[RADIOCARBON, VOL 22, No. 4, 1980, P 1116-1124]

UNIVERSITY OF MIAMI RADIOCARBON DATES XVIII

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The following radiocarbon dates are a partial list of samples measured for a variety of projects and materials since August 1979. Chemical and counting procedures remain the same as indicated in R, v 20, p 274-282.

Calculations are based on the 5568-year Libby ^{14}C half-life. Precision is reported as one standard deviation based only on statistical counting uncertainties in the measurement of the background, NBS modern standard, and sample activities. $\delta^{13}C$ values are measured relative to PDB and reported ages are corrected for isotopic fractionation by normalizing to $-25‰$. An additional 400-year reservoir age correction has been applied to marine carbonates.

SAMPLE DESCRIPTIONS

I. GEOLOGIC SAMPLES

Western Mediterranean series

Foraminiferal mud taken by piston corer at two localities in the western Mediterranean Sea. Dated to establish planktonic foraminiferal paleoclimate curve. Coll 1975 to 1978 and subm 1979 by P Loubere, Oregon State Univ, Corvallis.

UM-1801. Core 35326: 150 to 165cm **11,600 ± 200**
$\delta^{13}C = -0.6‰$
Sample coll in water depth 2480m (41° 24.8′ N, 5° 57.8′ W).

UM-1824. TR 173-16P: 92 to 107cm **7390 ± 110**
Sample coll at water depth 1904m (36° 10.1′ N, 1° 51.4′ W).

UM-1825. Core 35326: 275 to 290cm **16,760 ± 300**
Sample coll at water depth 2480m (41° 24.8′ N, 5° 57.8′ W).

Mediterranean Sedimentation series

Carbonate mud coll by piston corer from two sites in the W Mediterranean Sea. Samples analyzed to establish sedimentation rates for the area. Coll 1978 and subm 1979 by M Ayers, Duke Univ, Durham, North Carolina.

UM-1814. 35279: 5cm **10,500 ± 200**
Sample coll at water depth 2595m (36° 33′ N, 0° 4.5′ W).

UM-1815. 35073: 3 to 10cm **6110 ± 100**
Sample coll at (36° 55.9′ N, 0° 2.2′ W).

Sea Level Fluctuation series

Wood samples coll from littoral zone in several counties in Georgia

for sea level fluctuation studies. Coll 1979 by R Brokaw and subm 1979 by J Howard, Skidaway Inst Oceanog, Georgia.

UM-1875. RB-5 **3020 ± 90**

Sample taken from S bank of Tybee Creek, Chatham Co (31° 32′ 32″ N, 81° 20′ 30″ W).

UM-1876. RB-8 **2810 ± 110**

Sample from Sapelo R, McIntosh Co (31° 32′ 32″ N, 81° 20′ 30″ W).

UM-1877. RB-9 **4160 ± 80**

Sample from E bank of Carr's Neck Creek, Liberty Co (31° 41′ 25″ N, 81° 17′ 30″ W).

UM-1878. RB-11 **4550 ± 90**

Sample from N bank of Little Ogeechee R, Chatham Co (31° 55′ 00″ N, 81° 08′ 20′ W).

UM-1879. RB-12 **3750 ± 70**

Sample coll from N bank of Little Ogeechee R, Chatham Co (31° 57′ 05″ N, 81° 10′ 45″ W).

Peace River series

Soil samples coll from Peace R in Bartow, Florida (27° 47′ N, 81° 48′ W). Samples dated to determine chronology sequence of soils. Coll and subm 1979 by B Volk, Univ Florida, Gainesville.

UM-1826. BA-10, 15 to 36cm, #1 **2150 ± 130**
$\delta^{13}C = -25.2‰$

Sample of alluvium taken from depth 15 to 36cm from submerged stream bank.

UM-1827. S BA-15, 38 to 51cm, #2 **3260 ± 130**
$\delta^{13}C = -26.2‰$

Sample taken from depth 38 to 51cm.

UM-1828. VHS-1, A11 #3 **114.6% modern**
$\delta^{13}C = -27.2‰$

Sample from soil surface which is continuously exposed.

