Recreation and the United Metropolitan Water District of Los Angeles. In the course of the field work we located and salvaged, as far as possible, a total of 10 archaeological sites. (Map 3) Most of our activities were confined to surface collecting.

A brief description each site, including size, location, collection procedure and any special features is given below:

Bridgeport Flats No. 1 (LAN-396) This site consisted of artifacts unevenly scattered over the surface of a long flat terrace at the base of a steep hill, northeast of and three to five m. above Carlos Canyon Creek at its confluence with Piru Creek. The site, which covered the entire terrace, measured 80x200 m. with the long axis running east-west. The site was covered with a moderately heavy concentration of chemise chaparral, much of it over two m. high. The entire terrace was measured and divided into 10x10 m. units with plastic surveyors tape at the four corners and cotton twine delimiting the sides. Each unit was collected (sometimes on hands and knees), material bagged and labeled as to unit of origin. A total of 142 complete units were collected, an area of over 14,200 square m. Some of the more obvious concentrations of material were detected during collection but no special features were noted.



Bridgeport Flats No. 2 (LAN-439) This site is similar to Bridgeport Flats No. 1 but occupies a terraced grassy hillside approximately 25 m. above Piru Creek and several hundred m. west of the confluence of Los Alamos Creek to Piru Creek. The areal extent of the material scattered on the terraces was estimated at 50x150 m. The site was collected by areas rather than with a 10x10 m. grid because of the surface disturbances caused by travelers and U.S. Forest Service personnel who crossed over the Bailey Trail and camped on the site many years. The northern portion of the site appears to have been disturbed some years ago, and an old garbage pit (about 8x12 m.) was located in the center of the southern area. The extent of site disturbance is best reflected by the total absence of projectile points and the highly dispersed condition of the artifacts (i.e., artifacts scattered over a wide area). No special features were noted.

Bridgeport Flats No. 3 (LAN-393) Consisting of scattered artifactual material running along the northwest edge of a long, flat (E-W) grassy terrace some 15 m. above and just southeast of Piru Creek. The west end of the terrace is cut by a small intermittent stream, and only a few artifacts were found on the west side of the resulting arroyo. Artifacts were distributed over an area measuring 25x200 m., nearly all of which were found adjacent to the edge of the terrace, from which Piru Creek



is hidden from view by tall dense chemise chaparral. The entire site, except for the small area west of the arroyo was collected using a 10x10 m. grid. No concentrations of material or special features were noted.

Bridgeport Flats No. 4 (LAN-394) Located on a series of high terraces beginning 20 m. above the west side of Beartrap Canyon Creek where it flows into Piru Creek from the southwest. A series of features were recorded including 16 bedrock mortars, ranging in size from 8 cm. diameter and 3 cm. deep to 22 cm. diameter and 20 cm. deep, all of which were located on a 3x6 m. sandstone outcropping in the NE quadrant of the site. A burned-rock feature (possible a small roasting oven) was located weathering out of the soil bank immediately east of the bedrock mortars. A third feature consisting of a pitted boulder (1x1.5 m.) with one bedrock mortar (13 cm. diameter and 9 cm. deep) was found approximately 10 m. south of the large bedrock mortar feature on the edge of the eroding bank.

The site measured 120x60 m. with the largest area running (N-S) along the edge of the highest terrace. Along this edge the terrace drops onto a small bench where the previous mentioned features were located. The edge of this slope was used as the N-S datum line. The site was collected in quadrants.

Bridgeport Flats No. 5 (LAN-392) Located at the

southeast end of Bridgeport Flats where Piru Creek enters into Piru Gorge, this site had been almost totally bulldozed away. It appeared that the top 0.5 plus m. of the site had been removed and a dirt road cut (SSW/NNE) across the site. A few dark soil areas were observed in fresh bulldozer cuts. North-South and East-West datum lines were laid out, and because the site was so disturbed it was collected in quadrants with each quadrant no larger than 20x20 m.

Bridgeport Flats No. 6 (LAN-438) was bounded on the west side by Los Alamos Creek and the east side by Piru Creek, and situated on a bench formed at the confluence of the two creeks. The entire bench, some 10 m. above the streams, was covered by chemise chaparral with two large junipers at the top of the steep west bank above Los Alamos Creek. A bulldozed dirt road ran NE/SW through the center of the site and down into and across Los Alamos Creek. This triangular site measured 30x30x30 m. To facilitate surface collecting, the edges of the road-cut were used as central datum lines (the road ran about 45° NE) bisecting the site into east and west halves. Stakes were laid out at 10 m. intervals along both edges of the road and a 10x10 m. grid was laid out from these stakes. Only two of the units are complete 10x10 m. squares (W3 and E3). A rock feature was observed eroding out of the western bank of the road cut, noted and later

excavated. This feature consisted of generally flat slabs of stone lining the walls of an excavated pit measuring less than 1x1 m. The east half of this feature had been destroyed by the road cut and careful excavation of the west half yielded no traces of burning, contained material or covering (lid, etc.). A storage pit is indicated but beyond that its function is unknown at the present time.

