

III. RADIOCARBON DATE FROM THE POINT ST. GEORGE SITE NORTHWESTERN CALIFORNIA

Richard A. Gould

A radiocarbon date of 2260 ± 210 years B.P. or 310 B.C. from the Point St. George I occupation at the Point St. George Site, Del Norte County, California, indicates the earliest evidence of human habitation so far discovered along the northwestern California-southern Oregon coast.

In 1964 a field party from the University of California at Berkeley carried out excavations at the Point St. George Site (CA-DNo-11) in Del Norte County, California. The published report on this site (Gould, 1966) described the stratification and cultural materials found there but did not include any radiocarbon measurements. Nevertheless, charcoal samples were collected during these excavations, and the results are now available.

In the original report, two natural units containing cultural material were distinguished. The upper one consisted of shell-midden deposits with stone projectile points, bone needles, stone net-sinkers, and a wide variety of distinctive artifacts comprising an assemblage resembling that of the ethnographic Tolowa Indians of this region. This proto-historic midden layer was labelled Feature 31, and the cultural materials it contained were treated as the Point St. George II occupation. Underlying this midden deposit in Trench 3 at the site was a layer of smooth, dark brown sand (Feature 36) varying from about two to four feet in thickness and containing chipped stone projectile points and other artifacts differing considerably in style from those occurring in the midden levels. This earlier occupation was designated as Point St. George I. Underlying the Feature 36 soil there was sterile, light yellow sand called Feature 32 in the report. This sand underlay the other trenches at the site, too, although it varied in texture and compactness.

In 1964 five charcoal samples were collected from a series of small hearths at the site. One of these occurred in the Feature 31 - Point St. George II levels and was not processed because of the obviously proto-historic character of the associated materials. The other four samples came from different levels and squares within the Feature 36 - Point St. George I occupation. Two of these samples were discarded because of their extremely small size, while the other two were combined to make a single sample for processing. The combined sample consisted of charcoal and charcoal-rich sand from a pair of small, rather indistinct hearths in Square No. 52, Trench 3 at depths of 42 and 45 inches, that is, in the lowest foot of the Feature 36 deposit. This sample from these two hearths weighed 2.4 grams (after cleaning).

The sample (No. I-4006) was processed by Isotopes, Inc. of Westwood, New Jersey, in January, 1969, and yielded a date in years (B.P.) of 2260 ± 210 or 310 B.C.

The Feature 36 soil from which this sample was taken was entirely free of root contamination, and the hearths occurred in close association with stone artifacts which were typical of the Point St. George I assemblage. This soil appears to consist of sand (Feature 32) mixed with fine particles of charcoal and other organic materials which give it a distinct dark coloring. The diffuse nature of the hearths in this soil horizon is evidence for disturbance by wind during and after the Point St. George I occupation. Today the entire surface of Point St. George is subjected to strong northwesterly and southeasterly winds which have created several large, sandy blowouts and have prevented the growth of trees anywhere on the Point except in a few small swales. Geologically, the Feature 32 sand (and the Feature 36 soil, which is a derivative of this sand) is part of the Battery Formation, "A thin marine-terrace capping of unconsolidated sands exposed over the southern portion of the Crescent City platform," (Maxson 1933:136).

On the basis of fossil shells and geological positioning, both Maxson (1933:136) and Back (1957:24) regard the Battery Formation as a Pleistocene deposit. Back has commented:

"The Pleistocene age of the Battery Formation seems to be well established, but its position within the Pleistocene is not clearly indicated. The horizontal attitude, low degree of induration, and Recent aspect of the fauna identified by Hertlein suggest a late Pleistocene age for these deposits." (1957:24).

Battery Formation sands covers the entire surface of Point St. George except for a small exposure of Point St. George Formation beds (Pliocene) on the north side of the Point (about 200 yards beyond the nearest excavations) and the headland of undifferentiated rocks exposed along the west and southwest sides of the Point.

As summarized by Heizer (1964:132-133), there are radiocarbon dates for site Cs-23 on the lower Coquille River, Oregon, and the base of the Gunther Island site (Hum-67) at Humboldt Bay, California, of 350 years and 1050 years, respectively. There is an estimated date of 1620 A.D. for the Tsurai site (Hum-169) at Trinidad Bay, California...and further north along the Oregon coast there are three radiocarbon dates from site Ti-1 of 150, 280, and 500 years. More recently, there is a radiocarbon date of about 1310 A.D. for the early levels of Hum-118, a site excavated at Patrick's Point, California (Elsasser and Heizer, 1966:103). A comparison of artifact assemblages shows there are close resemblances between the materials from Gunther Island (Loud, 1918; Heizer and Elsasser, 1964), Patrick's Point, and Tsurai (Heizer and Mills, 1952) and the Point St. George II occupation. Comparative as well as stratigraphic evidence supports the idea of a relatively late date for Point St. George II.

