

A Unique Artifact from the Dobkin Site: Unfinished Smoking Pipe, Manufacturing Die, or Shamanic “Magic Trick”?

Henry C. Koerper and Nancy Anastasia Desautels-Wiley

Abstract

This article describes an unusual vesicular basalt artifact collected from the Dobkin site (CA-ORA-145) on Huntington Mesa, Orange County. Three functional interpretations are considered: unfinished smoking pipe; die for manufacturing certain kinds of cylindrical stone objects; and shaman’s paraphernalia for effecting sleight of hand manipulations. Further discussion considers the possibility that this rare object had been crafted at the Cogged Stone site (CA-ORA-83) at Bolsa Chica Mesa, where vesicular basalt was commonly employed during the Millingstone period to manufacture a stylistically varied portable cosmos. No definitive statements are possible regarding function, meaning, age, or place of manufacture for this unique specimen.

Introduction

At least four or five decades have passed since an Orange County relic collector discovered the unusual artifact illustrated in Figure 1. It was either Herrold Plante or Lawrence Gale who came upon this oddity lying on the surface of CA-ORA-145, the Dobkin Site (Figure 2). The shape of this vesicular basalt object offers some resemblance to the typical modern tobacco pipe, yet its internal configuration precluded its use for smoking.

The Dobkin specimen is described in detail below, followed by cursory notes on ORA-145. A Discussion section then addresses the functional possibilities for this unusual specimen; subsequently, the subject of its antiquity is broached, an issue that begs the

question of whether the stone carving had possibly been fashioned at the Cogged Stone site (CA-ORA-83), well known for its diverse portable cosmos, much of it crafted of the same lithic material, vesicular basalt. A Summary section ends our short study.

Description

The pipe-like Dobkin object (Figure 1) was produced by pecking and grinding. The vesicular basalt material was too coarse for an artisan to have applied a surface polish. The material is relatively dense compared to the majority of regional artifacts of vesicular basalt, and the artifact weighs a hefty 784.4 g. Maximum length is 105.7 mm, and height measures 92.4 mm. Maximum diameter of the “bowl” is 76.3 mm. The aperture atop the bowl (inside the rim) is roughly 32 to 33 mm wide. Rim thickness is moderately variable, the estimated average being about 10 mm.

Some amount of black substance, probably asphaltum, is seen in two places along the bowl rim, out of which a large chip had broken away. There are patches of this material within the chip scar, which indicates that the now missing piece had likely been glued back into place. Black mastic on the rim adjacent to the gap left by the absent sherd undoubtedly resulted from the repair work.