Bridgeport Flats No. 7 (LAN-395, 442, 443 and 444)

This was first thought to be one large site; however, it was decided that it was four sites made up simply of areas of thinly scattered lithic refuse. Bridgeport Flats No. 7a was located some 30 m. above the west side of Piru Creek on the same high terrace but about 60 m. northwest of Bridgeport Flats No. 4. The terrace was here blanketed by a thin cover of chemis chaparral. The site consisted of a very thin scatter of artifacts over a 20x20 m. area. The other three sites were located along Los Alamos Creek (just north of Bridgeport Flats) and were all covered by dense chemis chaparral. Bridgeport Flats No. 7b was located on a small bench 10 m. above the east side of Los Alamos Creek and consisted of artifacts scattered very thinly over a 10x10 m. area. Bridgeport Flats No. 7c was located 200 m. north of Bridgeport Flats No. 7b on a small bench just west of Los Alamos Creek. This site is bordered on the north by steep

slopes, and on the west and south by arroyos. Old U.S. Highway 99 cut through the eastern end of the site. Bridgeport Flats No. 7d was located 110 m. north of Bridgeport Flats No. 7c and consisted of material very thinly scattered over 200 square m. of 20° slope which dipped into the western side of Los Alamos Creek. A small intermittent stream ran across the southwest corner of the site. Because of the small size of these sites and the minimum yield of cultural items (less than 50 items per site) each was simply treated as one spatial unit with all material collected placed in one bag. (Actually Bridgeport Flats Nos. 7b, 7c and 7d were totally collected by an employee of the U.S. Forest Service who was not aware that discreet spatial information may have been lost not recording the exact physical location of individual artifacts on these very small, specialized activity, sites.

The material recovered from the Bridgeport Flats sites was organized into nine functional categories by Clay Singer<sup>9</sup> (personal communication) of the U.C.L.A. Archaeological Survey. For the most part the various functional categories reflect Singer's personal bias' in lithic tool analysis but lacking comparative collections for the region this bias is of little concern. Since most of the Bridgeport Flats collections are small (numbering less than 100 artifacts) and raw numbers would tend to confuse any comparative analysis, the various individual site col-

lections were taken as a single sample and the relative frequency of artifacts in each of the functional categories occurring at each site were computed as a percentage of the total sample. The tool types making up each of the functional categories were:

1. Grinding - mortars, pestles, monos, metates and abraders.
2. Pounding - angular and abrading (reused core) hammers, cobble hammerstones.
3. Projectile Points - arrow, atlatle (dart), and spear points.
4. Cutting - flake knives, biface knives and saws.
5. Chopping and Picking - choppers, chopping knives and saws.
6. Planning - scraper planes, pulping planes.
7. Scraping - utilized flake scrapers, retouched scrapers (convex, concave and straight), notches, denticulates, nosed and end scrapers.
8. Perforating - drills, reamers, beaks (becs) and piercing tools (percoirs).
9. Miscellaneous - gravers, burins, gouges, chisels, horned notches, and multi-function tools.

An analysis of the figures presented in Table 2 points to several well grounded assumptions. First the absence of a similarity in the ten sites negates the possibility that they represent relocations by an annually returning population. However, there does appear to be two specific site types, the base camp and the gathering site and the various examples of each of these types could be taken as relocations by annually returning populations.

The lack of caves in the vicinity of Bridgeport Flats might be proposed as an argument against calling some of the sites base camps, however, the storage pit associated with No. 6 seems to point towards some form of substitution storage unit. The fact that most of the middens associated with the various sites lacked depth is a very good argument for calling them seasonal gathering sites and their distribution over the valley flat may be explained through the assumption that proximity to water was a primary requirement for a desirable site location but the Piru Creek tends to have a meandering nature and often changes its course from year to year. Thus, in any given year a returning population might have found the previous year's site location was no longer suitably situated near enough to water so that they had to establish a new location. The climate of an area would also be an important factor governing the distribution of sites and their periods of occupation. By analyzing the climatological factors effecting Bridgeport Flats, and for that matter the whole region of the lower portion of the Piru Creek Drainage Basin, it will be noted that between the months of May and October the average temperature range is between 55 to 75 degrees (Figure 4), a range which is not only tolerable but also actually pleasant, mostly when it is compared to the temperature ranges for the same period of the desert to the east and the coast to the west. The

only argument which might be proposed, based on climatological information, is that the period between the months of May to October as indicated by Figure 3 corresponds with the period of least precipitation in the Piru Creek Drainage Basin. However, it should be pointed out that two of the side canyons associated with Bridgeport Flats contain spring fed creeks and thus are not dependent upon rain to continue flowing. Climatological data might also be used to fix the optimum period of occupancy of each site if it can be determined when and for how long each site would most benefit from the earliest and longest periods of daily sunlight. Even if the climatological situation were ideal and the sites were well watered and well sheltered they could never be used unless there were adequate food resources available in the area. By collecting and analyzing the various plant resources available only in the immediate vicinity of Bridgeport Flats thirty-six different species were identified and are listed with their uses and their respective gathering seasons (Table 3). By converting the various gathering seasons into a bar diagram (Figure 9) it becomes readily apparent that the period of the greatest diversity of plant resources available at Bridgeport Flats occurs from May through June. Many of the resources listed could, by themselves, support a small population for short periods of time, however, the best potential for a large population is only

