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UNIVERSITY OF MIAMI RADIOCARBON DATES III

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The following radiocarbon measurements made since our last date list (R, v 17, p 112-120), are a partial list of projects and samples released for publication by the submitters. The technique employed is liquid scintillation counting of wholly synthesized benzene as described by Noakes *et al* (1965) and discussed in R, v 16, p 402-408. Errors are reported as one standard deviation. No correction factors are applied.

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SAMPLE DESCRIPTIONS

I. ARCHAEOLOGIC SAMPLES

A. United States

UM-205. Broward County charcoal — **3945 ± 85** / **1995 BC**

Sample from 155cm beneath surface, 1.6km N of Hollywood Blvd, .8km W of State Rd #7, Broward Co, Florida (26° 01′ 59″ N, 80° 26′ 09″ W). Coll 1974 by W F Coleman; subm 1974 by F T Huna, Miami-West India Arch Soc, Miami, Florida. *Comment* (FTH): dates habitation by early S Florida Indians.

II. GEOLOGIC SAMPLES

A. United States

Shackelford Banks series

Two wood samples: SH-13 from 2.4km W of Cape Lookout Lighthouse, off coast of North Carolina (34° 39′ 28″ N, 76° 33′ 50″ W); SH-1 from W end of Shackelford Banks, 46m SW of Mullet Pond, near coast of North Carolina (34° 41′ 07″ N, 76° 38′ 45″ W). Coll 1973 and subm 1974 by K Susman, Duke Univ.

General Comment (KS): dates stratigraphic sequence for Shakelford Banks.

UM-187. Shakelford SH-1 — **12,280 ± 370** / **10,330 BC**

From 14m water.

UM-188. Shakelford SH-13 — **24,535 ± 800** / **22,585 BC**

From 23m water.

Snapper Point series

Mangrove peat from 4 cores, Snapper Point, Key Largo, Florida

(25° 19′ 57″ N, 80° 17′ 24″ W). Coll and subm 1974 by E R Rich, Dept Biol, Univ Miami.

General Comment: all peat samples were pretreated with 5% hot NaOH, 10% hot HCl, rinsed with deionized H_2O and dried.

General Comment (ERR): dates used as relative indicators of current processes in stable, land-mangrove areas. Cores 1, 3, and 4 have similar decay and environmental histories. Core 5 is from an anaerobic, offshore deposit, indicating an earlier shoreline. Visible root hairs were hand-picked by submitter.

UM-232. Core 1, 10 to 20cm **Modern**

Comment (ERR): questionable whether material at this interval was formed *in situ*.

UM-233. Core 1, 20 to 30cm **480 ± 85** **AD 1470**

UM-234. Core 1, 40 to 50cm **775 ± 60** **AD 1175**

UM-235. Core 1, 60 to 70cm **1130 ± 80** **AD 820**

UM-236. Core 3, 10 to 20cm **270 ± 85** **AD 1680**

UM-237. Core 3, 40 to 50cm **1110 ± 105** **AD 840**

UM-238. Core 3, 70 to 80cm **1450 ± 145** **AD 500**

UM-239. Core 4, 10 to 20cm **190 ± 95** **AD 1760**

UM-240. Core 4, 30 to 40cm **505 ± 85** **AD 1445**

UM-241. Core 4, 60 to 70cm **1465 ± 75** **AD 485**

UM-242. Core 5, 0 to 10cm **1350 ± 80** **AD 600**

Comment (ERR): sample from shallow bottom community containing live marine algae and other organisms.

Lake Okeechobee series

Lake samples studied to determine environmental effect of back-pumping on marsh areas; to reconstruct sedimentary environment of lake; to date onset of peat accumulation and end of marl deposition. Coll 1973 and subm 1974 by P J Gleason, C & S F Flood Control Dist, Palm Beach, Florida.

12,050 ± 210
UM-190. Lake Okeechobee, LO-1 10,100 BC

Marl from Lake Okeechobee bottom sediments, S lake Okeechobee, Florida (26° 52′ N, 80° 45′ W).

860 ± 120
UM-191. Lake Okeechobee, Core 11:0-2 AD 1090

Muck from 0 to 5cm, Kreamer I., Lake Okeechobee, Florida (26° 46′ N, 80° 44′ W). *Comment* (PJG): sample contained high ash content.

5000 ± 90
UM-192. Lake Okeechobee, Core 11:103-107 3050 BC

Peat from 262 to 272cm, same as UM-191. *Comment* (PJG): age is minimum for onset of peat deposition.

6470 ± 120
UM-193. Lake Okeechobee, Core 11:108-109 4520 BC

Calcitic marl from 274 to 276cm, same as UM-191. *Comment* (PJG): date represents end of marl deposition.

3055 ± 80
UM-194. Lake Okeechobee, Core 12:18-20 1105 BC

Sandy peat from 46 to 51cm, NE conservation Area 3, Broward Co, Florida (26° 15′ N, 80° 30′ W).

1445 ± 75
UM-195. Lake Okeechobee, Core 13:24-27 AD 505

Sandy peat from 61 to 69cm, N conservation Area 2B, Broward Co, Florida (26° 12′ N, 80° 24′ W).

3460 ± 80
UM-196. Lake Okeechobee, Core 14:9-11 1510 BC

Sandy peat from 23 to 28cm, S conservation Area 2B, Broward Co, Florida (26° 08′ N, 80° 22′ W).