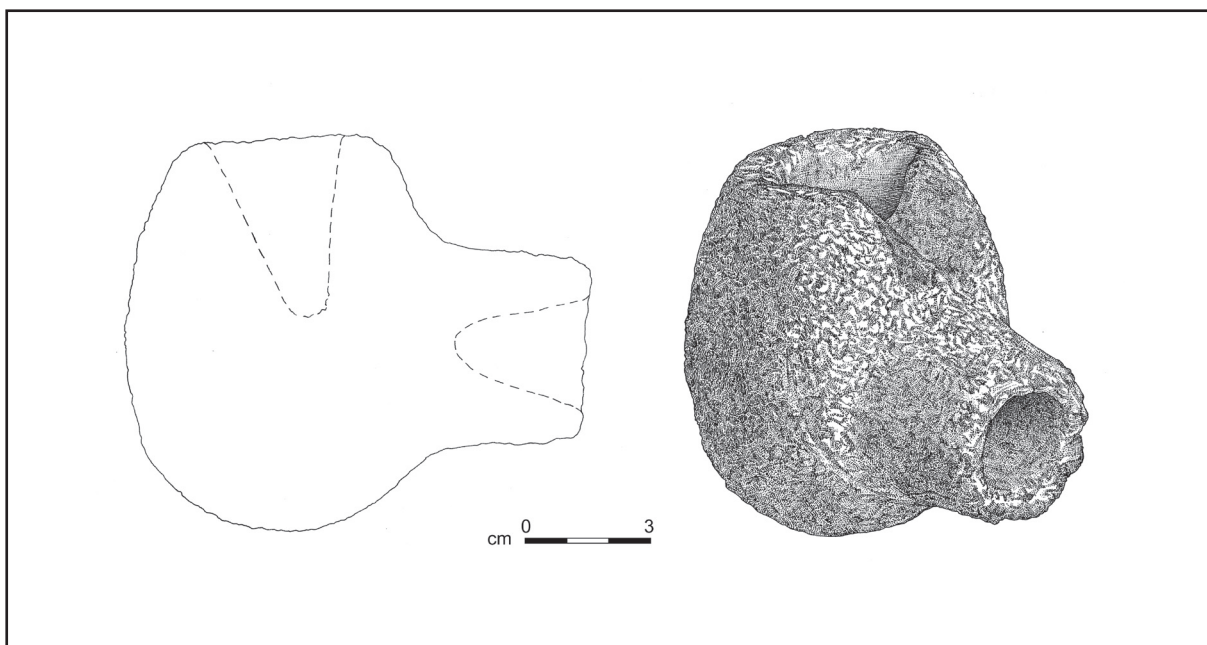


Figure 1. Unusual vesicular basalt artifact from the Dobkin site (CA-ORA-145).

The short cylindrical “stem” protruding from the bowl has a diameter of about 42 mm at midsection. Its aperture varies from about 24 to 25 mm from inside rim to inside rim. This rim has variable thickness, an average measurement being approximately 9 mm. There are some patches of asphaltum just below the outside edge of the rim.

Overall, the symmetry of the object is fairly balanced. The outer surface morphology is curvilinear/circular except for the comparative flatness of rims encircling the two apertures. These two cavities/holes with their entrances extend the theme of roundedness, each being a conically shaped void, and each tapering to a bluntly pointed terminus at depths of 40.7 mm (bowl) and 30.7 mm (stem) (Figure 1). The walls and rounded bottoms of each cavity are ground rather smooth compared to all outer heavily pitted surfaces. The rims allow the artifact to free stand on a horizontal surface, but the object will not do so on its rounded “bottom,” at least not when set upon a flat, hard surface. Of course, a rounded depression in the soil is all that

is needed for the Dobkin specimen to be placed in a stable position, bottom down, with the two openings pointing outward.

CA-ORA-145

The Dobkin site (ORA-145) no longer exists, having fallen victim to urban development. It was located near what is today the intersection of Newland Street and Ellis Avenue (Figure 2) at the southwestern corner of the junction of two cities, Fountain Valley and Huntington Beach, on Huntington Mesa (also known as Huntington Beach Mesa). Of the many prehistoric archaeology sites recorded on the mesa, the two closest of the more familiar sites are the Heil site (CA-ORA-283), excavated by government archaeologists during the Depression era (Anonymous 1936, 1937a:73-81), and the Newland Ranch House site (CA-ORA-183), also referred to as the Newland site or as the Newland Hillside site, which received attention under both the State Employment Relief Administration (SERA) (Anonymous 1935) and the Works