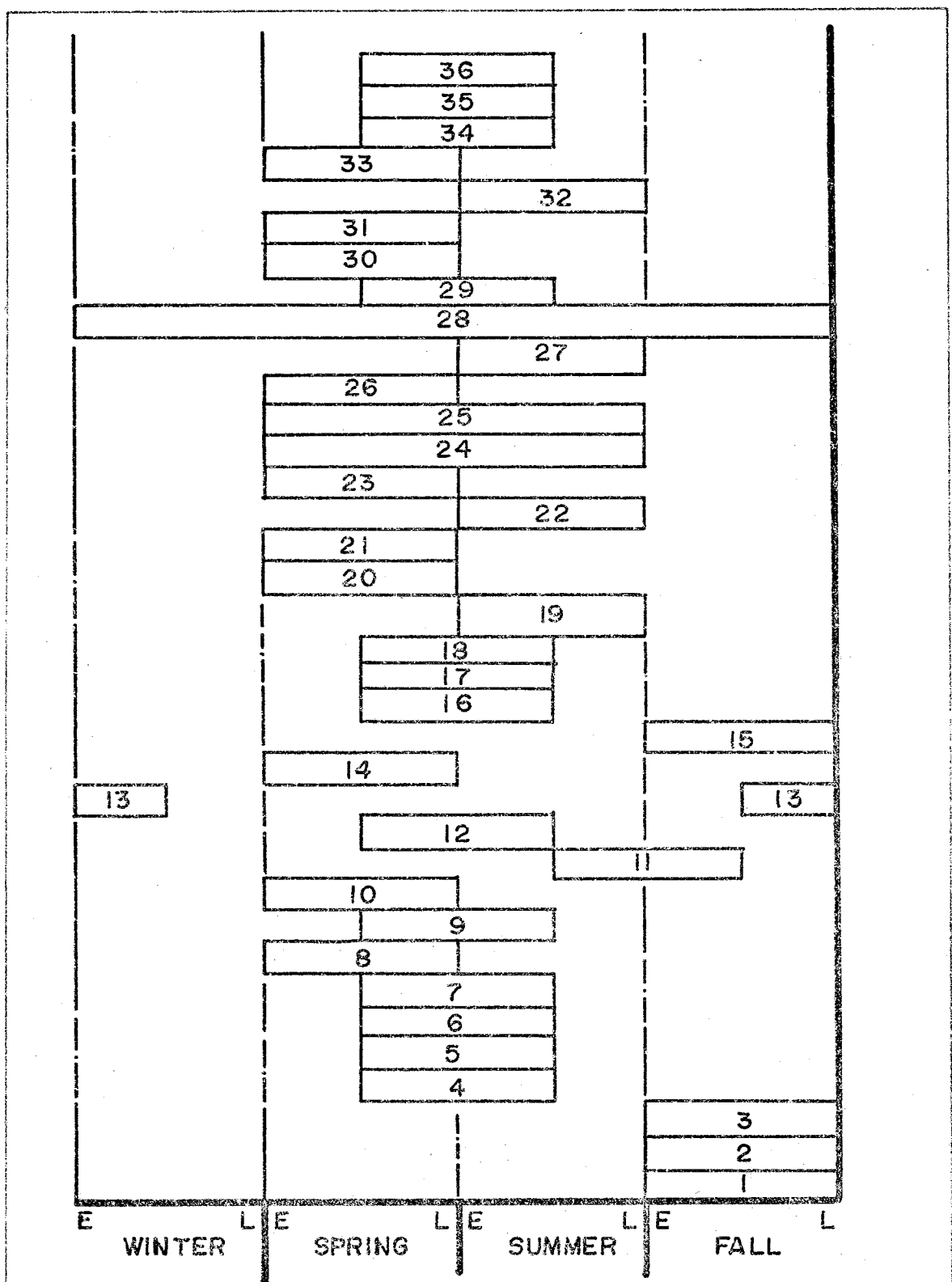


FIGURE 9

Bar graph of the gathering seasons of selected plant resources from Bridgeport Flats.



TABLE 3

## Plant Resources Associated with Bridgeport Flats

Resource	Use	Gathering Season
1. <u>Quercus dumosa</u> (scrub oak)	Acorns leached and eaten	Fall
2. <u>Quercus chrysolepis v. jepson</u> (goldencup, canon or maul oak)	Acorns leached and eaten, wood valued—strong, tough, and closely grained	Fall
3. <u>Quercus wislizenii</u> (interior live oak)	Acorns leached and eaten, galls thought to have a medicinal value	Fall
4. <u>Artemisia tridentate</u> (common sagebrush)	Seeds ground and eaten (questionable usage)	Spring/ Summer
5. <u>Salvia columbariae</u> (chia)	Seeds ground and eaten also used as fever remedy, and to neutralize alkaline water	Spring/ Summer
6. <u>Salvia apiana</u> (white sage)	Seeds ground and eaten used for eye medicine	Spring/ Summer
7. <u>Salvia leucophylla</u> (black/blue sage)	Seeds ground and eaten	Spring/ Summer
8. <u>Yucca whipplei</u> (Our Lord's Candle)	Pods and flowers boiled and eaten; stalks roasted and eaten immediately or stored, leaves made into fiber and pods used in bleaching	Spring
9. <u>Erigonum fasciculatum foliolosum</u> (wild buckwheat)	Seeds ground and eaten	Spring/ Summer

- |     |   |   |                   |
|-----|---|---|-------------------|
| 10. | <u>Arctostaphylos manzanita perrie</u><br>(manzanita)               | Berries and seeds eaten, medical use of the leaves, source of dye   | Spring            |
| 11. | <u>Elymus condensatus</u><br>(wild rye/giant redgrass)              | Seeds ground and eaten  | Summer/<br>Fall   |
| 12. | <u>Bromus carinatus v. californicus</u><br>(California brome grass) | Seeds ground and eaten  | Spring/<br>Summer |
| 13. | <u>Heteromeles arbutifolia</u><br>(toyon)                           | Berries roasted and eaten   | Fall/<br>Winter   |
| 14. | <u>Ceanothus crassifolius</u><br>(mountain lilac)                   | Seeds eaten, used as soap   | Spring            |
| 15. | <u>Juglans californica</u><br>(California black-walnut)             | Nuts eaten  | Fall              |
| 16. | <u>Juniperus californica</u><br>(California juniper)                | Fruit eaten   | Spring/<br>Summer |
| 17. | <u>Pseudotsuga macrocarpa</u><br>(big-cone spruce)                  | Nuts eaten  | Spring/<br>Summer |
| 18. | <u>Pinus sabiniana</u><br>(digger pine)                             | Nuts eaten  | Spring/<br>Summer |
| 19. | <u>Cerocarpus betuloides</u><br>(hardtack/mountain mahogany)        | Fruit eaten   | Summer            |
| 20. | <u>Rhus ovata</u><br>(sugarbush)                                    | Drink made from seeds, flowers eaten, and leaves used to make medicinal tea   | Spring            |
| 21. | <u>Rhus trilobata</u><br>(squaw bush)                               | Branchlets prized in basket making, berries eaten or made into beverage, stems prepared to aid coughs and lung trouble, a tonic | Summer            |

