

THE ARCHAEOLOGY OF VOLCAN MOUNTAIN, SAN DIEGO COUNTY: RESULTS 1991-2002

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Preserve land on Volcan Mountain includes open space owned by the County of San Diego, Department of Parks and Recreation; California State Department of Fish and Game; San Dieguito River Park; and San Dieguito Land Conservancy. A team of professionals and trained volunteers under the supervision of the author have surveyed over a thousand acres on Volcan Mountain over the past ten years. Over 60 historic and prehistoric sites have been recorded by the team. Several of the sites contain rock features, including rooms and walls. One of the most interesting of these sites is a large prehistoric site complex on the summit of Volcan Mountain. The complex contains stacked stone architecture, unique milling features, trade items, and habitation areas. Volcan Mountain also provided linkage between the Anza-Borrego Desert, San Felipe Valley, and the Cuyamaca Mountains through Arkansas Canyon, which contains a series of sites related to those in the upper elevations of the mountain.

Volcan Mountain is a unique topographic feature, located north and east of the town of Julian, in eastern San Diego County. The mountain, which is actually a horseshoe-shaped series of ridges, rises steeply from the San Felipe Valley on the east, to an elevation of over 5,500'. The summit called Volcan is 5,353', at the southern end of the range. Portions of Volcan Mountain burned in the catastrophic Pines Fire during the summer and early fall of 2002.

Because of its importance in linking open space in Anza-Borrego Desert and the Cuyamaca Mountains, acquisition and preservation of land on Volcan Mountain has been a high priority for over a decade. The Volcan Mountain Preserve Foundation, established by concerned local citizens, led the charge to persuade public agencies to support acquisition of land for park purposes. Land acquisitions began soon after the passage of the 1988 Park Bond Act.

Currently, several public agencies hold thousands of acres of land on Volcan Mountain: the County of San Diego (2,645 acres), the State Department of Fish and Game (1,641 acres currently owned plus 6,688 acres in the process of acquisition), the San Dieguito River Park (390 acres in Arkansas Canyon, plus 142 acres on the summit), and the San Dieguito Land Conservancy (23 acres). This open space is linked to the Santa Ysabel Open Space Preserve, and BLM land. Future acquisitions may link the preserve to Anza-Borrego Desert State Park.

In 1991, the County of San Diego began organizing systematic archaeological surveys of Volcan

Mountain under the author's direction. Sponsored by the County's Department of Parks and Recreation, the effort involved volunteers from the Society for Amateur Scientists, Volcan Mountain Preserve Foundation, San Diego State University, San Diego Natural History Museum, and the San Dieguito River Valley Park. Over 100 volunteers were trained and participated in the survey over a ten year period, surveying over 3,000 acres of rugged, open space park land in this remote part of San Diego County.

Called the Volcan Mountain Preserve Archaeological Survey, the program provided extensive training to the volunteer participants. Training was typically done in the fall and winter months, when surveying on the mountain was not possible. Training included technical as well as ethical guidance. Volunteers received a short course on San Diego County prehistory, history, and archaeology. They were taught how to record, map, and describe a wide variety of site types and features. In addition, they were taught the ethics of archaeology, not only for their participation in the program but so that they could become advocates for the preservation of cultural resources in their communities.

Over 60 archaeological sites were recorded by the volunteer survey team. Most of these sites contain pottery, which associates the sites with the Late Prehistoric period of San Diego prehistory (beginning approximately 2000 years ago). The surveyed lands were divided into three geographic units: the upper elevations, or summit, of Volcan Mountain; Arkansas Canyon; and San Felipe Valley.

VOLCAN MOUNTAIN SUMMIT

The Volcan Mountains have been the home of the Kwaaymii and Kumeyaay for thousands of years. Names for Volcan included a school site called *a sit so min o mait* "sharp ridges", and *che milsch naha*, a spring on the mountain (Davis, November 1923). The mountain was also important to the Luiseño people, who lived north of the Kumeyaay, in the northern part of San Diego County and into Riverside County. The Luiseño called Volcan *I'pa*, and knew it as a mountain that was one of the First People (DuBois 1908:115).

The first surveys done on Volcan were conducted for a proposed development. The southwestern slopes of the mountain were surveyed, and testing programs were completed at seven of the twelve sites identified in the project area (Cardenas and Robbins-Wade 1986). One of the sites, SDI-10632, contained Late Prehistoric projectile point types, as well as Tizon Brown Ware pottery. Most of the other sites were milling locations.