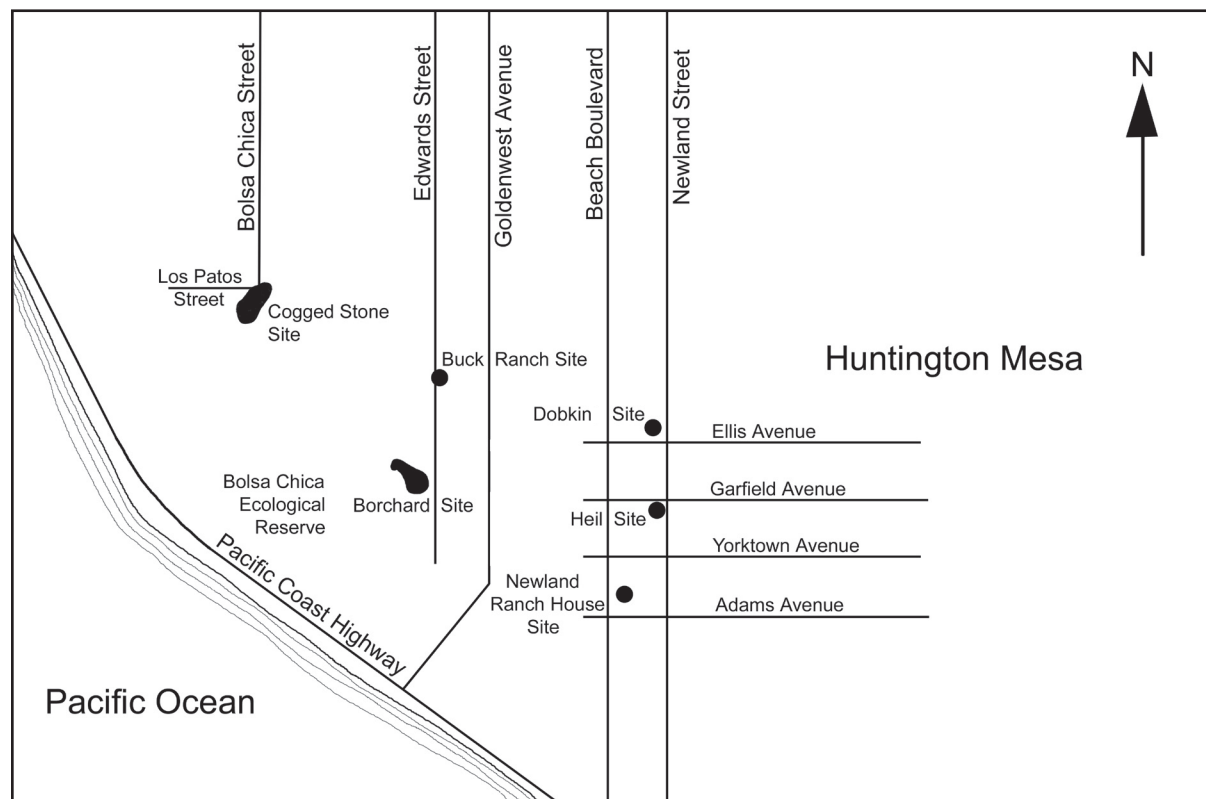


Figure 2. Location map.

Progress Administration (WPA) (Anonymous 1937b, 1937c, 1937d, 1937e, 1937f) as well as in later times (e.g., Schroth 1983:61; Cottrell et al. 1985). The Heil site is 1 km directly south of ORA-145, and the Newland site is just 2.5 km south-southwest of ORA-145. From their Huntington Mesa location with its grassland-herbland and coastal sage-scrub micro-environments, inhabitants of these three sites had easy access to varied resources, especially those of the marshlands (saltmarsh, freshwater marsh, and ecotone) at the Santa Ana Gap to the southeast.

Other sites with names readily recognizable to regional avocational and professional prehistorians and situated not very far from the Dobkin location, include the Borchard site (ORA-365), 3.4 km away at the western edge of Huntington Mesa (Koerper and Whitney-Desautels 1999a:72; Desautels et al. 2005; Koerper et

al. 2006; Koerper et al. 2007), and the Buck Ranch site, 3.3 km away, in fertile lowlands (Gospel Swamp area) beyond the mesa (Chace 2008; Koerper 2009; see also Strandt 1965:30-32). Of the sites receiving mention here in relation to the Dobkin site, probably the one most germane to our research is at a 5.7 km distance, the Cogged Stone site (ORA-83). It sits on the upper terrace of Bolsa Chica Mesa, overlooking the Bolsa Chica Ecological Reserve (Figure 2). ORA-83 is arguably the single best known site in coastal southern California owing especially to its early Millingstone component, which contained hundreds of examples of the much celebrated cogged stone, a genre of artifact that has inspired several dozen propositions concerning function. The reader might wish to consult the following published sources regarding ORA-83 and/or cogged stones, the great majority of which are published in the *Pacific Coast Archaeological Society Quarterly*:

Herring (1968); McKinney (1968); Muñoz (1975); Carter and Howard (1975); Langenwalter and Brock (1984); Eberhart (1989); Koerper and Mason (1998); Koerper and Whitney-Desautels (1999a, 1999b); Underbrink and Koerper (2006); Koerper et al. (2007).

