# An Early Ceramic Pipe from the San Bernardino Mountains

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# Preface

Becoming a good archaeologist is no simple task. Seen towards the end of a career and looking back, I can reflect on the numerous "old timers" who provided insight or guidance along the way. While not an "old timer" at the time or even now but someone who was far ahead of me. Phil always encouraged his students to think critically, asking what it is that you want to understand and then figuring out how to go about arriving at an answer or solution. This included not just the thought process but encouraging replicative studies to better comprehend the process. He taught by example. When Phil wanted to understand lithic technology, he did not just read up on it but learned what was available by the book and also by the spoken word, going to the experienced knappers and working with them. He then broke lots of rock practicing what he read, heard, and learned. I was fortunate to have returned to the graduate program just when he was getting heavily into lithics. We would all spend hours working on "breaking rock." I was good at that; it just rarely amounted to anything with form and function. "If you're not bleeding, you are not getting into the rock" was one of his quotable quotes at the time. Another was "... if you are not thinking of archaeology for 50 minutes of every 60 minutes, then you are not serious about understanding prehistory."

My direct association with Phil was while we were both at UC Riverside, a span of 14 years. We worked on a number of projects together and often with other students in the mix of project completion or research interests. I have attempted to mimic his skills of critical thinking throughout my career. What would Phil do, how would he perceive this problem and, more practically, how would he approach solving it? What I perceived to be his thought process continues to motivate me to think in new and creative ways. I would always try to measure up to Phil's exacting standards of research, rethinking a problem and then then trying to express it in writing. I still go through numerous drafts. Phil has been a good mentor and a great friend both in the field and outside the field.

## Abstract

A morphologically unusual clay pipe from CA-SBR-467 on the north central flanks of the San Bernardino Mountains is described and dated to the first millennium AD, making it the oldest ceramic pipe in western North America. Comparison with other pipes leads to the proposal for a new taxon of ceramic pipe, herein named "Deep Creek," a category that presently includes but one other specimen, previously unpublished, that was found in northeastern San Diego County.

# Introduction

CA-SBR-467 is a prehistoric site located along the southeastern flanks of the Ord Mountains within the north-central flanks of the San Bernardino Mountain Ranges (Figure 1). In 2001, from a 20 to 80 cm thick midden in the central portion of the site, test excavations recovered ground stone tools in association with lithic and faunal remains. Of particular interest, and the focus of this paper, is an unusual clay pipe found in situ and adjacent to and slightly lower than a cache of two large metates and a mano.

Pacific Coast Archaeological Society Quarterly, Volume 49, Numbers 3 and 4

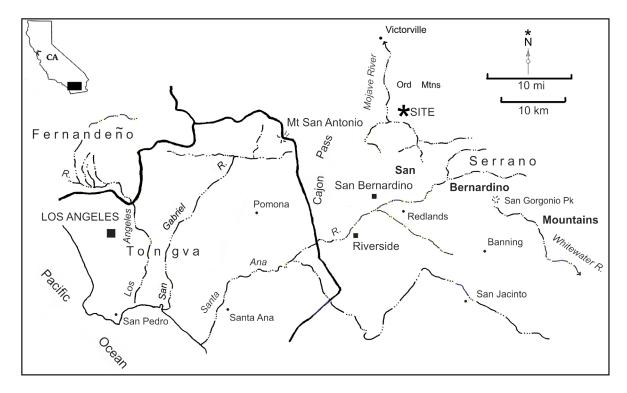


Figure 1. Location of the CA-SBR-467 site in southern California.

The section immediately following expands on the natural setting of the site, on site assemblage, and on provenience for the pipe, and the section also addresses the nature of site occupation. Subsequent to that, another section offers a description of the SBR-467 fired clay pipe and places the artifact in time. Next, comparisons are made with certain other kinds of pipes, resulting in a proposal for a new taxonomic category of pipe. This article ends with a summary and concluding remarks.