In 1991, the author and the property owner, Philip Rutherford, visited some of the sites on top of Volcan. Mr. Rutherford noted that he and his family had left the sites alone, realizing their significance. This field trip was the first of many to the summit of Volcan to survey for archaeological sites.

The summit ridges of Volcan within the preserve consist of several high points and two meadowlands, Simmons Flat and Ferguson Flat. The eastern sides of the ridges drop steeply down into the San Felipe Valley, and are windblown. Only two archaeological sites were found on the eastern side of the ridge. Most of the habitation sites are on the western side of the ridge, overlooking the Santa Ysabel valley and modern town site of Julian. Prominent features of these sites include extensive milling areas, distinctive vegetation types, and rock architecture.

The rock architecture, consisting of room enclosures and walls, is most notable at site SDI-12925, which extends over 1500 feet down the ridgeline above Ferguson Flat. A rock wall one to five stacks high connects the four habitation loci. Two well-made rock enclosures end the site. This particular locus is called the Cactus Site, because prickly pear cactus grows throughout the midden deposit. The site also contains extensive milling features and cupules.

One of the rock wall enclosures at the Cactus Site still contains two hewn logs, probably used to enclose the open side of the structure. One side of the enclosure is made from stacked rock, while two other

sides are natural boulders and rocks. The fourth side is open, but with the two logs leaning against one another and two other sides. The cuts on the ends of the logs appear to have been made with a metal axe. According to notes made by Edward Davis, native people lived on Volcan into the early part of the 20th century, and probably used the mountain later than that. Davis took a photograph of a lean-to summer campsite on Volcan; this enclosure could date to that time period.

A glass trade bead was found at the Cactus Site (SDI-12925, Locus 4). The bead was on the surface of the ground in the midden portion of the site. It is a cobalt blue hexagonal bead, with beveled ends, creating additional facets. There is a lighter blue circle around the hole. Similar types of beads have been found at San Buenaventura Mission, Mission San Antonio, and Old Sacramento. The beads found at San Buenaventura were called Types F1a-h, and were cobalt hexagonal beads; some had a lighter core. These were dated to 1805 or later; Gibson (1976) noted that machine grinding of the faceted ends replaced hand grinding circa 1850.

The faceted beads at Mission San Antonio dated after 1850, and were found in contexts dated to as late as 1880 (Meighan 1985:56-63). Meighan stated that these beads date to the American period (Meighan 1985:59).

One example of a cobalt hexagonal bead was found in Old Sacramento (Motz and Schulz 1980:53). It was identified as a type that is typically found in contexts dating to the mid-1800s.

The blue hexagonal beads are sometimes called "Russian Trade Beads" (Motz and Schulz 1980:53; Sprague 1985:91). They have been classified by Karklins (1985) as Class If (monochrome drawn beads whose surfaces have been modified by grinding), Class IIIf (multi-layer drawn beads modified by grinding), and Type MPII (monochrome beads exhibiting faceting). The bead is similar to example number 12 in Van der Sleen (1973), called a cornerless hexagonal bead.

The presence of the late 19th century glass trade bead, and the hewn logs, support the proposition that native people lived on Volcan long after other parts of San Diego County had been abandoned to settlers.

The rock architecture at another site on Volcan Mountain could have been a prehistoric fortification. This site, SDI-13723, consists of concentric rings of rock rooms and walls spiraling up a steep hilltop. Obsidian and Tizon Brown Ware pottery were found

in the rooms. Stone forts and structures were built by the Kumeyaay as defensive features (Spier 1923:306). The location of the structure, overlooking the Santa Ysabel Creek watershed, would have provided an excellent lookout.

Two sites in the Simmons Flat area are notable. Site SDI-12923 contains several boulders containing cupules. Some of the cupules are typical dimples in the rock, while two are deep and finely ground into the tops of the boulders. This site also features milling, prickly pear cactus, and a midden deposit. The other site of interest is SDI-13760, which is located on the next ridge west of SDI-12923. Site SDI-13760 has a midden deposit on a leveled area. Rock rooms and walls have been built on the level area. The site also contains milling features.