There is little that can be reported regarding ORA-145 (see Mason 1987). As early as the 1920s, local relic collectors were mining the Dobkin site. Archaeological Research, Inc. (1972) tested the shell midden by digging five backhoe trenches and four excavation units. The Pacific Coast Archaeological Society (PCAS) had also conducted field studies there, but the organization produced no report. The findings have provided solid evidence for a Late Prehistoric component, the time sensitive artifacts including Coastal Cottonwood Triangular points (see Koerper et al. 1996). Artifacts manufactured prior to the Late Prehistoric period and recovered by collector Lawrence Gale at ORA-145 included an Elko series projectile (see Koerper et al. 1994) and two O-Type charmstones (see Elsasser and Rhode 1996); these and other objects from the Gale collection are housed at the Archaeological Research Facility at California State University, Fullerton.

Among the PCAS holdings of ORA-145 materials, there is an unusual cogged stone—a fish vertebra type (see e.g., Underbrink and Koerper 2006), but with a slightly concave lateral panel. Most likely it had been made at ORA-83 and brought at some unknown time to ORA-145. A crow's flight path would not have been possible for trekkers from the Dobkin site, given the marshy areas at the Bolsa Gap, and we suppose that some trail had meandered an estimated 7-8 km between the two locations.

Discussions

Functional Considerations

As previously noted, the morphology of the Dobkin artifact resembles a typical modern smoking pipe;

however, its two holes do not connect, and consequently it could not have been smoked. If the artisan had intended to connect the two chambers, the intersecting moment would have required additional drilling, the necessary vertical and/or horizontal distances totaling only about 35 mm (see Figure 1). Could increasing surface contact between reamer and tunnel walls and concomitant friction have so slowed the progress of manufacture that a perceived cost-benefit imbalance dissuaded the craftsman from laboring on, thus resulting in a failed tobacco pipe? We have occasionally observed unfinished small perforations on Middle Holocene plummet-like charmstones, particularly in cases where the lithic medium seems to have been relatively intractable to a stone drill.

Yet, so substantial had been the investment in time and energy to produce the Dobkin artifact that the idea of abandonment of a goal close at hand seems unlikely. It also seems improbable (but not out of the question) that the stone worker had expired before he could complete his pipe. Would a taboo or other belief have then precluded another craftsman from finishing the effort of a recently deceased person?

Then again, the Dobkin artifact may not have been conceived as a pipe at all; that is, perhaps the artifact was complete. If so, this might help account for why the now missing divot that had disengaged from the upper bowl, just above the stem, had apparently been glued back into place.

Our perusal of the ethnological literature of Alta and Baja California and of the Great Basin turned up no artifact of similar morphology. Of the many archaeological pipes and sucking tubes illustrated in Bonner (1985), none possessed a similar shape. Nor did Hudson and Blackburn illustrate any similar item in their discussions either of archaeologically recovered smoking pipes (1986:118-129) or of sucking tubes (1986:285-288).

Perhaps the holes had instead served to receive sacred objects for display in ritual/ceremony. One can imagine, for instance, certain plummet-like charmstones set conformably into the tapering cylindrical chambers. However, a more simple design could have easily accomplished such a holding function. The manufacturing effort, it seems to us, would not have been justified for so mundane a purpose.

It has long been speculated that coastal southern California Native peoples may have produced dies that were used to fashion tubes, pipes, and other cylindrical objects. Reflecting statements from his Chumash informants, Henshaw (1887:7, 18-19) offered that some donut stones had perhaps been so employed. One might reasonably hypothesize that the Dobkin oddity had functioned as a manufacturing die to fashion cylindrical objects that gradually narrow to pointed or rounded termini. If so, would those objects have been perhaps cylindrical charmstones?