Thus the radiocarbon date for the Point St. George I occupation is the earliest date so far obtained for archaeological remains from the southern Oregon and northwestern California coast by at least 1000 years. Elsasser and Heizer

have stated:

"It has been suggested, though without much evidence to support the proposition, that the northwestern coast of California was the last area of the state to be permanently settled. This may be true, but it may also be wrong."
(Elsasser and Heizer, 1966:2).

The question now is: does the Point St. George I occupation and its associated date of 310 B.C. represent the earliest human habitation of this coastal region? Elsasser and Heizer have rightly cautioned against relying too heavily on negative evidence. Before starting excavations in Del Norte County I was able to examine several large surface collections of artifacts from sites on the coast between Klamath, California, and Pistol River, Oregon (Gould, 1965) and in 1965 I also examined surface collections of artifacts from the Oregon and northern California coast presently housed at the American Museum of Natural History. Out of the roughly 600 artifacts (mainly chipped stone projectile points) in these collections, there were none present that did not seem to belong to assemblages related to either the Point St. George I or II occupations. In other words, despite fairly intensive excavations, surface surveys, and studies of surface collections by myself and other investigators, there as yet exists no unambiguous evidence for human habitation of the northwestern California or southern Oregon coast prior to the Point St. George I occupation. Two ways to test this hypothesis are to continue archaeological surveys and excavation in this region either until more ancient material is found or the probabilities of finding such material become diminishingly small.

Another approach to this problem would be detailed geological studies of the coastal terraces of this region with the aim of determining the earliest date when the coastline would have been suitable for human habitation. Present geological studies indicate that the marine terrace which includes Point St. George (the Crescent City platform) was partially submerged during the late Pleistocene. Since that time there has been a series of at least three uplifts which extended and diverted the course of the Smith River and lowered the sea-level in relation to the land surface of the Crescent City platform (Back, 1957:36-37). Terraces indicative of these uplifts are visible along the Smith River at Hiouchi Valley about 5 miles inland and along the lower reaches of the river (the most recent being the Fort Dick terrace) above the present flood-plain (Back, 1957:37). However, no attempt has been made yet to date these uplifts in terms of years.

On the basis of the materials collected so far and the radiocarbon date, more archaeological excavations are needed to determine the nature and extent of the Point St. George I occupation at the Point St. George Site. Moreover, it is also recommended that additional samples be obtained for radiocarbon dating.

BIBLIOGRAPHY

Back, W.

- 1957 Geology and Ground-Water Features of the Smith River Plain, Del Norte County, California. U.S. Geological Survey Water-Supply Paper No. 1254, Washington, D.C.

Christensen, M. N.

- 1966 Quaternary of the California Coast Ranges. In Geology of Northern California, ed. by E. H. Bailey, California Division of Mines and Geological Survey Bulletin No. 190:305-314, San Francisco.

Elsasser, A. B. and R. F. Heizer

- 1966 Excavation of Two Northwestern California Coastal Sites. Reports of the Univ. of Calif. Archaeological Survey, No. 67:1-149, Berkeley.

Gould, R. A.

- 1965 Description and Analysis of Surface Collection. In An Introduction to Tolowa Prehistory, Ms., Dept. of Anthropology, Univ. of California, Berkeley, pp. 36-57, Figs. 9-31, 70-71.

- 1966 Archaeology of the Point St. George Site, and Tolowa Prehistory. Univ. of Calif. Publs. in Anthropology, Vol. 4, Berkeley.

Heizer, R. F.

- 1964 The Western Coast of North America. In Prehistoric Man in the New World, ed. by J. D. Jennings and E. Norbeck, Univ. of Chicago Press, pp. 117-148.

Heizer, R. F. and A. B. Elsasser

- 1964 Archaeology of Hum-67, the Gunther Island Site in Humboldt Bay, California. Reports of the Univ. of Calif. Archaeological Survey, No. 62:5-122, Berkeley.

Heizer, R. F. and J. E. Mills

- 1952 The Four Ages of Tsurai. Univ. of Calif. Press, Berkeley.

Loud, L. L.

- 1918 Ethnogeography and Archaeology of the Wiyot Territory. Univ. of Calif. Publs. in Am. Arch. and Ethnol., Vol. 14:221-436, Berkeley.

Maxson, J. H.

- 1933 Economic Geology of Portions of Del Norte and Siskiyou Counties, Northwesternmost California. Calif. Journ. of Mines and Geology (State Mineralogist's Report), Vol. 29:123-160.

Wahrhaftig, C. and J. H. Birman

- 1965 The Quaternary of the Pacific Mountain System in California. In The Quaternary of the United States, ed. by H. E. Wright, Jr. and D. G. Frey, Princeton Univ. Press, pp. 299-340.