

The Archaeology of Witchstick Cave, Tomo Kahni State Historic Park, California

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Abstract

This paper describes and interprets a modest collection of material excavated from a small cave within Tomo Kahni State Historic Park east of Tehachapi. These cultural remains probably reflect activity by the Kawaiisu very late in time.

Introduction

Small, single component sites possessing limited cultural remains can provide important data sets useful for the understanding of prehistoric human behavior (Glassow 1985). This follows especially from the fact that their assemblages were unlikely to have been impacted by complex mixes of other functional and/or temporal materials. This article describes one such small site and demonstrates the information potential of this class of sites.

In the 1950s, the Archaeological Survey Association of Southern California (ASA), an avocational group founded in 1947 and associated with the Southwest Museum, conducted investigations at a number of sites near Nettle Spring, located east of Tehachapi, California. Witchstick Cave, so called due to the presence of a wooden object designated as a “witch stick” by the crew, was one of the sites excavated. The collection and records from the site were donated to California State University, Bakersfield (CSUB) in the early 1990s by Gordon Redtfeldt, who had been active in the ASA work in the Nettle Spring area. In spite of a field effort by the authors, the precise

location of the site could not be reestablished, and it could not be formally recorded; thus, it has no trinomial. Nevertheless, its general location, now within Tomo Kahni State Historic Park, is known. This report describes and interprets the extant materials from that site. Unfortunately, the “witchstick” itself was not in the collection.

Natural and Cultural Setting

Witchstick Cave is located in the immediate vicinity of Nettle Spring, along the western side of Sand Canyon in the far southern Sierra Nevada (Figure 1). The Nettle Spring area lies within a juniper woodland plant community (Twisselmann 1967) and is situated within ethnographic Kawaiisu territory (Zigmond 1986). The Kawaiisu were hunter-gatherers and spoke a language assigned to the Numic branch of Northern Uto-Aztecan (Zigmond 1986).

Witchstick Cave was one of the many sites identified in association with the Nettle Spring site complex, investigated by the ASA in the mid-1950s and by Antelope Valley College (AVC) in the early 1970s. The focus of the complex is the main site area (CAKER-230) but includes small camps (Ptomey 1991; Osborne 1994; Hinshaw and Rubin 1996; Sutton et al. 2010), rock art localities (Sutton 1981, 2001; Lee 1999; Fleagle and Sutton 2007), and a cremation locality (Siefkin and Sutton 1995). Archaeologists from California State Parks conducted extensive surveys

of the area, recording and updating many sites in the 1990s (Dallas 2000). In addition, a general assessment of the overall Nettle Spring collection was conducted by archaeologists from Cal Poly Pomona, including the incorporation of mapping information into a GIS database (Allen and Burns 2008).

Site Description

Witchstick Cave was discovered by the ASA, probably in 1955, and was designated “39-S-F,” or “Cave # 1-X.” At that time, the ASA referred to the Nettle Spring area as “Philips Ranch” (see Price 1954). The ASA notes indicated that the site was located several hundred meters to the northeast of Nettle

Spring. The ASA records included a simple sketch map of the cave, a list of materials observed, and some rough measurements that provide the only provenience for the artifacts. The cave was described as facing northwest and having an alcove near the “West Entrance.” The dimensions of the cave were given as 2.5 feet high, 5.5 feet in “circumference” (perhaps intended as width), and six feet deep. The field sketch of the site is reproduced in Figure 2. The map, list, and collection represent the only information regarding the site.

The authors contacted former ASA members to obtain more information about site location, but only general data were obtained. Subsequently, we walked the area