The design of the Dobkin artifact allows it to be grasped comfortably in one hand and alternately rotated in clockwise and counter-clockwise arcs to grind a blank to proper shape. Of course, such a die, if that had been its purpose, might have been held either stationary or set in motion while the item being crafted, held in the opposite hand, was simultaneously rotated, first in one direction and then twisted to the opposite.

Interestingly, Fernando Librado described for Harrington how he might shape a steatite [cylindrical] smoking pipe using a die, although he himself seems never to have done so. Witness:

I stick the pipe in the hole of an instrument for making it, and I turn the soapstone back and forth, grinding it into the shape desired. I rock the tip of the pipe in the stone to make it taper [Hudson and Blackburn 1986:119].

A major problem with the die hypothesis is that in the manufacture of the holes, the walls of those holes would soon have been ground too smooth to serve as effective abraders. Indeed, such smoothness is very evident in the Dobkin object. It would probably not have been cost-effective to periodically roughen the interior walls to remove the slick surfaces. An abrading stone with more or less flat faces would seem to be the superior tool for grinding all kinds of stone.

Another hypothesis is that the Dobkin object had been employed as shamanic paraphernalia. Its two conical channels, or chambers, may have sequestered items required in the kinds of legerdemain often associated with sucking cures and the like.

The subject of such prestidigitation has previously been broached with regard to a local archaeologically excavated Late Prehistoric stone artifact (Winterbourne 1967:22-23). Works Progress Administration archaeologists excavating at the Goff's Island site (CA-ORA-8, also known as CA-ORA-108 and CA-ORA-110), Laguna Beach, discovered a burial feature with some rather spectacular mortuary furniture. One item was a 290 mm long steatite sucking tube (Figure 3) found near a skeleton presumed to be the remains of a shaman. The channels, drilled from either end, are not precisely joined at the middle. Pointing to an oval hole in the tube and to a schist inlay piece that slips easily into an opening at about the middle of the tube, Winterbourne guessed this to be a device to allow a shaman to palm a "disease object" to be "sucked" out of and then revealed to an ailing patient. Thus, through sleight of hand, the inset might be slipped into the hole and subsequently extracted out one end of the tube. Similarly, the modern magician's repertoire of tricks frequently involves "miraculous" appearances and/or disappearances of objects.

A partial testing of the "magic trick" hypothesis involves taking some measure of the ease with which the artifact might be manipulated to conceal and

subsequently reveal an object. We showed the Dobkin artifact to professional magician Ken Sands, owner of *Magic Galore and More* in Westminster. He immediately pointed out and demonstrated the possibilities of the piece to effect various “magical” illusions.

To begin, the protuberant stem, which is smaller than the bowl, can be successfully concealed by one palm; the stem hole (concealed chamber) might sequester, say, a small waterworn stone. The hands surround the bowl, allowing little more than its hole to be visible; this chamber is empty, or perhaps it contains an object quite different in shape or material from the waterworn pebble. With a big motion to draw the attention of the observer (patient), the magician-shaman also would have employed a small motion to rotate the opening of the stem into that position previously occupied by the opening in the bowl. The stem would have been initially covered and thus, hidden by one hand. Next, the contents of the visible stem chamber would be revealed. There would then have occurred a transformation—perhaps something out of nothing, or a differently shaped object, or perhaps an item of dissimilar color or substance.

Indeed, the two rim diameters are not equal, but the differential can be obscured by the manner in which the thumb and forefinger (index finger) surround the chamber entrances. Recall that there is black mastic (probably asphaltum) on the bowl rim adjacent to

the repair. We wonder whether this substance on the stem rim had been applied to mimic the repair mastic present on the larger rim, this in order to promote the illusion.

No definitive conclusion is currently possible. We cautiously favor the idea that the Dobkin artifact related to shamanic practice, possibly remedial/medical in nature. If correct, then yet another object of the portable cosmos has been identified.

Dating

The greater occupation of the Dobkin site was a Late Prehistoric phenomenon, but the village held pre-Late Prehistoric artifacts, such as the two O-type charmstones noted above. Of particular interest is the fish vertebra type cogged stone, its ultimate origin probably ORA-83 on Bolsa Chica Mesa. This raises questions of the why and when of its transport onto Huntington Mesa, queries not likely to be satisfactorily answered.

