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UNIVERSITY OF MIAMI RADIOCARBON DATES X

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The following dates are a partial list of archaeologic and geologic samples measured since spring of 1976. The method used is described by (Stipp *et al,* 1976). Errors reported are one standard deviation and include only the counting errors on the unknown sample, background, and modern standard. No corrections have been made on these dates. Sample descriptions and comments are based on information supplied by the submitters.

ARCHAEOLOGIC SAMPLES

Wightman series

Shell and charcoal from Wightman site, Sanibel I., Florida (26° 30′ N, 82° 10′ W). Continuation of a study on the occupation of this site (R, v 18, p 211; Fradkin, 1976). *Comment* (DP): this 1st series of 7 shell samples was coll from a cleaned, exposed W wall profile from Trench A. Coll and subm 1975 by J T Milanich, Florida State Mus, Gainesville, Florida.

UM-727. Zone "C" 70cm **1900 ± 90**
Upper zone of constructed shell mound.

UM-728. Zone "D" 80cm **1630 ± 65**
Crushed shell, sand and ash layer between strata of constructed mound.

UM-729. **1810 ± 210**
Duplicate run of UM-728.

UM-730. Zone "E" 160cm **1690 ± 60**
Lower zone of constructed shell mound.

UM-731. Zone "F" 190cm **1480 ± 95**
Shell midden underlying constructed mound.

UM-732. **2060 ± 70**
Duplicate run of UM-731.

UM-733. Zone "G" 220cm **2820 ± 80**
Tidally deposited sand, shell, and humus stratum.

UM-734. Zone "H" 250cm **1610 ± 70**
Intertidal oyster bar.

UM-735. Zone "I" 270cm **1740 ± 70**
Shell layer under oyster bed.

UM-736. **2080 ± 50**
Duplicate run of UM-735.

General Comment (DP): the following 18 shell and charcoal samples come from several locations within site. Sample locations are indicated by a coordinate system. Coll 1976 by J J Stipp; subm 1976 by C Wilson, Sanibel-Captiva Conservation Foundation.

UM-919. Sample #1 **1890 ± 110**
3m quad (129-132N, 123-126E). Charcoal from beneath barren, storm driven shell layer, SW corner.

UM-920. Sample #2 **2210 ± 110**
Same as UM-919 except from NE corner.

UM-921. Sample #3 **1805 ± 75**
Charcoal from S wall of trench (123N, 129E) at same level as UM-919.

UM-922. Sample #4 **2300 ± 85**
Charcoal from top of oyster bed directly below UM-921.

UM-860. Sample #5 **1895 ± 65**
Oyster shell from top of oyster bed and directly below UM-922.

UM-861. Sample #6 **1950 ± 65**
Shell from top of oyster bed at same location as UM-920.

UM-862. Sample #7 **1675 ± 60**
Oyster shell from middle of oyster bed at same location as UM-861.

UM-863. Sample #8 **1885 ± 70**
Mixed shell from middle clay floor in E wall profile of a N-S trench (125N, 129E).

UM-864. Sample #9 **1730 ± 70**
Shell from above storm driven layer and below UM-863.

UM-865. Sample #11 **2400 ± 180**
Shell between 2 ash layers in E wall profile of quad (129N, 129E).

UM-866. **2510 ± 130**
Duplicate run of UM-865.

UM-923. Sample #12 **1220 ± 125**
Charcoal coll side by side with UM-866.

UM-867. Sample #14 **2295 ± 85**
Oyster shell from hole in both sides of trench running N from quad of UM-919 (136N, 126E).

UM-868. Sample #15 **2855 ± 95**
Shell from storm layer in S wall of quad at same location as UM-919.

UM-869. Sample #16 **3395 ± 80**
Shell from storm layer in S wall of E-W trending trench (123N, 129E).

UM-924. Sample #17 **2045 ± 70**
Charcoal from same location as UM-869 overlying storm layer.

UM-870. Sample #19 **1690 ± 70**
Oyster shell from same location as UM-867 at base of oyster bed.

UM-871. Sample #20 **2055 ± 80**
Oyster shell from same quad as UM-919 and at same level as UM-870.

UM-872. **1655 ± 80**
Oyster shell from highest level of living site at Wightman site.

GEOLOGIC SAMPLES

A. United States

Corkscrew Swamp Sanctuary series

A piston core containing peat and marl from Corkscrew Swamp Sanctuary, Central Marsh, Naples, Florida (ca 26° 20′ N, 81° 45′ W). Samples taken to determine rate of peat growth and paleo-environment. Coll 1976 by M Duever, Corkscrew Swamp Sanctuary, and W Kropp, Univ Miami; subm 1976 by W Kropp. *Comment* (DP): basal peat from Corskscrew Swamp Sanctuary, UM-635, was dated, 4720 ± 90, R, v 19, p 123.