#### CA-SBR-467

## Site Setting

Site SBR-467 is located along a ridge on the south-facing slopes of the Ord Mountains, which are part of the San Bernardino Mountain Range of the Transverse Ranges, and overlook the Deep Creek drainage (Figure 1). Site elevation is about 1,360 m asl with the topography characterized as gentle tablelands with washes and ever-increasing, deep-cut canyons leading to the Deep Creek drainage to the south. Deep Creek is the east fork of the Mojave River and represents two-thirds of its upper mountainous watershed. The Mojave River flows north through Victorville and Barstow where it turns east and north again, eventually flowing into Death Valley during epic flood periods. The well-formed colluvial deposits are fine-grained and well drained; they contain grus (decomposing granitics) (Onken 2002). Low rock outcrops and exposures of granite, aplite, and quartzite are scattered across the landscape, indicative of bedrock formations close by.

The surrounding vegetation community consists of pinyon/juniper woodland, which contains a number of important plants used for food, medicine, and utilitarian purposes. Nearby economically important plants include single needle pinyon pine (*Pinus*)

monophylla), California black oak (Quercus kelloggii), Indian tea (Ephedra sp.), California juniper (Juniperus californica), Joshua tree (Yucca brevifolia), Mojave yucca (Yucca schidigera), chaparral yucca (Yucca whipplei), holly-leaf cherry (Prunus ilicifolia), prickly pear cactus (Opuntia sp.), yerba santa (Eriodictyon trichocalyx), chia (Salvia columbaria), and buckwheat (Eriogonum sp.). Many other plants, shrubs, and trees too numerous to list here are easily found throughout the region. Vegetation was burned off the site during the Willow Fire Incident in August 1999 (Figure 2).

## Site Assemblage and Nature of Occupation

The SBR-467 site consists of at least two loci containing a number of surface artifacts and features scattered across the broken ridge line over a 450 m x 120 m area (McCarthy 1999a; McDonald and McCarthy 2000). The site was tested in 2001, during which 22 hand-excavated units were completed (McKay 2006). The testing revealed the presence of substantial subsurface deposits at both loci, although it is possible that other deposits may be present becasue the excavations were only conducted in areas previously disturbed by recreational activities and an earlier failed attempt to protect the site during decommissioning of a dirt road that bisected the site.

Material recovered from the assemblage included ground stone tools (metates, a bowl fragment, a pestle, and manos), waste flakes, few projectile points or fragments thereof, faunal remains, one bone tool (awl), one bead, several hammerstones, and the ceramic pipe (Figures 3–5). Ground stone tools were noted throughout the deposit and were well represented on the surface. Surface finds included 10 bedrock metate features and 42 portable metates. Seven manos and mano fragments were recorded on the surface. Projectile points are represented by an Elko Corner-notched dart point, two Rose Spring arrow points, and one Cottonwood Triangular arrow point (McKay 2006:39). Lithic materials consist of local jaspers, chalcedony, chert, and some obsidian (Kaberline 2005). The obsidian was not sourced. Faunal remains include deer (Odocoileus hemionus), jackrabbit (Lepus californicus), and cottontail (Sylvilagus audubonii). One bone awl tip and a bone bead were recovered from depths of 60 to 70 cm and 30 to 40 cm, respectively.



Figure 2. View of CA-SBR-467 looking southwest. Photo taken in October 1999 after the Willow Fire burned across the site.

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Figure 3. Profile views of CA-SBR-467 pipe.







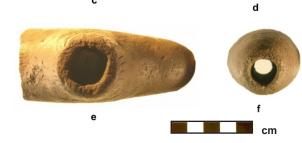


Figure 4. Views of the CA-SBR-467 pipe. Note decoration around the lip of the bowl and at the top of the bowl.

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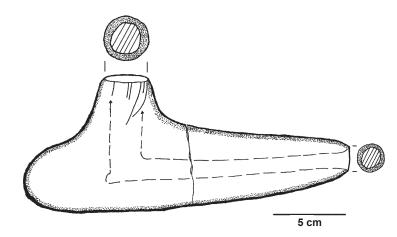


Figure 5. Drawing of the CA-SBR-467 pipe showing internal details of stem and bowl.

