A Dorsal Fin Effigy from the Bonita Mesa IV Site (CA-ORA-134)

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Abstract

A long forgotten and not previously published artifact found during the 1964-1965 PCAS investigations at CA-ORA-134 reappeared during a recent PCAS curation workday. This specimen bears close resemblance to a killer whale dorsal fin. Its reappearance is especially timely since the previous *Quarterly* carried an article (Koerper and Desautels-Wiley 2012) proposing a new genre, the "dorsal fin effigy," for inclusion within the portable cosmos of south central coastal California.

Introduction

A recent *Quarterly* article (Koerper and Desautels-Wiley 2012) illustrated and discussed a number of stone artifacts whose shapes, with varying degrees of persuasion, suggested mimicry of cetacean dorsal fins. The study also provided ethnohistoric, ethnographic, and archaeological testimony to the importance of cetaceans in both the material world and nonmaterial landscapes of regional Native peoples. Koerper and Desautels-Wiley (2012) were convinced that some number of these artifacts had indeed been crafted to represent the dorsal appendage. Accordingly, they proposed a new genre, the "dorsal fin effigy," to be included among a range of objects making up the portable cosmos of south central coastal California (see e.g., Lee 1981).

Left unstated by Koerper and Desautels-Wiley was anticipation that future observations, perhaps influenced by their study, might identify artifacts that further supported the "dorsal fin effigy" concept. Such a discovery might occur through field work, revisits to curated collections, perusal of privately

held collections, or rereads of published and unpublished documentations. Here, subsequent supporting information receives timely attention, just on the heels of the Koerper and Desautels-Wiley (2012) essay, owing to recent volunteer work conducted by PCAS members at the Society's archaeological collections storage facility in Santa Ana. There, an effigy with very credible dorsal fin shape was recognized during a "curation day" get-together. It is herein illustrated in an artist's rendering (Figure 1) and in two photographs (Figures 2 and 3) and is described in detail. This essay provides notes regarding the specimen's provenance, at or near the Bonita Mesa IV site (Figure 4), located within easy walking distance of Newport Bay. Brief notes will address the nature of this small food gathering and processing camp.

The Reemergence of an Unusual Artifact and Its Description

The artifact seen in Figures 1-3 was collected in either 1964 or 1965, during PCAS investigations at and around CA-ORA-134, or the Bonita Mesa IV site, which sat at a western edge of the San Joaquin Hills just above a southern extension of Bonita Canyon (Figure 4). At some unknown time the specimen was placed in a storage box that eventually found its way to the present PCAS curation facility, located in a historic Pacific Red Car rectifier station¹ on the grounds of Garfield Middle School in Santa Ana, a mere two and a half blocks distance from where John Peabody Harrington once lived (see Marr 2006). PCAS volunteers

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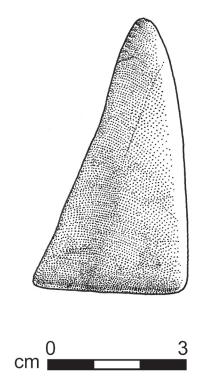


Figure 1. Dorsal fin effigy collected at or near CA-ORA-134 (Bonita Mesa IV).

Megan Galway and Kathleen Shada rediscovered this complete, ground stone artifact (Cat. No. 516).

The object exhibits careful grinding over all surfaces, almost certainly to effect the look of a cetacean dorsal fin. More specifically, its plan view design (Figures 1 and 2) immediately recalls the dorsal appendage of Orcinus orca, or killer whale (a.k.a., orca, great killer whale, grampus), (see Figure 5) largest member of the dolphin family (Delphinidae). Orca dorsal fins generally remind one of isosceles triangles, but some will show a salient lean forward, others not. Some amount of variability might be evident when side and head-on views of the appendage are compared between individual animals (see Figure 5) (Carwardine 2002:153-154). Some fins might have nicks and scars on trailing edges. The male fin is taller on average than that of the female. In the oldest males the appendage may reach 1.8 m in height; with greater heights, fins usually become wavy (Carwardine 2002:152-153).



Figure 2 Opposite face of effigy seen in Figure 1.

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Figure 3. Lower end of Bonita Mesa artifact shown in Figures 1 and 2. Note that the bottom end is fully crafted with no breakage, indicating specimen is complete.

