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Authors
Hyland, Justin R
Gutierrez, Maria De La Luz

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An Obsidian Fluted Point from Central Baja California

JUSTIN R. HYLAND
Dept. of Anthropology, Univ. of California, Berkeley, CA 94720.

MARÍA DE LA LUZ GUTIÉRREZ
Centro Regional Baja California Sur, Instituto Nacional de Antropología e Historia, La Paz, BCS Mexico.

This report describes an obsidian fluted point fragment recently discovered in the central part of the Baja California peninsula south of San Ignacio, Baja California Sur. The basal fragment, which shows signs of impact breakage, is only the second fluted point reported for Baja California. The obsidian has been traced to the nearby Valle del Azufre source.

In April 1993, a fluted point of obsidian with a Clovis-type base was identified within a local collection by archaeologists of the Proyecto Arte Rupestre Baja California Sur (Gutiérrez and Hyland MS, 1994a, 1994b), an ongoing project of the Mexican Instituto Nacional de Antropología e Historia (INAH) that is investigating the prehistoric mural tradition in the Sierra de San Francisco of central Baja California.

Although the point had been collected several years prior, the owner was able to clearly recall its original provenience. The point was surface collected from an alluvial terrace at Rancho El Batequi, approximately 14 km. to the south of San Ignacio (Fig. 1). Coincidentally, Rancho El Batequi is located only 4 km. to the north of Rancho San Joaquín, where a complete fluted point was reported by Aschmann (1952:262-263). According to Aschmann (1952:262), the Rancho San Joaquín point was apparently made from a "very fine grained, almost glassy, basalt and the flake scars are considerably worn." This fine-grained basalt is locally abundant. Unfortunately, while illustrated by Aschmann (1952:262), the point could not be collected or photographed and cannot now be located. While several fluted points have been reported from across the Gulf of California in Sonora (García-Barcena 1979), to date these are the only two fluted points reported from the Baja California peninsula (see Ritter 1992 for a review of the evidence for the early occupation of Baja California).

The point is a basal fragment and shows basal grinding (Figs. 2 and 3). The broken end exhibits a bending fracture typical of endshock. The fact that flake scars from the side margins and base superimpose both flutes indicates that final shaping of the point occurred after successful fluting, and that the endshock fracture resulted not during fluting but more probably from impact in actual use (M. S. Shackley and P. Mills, personal communications 1994). The maximum dimensions of the fragment are: length, 33.3 mm.; width, 25.3 mm.; and thickness, 7.1 mm. The fragment weighs 6.9 g. The surface is not heavily weathered and is still very glassy. The point is curated at the Museo Nacional de Antropología in Mexico City.

Energy Dispersive X-ray Fluorescence (EDXRF) analysis of the fragment was conducted at the University of California, Berkeley (Shackley 1993). The results indicate that the obsidian is from the recently discovered Valle del Azufre source.
source (Gutiérrez and Hyland 1994b), located approximately 45 km. to the northeast of Rancho San Joaquin on the northern margin of the Tres Virgenes Volcanic Field (Fig. 1). The measurement of the obsidian hydration rind on this specimen will be undertaken in the near future.

The fact that the obsidian was obtained from the nearby Valle del Azufre source not only indicates that this newly discovered source has been exploited for at least 10,000 years, but also suggests the presence of a locally-focused Paleoindian population, whose mobility on the narrow Baja peninsula would have been perhaps more restricted than on the mainland.

Today, the area around Rancho El Batequi and Rancho San Joaquin occupies a low-lying and seasonally inundated confluence of arroyos near the head of Laguna San Ignacio. The water table is generally less than two meters below the surface, and there is a permanent spring at Rancho San Joaquin. Aschmann (1952:263) noted that the alluvial terraces at Rancho San Joaquin show evidence of heavy and continuous prehistoric occupation, with dense scatters of flaked stone, manos, metates, and other implements, as well as a large number of Archaic and later points of basalt, obsidian, chalcedony, and quartz.

In addition to the point reported by Aschmann, potentially significant mammoth remains have been recovered from diatomaceous deposits less than one kilometer to the southwest of Rancho San Joaquin at the site of El Mezquital (Alvarez and González MS; see Fig. 1). Remains of Pleistocene bison, camel, and horse are reported from Arroyo Comundú, approximately 160 km. to the south of San Joaquin (Massey 1947:352). Massey (1947:352) reported that no artifacts were found in association with these remains, but noted the presence of longitudinally split bison bones and "reports" of camel and horse bones with burned ends from this location.

In conclusion, the discovery of the two fluted points and the remains of Pleistocene fauna within a 4-km. radius of Rancho San Joaquin suggests that this area may warrant further evaluation as a potentially productive site for future investigations of the late Pleistocene occupation of the Baja California peninsula.
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