Based on the 2001 testing, McKay (2006) indicated that SBR-467 was a sedentary occupation site; this was inferred from the concentrations of artifacts and features identified on the surface, the extensive midden, and the apparent presence of house pits. While the midden is extensive, the data more accurately suggest intensive seasonal resource procurement activities. A large amount of faunal remains from deer, cottontail, and jackrabbit suggest hunting and processing as a primary activity. In addition, the large number of milling tools indicates that plant gathering and processing were also major activities.

This site is similar to CA-SBR-4394 in the Big Bear Lake area (McCarthy 2009). Both sites contained a large faunal assemblage and considerable milling equipment. SBR-4394 had episodes of occupation from 2,000 years ago into the early 1800s. Also, the flaked stone material was similar in that local jasper sources were well represented (McCarthy 2009). Site SBR-4394 was likely occupied intermittently during the spring, summer, and fall to utilize local plant and animal resources. Given its elevation at 1,769 m asl, it is unlikely that occupation extended into the winter. In contrast, SBR-467 is close to known ethnographic sites along Deep Creek. It probably represents a major activity area for those spending the winter along the creek. While seasonal water might have been available at the site, it is likely that the occupants relied mostly

on Deep Creek for water. Several extensive occupation sites have been reported along a stretch of Deep Creek in close proximately to SBR-467, and numerous sites indicate extensive occupations that are likely related to winter villages, including Warm Springs (CA-SBR-293) (Sanburg 1974), Hot Springs (CA-SBR-294), and the Deep Creek site (SBR-176) (Altschul et al. 1989). One house pit was recorded along the creek at CA-SBR-10,000 (McCarthy 1999b), but few systematic investigations have been undertaken in the region.

## The Pipe

## Provenience

The ceramic pipe (Figures 3-5) was found in Unit 11, located in the southern portion of the site within Locus A. Unit 11 is one of five units that were excavated to form a block of adjacent units (Figure 6). The pipe was recovered from midden deposits at a depth of 52 to 58 cm below present ground surface (Figure 7). Two metates (one on top of the other) and a mano beneath them were found at 10 to 20 cm above and to the south of the pipe.

## **Description**

The pipe measures 230 x 53 x 90 mm and is made of clay that was low-temperature fired (Maynard 2002).

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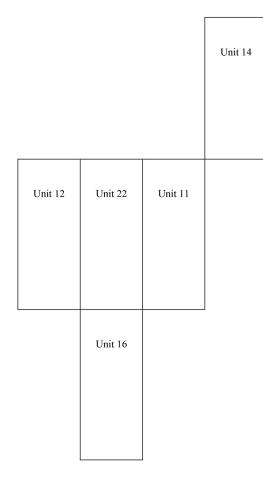
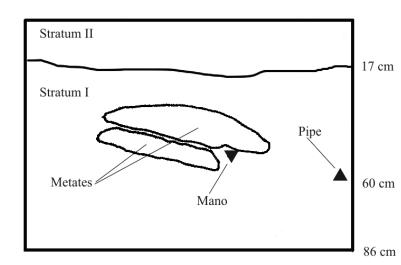


Figure 6. Plan view of block units excavated in a portion of Locus A, the southern portion of CA-SBR-467. Units measured 1.0 x 1.5 m with an orientation of the long axis N/S.



In profile the raised bowl and bulbous distal end offer a look similar to that of a whale (Figure 3), but there are no other attributes that suggest or support cetacean imagery. The stem portion of the pipe is rounded in cross section. The upper exterior portion of the bowl is decorated with incising (Figure 4a-d). One incision forms a ring around most of the bowl just below the lip. A portion of the top of the bowl of the pipe has been degraded, so the incised ring does not extend the full circumference. Other parallel lines extend downward from the ring. Two incisions are 40 mm in length, while the other 28 lines are less than 20 mm. The interior diameter of the bowl measures 18 mm (Figure 4e), while the diameter of the draw channel is ca. 13 mm and appears very uniform throughout the length of the stem (Figure 4f; Figure 5). It is more likely that clay was molded around a stick to form the stem and its channel, and another stick was used to form the bowl opening (see McKay 2006:46, 76). In other words, there was no drilling.

There are no indicators that the pipe was ever smoked. No residues adhere to the inner walls of the pipe bowl (Maynard 2002). Also absent is any evidence of mastic at the proximal end that might indicate insertion of a hollow bird bone tube or any other kind of mouthpiece.