	was also made from it to aid loss of appetite	
22.	<u>Rhus laurina</u> (laural sumac)	Seeds made into drink Summer
23.	<u>Encelia farinosa</u> (brittle bush)	Seeds eaten Spring
24.	<u>Eriophyllum confertiflora</u>	Seeds eaten Spring/Summer
25.	<u>Eriodictyon californicum</u> (yerba santa)	Leaves used as medicinal tea Spring/Summer
26.	<u>Adenostoma fasciculatum</u> (chamise)	Medicinal use of bark and leaves Summer
27.	<u>Lupinus Sp.</u> (lupin)	Seed pods eaten Spring
28.	<u>Helianthus annuus</u> (common sunflower)	Seeds ground and eaten Throughout year
29.	<u>Prunus ilicifolia</u>	Seeds/fruit eaten Spring/Summer
30.	<u>Astragalus antiselli</u> (rattle-snake/loco weed)	Pods were pounded and added to food as a spice Spring
31.	<u>Eremocarpus setigerus</u> (turkey mullin)	Fish poison, and medicinal use of leaves Spring
32.	<u>Sambucus coerulea</u> (elderberry)	Berries cooked into sauce, bark and flowers used medicinally Summer
33.	<u>Calochortus nuttallii</u> (mariposa lily)	Corn eaten Spring
34.	<u>Brodiaea capitata</u> (blue dicks)	Corn eaten, used as a shampoo Spring/Summer
35.	<u>Nicotiana Sp.</u>	Smoked and chewed Spring/

(tobacco)		Summer
36. <u>Populus trichocarpa</u> (black cottonwood)	Twigs prized to make the warp sticks for twined baskets; also reported to be used as a love medicine, roots used to make baskets	Spring/ Summer

Selected medicinal plants associated with Bridgeport Flats, but which lack specific gathering seasons:

Datura meteloides (Jimson Weed or Toloache) a liquid which was chiefly used during puberty rites because of its hallucinogenic effect was fermented from the plant's seeds. Also a liquid was brewed from the crushed root as a cure for rattlesnake and tarantula bites and the leaves were dried and smoked as a cure for asthma. (The effective use of Toloache depended upon the patient having a strong heart).

Eremocarpus setigerus (Turkey Mullein or Dove Weed) the whole plant was crushed and used in well-dammed streams as a fish poison, the fresh leaves were crushed into a poultice which was applied as a counterirritant for internal pain or asthma, the stems were brewed into a tea for chills and a poison for arrows is also reported to have been made from an unknown portion of the plant.

Arbutus menziesii (Madrone) a tea was brewed from the root bark and leaves for colds and from the dry trunk bark for stomach-aches.

realized during the months of May and June.

It is unfortunate that the archaeological resources of the lower portion of the Piru Creek Drainage Basin are not as intact as those of the upper and middle portions since recent field work in the Hardluck Valley has revealed a thirty site complex with much the same distribution pattern as was found at Bridgeport Flats. The only thing lacking in the Bridgeport Flats and Hardluck Valley site complexes are the large village sites, however, there are large major village sites located at each end of the drainage basin in the area contiguous to the mouth of Piru Creek to the south and in the vicinity of Fort Tejon to the north. The farthest northern boundary of the Alliklik is thought to be on the southern shore of Quail Lake near Tejon Pass; however, very little field work has been conducted in that area so that it is presently impossible to confirm this suspicion (Kroeber 1915).

## CONCLUSION

An analysis of the topography of the Piru Creek Drainage Basin clearly indicates that the area forms a unique environmental zone with at least two hundred years of relatively stable climatic conditions. However, what is not so readily apparent is the extent of damage which two hundred years of non-aboriginal utilization has created in the area. Over-grazing has either totally replaced native plant communities or forced them into marginal areas of the drainage basin. Over-grazing is chiefly responsible for most of the area's present erosion activity. The introduction of domestic animals and the policies of open range grazing have seriously pressured the area's native faunal populations to the point that although most of the species which were thought to have been present in prehistoric times are still present but no longer in the distribution and numbers which they formerly enjoyed. The attempt to harness the flood-prone Piru Creek is directly responsible for the loss of one of the most important archaeological zones within the drainage basin, since the Santa Felica Dam's construction was a county project at a time when there were no provisions for the protection of our archaeological resources. Today such provisions are still far from adequate, however, the