The *florit* of manufacture of vesicular basalt objects assignable to the regional portable cosmos falls to around the seventh to eighth millennia B.P., with the spatial focus being ORA-83, again a 7-8 km walking distance from the Dobkin site. Perhaps the unusual Dobkin vesicular basalt “pipe-like” artifact had been scavenged off the Cogged Stone site. Detracting from this idea is the observation that

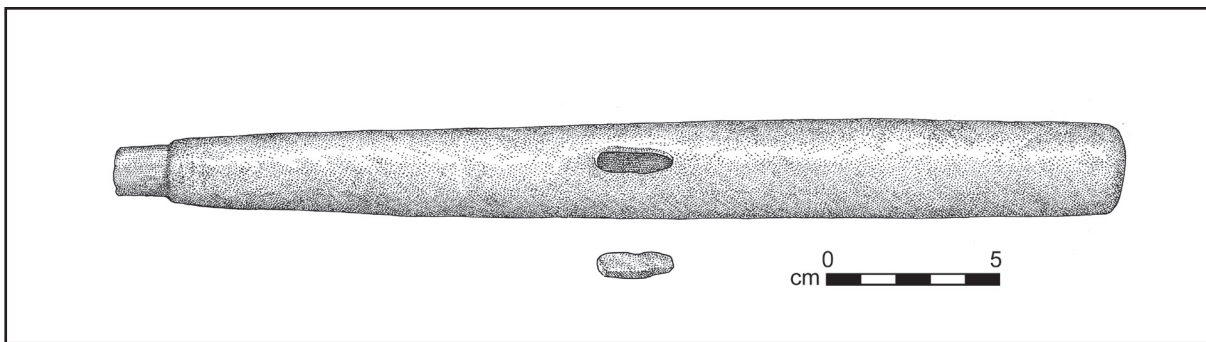


Figure 3. Steatite sucking tube from the Goff's Island site (CA-ORA-8).

its material appears more dense than the vesicular basalt normally used to make the ORA-83 discoidals and cogged stones.

We suspect that the Dobkin specimen is of significant antiquity, and perhaps its function and meaning had once connected to an early Bolsa Chica Mesa portable cosmos. Admittedly, support for this hypothesis is little more than circumstantial.

We also raised the possibility that the object might have been connected with behavior surrounding plummet-like charmstones. If that had been the case, then the temporal assignment would fall to some point in the Middle Holocene, not the Early Holocene.

Summary and Concluding Remarks

The Dobkin vesicular basalt artifact with its morphological resemblance to a modern smoking pipe obviously could not have functioned as such, for its two channels did not connect. It may then have been an unfinished pipe, but we have proffered two additional hypotheses regarding function—a die for the manufacture of cylindrical objects with pointed to rounded terminal ends and shamanic paraphernalia whose design bespeaks sleight of hand manipulations, possibly once directed to ritual curing. We tentatively favor the medicine man “magic trick” hypothesis.

Given that the Cogged Stone site (ORA-83) was perhaps only a 7-8 km walk away from the Dobkin site and that the former location had once witnessed prodigious production of vesicular basalt artifacts beginning in the Early Holocene, one must consider whether the Dobkin find had had its origin on Bolsa Chica Mesa where subsequently it was collected at some unknown date and transported to Huntington Mesa. But then again, if there had been an association with the plummet-like charmstone genre, then temporal placement would fall to the Middle Holocene.

We have offered no definitive answers to the functional and chronological issues. Doubtless, some readers would like to share their alternate hypotheses, maybe through the *Pacific Coast Archaeological Society Newsletter*.