UM-1829. VHS-1, 91cm, #4 **<270**
$\delta^{13}C = -27.2‰$

Sample taken immediately above water table at depth 91cm.

UM-1830. 1021, 1028, 1035, #5 **112.5% modern**
$\delta^{13}C = -29.2‰$

Sample taken from A1 horizon.

UM-1831. 1068, 1074, 1079, #6 **<370**
$\delta^{13}C = -28.4‰$

Sample coll from A1 soil horizon.

UM-1832. BA-10, 15 to 36cm, #11 **3500 ± 370**
$\delta^{13}C = -26.9‰$

Sample identical to UM-1826, above, but treated with NaOH.

110.9% modern

UM-1833. 1021, 1028, 1035, #15 $\delta^{13}C = -27.5‰$

Sample identical to UM-1830, above, but treated with NaOH.

Southern California series

Various species of wood taken from excavations and welling operations in S California. Dated for rate of alluviation studies. Coll 1974 and subm 1979 by D Morton, Branch chief, Western Environmental Geol, Menlo Park, California. Coordinates are unavailable and, thus, are only general. All samples are from within Los Angeles city limits (34° 03′ N, 118° 15′ W).

19,630 ± 230

UM-1816. LA Landslides $\delta^{13}C = -26.3‰$

Sample taken from excavation in Los Angeles.

11,800 ± 130

UM-1817. Burrows (61m) $\delta^{13}C = -25.2‰$

Sample taken from well at depth 61m in San Jacinto Valley.

+2210
31,440
−1730

UM-1818. Burrows (91m) $\delta^{13}C = -23.7‰$

Sample taken from same site as UM-1817, from depth 91m.

+510
18,500
−480

UM-1819. Bridge Street (160m) $\delta^{13}C = -25.1‰$

Sample taken from well in San Jacinto Valley at depth 160m.

+660
29,850
−610

UM-1820. Sanderson & San Jacinto (131m) $\delta^{13}C = -22.5‰$

Sample taken from well at intersection of Sanderson and San Jacinto R, at depth 131m.

810 ± 60

UM-1821. Temescal Canyon $\delta^{13}C = -28.0‰$

Sample coll during excavation.

+950
33,460
−850

UM-1822. DWR Long #36565 $\delta^{13}C = -25.5‰$

Sample taken from well in San Jacinto at intersection of First St and Camino Los Banos. Sample from depth 140m.

12,260 ± 210

UM-1823. West Side Bridge St $\delta^{13}C = -23.7‰$

Sample taken from well on W side of Bridge St, San Jacinto.

San Andreas Fault series

Carbonized wood fragments coll from San Andreas Fault, Dogtown trenching site, Point Reyes Natl Seashore, California (37° 56′ 56″ N, 122° 42′ 46″ W). Dated to determine recurrence interval on San Andreas fault. Coll and subm 1979 by N Hall, Foothill Coll, Los Altos Hills, California.

UM-1794. SAF-PR3-79 **2230 ± 110**
$\delta^{13}C = -24.8‰$

Sample from fluvial unit beneath clayey gravel interpreted to be paleosol.

UM-1795. SAF-PR4-79 **1410 ± 100**
$\delta^{13}C = -24.7‰$

Sample from gray sands overlying bluish gray clay.

UM-1796. SAF-PR8-79 **1250 ± 110**
$\delta^{13}C = -24.3‰$

Sample from unconsolidated fluvial sands.

UM-1797. SAF-PR9-79 **380 ± 90**
$\delta^{13}C = -27.0‰$

Sample from unconsolidated alluvium.

Alaskan River series

Samples of suspended particulate matter from the Kuparuk R and the Colville R delta, Alaska. Samples dated to establish mean ^{14}C activity of river borne particulate matter and for constructing ^{14}C baseline for coastal marine food chains.

UM-1803. 79-12 **900 ± 120**
$\delta^{13}C = -26.4‰$

Sample from Colville R delta (70° 3′ N, 150° 30′ W).

UM-1804. 79-14 **2690 ± 90**
$\delta^{13}C = -26.9‰$

Sample from Kuparuk R (70° N, 149° W).