Many of the sites on Volcan Mountain contain the milling features known as Cuyamaca Ovals (unique oval milling features described by Foster 1981 and True 1970). These distinctive bedrock basins are associated with Late Prehistoric sites within Cuyamaca Rancho State Park. Some of the examples from Volcan Mountain have the same shape, narrow at one end, and patterning, with the grinding surfaces located very close together. Most of the sites that contain Cuyamaca Ovals also feature mortars and slicks.

Table 1 summarizes the attributes of the sites recorded in the summit area of Volcan Mountain, based on field observations during the surveys. It is likely that additional cultural materials are present; visibility was often a limitation. Of the 36 sites recorded on the summit, 35 had milling features. Four of the sites contain cupules as well as milling features. Twenty of the sites had midden deposits; pottery was associated with all but two of these. Two sites had pottery but no observed midden deposits. Three had obsidian flakes visible during the survey. Several of the sites contained late period projectile points. Metavolcanic and quartz flakes are common in the sites. In addition to Tizon Brown Ware pottery, made in the mountains, many of the sites also contained desert Buffware sherds.

Only four of the 36 sites were on east-facing slopes or ridges. Weather is much more severe on the eastern slopes, with high winds from the desert battering these locations. Four of the sites are characterized by *Opuntia* sp. (Prickly pear) cactus and/or *Prunus virginiana* (western choke cherry). When present, these plants grow in the middle and throughout the site, and no where else in the vicinity. Hedges and Beresford (1986:27, 32) indicated that both Prickly Pear and Wild Cherry (in Hedges and Beresford,

Prunus ilicifolia for Santa Ysabel, which is at a lower elevation than Volcan) were used by the Kumeyaay as food plants. There is no doubt that the plants present on the sites at Volcan were either planted or were encouraged volunteers.

Nine of the 36 sites have rock architecture, consisting of stacked rock walls or enclosures. Some of these sites also have pit features and one has a leveled area. The abundance of architectural features and structures on the summit of Volcan is unique.

The summit of Volcan Mountain also features historic sites. In 1928, airway beacons were established on peaks throughout the United States to visually guide aircraft. Volcan Mountain was one of the peaks identified as an airway hazard (there are still unfortunate crashes into the mountain, due to unpredictable wind updrafts from the desert). Although the original airway beacon is gone, its tower and supporting features still exist on the summit.

A cabin foundation and chimney were recorded by the survey team near the summit, in Simmons Flat at 5000' in elevation. Local lore was that the cabin was occupied by an astronomer evaluating Volcan Mountain as a potential site for a major telescope. According to Bradford Behr of the California Institute of Technology (CalTech), Volcan Mountain was on the short list of locations that were tested between 1928 and 1932 for placement of the Hale telescope, which eventually was placed on Palomar Mountain. Behr related that the astronomers returned to the potential sites many nights throughout the year to evaluate conditions, establishing outposts or residences in some cases.

ARKANSAS CANYON

Volcan Mountain is linked to San Felipe Valley by Arkansas Canyon, providing a travel route from the desert to the mountains and the coast beyond. In addition, Arkansas Canyon contains several late prehistoric village sites. The canyon is a broad, oak-lined valley. It crosses several ecological zones, from mesquite groves near the valley floor to pines near the top of the canyon. Native grasses, seeds, herbs, and animals were also abundant in the canyon. The sites are also scattered with obsidian flakes, traded into the area.

Most of the public land in Arkansas Canyon is owned by the San Dieguito River Park. Archaeological surveys were conducted in the canyon by a force of volunteer and professional archaeologists in the early