Acknowledgments

We very much appreciate the efforts and cooperation of several people. We acknowledge the late Herrold Plante for relinquishing the Dobkin specimen for scientific study, and per his request, the artifact will soon be turned over to a museum. Professional magician Ken Sand, owner of *Magic Galore and More* in Westminster, was generous with his advice and support. Nancy Jenner, Collections Manager of the Archaeology Research Facility, Anthropology Department, at California State University, Fullerton, made available a number of Dobkin site artifacts for our study. Scott Findlay facilitated access to the Dobkin site artifacts held at the Pacific Coast Archaeological Society’s curation facility in Santa Ana. We thank Dr. Gary Breschini of Coyote Press for allowing reuse of the illustration of Figure 3. Joe Cramer produced all of the figures, and Karen Koerper typed the several drafts of our study. We are grateful for the comments of Ivan Strudwick and the anonymous reviewers.

References Cited

- Anonymous
1935 Newland Hillside Excavation. 5/27/35-5/31/35 and 6/3/35-6/24/35 SERA Historical Research Project #31-F2-96. Ms. on file at UCI Langson Library, Special Collections. [Reprinted in the *Pacific Coast Archaeological Society Quarterly* 4(2):1-17.]
- 1936 Heil Site. WPA Anthropological Project #4465. Ms. on file at UCI Langson Library, Special Collections.

- 1937a List of Artifacts [from Norris Camp, Heil, Santiago Cave and Black Star Canyon Sites], WPA Anthropological Project #4465. Ms. on file at UCI Langson Library, Special Collections. on file at South Central Coastal Information Center, California State University, Fullerton.
- 1937b Daily Notes, Newland Site. June 16 to July 13, 1937. WPA Anthropological Project #4465. Ms. on file at UCI Langson Library, Special Collections. Chace, Paul G.
2008 Locating the Buck Ranch Prehistoric Burial Ground, Huntington Beach, California. *Pacific Coast Archaeological Society Quarterly* 40(2):41-49.
- 1937c Daily Notes, Newland Site. Oct. 21, 1937-Nov. 20, 1937. WPA Anthropological Project #7680. Ms. on file at UCI Langson Library, Special Collections. Cottrell, Marie, Constance Cameron, Vada Drummy-Chapel, Theodore Cooley, and Adella Schroth
1985 Archaeological Investigations Conducted at the Newland House (CA-ORA-183), Huntington Beach, California. *Pacific Coast Archaeological Society Quarterly* 21(1):1-74.
- 1937d Daily Notes for Newland Site. Nov. 22, 1937-Nov. 27, 1937. WPA Anthropological Project #7680. Ms. on file at UCI Langson Library, Special Collections.
- 1937e List of Artifacts - Newland Site. Oct. 21, 1937-Nov. 20, 1937. WPA Anthropological Project #7680. Ms. on file at UCI Langson Library, Special Collections. Desautels, Nancy A., Henry C. Koerper, and Jeffrey S. Couch
2005 A Birdstone and Phallic Pestle Cache from CA-ORA-365. *Journal of California and Great Basin Anthropology* 25(1):109-117.
- 1937f Drawings of November Artifacts - Newland Site. WPA Anthropological Project #7680. Ms. on file at UCI Langson Library, Special Collections,. Eberhart, Hal
1989 Report of Field Work at Bolsa Chica. *Pacific Coast Archaeological Society Quarterly* 25(3):53-72.
- Archaeological Research, Incorporated
1972 Report of Archaeological Testing: The Dobkin Site (4 Ora-145). Report on file at South Central Coastal Information Center, California State University, Fullerton.
- Bonner, Wayne Howard
1985 *Smoking Pipes and Sucking Tubes of Prehistoric California: A Distributional and Typological Study*. Unpublished Master's thesis, Department of Anthropology, California State University, Long Beach.
- Carter, Christine, and Jerry Howard
1975 *Phase I Archaeological Investigations, CA-ORA-83, Orange County, California*. Archaeological Research, Inc., Costa Mesa. Ms. Henshaw, Henry W.
1887 Perforated Stones from California. In *Bureau of American Ethnology Bulletin* 2, pp. 1-34. Smithsonian Institution.
- Herring, Alike K.
1968 Surface Collection from CA-ORA-83, A Cogged Stone Site at Bolsa Chica, Orange County, California. *Pacific Coast Archaeological Society Quarterly* 4(3):3-37.