UM-952. CS6 (1)-1: 0 to 10cm **575 ± 140**
Peat.

UM-953. CS6 (1)-2: 33 to 46cm **1190 ± 120**
Peat.

UM-954. CS6 (1)-3: 69 to 81cm **3065 ± 85**
Peat.

UM-955. CS6 (2)-4: 106 to 121cm **5715 ± 210**
Peat.

UM-956. CS6 (2)-5: 116 to 127cm **6620 ± 105**
Marl.

UM-957. CS6 (2)-5X: 116 to 127cm **7065 ± 235**
Helisoma gastropod shell.

UM-958. CS6 (2)-6: 195 to 203cm **10,600 ± 180**
Marl.

Cluett Key series

Various piston core samples of peat and carbonate sediments from Cluett Key, Dildo Mud Bank in Florida Bay, S Florida (25° 03′ N, 80° 52′ W). Cluett Key is a mangrove island with a central lagoon. The following peat samples underlay carbonate sediments and are being used to determine if dolomite is forming at present. Coll 1976 by B Halley, USGS, Fisher I.; subm 1976 by M Calvert, Univ Miami. *Comment* (DP): UM-980 and -983 contain no dolomite, and were dated as controls.

UM-980. Cluett 14 **2025 ± 70**
Carbonate sediment.

UM-983. Cluett Δ1 **1735 ± 70**
Carbonate sediment.

UM-981. Dolomite I (Cluett) **4240 ± 90**
Carbonate sediment containing dolomite, HCl wash to 55% of original weight.

UM-982. Dolomite I (Cluett) **3440 ± 80**
Same sediment as UM-981, but sample was washed with EDTA to 72% of original weight to concentrate dolomite.

UM-986. Δ14: 279cm **3795 ± 90**
Peat of mangrove roots.

UM-987. Δ1: 213 to 238cm **4500 ± 100**
Peat of mangrove roots.

General Comment (DP): next 2 peat samples were coll to determine if peat from Cluett Key is same age as peat from a mud flat extending away from island.

UM-984. Cl 14: 219 to 238cm **4600 ± 95**
Peat of mangrove roots from mud bar covered by 46cm water.

UM-985. Δ32: from 122cm **595 ± 65**
Peat of mangrove roots from intratidal zone on Cluett Key.

Long Reef series

Coral from core taken from Long Reef, Dry Tortugas (24° 37′ N, 82° 45′ W). Dates to determine growth rates of *Montastrea annularis*. Coll 1976 by E Shinn, USGS, Mimai, Florida; subm 1976 by D Puppolo, Univ Miami.

UM-973. P-16 **3615 ± 95**
4.88m below reef surface.

UM-974. P-30 **4760 ± 85**
9.14m below reef surface.

UM-975. P-43 **5915 ± 225**
13.11m below reef surface.

UM-976. P-45 **5940 ± 90**
13.72m below reef surface.

UM-977. P-50 **34,270 $^{+1300}_{-1560}$**
15.24m below reef surface. Unid Pleistocene material at base of coral reef.

UM-1019. P-50 **36,060 $^{+1725}_{-2200}$**

Duplicate run of UM-977.

UM-978. P-57 **35,160 $^{+1000}_{-1145}$**

17.37m below reef surface. Unid Pleistocene material below coral reef.

New York Bight Apex series

Marine shells from 7 cores taken as a part of NOAA's Marine Eco Systems Analysis program (MESA) on New York Bight (40° 25′ N, 73° 50′ E). Samples represent inner shelf clastic sediments. Dated to determine stratigraphy of area. Coll 1972 by S J Williams, CERC; subm 1976 by G L Freeland, NOAA-AOML, Miami, Florida.

UM-909. UC-5, 0.3m **7665 ± 100**

Coll 1974 by G L Freeland.

UM-911. C-60, 0.49m **2230 ± 100**

UM-912. C-59, 1.1m **1510 ± 75**

UM-913. C-58, 2m **2955 ± 90**

UM-914. C-53, 0.3m **430 ± 75**

UM-915. C-44, 0.33m **3740 ± 85**

UM-910. C-42, 0.9m **8380 ± 115**

B. West Indies

Mt Pelée series

Charcoal from pyroclastic sediments near Mt Pelée, Martinique, West Indies. Dated to determine frequency of cyclic eruptions on Mt Pelée, and stratigraphy of Mt Pelée. This is a continuation of earlier series of dates from Mt Pelée, see R, v 18, p 210-220. Coll and subm 1976 by A L Smith and M J Roobol, Univ Puerto Rico at Mayaguez.