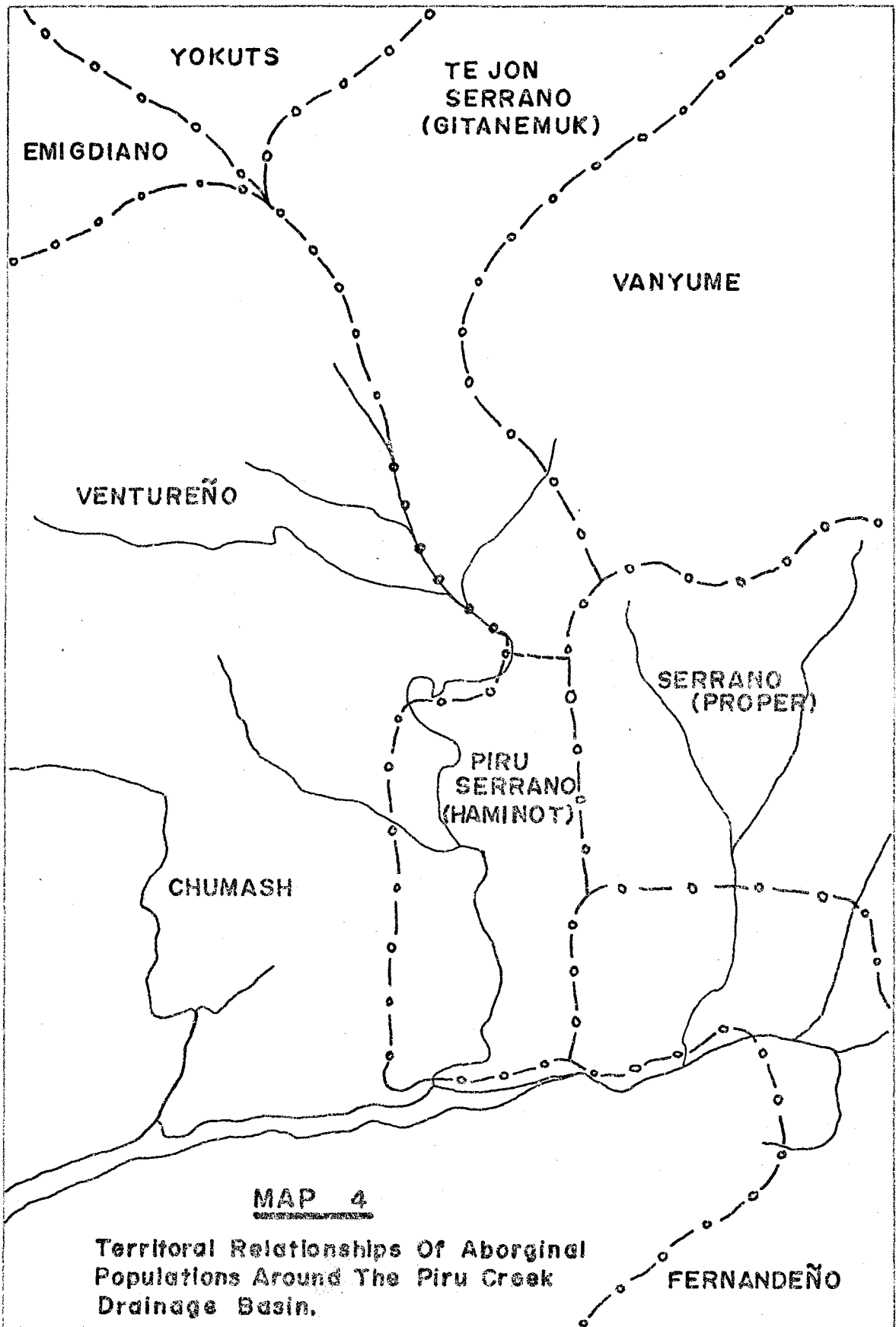
two subsequent reservoirs planned for the Piru Creek have at least been preceded by salvage projects. At present the Piru Creek Drainage Basin is still in danger mostly as a result of urban pressures from the population centers of the three California counties within which it is located. There is an increasing demand upon the area to develop more water storage facilities for agricultural and industrial purposes and also to develop more accessible and diversified recreational areas for these population centers. The end result will be that undisturbed portions of the Piru Creek Drainage Basin which had formerly been inaccessible to great numbers of people will be open to what is essentially a destructive process.

Historically the Piru Creek Drainage Basin was one of the first areas of Ventura County to experience long, sustained contact with the earliest Spanish explorers. From the journals and records of these first Europeans it is evident that at the time of contact the area was occupied by a stable, indigenous aboriginal population. However, the population succumbed very rapidly to the effects of missionization so that by 1830, for all practical purposes, the indigenous aboriginal population had been disseminated into other areas. The mission records for this period are still an untapped source of data - when they are completely translated and organized into a workable form they will, in all probability, show that the aborig-

inal population of the Piru Creek Drainage Basin was never as large as we have been led to believe but rather was a very small closely related population.

Ethnographically it appears that the Piru Creek Drainage Basin was occupied by a relatively distinct population, the Alliklik. Based on information collected in other areas of Southern California it can be assumed that the Alliklik were part of a Shoshonean-speaking invasion which entered through the desert regions of the state sometime around the first century A.D., this is evident from Map 4 where the Alliklik form a sort of a buffer zone between Shoshonean and non-Shoshonean-speakers. The area was heavily worked by ethnographic researchers from the 1890's to the early 1930's - who had an opportunity to collect information from many first hand sources. However, most of the material which they collected was never published and a good percentage has been lost. Regardless of this loss is the fact that most of these men so alienated their informants that subsequent attempts to reconstruct this early data have failed. One particularly knowledgeable informant refused to even see me because in 1927 she had indicated to an ethnographer the locations of various village and cemetery sites only to later find this individual had dug up and removed her own parents' graves. One fact upon which most early researchs in the area seem to agree, is that the Shoshonean-speaking





