

## **CHAPTER 2**

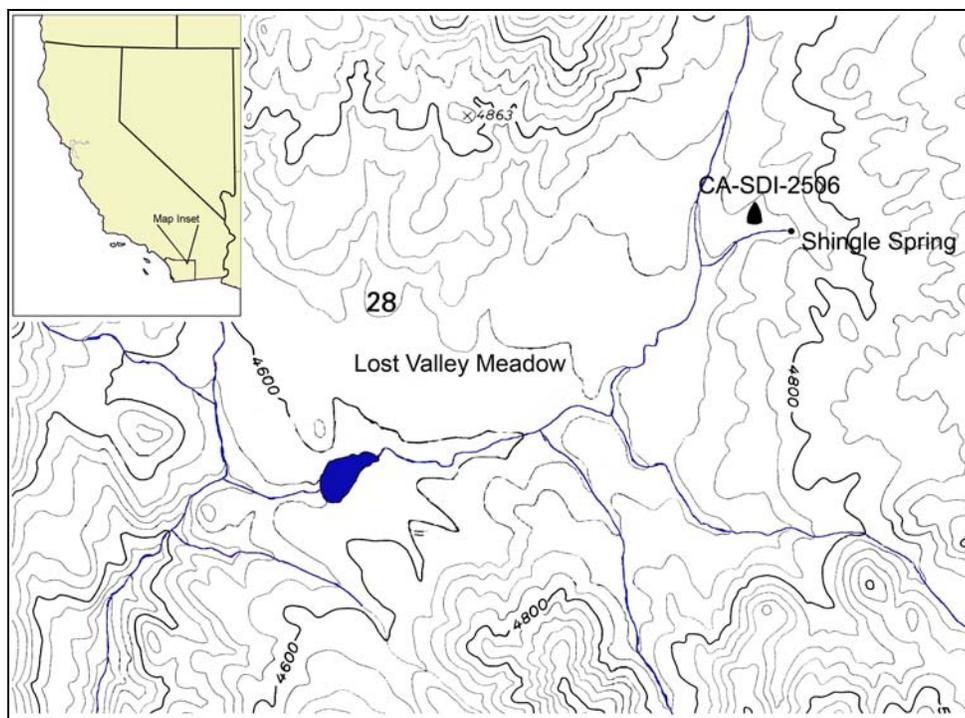
### **BACKGROUND**

#### **PROJECT**

The end of the trail is literally Lost Valley, an oasis beautiful by any standard. Lost Valley is a high, remote sheltered valley located in the north-central portion of San Diego County, in southern California (Fig. 1). Mountains at the rim of the valley encompass a meadow that may be the remnant of a Pleistocene lake at the center of the valley floor. To the east, the mountains give way in steep descent to the desert oasis of Borrego Springs. The prehistoric inhabitants likely came to Lost Valley because of the abundance of oak trees of various species, spring water available year round, and the animals that were attracted to food sources found at this oasis.

Archaeological field schools were conducted at Lost Valley for seven summer sessions from 1997-2003 through San Diego State University (SDSU) under the tutelage of Dr. Larry Leach (then head of the Anthropology Department, now Professor Emeritus). I participated in the field school for the summers of 2002 and 2003, and also completed the preliminary laboratory work on the excavation materials from the 2002 and 2003 field sessions in the semesters following those field sessions. Laboratory work consisted of cleaning, sorting, identifying, and cataloging all the materials brought back from the field and was also conducted under the advisement of Dr. Larry Leach. For Dr. Leach, it is of the utmost importance that all materials that were collected, and that have now been cataloged, be analyzed and published as part of the archaeological record. Without publication and availability, there is no archaeological record.

In response to this call to action, several graduate students have used the materials from the excavations at Lost Valley as the foundation of their master's theses. For example, George Kline wrote a thesis presenting the analysis of the contents of the excavations from Lost Valley (CA-SDI-2506, CA-SDI-2507, CA-SDI-2508, and VS-766C). In April 2008 he defended his thesis entitled "Metates to Merit Badges: The Contrasting Occupational Sequences of Lost Valley" (Kline 2008).