UM-855. MP 507 **9175 ± 110**

Charcoal from pumiceous crystal groundsurge deposit, from lowest bed exposed in a 43m sec from lower part of Riviere des Peres, W Pelée (14° 45′ 12″ N, 61° 11′ 03″ W). *Comment* (DP): UM-430, 310 ± 60 yr is 4.5 from top of sec.

UM-935. MP 506 **615 ± 75**

Charcoal, 15m below top of 45m sec from lower part of Riviere des Peres, W Pelée (14° 45′ 12″ N, 61° 11′ 03″ W). Sample is a nuée ardente of Pelean type. *Comment* (DP): UM-430 (310 ± 60 yrs) is 4.5m from top of sec.

UM-936. MP 506 **575 ± 70**

Duplicate run of UM-935.

UM-856. MP 564 **21,185 ± 420**

Charcoal from rd cut near Riviere Laggarde, near Macouba, E Mt Pelée (14° 52′ 0″ N, 61° 9′ 20″ W). Sample is only carbon obtained from this type of deposit, a nuée ardente deposit of St Vincent type.

Soufriere Volcano series

Charcoal from various locations around Soufriere, West Indies. Coll with a mason's trowel. Dated to establish approx date of eruption, and to correlate stratigraphy of region. Coll and subm 1976 by K Rowley, Seismic Research Unit, St Augustine, Trinidad.

UM-873. SV 761 **4335 ± 95**

Charcoal, carbonized tree trunk from base of a nuée ardente flow in Rabacca R bank (13° 18′ 10″ N, 61° 07′ 30″ W) ca 12m above water level.

UM-874. SV 764 **4325 ± 95**

Wood, angiosperm twig from volcanic mudflow in Rabacca R bank (13° 18′ 12″ N, 61° 8′ 10″ W).

UM-875. SV 778 **2700 ± 90**

Charcoal, carbonized tree trunk from basaltic andesite nuée ardente flow near Waribishy R (13° 18′ 45″ N, 61° 07′ 15″ W).

UM-876. SV 781 **2480 ± 70**

Charcoal, carbonized twig and bark from partially welded "ash flow" deposit near Overland Village.

UM-877. SV 840 **635 ± 65**

Charcoal, carbonized tree trunk from pyroclastic flow of block and ash material from Wallibou Dry R (13° 19′ 00″ N, 61° 13′ 35″ W).

UM-878. SV 841 **555 ± 70**

Charcoal, carbonized tree trunk from a pyroclastic flow deposit in coastal cliff sec of Wallibou Beach (13° 19′ 15″ N, 61° 13′ 45″ W).

UM-879. SV 843 **615 ± 60**

Charcoal, carbonized branch of Angiosperm tree from a lithic groundsurge deposit on the East Soufriere Trail (13° 19′ 10″ N, 61° 10′ 10″ W).

UM-880. SV 844 **1045 ± 70**

Charcoal, carbonized branch of Angiosperm tree from fossil soil horizon in lithic groundsurge deposit on East Soufriere Trail (13° 19′ 10″ N, 61° 10′ 10″ W).

UM-881. SV 846 **4165 ± 70**

Charcoal, carbonized branch of Angiosperm tree from a pyroclastic flow deposit in Rabacca Valley (13° 17′ 50″ N, 61° 07′ 15″ W).

C. Bahamas

Joulters Cays series

Ooids retrieved from 2 cores 152m apart. Continuation of a study on stratigraphy and sedimentation rates on Joulters Cays, Bahamas (25° 17.5′ N, 78° 07′ W) (R, v 19, p 00). Coll and subm 1976 by P M Harris, RSMAS, Miami, Florida, and R Erlich, Univ Miami.

General Comment (DP): ages represent ca 25% dissolution of whole ooids unless otherwise noted.

UM-965. 76-9-5B **615 ± 105**
30cm below surface.

UM-966. 76-9-5D **625 ± 90**
91cm below surface.

UM-967. 76-9-5F **495 ± 120**
122cm below surface.

UM-968. 76-9-5I **735 ± 90**
183cm below surface.

UM-969. 76-9-5J **3185 ± 115**
457cm below surface.

UM-970. 76-9-5K **3755 ± 100**
488cm below surface. 47% dissolution of whole ooids.

UM-971. 76-9-5L **23,130 ± 490**
732cm below surface. 100% dissolution of whole ooids.

UM-972. 76-8-1A **1895 ± 65**
30cm below surface. 100% dissolution of whole ooids.

References

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