- Hudson, Travis, and Thomas C. Blackburn
1986 *The Material Culture of the Chumash Interaction Sphere, Vol. IV: Ceremonial Paraphernalia, Games and Amusements*. Ballena Press Anthropological Papers No. 30. Menlo Park, California.
- Koerper, Henry C.
2006 The Aetiology of the Donut Stone and Its Symbology: A Case Study of "Sexualization-Sacralization." In *Contributions from Orange County Presented in Remembrance of John Peabody Harrington*, edited by Henry C. Koerper, pp. 87-125, Coyote Press Archives of California Prehistory No. 53. Salinas, California.
- 2009 The Case of the Missing Buck Ranch Mortuary Remains: A Mystery Partly Solved. *Pacific Coast Archaeological Society Quarterly* 41(2 & 3):95-110.
- Koerper, Henry C., Jeffrey S. Couch, Joanne Couch, and Nancy A. Desautels
2006 A Unique Dart Bunt from CA-ORA-365, the Borchard Site. *Proceedings of the Society for California Archaeology* 19:132-137. Chico.
- Koerper, Henry C., Joanne H. Couch, Jeffrey S. Couch, and Nancy Anastasia Desautels
2007 Prehistoric Dolomite and Obsidian Disc Beads: New California Artifact Types from Orange County. *Pacific Coast Archaeological Society Quarterly* 39(1):53-64.
- Koerper, Henry C., and Roger D. Mason
1998 A Red Ochre Cogged Stone from Orange County. *Pacific Coast Archaeological Society Quarterly* 34(1):59-72.
- Koerper, Henry C., Adella Schroth, and Roger Mason
1994 Morphological and Temporal Projectile Point Types: Evidence from Orange County, California. *Journal of California and Great Basin Anthropology* 16(1):81-105.
- Koerper, Henry C., Adella Schroth, Roger Mason, and Mark L. Peterson
1996 Arrow Projectile Point Types as Temporal Types: Evidence from Orange County, California. *Journal of California and Great Basin Anthropology* 18(2):258-283.
- Koerper, Henry C., and Nancy Whitney-Desautels
1999a Astragalus Bones: Artifacts or Ecofacts? *Pacific Coast Archaeological Society Quarterly* 35(2 & 3):69-80.
- 1999b A Cowry Shell Artifact from Bolsa Chica: An Example of Prehistoric Exchange. *Pacific Coast Archaeological Society Quarterly* 35(2 & 3):81-95.
- Langenwalter, Paul E., II, and James P. Brock
1984 The Samuel Evans Cogged Stone Research. *Pacific Coast Archaeological Society Quarterly* 20(2):77-80.
- Mason, Roger
1987 *Research Design for Evaluation of Coastal Archaeological Sites in Northern Orange County, California*. Report produced through Scientific Resource Surveys, Inc. and on file at South Central Coastal Information Center, California State University, Fullerton.
- McKinney, Aileen
1968 Cogged Stones in Private Collections. *Pacific Coast Archaeological Society Quarterly* 4(3):39-55.
- Muñoz, Jeanne
1975 Report of Archaeological Investigations of the Southwest Portion of CA-ORA-83. *Pacific Coast Archaeological Society Quarterly* 11(3):1-32.

Schroth, Adella

- 1983 Radiocarbon Dating with Application to Orange County Archaeology. *Pacific Coast Archaeological Society Quarterly* 19(2):35-81.

Strandt, Herman F.

- 1965 Life and Customs of the Southwestern Coast Indians (Part Two of Three Parts): Burial Customs of the Orange County Indian. *Pacific Coast Archaeological Society Quarterly* 1(3):27-32.

Underbrink, Susan, and Henry C. Koerper

- 2006 A Taxonomic Tour of Cogged Stone Types. *Proceedings of the Society for California Archaeology* 19:111-119. Chico.

Winterbourne, John

- 1967 Report of the Goff's Island Site Excavation, May 1, 1939 to January 22, 1940. *Pacific Coast Archaeological Society Quarterly* 3(2&3).