**Figure 1. Location of Lost Valley, California and site CA-SDI-2506 (The Bog Site).**

In addition, three other theses have been completed using the excavations as the data and knowledge base. “Life at 5000 Feet: An Archaeological Investigation of CA-SDI-2508 (Leaning Pines), Lost Valley, San Diego County, California,” a thesis by Kaylene Fleming (1999), presents a complete analysis of the artifacts excavated from the Leaning Pines site at Lost Valley. The Leaning Pines site is a stone’s throw from CA-SDI-2506, the Bog Site excavation (Kline 2008). Shasta Gaughen’s 2002 thesis, “The Ethnobotany of the Cupeño,” (Gaughen 2002), combines data from the field schools with interviews of Cupeño elders about plant use in the Lost Valley area. In 2005, John Simmons completed his thesis, “An Analysis of Function at Several Late Prehistoric Sites in Lost Valley, California” (Simmons 2005), in which he tested a hypothesis of the settlement systems of Lost Valley through statistical analysis.

### **CULTURAL BACKGROUND: THE CUPEÑO PEOPLE**

According to ethnographic data, members of one of the Cupeño clans (*temewhanitcem*) made a seasonal trek from the main village at Cupa (or *Kupa*), near the modern town of Warner Springs, California, to Lost Valley (APEC 1981; Pignolio 1999;

Strong 1929). Oral tradition indicates that there were three original Cupeño clans: the *kavalim*, the *pumtumatulnikteum*, and the *temewhanitcem* (Strong 1929:186, Table 8). Duncan Strong names three more clans that lived at Cupa and two more that occupied *Wilikal*; all five of these clans are of the wildcat moiety and are therefore related to the women who had to marry outside of their clan of birth. The three Cupeño clans are of the coyote moiety (Strong 1929:186, Table 8). I will show the relationships of these clans through the telling of the following story.

“The Cupas say they have lived in the vicinity of the hot springs in San Jose Valley from time immemorial and that it is their homeland and that of their ancestors...Yet there was a time when they first came to the area” (Almstedt 1981:33). The story of culture hero *Kisily Pewik*, from Cupeño oral history, is told in two versions in Hill and Nolasquez (1972). In the second version, Kisily’s mother is Diegueño, married to a Kavalym man at Cupa. Diegueños come to Cupa and kill all the people there (by burning them) except Kisily’s mother (as she is kin) and her newborn infant (Kisily). The Diegueños want to throw the infant into the fire but she stops them by telling them the infant is a girl (Kisily is a boy). The Diegueños want her to come back to their village with them (to the south). She says she cannot travel right then, but will catch up with them the following day (Hill and Nolasquez 1972).

As soon as the Diegueño warriors leave, Kisily’s mother with Kisily held tight, heads straight for Soboba (to the north). Soboba, then identified as a Cahuilla village, is where they live until Kisily is grown. As an adult he wishes to return to his homeland. Mother and son return to Cupa where he marries two Luiseño women. By these women he has one son by the first, and two sons by the second. Since reckoning is through the male line, all his children are of his moiety, which is coyote. This means that the two Luiseño women had to be of the opposite moiety, wildcat, for a proper marriage to take place. The sons become the heads of the three main clans of Cupeño origin: *kavalim* (Kavalym), *pumtumatulnikteum* (Blacktooth), and *temewhanitcem* (Northerner) (Hill and Nolasquez 1972:41; Strong 1929:186).

This story is repeated through the literature in various versions as Cupeño oral literature. I believe there is some truth to the myth, thus the story is reviewed here to show the possible descent of the modern Cupeño from Kisily as the last surviving Cupeño. The story is informative in the way of trade, trading, relationships, and which directions of travel

were most likely for trade because of kin and clan alignments. For this thesis I modeled a series of the least-cost paths and compared one to a current aerial photo view provided by the Google Earth Internet program. This same method of comparison could be done selecting the locations of Soboba, Lost Valley, and Cupa for an interesting comparison of modeled travel between the villages and places named in the Cupeño oral literature.