| Site Number | Milling | Obsidian | Pottery | Cupules | Midden | Rock Architecture | Location | Unique vegetation | Elevation |
|-------------|---|----------|---------|---------|--------|-------------------|-------------------|-------------------|-----------|
| 10629 | 1 Mortar | X | X | X | X | X | SW facing slope | X | 4960 |
| 10630 | Mortars, slicks | X | Yes | X | X | X | W facing ridge | X | 5040 |
| 10631 | 1 Mortar | X | Yes | X | Yes | Yes | W facing ridge | Poison Oak | 5000 |
| 10632 | 17 boulders with milling features: basins, slicks, and mortar | Yes | Yes | X | Yes | X | W facing ridge | X | 4320 |
| 10633 | Mortar, basin, slicks | X | X | X | X | X | SW facing slope | X | 4240 |
| 10634 | Basin and slicks | X | X | X | X | X | W facing drainage | X | 4160 |
| 10635 | Mortar, slick | X | X | 38 | X | X | W facing drainage | X | 4180 |
| 12925-4 | 20 boulders with mortars, basins, slicks | X | Yes | 6 | Yes | Yes | W facing drainage | Opuntia | 4925 |
| 12921 | None | X | Yes | X | Yes | Yes | W facing drainage | X | 4200 |
| 12925-3 | Mortars, basins, slicks | X | Yes | X | Yes | Yes | W facing drainage | X | 4950 |
| 12922 | Mortars, slicks, basin | X | Yes | X | Yes | X | E facing drainage | X | 5300 |
| 12925-2 | Mortars, slicks, basins | X | Yes | X | Yes | Yes | W facing ridge | X | 4975 |
| 12923 | Mortars, slicks, basins | X | Yes | 15 | X | X | W facing ridge | Prunus, Opuntia | 4900 |
| 12925-1 | Mortars, slicks, basins | X | Yes | X | Yes | Yes | W facing ridge | X | 5141 |
| 13129 | Mortars and basins | X | Yes | X | Yes | Yes | E facing ridge | X | 4960 |
| 13720 | Basins and slicks | X | Yes | X | Yes | X | W facing ridge | Prunus | 4690 |
| 13722 | Mortars and slicks | X | X | X | Yes | X | E facing ridge | X | 5160 |
| 13723 | Mortars and basins | Yes | Yes | X | Yes | Yes | W facing hilltop | Prunus | 4800 |
| 13724 | Basin and slicks | X | X | X | X | X | W facing ridge | X | 4840 |
| 13725 | Basin | X | X | X | X | X | W facing ridge | X | 4820 |
| 13760 | Basins and slicks | X | Yes | X | Yes | X | W facing ridge | X | 5150 |
| 14054 | Mortars, basins, slicks | X | X | X | X | X | E facing ridge | X | 4900 |
| 14172 | Mortar, basin | X | Yes | X | X | X | S facing slope | X | 5175 |
| 14174 | Mortars, basins, slicks | X | Yes | X | Yes | X | SW facing slope | Poison Oak | 5050 |
| 14262 | Mortars | Yes | X | X | X | X | SW facing scope | Datura | 4965 |
| 14263 | Mortar | X | X | X | X | X | S facing ridge | X | 4805 |
| 14304 | Mortar | X | X | X | X | X | W facing ridge | X | 4800 |
| 14305 | Slicks | X | X | X | X | X | W facing slope | X | 4860 |
| 14310 | Mortars, basins, slicks | X | Yes | X | Yes | X | W facing slope | Poison Oak | 5015 |
| 14311 | Mortars, basins, slicks | X | X | X | X | X | W facing slope | X | 4975 |
| 14312 | Mortar and slicks | X | X | X | X | X | W facing slope | X | 5025 |
| 14313 | Basin | X | Yes | X | Yes | X | W facing ridge | X | 5140 |
| 14314 | Mortars, basins, slicks | X | Yes | X | Yes | X | W facing slope | X | 5065 |
| 16099 | Mortars | X | Yes | Yes | Yes | Yes | W facing ridge | X | 5400 |
| 16100 | Basins and slicks | X | X | X | Yes | X | W facing ridge | X | 5160 |
| 16101 | Mortars, basins, slicks | X | Yes | X | Yes | X | W facing ridge | X | 5050 |

Table 1: Prehistoric sites recorded on the summit of Volcan Mountain.

and mid-1990s (Carrico 1998). Lisa Chaddock's masters thesis at San Diego State University focused on the use of native plants by the Indians living in Arkansas Canyon.

The archaeological sites in Arkansas Canyon are smaller habitation areas than those on the summit of the mountain. The sites contain obsidian, Tizon Brown Ware, and Buff Ware pottery, and at least one has a possible pit house structure. For the most part, however, the sites in the canyon appear to be seasonal camps, for the exploitation of specific plant resources.

The most notable site in Arkansas Canyon is the 1890s settlement of the Grand family. Extensive research on the Grand family has been conducted by historian Judy Swink, including a translation of the diaries of Fred Grand. To summarize her findings, the Arkansas Canyon area was settled by brothers August and Frederic Grand, of Provence, France, in 1888 and 1891. By 1892, Fred had built a homestead in Arkansas Canyon, and had planted grapes, pears, and apples. Remains of the homestead include a Basque-style oven, an adobe house, and a rock barn and storehouse. The storehouse is referred to as the Grand Winery,

and is a fine example of stone masonry. Unfortunately, these structures were damaged during the recent Pines Fire, and are at great risk of collapse.