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## Dating

Radiocarbon dates were obtained from samples taken in Units 14 and 22 (see Figure 6) adjacent to the pipe (Table 1). The results indicate a discrepancy in dating because the older deposits should be at greater depth in adjoining units. The samples were taken within 2 m of each other horizontally and within 40 cm vertically, yet their ages vary considerably. Other radiocarbon samples taken from other areas of the site are not adequate for comparing depth to depth given the undulating surfaces across the site and varying depths of the deposits. What can be inferred is that site use began approximately 2,000 years ago and terminated about 1,000 years ago. Suffice it to say that the pipe is from a cultural deposit that is over 1,000 years old.

# Comparisons and a Proposed New Type

Numerous attempts were made to locate specimens similar to the SBR-467 pipe. Inquiries were made at several regional museums, and a literature review was conducted. A review of Bonner's thesis (1985) on smoking pipes and sucking tubes of prehistoric California revealed nothing remotely similar.

Pipes have been made from stone, clay, and wood throughout California prehistory. Ceramic pipes were thought to have come into use in southern California about 800 years ago, derived from southwestern influences, and include keeled bow pipes. Ceramic pipes that have a keel (including bulbous, elbowed, and funneled) (see Bonner 1985:150, 182, 184-186) generally date to after 700 BP (Bonner 1985:204). Keeled style pipes observed by Bonner (1985) are one-half to one-third the size of the SBR-467 specimen and are not at all similar in morphology. No pipe described in Bonner (1985) resembles either the pipe recovered from SBR-467 or another unusual pipe (Figure 8) that is curated at the Autry National Center, Los Angeles.

That other pipe (Southwest Museum No. 1998.14.229) was found in the 1930s in northeastern San Diego County, along the north side of San Luis Rey River near the La Jolla Reservation and east of Pala and within the ethnographic territory of the Luiseño. The pipe was apparently broken into several pieces and was recovered during the plowing of a field. Artifact provenance suggests that the pipe was made of steatite. While the specimen itself was not available for review due to extensive facility upgrading at the museum, photographs of it (Figure 8) suggest that it was made from clay rather than steatite.

The two pipes illustrated herein have size and general outline in common. The specimen from San Diego has general provenance but lacks site provenience. Since the two specimens comprise an unreported type, I propose that a new ceramic pipe type be designated and that it be named "Deep Creek" in recognition of the area in which the SBR-427 specimen was found.

#### Summary and Concluding Remarks

This article provides detailed description of an unusually shaped pipe (Figures 3-5), one appearing not to have been used for smoking, that was excavated from SBR-467 in the San Bernardino Mountains. Set within a pinyon/juniper woodland vegetation community, the site likely served as a winter settlement. The pipe, dating within the first millennium AD, was found close to two stacked metates and a mano.

Table 1. Radiocarbon Dates from CA-SBR-467.

| Sample                    | Material | Uncalibrated Age        | Calibrated Age |
|---------------------------|----------|-------------------------|----------------|
| RC-003: Unit 14, 60-70 cm | Bone     | $890\pm60~BP$           | 930-680 BP     |
| RC-004: Unit 22, 20-30 cm | Charcoal | $1970\pm50~\mathrm{BP}$ | 2,010-1,820 BP |



Figure 8. Ceramic (?) pipe from northeastern San Diego County. Pipe was found in four pieces. A piece is missing from the distal end. Images courtesy of the Southwest Museum, Autry National Center, Los Angeles; Photo #1998.14.229.

30 cm

Clearly, the specimen was morphologically dissimilar to Keel type pipes, which were also of fired clay (see Bonner 1985:164, 182, 184-186). However, it bears enough similarity to a northeastern San Diego County pipe (Figure 8), previously unpublished, to reasonably infer that the two artifacts belong in the same genre. Accordingly, they now fold into a new ceramic pipe taxon, "Deep Creek."

When the San Diego County pipe again becomes available for study, it will be interesting to see whether it contains residues that would demonstrate it was smoked. One would also want to observe whether there are telltale signs of mastic (e.g., asphaltum) at the proximal end to indicate that a mouthpiece (e.g., bird bone tube) had once been inserted.