Hatteras Slope series

Foraminiferal sand coll via piston cores and coral coll from the Florida Hatteras Slope. Samples dated to determine sedimentation rates. Coral coll 1886 by Agassiz and subm 1979 with foraminiferal sand by M Ayers.

UM-1791. 344998: 20 to 40cm **38,970 +1940 −1560**

Foraminiferal sand coll at water depth 420m (32° 35′ N, 77° 33′ W).

UM-1792. 16154 **680 ± 70**

Coral (29° 24′ N, 79° 43′ W).

28,770 + 860 − 780

UM-1793. 34987: 25 to 40cm

Foraminiferal sand coll at water depth 440m (32° 43′ N, 77° 21′ W).

Lost Lake series

Low grade peat and freshwater gastropods taken with an auger from a site 400m SE of Lost Lake, California (34° 16′ N, 117° 27′ W). Coll and subm 1979 by R Weldon, Caltech, Pasadena.

2430 ± 110

UM-1812. CP1 $\delta^{13}C = -23.7‰$

Peat coll 91cm below surface, underlain by 1.5m lake clay.

5180 ± 90

UM-1813. CP2 $\delta^{13}C = -10.4‰$

Freshwater gastropods coll at depth 2.4m in 1.5m sequence of lake clay.

General Comment (RW): comparing dates for these 2 samples should yield a movement rate on the San Andreas Fault through Cajon Pass.

Pamet Bog series

Peat samples coll with a piston sampler from Pamet Cranberry Bog, North Truro, Barnstable Co, Massachusetts (42° 00′ N, 70° 02′ W). Samples dated for correlation with pollen stratigraphy. Coll and subm 1979 by W Patterson, III, Univ Massachusetts, Amherst.

UM-1914. PB 105 to 110 **1910 ± 100**

Sample depth 105 to 110cm.

UM-1915. PB 400 to 405 **3700 ± 110**

Sample depth 400 to 405cm.

850 ± 70

UM-1798. 8 La 118 $\delta^{13}C = -26.8‰$

Sample coll from wooden post at Alexander Springs, Ocala Natl Forest, Florida (29° 05′ 06″ N, 81° 34′ 42″ W). Dating required for cultural resources management in Ocala Natl Forest. Coll and subm 1979 by A Prokopetz, US Forest Service, Tallahassee, Florida.

UM-1913. Main **860 ± 90**

Thalassia detritus coll via core taken at Crane Key in Florida Bay (25° 0.5′ N, 80° 37′ W). Sample dated for physical sedimentation studies, specifically storm events. Coll and subm 1979 by H Wanless, RSMAS, Miami, Florida.

II. ARCHAEOLOGIC SAMPLES

Alachua and Suwannee County series

Charred wood fragments coll from Alachua and Suwannee Co, Florida. Dated to establish chronology and periods of utilization of several

Indian sites in central Florida. Coll 1976 and subm 1979 by J Milanich and L Loucks, Florida State Mus, Gainesville.

UM-1781. Sample A 8-A-462 FS 11 **1680 ± 70**

Sample from aboriginal fire pit, Alachua Co, dates late Cades Pond culture.

UM-1782. Sample B 8-A-462 FS 18 **1460 ± 70**

Sample from probable storage pit, Alachua Co, dates late Cades Pond culture.

UM-1783. Sample C 8-A-462 FS 24 **1740 ± 70**

Sample from Feature 6, a probable fire pit which dates late Cades Pond period, Alachua Co (29° 32′ 12″ N, 82° 05′ 24″ W).

UM-1784. Sample D 8-A-48 FS 18 **590 ± 80**

Sample from circular fire pit from Woodward Village site, Alachua Co (29° 31′ 50″ N, 82° 19′ 37″ W). Dates single component of Hickory Pond period.

UM-1785. Sample E 8-A-48 FS 20 **520 ± 70**

Sample from fire pit, Woodward Village site, Alachua Co (29° 31′ 50″ N, 82° 19′ 37″ W). Dates single component of Hickory Pond period.