**MAP 4**

**Territorial Relationships Of Aboriginal Populations Around The Piru Creek Drainage Basin.**

invasion did not replace the dominantly coastal dwelling Hokan-speaking Chumash. Rather, they seem to feel that the Shoshonean-speakers replaced a more archaic population, probably members of the so-called "Milling Stone Cultures" which have been credited with some of California's earliest aboriginal occupations. It appears fairly certain that the Chumash did not occupy the Piru Creek Drainage Basin until after 1830 when the Alliklik had been removed as a result of missionization, and it is also fairly certain that their occupation was shared by members of other California aboriginal groups. The fact that missionization tended to give the California aborigine a cultural level similar to that of the Mexican peon is important since with the breakdown of the mission system we also see a breakdown in aboriginal tribal organizations. In fact, several questions which we can seriously ask and for which at present there is little hope of gaining answers are: to what degree was the California aborigine Hispanized, what was his legal and social status after secularization and to what extent does Hispanization effect aboriginal cultures. For example many informants provided Spanish words for various aboriginal cultural items and traits and also many of them gave as items and traits of aboriginal culture items and traits which were actually parts of Mexican culture. Another example was the treatment given to Juan Jose Fustero when he appeared

in the Ventura County Court on a charge of drunkenness, the question was not that liquor was sold or consumed by an Indian but rather that an individual was drunk - in fact even though Fustero could speak English the judge made a special effort to arrange for a Spanish-speaking translator. This incident, however, occurred rather recently and at a time when the Fustero family were not only the last aboriginal occupants of the Piru Creek Drainage Basin but also very probably the last aboriginal occupants of Ventura County.

Archaeologically the Piru Creek Drainage Basin presents information which does not clarify but actually further confuses the historical and ethnographical record. The region has long been known as a productive area for "Indian artifacts" and most of the archaeological sites in the area were "looted" in one way or another before 1940. Then after 1940 most of these same sites were destroyed, so that it is impossible to adequately reconstruct a full picture of the area's prehistoric utilization. We can, however, say that the area seems to conform to a general Shoshonean model as seen in other parts of Southern California (Hanks 1971, Strong 1929). This model is characterized by a single or several large village sites which served as ceremonial centers and semi-permanent winter habitation locations. The large villages are in turn complemented by a series of seasonal site clus-

ters, usually made up of a central base camp and numerous gathering stations. It appears that the population utilized a well defined territory over which they moved in a seasonal pattern. The pattern of movement was probably regulated to the availability of plant and water resources. Since the territory in question was small and well confined, it can be further presumed that the population visited certain locations more than once during the course of a year. The location of the major villages at the confluence of the Piru Creek and the Santa Clara River also indicates that another important activity of these villages may have been trading. It is a known and well accepted fact that the Santa Clara River Valley was once the main trading artery between the coastal and interior zones of this region of California. Therefore, it is not out of the question to assume that the villages of the Piru figured in this trade network. No excavations were conducted as part of this research but considering the present degree of disturbance in the area, it is doubtful whether they could have yielded any useful information. The analysis of local artifactual collections could have been used to fill gaps lacking through excavation, however, most local collections lack proper provenience so that they cannot be effectively organized into a local typology.

At best this research presents nothing but specu-

lative conclusions based upon very fragmented information. The degree of destruction experienced by the Piru Creek Drainage Basin is hopelessly complex and far beyond the point of the reversal or retrieval of worthwhile data. The Alliklik, if they ever did exist or if they were ever the prehistoric occupants of the area, are forever lost to us save for the meager information yet to be learned in the Mission Records. Therefore, if anything worthwhile can be said of this research, it is that it cries out like "a voice in the wilderness" against the insensitive and destructive treatment of our diminishing archaeological resources, and it points to the need for more understanding and stronger laws to not only protect and preserve but to explore the fragile pages of our archaeological past.

## NOTES

1. The footnoting and bibliography in this paper conform to the style established and used by American Antiquity, the journal of the Society for American Archaeology.
2. Mr. Dale King, Reasoner Canyon, Piru, California.
3. Properly speaking the lower portion of the Piru Creek Drainage Basin cannot be considered historically or ethnographically outside of the context of the Santa Clara River Valley.
4. The word Beneme occurs frequently in the literature, however, its derivation and meaning at present is unknown.
5. This term also appears as "l'at'ap'alliklik" in Van Valkenburg (1935:4) and as "l'alliklik" in the plural in Kroeber (1925:614).
6. These answers were translated from the original Spanish Respuestas, located in the Santa Barbara Mission Archives. English translations of these Respuestas can also be found in each of Fra Zephyrin Engelhardt's books on the California missions.
7. M. refers to meters.
8. Cm. refers to centimeters.
9. Clay Singer, University of California at Los Angeles Archaeological Survey.

## BIBLIOGRAPHY

BOLTON, HERBERT E. (ed.)

1925 Spanish Exploration in the Southwest: 1542-1706. C. Scribner's Sons, New York.

1926 Historical Memoirs of New California by Fra Francisco Palou O.F.M., Vol. 2. Russell and Russell, New York.

BOULTON, HENRY E.

1930 Anza's California Expeditions, Vol. 1. University of California Press, Berkeley.

CARMAN, MAX FLEMING, JR.

1964 Geology of the Lockwood Valley Area, Kern and Ventura Counties. California Division of Mines and Geology Special Report, No. 81. Sacramento.

CORDOVA, SIMON

1956 Geology of the Piru Area, Ventura County, California. Unpublished Masters Thesis. Department of Geology. University of California, Los Angeles.

COUES, ELLIOTT (ed.)

1900 On the Trail of a Spanish Pioneer: Fra Francisco de Garcés, Vol. 1, E.P. Harper, New York.

EDWARDS, RONALD D., DANIEL R. RABEY AND RICHARD W. KOVER

1970 Soil Survey of the Ventura Area, California. United States Department of Agriculture, Soil Conservation Service. Washington, D.C.