### **TRADE AND TRAILS THROUGH LOST VALLEY**

Although it has been proposed that Lost Valley may have had permanent Cupeño occupation prior to contact (Fleming 1998:21), so far there is no conclusive evidence of year-round occupation. One of the things that may be shown with the least-cost path analysis is that the location of Lost Valley is not on any major travel or trade route, but out of the way, hidden (or lost) as it were. It is one of my hypotheses that in observing the locations of major village sites in the Shoshonean language region, major networks of travel paths traversed every major village.

David Prescott Barrows, in talking about the connection between the Cahuillas and the Chemehuevis, relates the following: “The route traveled between these two tribes is an almost direct trail running eastward from the Cabeson valley to the Colorado [River]. In places the path has been worn deep in the ridges of rock over which it passes. The Indians take about two days to make the trip” (1900:25). Other references to trails and routes through the Cahuilla territory are mentioned as follows: the Mojave desert was “crossed by the old Mormon road from Salt Lake City to San Bernardino, as well as the overland trail from Santa Fe, both roads meeting near the western side of the desert on the Mojave river” (Barrows 1900:25). San Gorgonio pass also was used to travel from the Banning area to the Colton area. The San Gorgonio pass is another location that can be found on a map and checked through inspection of aerial photographs in seeking information on the locations of trails that lead in and out of the surrounding canyons (Barrows 1900:25-26). Then, “[u]p the San Jacinto ridges, dark and gloomy with shadows, run the ancient trails by which the Coahuillas entered the mountains and became hillsmen, as well as men of the desert” (Barrows 1900:27). Cahuilla well digging was an art that was appreciated by Barrows. The Cahuillas had their own way of digging a well so that a person could gradually walk down to the water level (Barrows 1900).

The desert climate is the reason for the scant vegetation, but that climate is also responsible for the fact the vegetation is rich in nutrients (Barrows 1900). Barrows also noted that the canyons contained much of the vegetal foodstuffs that women gathered and credits the women for their ability to find plant foods in the desert and near mountains for keeping the people healthy in an otherwise harsh environment.

### NATURAL HISTORY OF LOST VALLEY

The natural history of Lost Valley has been discussed in detail elsewhere and will not be repeated here. Previous accounts include Philip Pryde 1978, who focused on the natural history and climate of the San Diego region, and Jess McColloch (1984) who summarized evidence on the geology of Lost Valley. Kline (2008) focused on lithic resources from around Shingle Spring, but gave a general review of the natural history of Lost Valley. Fleming (1999) centered attention on site CA-SDI-2508, but provided a general review of the natural history of Lost Valley. Gaugen (2000) concentrated on the ethnobotany of the area. The firm APEC 1981 gives a review of the natural history of the Valley of San Jose at the head of the San Luis Rey Watershed. Andrew Pigniolo and colleagues (1998) provided a general review of the natural history of Lost Valley.

The two main villages of the Cupeño were *Kupa* (or *Cupa*) at Warner's Ranch, and *Wilikalpa* (or *Wilikal*), which was four miles southeast of *Kupa* at what is now San Ysidro (Strong 1929:248). *Wiatava*, or Lost Valley, is located in the northeast corner of Cupeño territory, so that it is north and east of Warner Springs. The Cupeño clan, *temewhanitcem* (or Northerers), had control/ownership of *Wiatava* and used the valley for collection of acorns, seeds, berries, wild oats, and other foodstuffs. A map from Strong (1929:248) is helpful in understanding the distribution of Cupeño territory with clan ownership marked on the various areas (Fig. 2). Evidence shows that the Cupeño language is closer to Cahuilla than to Luiseño (Bright and Hill 1967; Kroeber 1925).

The Cupeño, throughout their territory, were privy to a great variety of plant and animal foods. Most important were the oaks. Acorns were harvested in October and stored for future use in large woven basketry granaries. Manzanita, sage, chia, buckwheat, wild rose, and elderberry were also collected in Lost Valley. There were also a variety of medicinal plants and animal food sources available in the Cupeño territory (Pigniolo

1998:16). Fibers, and items made from fibers (e.g., nets, baskets, rope), do not preserve well in the archaeological record except under certain conditions of dryness or bog like conditions, thus few of these objects survive. The Cupeño territory also had important riparian habitat, which supplied materials for bows, arrows, baskets, and sandals (APEC 1981; Barrows 1900; Bleitz and Porcasi; Hill and Nolasquez; Strong 1929).