UM-1786. Sample F 8-Su-65 FS 79 **510 ± 70**

Sample from *in situ* charred post, Suwannee Co (30° 08′ 01″ N, 83° 08′ 04″ W). Dates Mission period Utina Indian.

UM-1787. Sample G 8-Su-65 FS 121 **250 ± 80**

Sample from aboriginal smudge pit, Suwannee Co (30° 08′ 01″ N, 83° 08′ 04″ W). Dates Mission period Utina Indian.

UM-1788. Sample H 8-A-463 FS 64 **1360 ± 80**

Sample on top of Burial 16, Henderson Mound, Alachua Co (29° 38′ 28″ N, 82° 23′ 47″ W). Dates early Hickory Pond period of Alachua tradition.

UM-1789. Sample I 8-A-463 FS 72 **1210 ± 70**

Sample from under skull of Burial 13, Henderson Mound, Alachua Co (29° 38′ 28″ N, 82° 23′ 47″ W). Dates early Hickory Pond period of Alachua tradition in N-central Florida.

UM-1790. Sample J 8-A-463 FS 85 **840 ± 100**

Sample from alongside Burial 15, Henderson Mound, Alachua Co (29° 38′ 28″ N, 82° 23′ 47″ W). Dates early Hickory Pond period of Alachua tradition in N-central Florida.

Useppa Island series

Shell samples coll from Useppa I., Lee Co, Florida. Dated for analysis of middens on Useppa I. Coll 1979 by J Milanich and J Chapman; subm 1979 by J Milanich, Florida State Mus, Gainesville.

UM-1835. TEST-2 Useppa (A) **5630 ± 100**

Busycon columella from buried shell midden, dates presumed Archaic period shell midden (26° 39′ 45″ N, 82° 12′ 46″ W).

UM-1836. TEST-2 Useppa (B) **4940 ± 100**

Mercenaria from same site as UM-1835.

UM-1837. TEST-3 Useppa (C) **1850 ± 90**

Crassostrea from buried shell midden (26° 39′ 52″ N, 82° 12′ 43″ W). Sample dates lower portion of shell midden, may correlate with early Caloasahatchee region coastal cultures.

UM-1838. TEST-3 Useppa (D) **2260 ± 80**

Duplicate run of UM-1837 using *Strombus*.

UM-1839. TEST-6 Useppa (E) **1360 ± 70**

Various shell fragments which date construction of ramp leading to large, steep, shell mound (26° 40′ N, 82° 12′ 44″ W).

UM-1840. TEST-6 Useppa (F) **1180 ± 80**

Busycon and *Strombus* shell samples which date upper shell midden underlying what appears to be constructed shell ramp leading to shell mound (26° 41′ N, 82° 12′ 44″ W).

UM-1841. TEST-5 Useppa (G) **1700 ± 80**

Busycon columella dates lower portion of shell midden (26° 39′ 52″ N, 82° 12′ 44″ W).

Horrs Island series

Shell samples coll from Horrs I., Collier Co, Florida. Dated for interpretation of multi-component site presumed to be late Prehistoric Calusa. Coll and subm 1979 by A McMichael, Florida State Mus, Florida.

UM-1918. #4 Md C Strat A **4460 ± 110**

Busycon shell from base of Strat A. Dates shell used in construction of small shell mound (25° 54′ 13″ N, 81° 41′ 3″ W).

UM-1919. #6 Md B Strat C **4220 ± 80**

Clam shell from densely packed shell layer with sand matrix which dates construction of mound (25° 54′ 14″ N, 81° 41′ 5″ W).

UM-1920. #8 Md B Strat C **6330 ± 90**

Duplicate run of UM-1919 using oyster shell.

UM-1921. #9 Md B Zone A **4250 ± 90**

Oyster shell from densely packed shell cap on shell and sand mound (25° 54′ 14″ N, 81° 41′ 5″ W).

UM-1922. #20 Md C Strat A **4470 ± 80**

Strombus shell from approximate center of Strat A which dates construction of small shell mound (25° 54′ 14″ N, 81° 41′ 5″ W).

UM-1923. #22 Md A Strat A **4340 ± 70**

Trachycardium shell from upper layer of conical shell and sand mound which dates construction of mound (25° 54′ 14″ N, 81° 41′ 0″ W).

