

# Radiocarbon

1963

## UCLA RADIOCARBON DATES II

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The measurements reported in this list have been made in the Isotope Laboratory at the Institute of Geophysics, UCLA during 1962. Dates have been calculated on the  $C^{14}$  half life of 5568 years and using 95% NBS oxalic acid as modern standard, in agreement with the decision of the Fifth Radiocarbon Dating Conference (Godwin, 1962).

### ACKNOWLEDGMENTS

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### SAMPLE DESCRIPTIONS

#### *A. United States*

**UCLA-131. Ash Cave, Washington** **7940 ± 150**  
**5990 B.C.**

Charcoal and charred midden material from hearth at Ash Cave (45WW61) in the lower Snake River canyon, Walla Walla County, Washington (46° 33' N Lat, 118° 33' W Long). Hearth was located at surface of a deep midden deposit (Stratum 3) mantled by a layer of Mt. Mazama ash (Stratum 2). Enclosed in the midden deposit were remains typical of the Old Cordilleran culture in the Pacific Northwest (Butler, 1961). Coll. 1958 by B. R. Butler; subm. by E. H. Swanson Jr., Idaho State College Mus. *Comment* (B.R.B.): Mt. Mazama ash separates Old Cordilleran culture components from the subsequent Cold Springs horizon at various sites in the Columbia Plateau; the Ash Cave date provides a *terminus ante quem* date for this geologic horizon marker and for the Cold Springs horizon in the Columbia Plateau.

#### **Birch Creek Valley series, Idaho**

Charcoal from two large rockshelters, Veratic and Bison caves, near Blue Dome in the Birch Creek Valley of eastern Idaho (44° 05' N Lat, 112° 55' W Long). Both caves were continuously occupied from late Anathermal to early historic times. Veratic Cave is located at the base of an alluvial fan, and Bison Cave is located near the top of the same fan. The physical stratigraphy at Veratic Cave is complex, but the deposits at Bison Cave can be grouped into

**UCLA-161. Veratic Cave****5870 ± 120  
3920 B.C.**

Charcoal from Level 29.

*General Comment* (E.H.S.): the C<sup>14</sup> dates from Veratic Cave are in stratigraphic order and check the evaluation of the finely stratified sediments at the site. The overlap in the C<sup>14</sup> dates from the two sites will permit establishment of a composite continuous cultural sequence. The two series of C<sup>14</sup> dates confirm in broad outline previous estimates of the geologic age of the deposits at the site and show that the bulk of the alluvial fan deposits are Altithermal in age. They will also be useful for evaluation of the deposits and the attendant depositional processes. Side notched points occur below the two earliest dated horizons at Veratic Cave and continue in an unbroken sequence into the historic deposits at both sites. This cultural continuum, of considerable significance in northwestern prehistory, could not have been so clearly established without C<sup>14</sup> dates.

**Lorenzen series, Modoc County, California**

Charcoal samples from Pit M-11, Lorenzen Site, Modoc County, California. Site is a deep, stratified deposit which includes at its lowest levels Cascade point artifacts. Coll. and subm. by M. A. Baumhoff, Univ. of California, Davis, California.

**UCLA-126. Lorenzen Site, 18 in. depth** **390 ± 70  
A.D. 1560****UCLA-125. Lorenzen Site, 48 in. depth** **1470 ± 60  
A.D. 480****UCLA-127. Lorenzen Site, 75 in. depth** **3300 ± 100  
1350 B.C.**

*General Comment* (M.A.B.): the date sequence is within the expected range. The deepest sample (UCLA-127) appears to be near the beginning of the Achumawi-Atsugewi occupation, for which our current work on glottochronology indicates an age of 3100-3500 yr.

**Canada Verde series, Santa Rosa Island, California**

Three separate cultures are recognized on Santa Rosa Island, the earliest being the Dunedweller, followed by Highland and finally the Canalino. Some of the stratified sites contain remains of more than one culture. The site at Canada Verde, on the north central coast (34° 01' 31" N Lat, 120° 08' 05" W Long), is ca. 35 ft above sealevel, covers 1200 yds in length and is ca. 30 ft deep. The site contains four cemeteries in which several hundred skeletons have been found. A great number of artifacts have been found with the burials, including a number of points of Gypsum Cave type. Coll. by P. C. Orr and B. White; subm. by P. C. Orr, Santa Barbara Mus. of Nat. History, Santa Barbara, California.