It is curious that the SBR-467 pipe appears not to have been smoked. Did it serve a ritual purpose not requiring tobacco or some other combustible?

The author hopes that this report will stimulate further discussion and research regarding smoking pipes and certain other tubular objects.

#### Acknowledgments

I wish to thank John Goodman and his crew who assisted me in the excavation of CA-SBR-476. The staff at the Southwest Museum, when contacted over 12 years ago, was most helpful in researching their collections and providing photographs of the San Diego County specimen seen in Figure 8. I am grateful to the current staff of the Autry National Center for granting permission for publication of these two images. Thanks also to Wayne Bonner, Hank Koerper, the anonymous reviewers, and Mark Q. Sutton, *Quarterly* issue guest editor, all of whom provided helpful suggestions that improved this report.

## **References** Cited

- Altschul, Jeffrey H., William C. Johnson, and Matthew A. Sterner
- 1989 The Deep Creek Site (CA-SBr-176): A Late Prehistoric Base Camp in the Mojave River Forks Region, San Bernardino County, California. Statistical Research Technical Series No. 22. Tucson.

# Bonner, Wayne Howard

1985 Smoking Pipes and Sucking Tubes of Prehistoric California: A Distributional and Typological Study. Master's thesis, Department of Anthropology, California State University, Long Beach.

# Kaberline, Mike

2005 Appendix H: Lithic Analysis of Specimens Recovered from Test Excavations at the Warm Springs Road Site (CA-SBR-467), Mountaintop Ranger District, San Bernardino National Forest, California. In *Report Documenting Archaeological Testing at Prehistoric Site CA-SBR-467, the Broken Pipe Site, Pamshriyet Qerperq, Section 14, T3N, R3W, Mountaintop Ranger District, San Bernardino National Forest, California* by D. C. McKay. Report on file at the U.S. Forest Service, San Bernardino National Forest, Forest Supervisor's Office, San Bernardino, California.

# Maynard, David

2002 *Analysis of a Ceramic Pipe Artifact from Site CA-SBR-467.* Letter report on file at the Heritage Resources Department, San Bernardino National Forest, San Bernardino, California.

McCarthy, Daniel F.

- 1999a CA-SBR-467, Site Record Update. On file, San Bernardino Archaeological Information Center, California Historical Resources Information System, San Bernardino County Museum, Redlands.
- 1999b CA-SBR-10,000, Site Record. On file, San Bernardino Archaeological Information Center, California Historical Resources Information System, San Bernardino County Museum, Redlands.
- 2009 Twenty, Two Hundred, Two Thousand Years, Data Recovery Excavations at CA-

SBR-4394, Big Bear Valley, San Bernardino National Forest, San Bernardino County, California. Report on file at the San Bernardino Archaeological Information Center, California Historical Resources Information System, San Bernardino County Museum, Redlands.

## McDonald, Meg, and Daniel F. McCarthy

 2000 CA-SBR-467 Research Design and Mitigation Plan, Mountaintop Ranger District, San Bernardino National Forest, California.
Report on file at the U.S. Forest Service, San Bernardino National Forest, Forest Supervisor's Office, San Bernardino, California.

# McKay, Douglas C.

2006 Report Documenting Archaeological Testing at Prehistoric Site CA-SBR-467, the Broken Pipe Site, Pamshriyet Qerperq, Section 14, T3N, R3W, Mountaintop Ranger District, San Bernardino National Forest, California. Report on file at the U.S. Forest Service, San Bernardino National Forest, Forest Supervisor's Office, San Bernardino, California.

# Onken, Jill

2002 Geoarchaeology of CA-SBR-467. Technical Report 02-12 prepared by Statistical Research, Inc., Redlands, California. Report on file at the U.S. Forest Service, San Bernardino National Forest, Forest Supervisor's Office, San Bernardino, California.

# Sanburg, Delmer E.

1974 *The Warm Springs Archaeological Site: A Preliminary Report.* Report on file at the San Bernardino Archaeological Information Center, California Historical Resources Information System, San Bernardino County Museum, Redlands.

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