UM-1924. #24 Md A Strat B **4030 ± 80**

Crassostrea shell from layer below Strat A (25° 54′ 14″ N, 81° 41′ 0″ W).

UM-1925. #26 Md A Strat A **4060 ± 80**

Crassostrea shell from densely packed shell core of Mound A (25° 54′ 14″ N, 81° 41′ 0″ W).

UM-1926. #33 TEST-9 Strat H **3900 ± 80**

Crassostrea from thin shell lens within largely shell-free stratum in a large stratified shell midden. Probably dates pre-Glades tradition (25° 54′ 15″ N, 81° 40′ 54″ W).

UM-1927. #34 TEST-9 Strat B **3900 ± 90**

Crassostrea fragments dates shell stratum 1.25 to 1.50m below surface of large stratified shell midden. Presumed to be Glades or pre-Glades tradition (25° 54′ 15″ N, 81° 40′ 54″ W).

UM-1928. #35 TEST-9 Strat A **4120 ± 90**

Crassostrea fragment dates uppermost stratum of large, stratified shell midden (25° 54′ 15″ N, 81° 40′ 54″ W).

UM-1929. #36 TEST-9 Strat D **4080 ± 80**

Crassostrea shells date shell stratum from bottom, 3.4m below surface, of test excavation in large, stratified midden (25° 54′ 15″ N, 81° 40′ 54″ W).

UM-1930. #37 TEST-9 Strat C **3980 ± 90**

Crassostrea shells date shell stratum at 2m depth in excavation of large, stratified shell midden (25° 54′ 14″ N, 81° 41′ 0″ W).

UM-1931. #38 TEST-9 Strat J **3890 ± 80**

Busycon shell from thin layer of whelk shells, 2.5m deep, within dense shell zone in large, stratified midden (25° 54′ 14″ N, 81° 41′ 0″ W).

Shiloh Mound series

Charred wood and shell samples from Mound A, Shiloh Natl Military Park, Tennessee (35° 06′ N, 88° 21′ W). Sample dated to determine time of construction and utilization of Mississippian Period mound. Coll and subm 1979 by J Ehrenhard, Southeast Archeol Center, Tallahassee, Florida.

UM-1807. T2 L2 **860 ± 70**

Charred wood from clayey moist soil.

UM-1808. T2 L9 **1190 ± 60**

Charred wood from friable, clayey soil.

UM-1809. T2 L11 **1130 ± 80**

Charred wood from friable, reddish and brown sands.

UM-1810. T2 L23 **1220 ± 50**

Charred wood from yellowish gray sand, dark sand and gravel.

UM-1811. T2 L26 **1810 ± 180**

Charred wood from friable gravelly soil.

UM-1872. T2 L26 **2280 ± 90**

Busycon used as cross-check for UM-1811.

UM-1873. T2 L26 **2360 ± 70**

Busycon sample from same shell as UM-1872 though recrystallized and bored through.

UM-1874. T2 L31 **2270 ± 80**

Busycon fragment from friable, gravelly soil.

Aqui Esta series

Marine shells (*Busycon*) coll from Aqui Esta burial mound on S side of North Fork of Alligator Creek, Charlotte Co, Florida (26° 53′ 52″ N, 82° 02′ 40″ W). Dated to establish construction of mound. Coll by R Jones 1962 and subm 1979 by G Luer, Sarasota, Florida.

UM-1805. AE26 **1180 ± 50**

UM-1806. AE 9 **1050 ± 70**

UM-1756. DM 3C - 1 - 3 **2640 ± 90**

Charcoal coll 100cm below surface of Indian burial mound in sand matrix. Sample dated to establish age of new pottery type found in mound. Coll 1977 by P Recourt from Pelates I., Duval Co, Florida (30° 25′ 30″ N, 80° 30′ 20″ W), and subm 1979 by R Goslin, Northeast Florida Anthropol Soc, Jacksonville, Florida.

References

Calvert, M, Rudolph, Kim, and Stipp, J J, 1978, University of Miami radiocarbon dates XII: Radiocarbon, v 20, p 274-282.