**UCLA-137.** **3250 ± 140  
1300 B.C.**

Charcoal from hearth, 50 ft W of stake of Blackbottom Cemetery A. Depth 12 in. beneath an eroded midden.

**UCLA-179.** **3020 ± 100**  
**1070 B.C.**

Shell necklace (Cyprea) from burial No. 94 in Blackbottom Cemetery.

**UCLA-138.** **3420 ± 100**  
**1470 B.C.**

Shell (Mytilus californianus) from eroded midden above UCLA-137.

**UCLA-139.** **3240 ± 120**  
**1290 B.C.**

Shell (Haliotis rufescens) from same eroded midden as UCLA-138.

**UCLA-140.** **4260 ± 90**  
**2310 B.C.**

Charcoal from Cemetery X, with burial at depth of 83 in. Sample in clean sand, below two strata of black midden, each separated by windblown sand. *Comment* (P.C.O.): UCLA-137, 138, 139 and 140 occupy the upper strata of a Dunedweller site and were originally regarded as late Dunedweller. However, the above dates signify a transitional period between late Highland and early Canalino cultures (Orr, 1960a).

#### **Canalino Culture series, Santa Rosa Island, California**

The prehistoric Canalino Culture was the last Indian culture on Santa Rosa Island, 35 mi off Santa Barbara, California. The following samples are from Cemetery A at Skull Gulch on the northwestern coast of the island (34° 00' 15" N Lat, 120° 11' 40" W Long). The site is large, occupying both sides of the gulch and comprising 73 house sites and three known cemeteries. Some of the cemeteries have been exposed by the erosion of the gulch, and the others discovered by trenching (Orr, 1956, 1960a). One previous date on this cemetery, UCLA-134, 330 ± 50 (UCLA I), was inconsistent with the stratigraphy of the site, and the following samples were run to check the age of Cemetery A which was expected to be 2500 to 3000 yr. Subm. by P. C. Orr.

**UCLA-135.** **1820 ± 90**  
**A.D. 130**

Shell (Mytilus californianus) from midden over Cemetery A.

**UCLA-178.** **900 ± 100**  
**A.D. 1050**

Shell beads (Olivella biplacata) screened from about the burials in Trench 4B, Level 2 of Cemetery A. *Comment* (P.C.O.): it seems unlikely that this small cemetery was in use for 900 yr; therefore it appears that one or perhaps both of these dates are in error.

**UCLA-142. Tecolote Point, Santa Rosa Island,** **4000 ± 120**  
**2050 B.C.**  
**California**

Shell (Mytilus californianus) from depth of 3 ft in midden overlying Cemetery A (34° 00' 25" N Lat, 120° 10' 55" W Long). Cemetery A represents the Red Head phase of the Dunc Dweller culture dated as 7070 ± 300 (L-290-D, Lamont IV). Coll. by P. C. Orr and B. White; subm. by P. C. Orr. *Comment* (P.C.O.): it appears as though occupation of this site and other

coastal areas was interrupted for up to 3000 yr during the period when the Highland culture was the dominant one on the island. (UCLA-105, UCLA I). The abandonment of coastal areas is probably also related to climate since it coincides with the "little pluvial" 4-6000 yr ago when rainfall was greater than at present.

**UCLA-144. Santa Cruz Island, California** **14,200 ± 250**  
**12,250 B.C.**

Wood from large log of Douglas Fir buried in cut bank of creek in Santa Cruz Island Formation (34° 0' 12" N Lat, 119° 52' 30" W Long). Coll. by Clifton Smith; subm. by P. C. Orr. *Comment* (P.C.O.): age compares well with L-244, 15,820 ± 280 (Lamont IV) and confirms that the Santa Rosa Island Formation (Orr, 1960b) and the Santa Cruz Island Formation (Chaney and Mason, 1934) are of late Wisconsin and essentially equivalent.

**San Nicolas Island series, California**

San Nicolas Island (33° 15' N Lat, 119° 30' W Long), is one of a group of eight islands lying off the coast of Southern California. The island is ca. 8 mi long and 4 mi wide. More than 50 occupation sites are known—more complete details are given by Reinman and Townsend (1960) and Meighan and Eberhart (1953).