ELSASSER, ALBERT B. AND ROBERT F. HEIZER

1963 The Archaeology of Bowers Cave, Los Angeles, California. University of California Archaeological Survey Report No. 59. Berkeley.

## ENGELHARDT, FRA ZEPHYRIN, O.F.M.

- 1915     The Missions and Missionaries of California.  
James H. Barry Co., San Francisco.
- 1927     San Fernando Rey: The Mission of the Val-  
ley. Franciscan Herald Press, Chicago.
- 1930     San Buenaventura: The Mission by the Sea.  
Schauer Printing Studio, Inc., Santa Bar-  
bara, California.

## FORBES, JACK D.

- 1966     The Tongva of Tujunga to 1801. University  
of California at Los Angeles Archaeological  
Survey Annual Report, Vol. 8, pp. 137-150.  
University of California, Los Angeles.
- 1969     Native Americans of California and Nevada.  
Naturegraph Publishers, Healdsburg, Calif-  
ornia.

## FREEMAN, VERNON M.

- 1968     People-Land-Water: Santa Clara Valley and  
Oxnard Plain, Ventura, California. Lorrin  
L. Morrison, Publisher, Los Angeles.

## GREENWOOD, ROBERTA S. AND ROBERT O. BROWNE

- 1969     A Coastal Chumash Village: Excavation of  
Shisholop, Ventura County, California.  
Memoirs of the Southern California Academy  
of Science, Vol. 8, Los Angeles.

## GUINN, JAMES MILLER

- 1901     Historical and Biographical Record of  
Southern California. Chapman Publishing  
Co., Chicago.

## HANKS, HERRICK E.

- 1971     The Archaeological Survey of Vasquez Rocks:  
A Site Locality in the Upper Santa Clara  
River Valley Region, Los Angeles, Calif-  
ornia. Unpublished Masters Thesis. Depart-  
ment of Anthropology. California State  
University, Northridge.



## HARRINGTON, JOHN P.

- n.d. Ethnographic and Linguistic Field Notes. Manuscript on file at the Smithsonian Institute, Washington, D.C.

## HERSHEY, OSCAR H.

- 1902 The Quaternary of Southern California. University of California Department of Geological Science Bulletin, Vol. 3, pp. 1-29.

## KROEBER, ALFRED LEWIS

- 1904 The Languages of the Coast of California South of San Francisco. University of California Publication in American Archaeology and Ethnology, Vol. 2, No. 2, pp. 29-80, Berkeley.
- 1907 Shoshonean Dialects of California. University of California Publication in American Archaeology and Ethnology, Vol. 4, No. 3, pp. 65-165, Berkeley.
- 1908 A Mission Record of the California Indians. University of California Publication in American Archaeology and Ethnology, Vol. 8, No. 1, pp. 1-27, Berkeley.
- 1915 A New Shoshonean Tribe in California. American Anthropologist, Vol. 17, pp. 773-775.
- 1925 Handbook of the Indians of California. Bureau of American Ethnology, Bulletin No. 78. Washington, D.C.

## LAMB, SYDNEY M.

- 1964 The Classification of the Uto-Aztecan Language: A Historical Survey. University of California Publications in Linguistics, Vol. 34, pp. 106-125, Berkeley.

## LYNCH, HENRY B.

- 1931 Rainfall and Stream Runoff in Southern California Since 1769. Manuscript on file at Metropolitan Water District of Southern California, Los Angeles.

NELSON, J.W.; W.C. DEAN; A.E. KOCHER; E.B. WATSON AND  
E.J. CARPENTER

- 1920 Soil Survey of the Ventura Area, California.  
U.S. Department of Agriculture, Bureau of  
Soils Field Operations - Advance Sheet.  
Washington, D.C.

PRIESTLEY, HERBERT INGRAM (trans.)

- 1937 A Historical, Political and Natural Descrip-  
tion of California by Pedro Pages, Solider  
of Spain. University of California Press,  
Berkeley.

SMITH, DONALD E. AND FREDERICK J. TEGGART

- 1909 Diary of Gaspar de Portola During the Calif-  
ornia Expedition of 1769-1770. Academy of  
Pacific Coast History Publications, Vol. 1,  
No. 3, pp. 30-100, San Francisco.

SMITH, NELSON

- 1910 A Translation of the Costanso Diary of the  
California Expedition of 1769-1770. Un-  
published Masters Thesis. Department of  
History. University of California,  
Berkeley.

STORIE, RAYMOND E. AND WILLIAM W. WEIR

- 1941 Key To The Soil Series of California.  
University of California Press, Berkeley.

STRONG, WILLIAM DUNCAN

- 1929 Aboriginal Society in Southern California.  
University of California Publications in  
American Archaeology and Ethnology,  
Vol. 26, Berkeley.

TROXELL, HAROLD C. AND WALTER HOFMANN

- 1954 Hydrology of the Los Angeles Region.  
California Division of Mines, Bulletin  
No. 170. Sacramento.