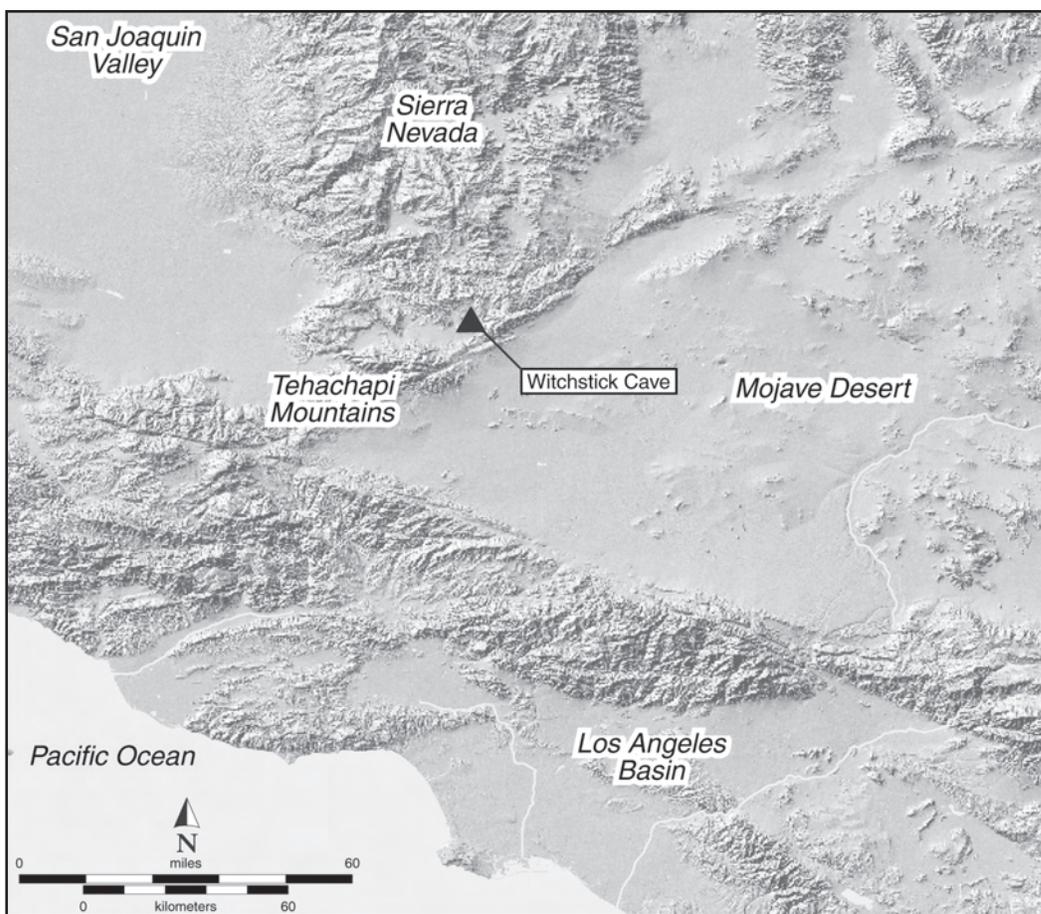


Figure 1. General location of the Witchstick Cave site.

in the hope of finding a cave that fit the ASA description, but the effort was unsuccessful.

Feature

A single feature, called a “cyst,” was described as being in the “West Entrance” alcove and may represent some sort of storage feature. It was recorded as being 24 inches (61 cm) in diameter and 9 to 10 inches (23 to 25 cm) deep. The top of the cyst was described as “collapsed” with the bottom being in “fair condition.” It was also noted that a rock was at the center of the feature and that a rim fragment of pottery was found nearby at a depth of four inches (see Figure 2).

Field Methods

Very little is known about the field methods involved with the investigation and collection of the Witchstick

Cave materials. A surface collection and at least some excavation, including the feature, was conducted. The extent of the excavation is unknown, and it is not clear whether screens were used. In other excavations conducted in the area by the ASA, units, levels, and screens were employed (e.g., at Teddy Bear Cave [Sutton 2001]). At least some soil was present in the cave, as it was noted that bedrock was encountered at 16 inches (41 cm).

The Collection

The collection, stored in a small cardboard shoebox, was transferred to CSUB where the materials were assigned catalog numbers, measured, weighed, photographed, and placed in separate plastic bags. Several types of material observed and listed in the field notes had not been collected, including “cedar bark, pinion [sic] nut shells, and charcoal.”