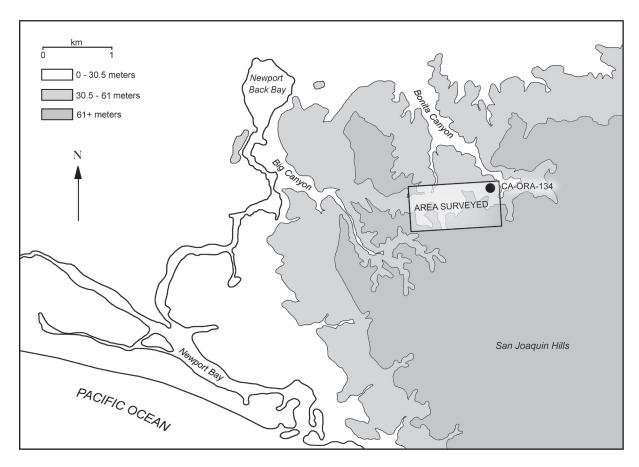


Figure 4. Location map. After map showing Bonita Mesa and environs circa 1890 (in Chace et al. 1967).

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Figure 5. Note size and shape variability of dorsal fins of three orcas. Original artwork by Joe Cramer.

The 32 g, 60.2 mm long, 14.3 mm thick ground stone object (Cat. No. 516) was crafted from light yellowish-brown (Munsell Hue 2.5Y, 6/4 [value/chroma]), very fine grained sandstone (hardness, Mohs 2). The specimen is relatively thick at its base (max. th., 12.9 mm); the base measures 33.3 mm. The edges along the lower margin are gently rounded (Figure 3).

Set on its base, the artifact curves upward, with a very slightly undulating concave edge defining one side, while the edge opposite is convex. Along perhaps 90 percent of the convex side, the margin is rounded, thinning near the artifact's apex. The majority of the margin on the concave side is generally rounded, but upward there is increasing edge sharpness. In other words, the apex becomes relatively thin, with a roundish termination.

Approaching the apex on the concave side and on that surface shown in Figure 1, there are several tiny indications of rodent gnawing. Some few scratches around the area of the apical end superficially resemble incising, but probably they resulted from shaping using an abrasive medium embedded with sizable sand grains.

Bonita Mesa IV

Before recent residential development, CA-ORA-134, a small shell midden (\approx 27 m [north-south] by \approx 30 m

[east-west]), lay within easy walking distance (≈3 km) from access to Upper Newport Bay. The ascent returning to the southern edge of Bonita Canyon (Figure 5) would not be rigorous, as the site sat at only 55 m asl.

In 1964 the PCAS began survey operations on Bonita Mesa, property then owned by the Irvine Company. The following year a subsurface sampling program was carried out at ORA-134 by PCAS volunteers under the direction of Paul Chace and Duane Hafner, the results of which were published in Chace et al. (1967). A wide variety of maintenance and manufacturing tools were unearthed at what may have been a multi-component site (see Chace et al. 1967:25, Table 23 for a quick summary). A large debitage sample was collected. Nearly all cultural remains were recovered from the upper 100 cm of the deposit. Few ornaments were recovered, and there was only a small amount of ochre. Fire hearths, fire pits, and cairns were recorded. Charcoal from one fire pit provided a radiocarbon assay of 1065±80 years BP (Chace et al. 1967:10).

The ORA-134 dorsal fin symbol does not appear in the published site report. This is not all that surprising since the effigy carries an inked label that includes "NO LOC." (no location) (see Figure 2), which likely indicates a surface pickup, but if so, would such have occurred during the 1964 survey or during the 1965 excavations? This question precipitated perusal of

1960s PCAS newsletters (then named *Smoke Sig-nals*) for mention of ORA-134. No particularly useful information turned up in the newsletters, but tucked in with the 1965 *Smoke Signals* issues there was a mimeographed, quick summary of work relating to both the 1964 survey work and the 1965 subsurface testing (Smith 1965). ORA-134 artifacts of interest were listed, but there was no mention of the object that is the subject of this essay.

Concluding Remarks

The basic referent of the ORA-134 ground sandstone object seen in Figures 1-3 was most probably the orca dorsal fin. The object's rescue from obscurity offers additional support for the acceptance of the recently proposed genre, "dorsal fin effigy," for inclusion within the portable cosmos of south central coastal California.

Acknowledgments

Joe Cramer drew the CA-ORA-134 artifact (Figure 1) and the three swimming killer whales of Figure 5; he also produced the map of Figure 4. The author thanks Karen Koerper for her typing and editing skills and Rene Brace for formatting this article. The work of an anonymous reviewer and Dr. Paul Chace is also greatly appreciated.

End Note

1. At a rectifier station, alternating current (AC) is changed into direct current (DC).

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