## WHEELER, GEORGE M.

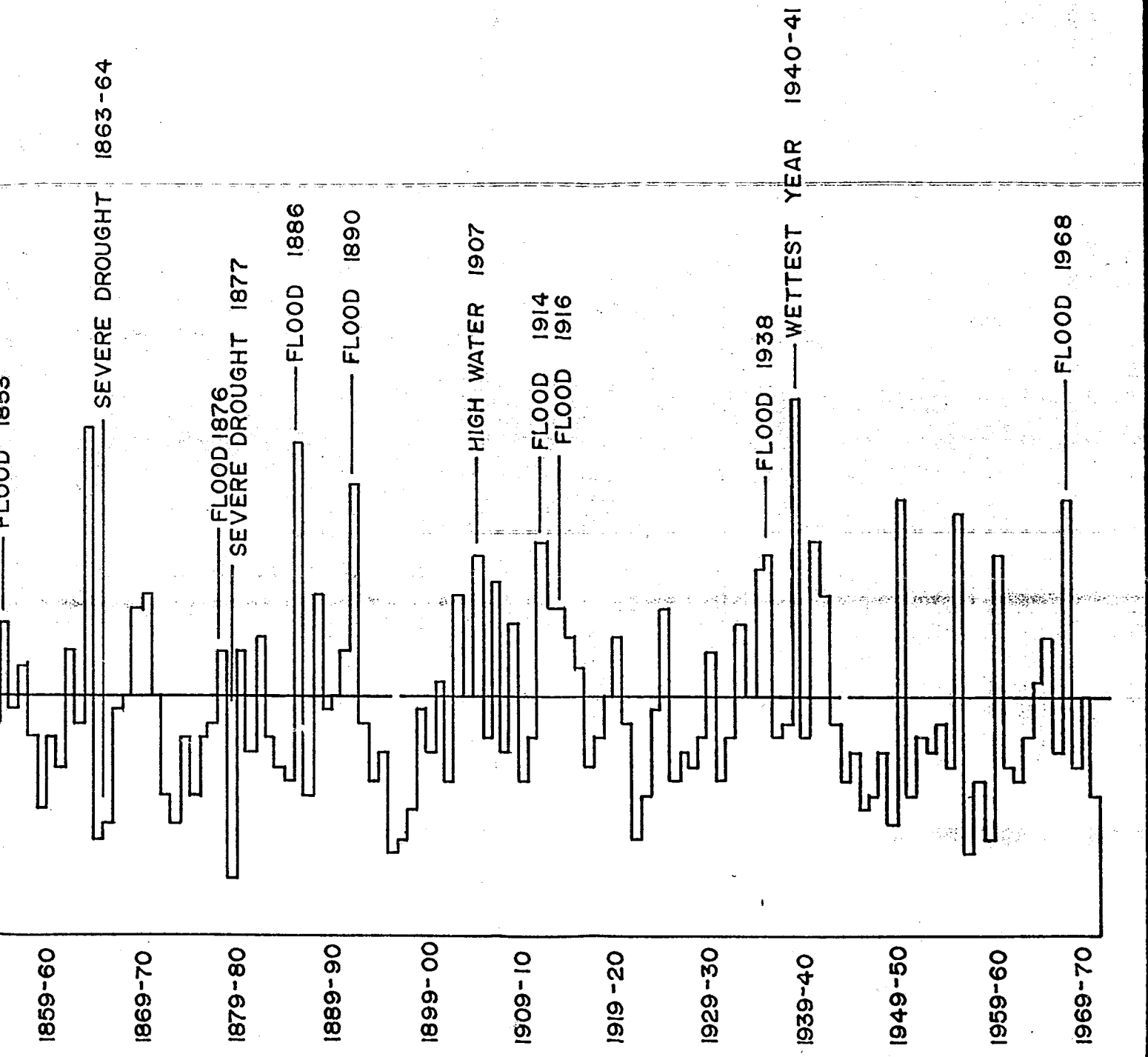
- 1879      Report Upon United States Geographical Sur-  
veys West of the One Hundredth Meridian,  
Archaeology. Publication of the United  
States Army Engineer Department, Washington,  
D.C.

## VAN VALKENBURG, RICHARD F.

- n.d.      1932 to 1936 Field Notes of Museum Activity  
in the Piru Region of Ventura County. Los  
Angeles County Museum of Natural History.
- 1935      Notes on the Ethnography and Archaeology of  
the Ventureno Chumash Indians. Manuscript  
on file at the National Anthropological  
Archives, Smithsonian Institute, Washing-  
ton, D.C.

FIGURE 1

of precipitation data collected from the Piru Creek Drainage Basin.



SITES	SAMPLE SIZE	SITE SIZE (METERS)	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	FEATURES	CORES	FLAKES
			GRINDING	POUNDING	PROJECTILE POINTS	CUTTING	CHOPPING, PICKING	PLANING	SCRAPING	PERFORATING	MISC.			
396	397	80 x 210	3.0	10.0	3.5	15.0	4.0	2.5	45.0	11.0	6.0	POT SHERD	302	3136
439	98	50 x 150	1.0	8.0	-	20.5	4.0	7.0	43.0	9.0	7.0	HIGHLY DISTURBED SITE	21	211
393	48	25 x 200	6.5	6.0	6.0	23.0	-	-	48.0	-	10.5	_____	8	134
394	97	50 x 100	8.5	4.0	6.0	17.5	4.0	4.0	44.5	10.5	1.0	BEDROCK MORTARS CUPULES, OVEN	13	258
438	16	40 x 40	12.5	-	12.5	12.5	12.5	6.0	18.5	6.0	18.5	ANVIL STORAGE PIT	6	83
392	55	?	INVALID SAMPLE									SITE DESTROYED	20	67
395	4	10 x 20	25.0	-	-	25.0	-	-	50.0	-	-	_____	2	3
442	-	10 x 10	-	-	-	-	-	-	-	-	-	_____	-	11
443	2	15 x 15	-	-	-	50.0	-	-	-	-	50.0	_____	2	16
444	9	10 x 20	-	-	-	22.0	-	11.0	55.5	-	11.0	_____	1	36

TABLE 2

Tool Frequencies at Selected Bridgeport Flats sites.