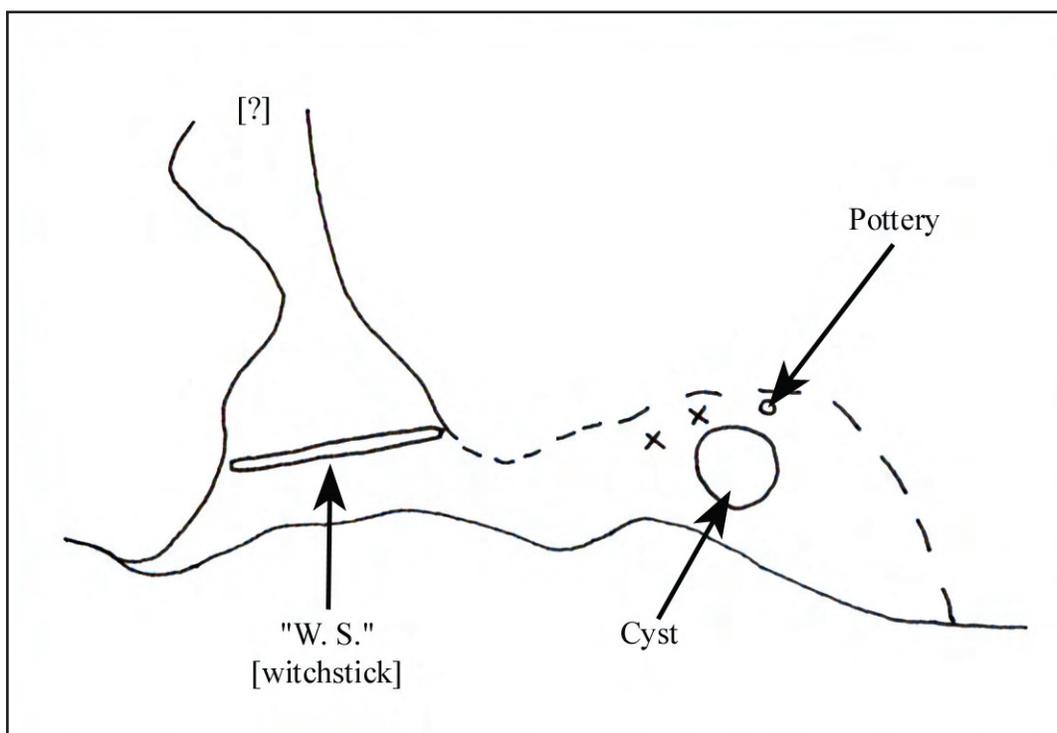


Figure 2. Sketch map of the Witchstick Cave site (redrawn from the original ASA sketch); no orientation or scale was provided. The significance of the dashed lines and “Xs” is not known.

Ceramics

A single piece of brownware pottery (Cat. No. 001) was collected at a depth of four inches (10 cm) near the feature. The sherd measures 84 mm long, 66 mm wide, and 4.5 mm thick. The piece is a rim fragment from a large bowl with a diameter of approximately 22 cm (about 12 percent of the rim is present). All surfaces of the sherd are fire-blackened, and no decoration is present. Zigmond (1986:401) noted that, "In all likelihood pottery-making was never an important industry [among the Kawaiisu] . . . Pottery may have been traded in, rather than made locally, for example, Owens Valley Brownware."

Basketry

Two relatively large fragments of basketry were recovered, along with a number of smaller fragments that may have fallen off the larger pieces. Both of the larger fragments are twined with rigid warps and were made from an unidentified material. The rim of the largest fragment (Cat. No. 002) appears to have been made from a bundle of similar material with a different plant in the center of the bundle. The wefts of both fragments are thin strips (2.5 mm across) that cross under two warps. The second largest fragment (Cat. No. 003) has some purplish discoloration of undetermined nature over most of its surface. The larger fragment also displays discoloration of the same nature and hue on a smaller portion of its surface. This coloration may be some sort of dye or residue (e.g., juniper berries?) or may be due to decomposition.

Both fragments display the same frequency of warps (three per cm) and wefts (two per cm). The warps of both average 2.7 mm in diameter, and the wefts of each average 2.5 mm across. Given such similarities and their collection from the same deposit, it would not be unreasonable to postulate that both fragments came from the same specimen. The small basketry fragments resemble the more complete fragments in

both material and in the fact that several exhibit the same purplish discoloration.

Among the Kawaiisu, utilitarian basketry was twined and manufactured from "unsplit willow for the warps and split willow for the wefts" (Zigmond 1986:402). The rim of the larger fragment closely resembles that of a burden basket, and the close weave of the body is unlike the characteristic winnowing-parching tray (Zigmond 1978, 1986). It is possible that the basketry represents a burden basket.

Cordage

Two fragments of cordage were recovered. One (Cat. No. 005) is of a white fiber (apparently cotton) and clearly not of aboriginal manufacture. It is 5-ply S-twist, 24 cm in length and 0.6 cm in diameter. It appears to have been cut at both ends but has no other alterations. The other fragment (Cat. No. 006) is of an undetermined plant fiber. It consists of two lengths of 2-ply, S-twist cordage loosely wound around each other with a Z-twist knot at both ends.

Zigmond (1986:402) noted that the Kawaiisu usually made 3-ply cordage, none of which was identified at the site. However, Harrington (1942:24-25) reported that the Kitanemuk used 2-ply string and combined several strands of 2-ply string to make heavier cordage. Kawaiisu cordage was commonly manufactured from the fiber of milkweed stems, although pondweed, nettle, and slippery elm were also employed (Zigmond 1986:402).