The name Arkansas Canyon has puzzled many. A possible explanation is that the name refers to a man who lived in the remote canyon area. A story about this man was written as part of the Federal Writers Project (Taylor 1939). In 1874, Banner had a haunted house that had once been a store. After it was abandoned due to the hauntings, a man named Arkansas took up residence. He had been raised in the woods, and claimed that he could not be scared by "owls and mice." However, strange noises began to disturb his sleep. He heard groaning, and a sound like someone stropping a razor. Convinced his neck was about to be cut, he left the house. Later, a ghost was seen at the house, and it was demolished soon after. Banner is at the base of Volcan Mountain, and it is possible that Arkansas Canyon was named after the man called Arkansas, who may have lived in the thickly forested area in the upper reaches of the canyon.

SAN FELIPE VALLEY, EAST OF VOLCAN MOUNTAIN

The San Felipe Valley contains many villages and camp sites. The main village of San Felipe was called Cienega, or *We-nelsch* in the native language; Edward Davis described the removal of these people from their village in September, 1903, to the Pala Reservation (Davis 1903). This latest village may have been one of many that were established over the centuries near San Felipe Creek and Sentenac Marsh (Schwaderer 2001:78-79). Villages extended throughout the valley; evidence of earlier occupation could have been buried or washed away by flooding.

Rivers (1989) discussed at length the various historic records concerning the villages along San Felipe Creek and Vallecito. There were more than one noted by the early explorers, beginning with Pedro Fages in 1782. The various descriptions of villages along the creek include statements that the settlements appeared deserted; the villagers may have fled the approaching parties, or they may have merely been at seasonal camps in the mountains. The villages were dependent on acorns, mesquite, deer, agave, and rabbits. There are several historical accounts attesting to the skill of the native people in using a rabbit stick (Rivers 1989).

The first recorded archaeological survey of the area of San Felipe Valley below Volcan Mountain was conducted by the Pacific Coast Archaeological Society

(PCAS) in 1969 (Long and May 1970; May 1995). Several archaeological sites were recorded in Arkansas Canyon and in San Felipe Valley on land now owned by the Department of Fish and Game. The sites were described and noted, and this information was sent to UCLA to record. Unfortunately, this information was not sent on by UCLA to San Diego when the South Coastal Information Center was established at San Diego State University so these sites do not show up on record searches of this area, nor do they have state trinomial numbers. PCAS volunteers excavated some of the sites. Obsidian was found at the sites, as well as pottery sherds.

Several miles of San Felipe Valley were surveyed by the volunteer team. This land, owned by the California Department of Fish and Game, extends north of the mouth of Arkansas Canyon, and includes the alluvial wash of the creek itself as well as the eastern foothills of the Volcan Mountain range.

An important artifact found during the survey of San Felipe Valley was a projectile point discovered near the confluence of Arkansas Canyon and San Felipe Valley. Discovered by a Society for Amateur Scientists member, Pam Scott, the isolated point was on a rocky ridgeline far from any camp or village site. It was identified as an Elko-eared projectile point, which dates in the Great Basin between 1200 BC and AD 600. Most of the other points found during the surveys have been the typical Late Prehistoric triangular points. The discovery of the Elko-eared point supports the use of this area as a trade corridor over a long period of time.

The portion of the preserved land in San Felipe Valley is owned by the Department of Fish and Game. A cultural resource management plan was prepared for these lands (Hector 2002). Severe sedimentation and erosion along the edges of the creek has most likely covered archaeological material in that area.

San Felipe Valley itself was a major travel corridor through the desert throughout prehistory, and became a stage coach route. The San Felipe Stagecoach Station was located near Scissors Crossing, and was active as a Butterfield stop between 1858 and 1861; it was used later by various other stage operators (Lindsay 2001:303). It was a wooden stage station, and the lumber was cut from Volcan Mountain; the trail used to haul it down the mountain into the valley was still visible in 1934 (Lindsay 2001:304). After the Stage Station was abandoned, the wood was hauled back up into Arkansas Canyon and remained there for many years (San Diego Historical Society Oral History Program 1962). Some of the wood was used by the

Grand family to construct outbuildings on their Volcan ranch (Lindsay 2001:304).