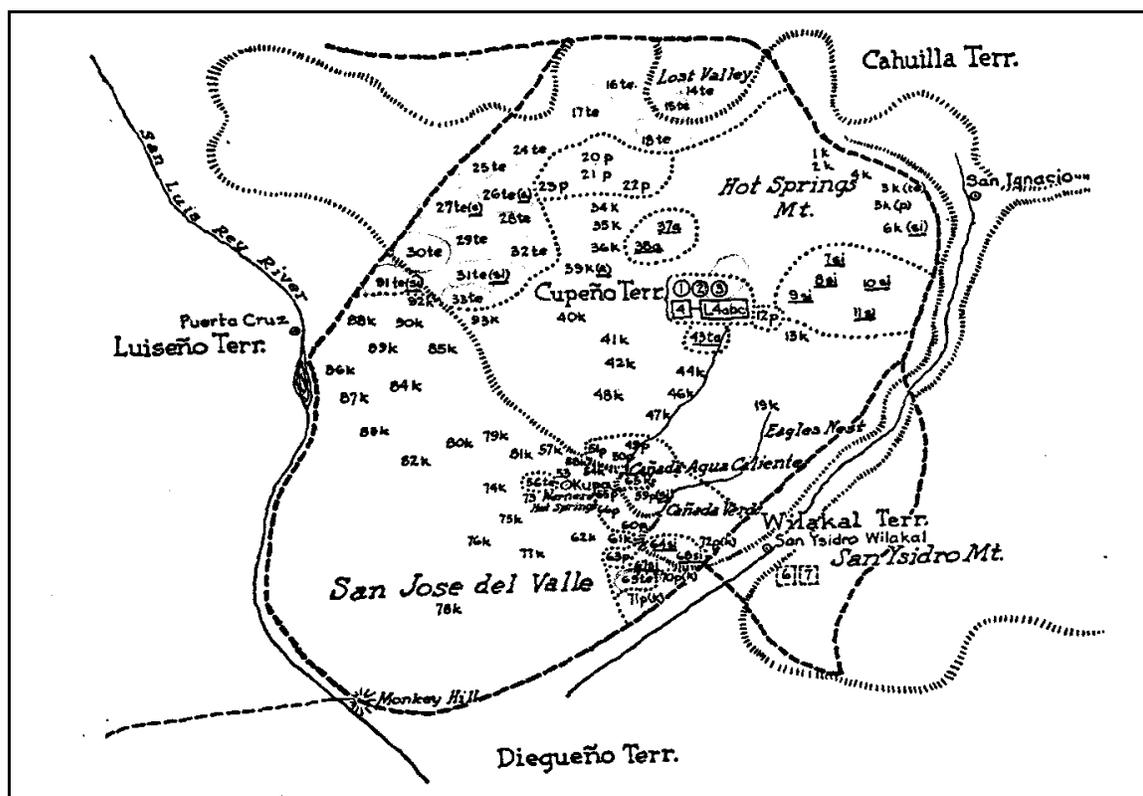


Figure 2. Sketch map of the Cupeño territory showing the lands owned by different clans. te = *temewhatnitcem* (Northerners) (from Strong 1929:248).

## CHAPTER SUMMARY

This thesis evolved from involvement in two field seasons of excavations in Lost Valley. It is of the utmost importance for project reports to be completed and published so that the data and the analyses are added to the archaeological record for posterity.

The study area encompasses the Cupeño territory, and Lost Valley was a part of the *temewhanitcem* clan's seasonally occupied subsistence territory, an area rich in acorns, seeds, small rodents, lagomorphs, and deer. The focus of this thesis is to model possible trade and travel routes between camps, villages, waterholes, or any other area where there was occasion to stop and deposit artifactual remains. The natural history of the area and the

topographic conditions seem to be major factors in the choices that were made as to which routes were taken by the peoples living at the headwaters of the San Luis Rey watershed so long ago. The next chapter provides a review of literature pertinent to the subjects of GIS in archaeology, least-cost path analysis, and how least-cost path has been used in archaeology.