Other Plant Materials

Cane and Reeds

Other types of plant materials were recovered from Witchstick Cave. Eight pieces of reed/cane were collected, three of which display some form of modification. One fragment (Cat. No. 013a) is a small piece

of reed (12.3 cm) twisted 360 degrees with no other apparent modification. A second reed fragment (Cat. No. 013b) is longer (21 cm if straightened) but is “pinched” at three points along its length and bent to a right angle at one end. The other end is broken and splintered, but the point of breakage may have been another “pinch.” The third fragment of modified reed (Cat. No. 013c) is a somewhat more robust piece (17 cm if straightened) bent at a right angle at its midpoint and “pinched” once on each leg, but on opposite sides; if the fragment is placed on a horizontal plane, one pinch will face upward, and the other will face downward. This reed material appears to be from a plant of the sedge family (Cyperaceae; e.g., *Scirpus*, *Carex*, *Cyperus*).

Three other fragments (Cat. No. 012a-c) of similar material (less cylindrical, flatter; possibly tule, cf., *Scirpus* sp.) also display possible “pinching,” but since each has only one “pinch,” it cannot be certain whether the alteration is cultural or natural. The Kawaiisu used tule mats for bedding and housing (Zigmond 1986:401). Two fragments (Cat. No. 012d-e) of denser, stiffer cane were also recovered but display no unequivocal modification. Cane would not have grown in Witchstick Cave so these fragments are almost certainly manuports.

Wood

The collection includes five thin wood strips (Cat. No. 010a-e) ranging in length from 3 to 30 cm that appear quite similar in form to the weft found in the basketry fragments. The strips are slightly broader than those found in the basketry (3 to 4 mm) and are not discolored with the purplish hue. These may be split willow strips used in the manufacture or repair of basketry. One small twig (Cat. No. 011) resembling the warps of the basketry and with diagonally cut ends was recovered. This may also represent material collected for the manufacture or repair of basketry.

Two small sticks (8 and 12 cm long; Cat. Nos. 008a and 008b) of relatively dense wood were recovered. No apparent modification is present, although the material could be suitable for the foreshaft of the composite arrows used ethnographically by the Kawaiisu (Zigmond 1986). One small fragment (6 cm long; Cat. No. 009) of cut/whittled wood has two planes of cuts severing the fragment and several “whittling marks” on its exterior. It is undetermined whether the cuts were made with metal or stone tools.

The “witchstick” was not in the collection transferred to CSUB. The piece was presumably wood, but it is not known if had been culturally modified. It seems likely that it had been, otherwise it would have just been called a “stick.” To judge from its depiction on the site map (Figure 2), the piece would have been some three feet long.

Fiber Bundle

One bundle of bark fibers (Cat. No. 007) was found, but no provenience was given in the field notes. Approximately 12 thin, short (average of 10 cm) strands of reddish brown bark were bound together by what appears to be a different type of bark wrapped around the bundle and tied in a simple knot. This bark closely resembles that of juniper (cf., *Juniperus californica*).

Grasses

Three types of grasses were also collected from Witchstick Cave. One (Cat. No. 014) appears to be some species of bunchgrass, another (Cat. No. 015) has small florets and may be from a small bush or a grass, and the third (Cat. No. 016) has long, relatively rigid blades. None show any evidence of being culturally modified.

Dating

The only temporally diagnostic artifact recovered from the cave is the cotton cordage, dating to very recent times. The other artifacts are not necessarily associated with the cordage, and the field notes revealed little information about artifact associations. The cave seems to have been shallow and incompletely protected from the elements, suggesting that the other perishables also probably date late in time. Lack of funding precluded radiocarbon assays.

Conclusions

The materials discovered in the cave indicate that it was not used as a habitation locale but rather had some limited purpose rather late in time. The people using Witchstick Cave were almost certainly Kawaiisu, likely associated with known nearby habitation sites. Perhaps it had functioned as a cache/storage area, a resting spot, and/or a children's play area.

Another possibility is that the site was a ceremonial location, possibly a place to seek a vision. A small cave discovered in the Rosamond area of the western Mojave Desert (O'Donnell et al. 1997) contained similar materials (sedge matting, cordage, strips of juniper bark) along with a small grass-lined pit containing several hundred seeds of fiddleneck (*Amsinckia tessellata*), a known hallucinogen (see O'Donnell et al. 1997:111, 113). While no hallucinogenic materials were in the collection from Witchstick Cave, a similar ceremonial function is possible.

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