CONCLUSION

Volcan Mountain is often covered with fog and clouds, invisible to airplane pilots and casual mountain visitors. Like the mass of Volcan hiding behind a bank of clouds, some aspects of archaeological sites aren't obvious at first or even second glance. After ten years of work on Volcan, I can say that I am only beginning to understand what I have found. Volcan Mountain is rich in prehistoric and historic archaeological sites. As I look forward to my second decade of work on Volcan, I realize that no matter how many times I might visit the mountain, or look at a site or artifact, I will see it a little differently, in a different light or with different eyes. It's important that we stay humble.

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REFERENCES CITED

- Cardenas, D. Sean and Mary Robbins-Wade
1986 Cultural Resources Inventory and Significance Assessment, Volcan Mountain Subdivision. RBR and Associates, San Diego.
- Carrico, Richard L.
1998 Historic Property Survey Report for the San Dieguito River Park Joint Powers Authority Land Acquisition, County of San Diego, California. Mooney and Associates.
- Davis, Edward
1923 Edward H. Davis Papers, San Diego Historical Society.
- DuBois, Constance Goddard
1908 The Religion of the Luiseño Indians of Southern California. *University of California Publications in American Archaeology and Ethnology* 8(3):69-186.
- Foster, Daniel G.
1981 A Cultural Resources Inventory and Management Plan for Cuyamaca Rancho State Park, San Diego County, California. Report on file at California Department of Parks and Recreation, San Diego.
- Gibson, R.O.
1976 A Study of Beads and Ornaments from the San Buenaventura Mission Site (Ven-87). In *The Changing Faces of Main Street*, edited by Roberta S. Greenwood, pp. 77-166.
- Hector, Susan M.
2002 San Felipe Valley Wildlife Area Archaeology Management Plan. Broken Fragments LLC.
- Hedges, Ken and Christina Beresford
1986 Santa Ysabel Ethnobotany. *San Diego Museum of Man Ethnic Technology Notes* No. 20. San Diego Museum of Man.
- Karklins, Karlis
1985 *Glass Beads*. Parks Canada.
- Lindsay, Diana
2001 *Anza-Borrego A to Z*. Sunbelt Publications, San Diego, California.
- Long, Paul V. and Ronald V. May
1970 An Archaeological Survey of Rancho de San Felipe. *Pacific Coast Archaeological Society Quarterly* 6(4):1-55).
- May, Ronald V.
1995 San Felipe Indian Village: An Archaeological Perspective. In: *Gold Rush Desert Trails to San Diego and Los Angeles in 1849*, edited by George M. Ellis, pages 175-183. *Brand Book Number Nine*, San Diego Corral of the Westerners, San Diego, California.
- Meighan, Clement W.
1985 Trade Beads. In *Excavations at Mission San Antonio*, edited by Robert L. Hoover and Julia G. Costello, pp. 56-63. Monograph XXVI, Institute of Archaeology, U.C.L.A.
- Motz, Lee and Peter D. Schulz
1980 European "Trade" Beads from Old Sacramento. In *Papers on Old Sacramento*, edited by Peter D. Schulz and Betty J. Rivers, pp. 49-68. Department of Parks and Recreation, Sacramento.
- Rivers, Betty
1989 "And We Saw Many Indians....": Historic Accounts of Four Colorado Desert Villages. Cultural Heritage Section, California Department of Parks and Recreation, Sacramento.
- San Diego Historical Society Oral History Program
1962 Interview with William H. Hunt, born October 23, 1876. Interviewed on March 30, 1962 by Larry Freeman.

Schwaderer, Rae

2001 A Cultural Resources Inventory of the Sentenac Canyon and Cienega Acquisition, Anza-Borrego Desert State Park, San Diego County, California. California Department of Parks and Recreation.

Spier, Leslie

1923 Southern Diegueño Customs. *University of California Publications in American Archaeology and Ethnology* 20.

Sprague, Roderick

1985 Glass Trade Beads: A Progress Report. *Historical Archaeology* 19(2):87-105.

Taylor, Dan Forrest

1939 Julian Gold, 2-8-1939, Federal Writers Project. On file at the San Diego Historical Society.

True, Delbert

1970 Investigation of a Late Prehistoric Complex in Cuyamaca Rancho State Park, San Diego County, California. *Archaeological Survey Monograph*. Department of Anthropology, University of California, Los Angeles.

Van der Sleen, W.G.N.

1973 *A Handbook on Beads*. Liberty Cap Books, York, Pennsylvania.