**UCLA-147. San Nicolas Island, Site 40** **3980 ± 100**  
**2030 B.C.**

Shell beads (*Olivella*) from two graves at Site SNI-40 on the northwestern side of the island. The burial area is on the inland slope of the dune and the burials were all found in sterile sand, with the midden seemingly skirting the edge of the area. Coll. by F. Reinman and S. Townsend; subm. by C. W. Meighan, Anthropol. Dept., UCLA.

**UCLA-165. San Nicolas Island, Site 16** **3300 ± 100**  
**1350 B.C.**

Shells (*Haliotis*) associated with burial at Site SNI-16 on the northwestern side of the island. The burial area was on the leeward side of the dune and shells and top of skull were only a few inches below surface of the sand. Coll. by F. Reinman and S. Townsend; subm. by C. W. Meighan.

**UCLA-164. San Nicolas Island, Site 18** **300 ± 60**  
**A.D. 1650**

Roughed-out blanks (*Haliotis*) for manufacture of shell fish-hooks from Site SNI-18 on extreme northwestern end of the island. It is a very high dune site which overlooks the beach to the N and to the W. Largest remaining site on the island. Coll. by F. Reinman and S. Townsend; subm. by C. W. Meighan.

**UCLA-195. San Nicolas Island, Site 51** **2550 ± 80**  
**600 B.C.**

Shell (*Mytilus californianus*) from Site SNI-51. From stratum at depth of 6 ft which contained some woven sea grass, cordage and a stone scraping tool. Deepest known occurrence of woven sea grass. Evidence of human habitation extends down to 7.5 ft. Subm. by C. Rozaire, Southwest Mus., Los Angeles.



**UCLA-196. San Nicolas Island, Site 51** **3170 ± 90**  
**1220 B.C.**

Shell (*Mytilus californianus* and *Haliotis cracherodii*) from Site SNI-51 at depth of 7 to 7.5 ft. Bottom layers of deposit. Subm. by C. Rozaire.

**UCLA-197. San Nicolas Island, Site 51** **2440 ± 80**  
**490 B.C.**

Charcoal from a cremation, Site SNI 51. Subm. by C. Rozaire.

*General Comment:* San Nicolas Island has been inhabited by maritime people for at least 4000 yr. The inhabitants must have had reasonably adequate boats, not only to make the channel crossing but for fishing and sea mammal hunting, as there is evidence from midden refuse that the economy was based on seafaring activities. This is therefore a good area to learn more about the transition from land-oriented to sea-oriented cultures.

### Lake LeConte series, California

Samples bearing on paleohydrography and paleoecology of Lake LeConte. Subm. by C. L. Hubbs, Scripps Inst. of Oceanography, La Jolla, California.

**UCLA-189. Lake LeConte** **32,200 ± 2000**  
**30,250 B.C.**

Clam shells (*Rangia*) representing an old brackish-water stage of the lake (33° 22' 12" N Lat, 115° 47' 55" W Long).

**UCLA-190. Lake LeConte** **3970 ± 100**  
**2020 B.C.**

Clam shells (*Tagelus*) representing a fairly recent marine stage of the lake (33° 22' 12" N Lat, 115° 47' 55" W Long).

**UCLA-191. Lake LeConte** **> 34,000**

Clam shells (*Chione*) from the very surface of the exposed lake bottom, where many of these clams occur in paired valves, indicating in situ deposit under marine conditions. Alt 160 ft below mean sealevel (33° 23' 32" N Lat, 115° 42' 00" W Long).

**UCLA-192. Lake LeConte** **270 ± 60**  
**1680 B.C.**

Charcoal from hearths containing freshwater-fish bones. Alt 160 ft below mean sealevel (33° 23' 21" N Lat, 115° 42' 12" W Long).

**UCLA-200. Painted Cave, Baja California** **530 ± 80**  
**A.D. 1420**

Wooden peg from rock crevice in large rock shelter in central Baja California (27° 38' N Lat, 112° 58' W Long). The shelter contains over 135 large painted full sized figures of humans and animals done in red, black and white. The paintings are pre-Spanish. The peg is presumed to be associated with the wall paintings. Coll. and subm. by C. W. Meighan, Anthropol. Dept., UCLA. *Comment* (C.W.M.): associated cultural remains belong to the Comondú culture. It is believed that the paintings are associated with the same culture.