DeSoto Canyon series

Two cores of silty clay, rich in calcareous faunas, from continental slope, DeSoto Canyon, Gulf of Mexico. Core GS-7102-5 from NW of canyon (29° 17′ N, 87° 15′ W). Core GS-7102-9 from SE of canyon (29° 00′ N, 87° 00′ W). Coll 1973 by S Gartner; subm 1973 by C Emiliani, RSMAS, Miami, Florida.

General Comment (CE): Core GS-7102-5 contains some detrital carbonate establishing maximum ^{14}C values for samples. Dates are part of study of paleoclimatology of Quaternary sediments from NE Gulf of Mexico. Because of upwelling, climatic record is preserved in greater detail than typical pelagic oozes.

12,925 ± 200
UM-61. GS-7102-5, 32 to 69cm 10,975 BC

18,390 ± 205
UM-60. GS-7102-5, 132 to 169cm 16,440 BC

UM-59.	GS-7102-5, 235 to 265cm	23,135 ± 410 21,185 BC
		+1930 30,145 −2550
UM-58.	GS-7102-5, 385 to 415cm	28,195 BC
UM-57.	GS-7102-5, 485 to 515cm	>42,500
UM-257.	GS-7102-9, 35 to 65cm	5735 ± 75 3785 BC
UM-258.	GS-7102-9, 65 to 100cm	8640 ± 190 6690 BC
UM-259.	GS-7102-9, 100 to 120cm	10,865 ± 145 8915 BC
UM-260.	GS-7102-9, 120 to 140cm	12,220 ± 140 10,270 BC
UM-261.	GS-7102-9, 183 to 200cm	16,310 ± 200 14,360 BC
UM-262.	GS-7102-9, 200 to 220cm	17,280 ± 195 15,330 BC
UM-263.	GS-7102-9, 230 to 250cm	17,885 ± 170 15,935 BC
UM-264.	GS-7102-9, 250 to 270cm	+500 17,885 −535 15,935 BC
UM-265.	GS-7102-9, 290 to 310cm	+610 20,625 −660 18,675 BC
UM-315.	GS-7102-9, 310 to 330cm	+390 21,640 −410 19,690 BC
UM-311.	GS-7102-9, 350 to 370cm	+545 25,040 −585 23,090 BC
UM-312.	GS-7102-9, 370 to 390cm	+590 23,260 −640 21,310 BC

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UM-313. GS-7102-9, 490 to 510cm **$25{,}035^{+550}_{-590}$ BC**

UM-314. GS-7102-9, 510 to 530cm **$27{,}560^{+860}_{-965}$ BC**

Edisto Beach series

Shell from 3 areas of Edisto I, Charleston Co, South Carolina: Edingsville samples from .8km offshore (32° 31′ N, 80° 16′ W); Bay Point Beach Ridge samples (32° 28′ N, 80° 20′ W); Botany Bay samples from intertidal zone (32° 33′ N, 80° 12′ W). *Mercenaria* valves from Privateer Creek, Seabrook I, Charleston Co, South Carolina (32° 34′ N, 80° 19′ W). Coll and subm 1974 by F W Stapor, Jr, South Carolina Wildlife & Marine Resources Dept.

UM-206. Edingsville C-1 **$30{,}120^{+1350}_{-1650}$ BC**

Mercenaria valves from recrystallized calcarenite. Calcarenite is substrate for vermetid reef.

UM-207. Edingsville C-2 **>32,380**

Mercenaria valves. *Comment* (FWS): UM-206 and -207 date formation of vermetid substrate.

UM-225. Edingsville R-1 **560 ± 100 AD 1390**

Vermetid-serpulid tubes.

UM-226. Edingsville R-2 **575 ± 75 AD 1375**

Vermetid-serpulid tubes.

UM-227. Edingsville R-3 **800 ± 90 AD 1150**

Vermetid-serpulid tubes.

UM-251. Edingsville R-4 **3990 ± 90 2040 BC**

Vermetid-serpulid tubes.

UM-252. Edingsville R-5 **680 ± 80 AD 1270**

Vermetid-serpulid tubes.

UM-255. Edingsville R-5b **835 ± 75 AD 1115**

Outer chalky fraction of UM-252. *Comment*: less radiogenic than apparently unaltered inner fraction.

840 ± 65

UM-208. Bay Point A-1 **AD 1110**

Mercenaria shells from 1 to 2m beneath surface. Sample from oldest area of beach ridge-plain.

1540 ± 75

UM-229. Bay Point A-1b **AD 410**

Outer chalky fraction of UM-208. *Comment*: less radiogenic than apparently unaltered inner fraction.

1710 ± 85

UM-209. Bay Point A-2 **AD 240**

Mercenaria valves from 1 to 2m beneath surface. Sample from oldest area of beach-ridge plain.

3020 ± 70

UM-230. Bay Point A-2b **1070 BC**

Outer chalky fraction of UM-209. *Comment*: less radiogenic than apparently unaltered inner fraction.

2635 ± 80

UM-243. Bay Point A-3 **685 BC**

Mercenaria shells from 1 to 2m beneath surface. Sample from oldest area of beach-ridge plain.

2530 ± 75

UM-253. Bay Point A-3b **580 BC**

Outer chalky fraction of UM-243. *Comment*: more radiogenic than apparently unaltered inner fraction.

1490 ± 70

UM-210. Bay Point B-1 **AD 460**

Mercenaria valves from 1 to 2m beneath surface. Sample from 2nd oldest area of beach-ridge plain.

1390 ± 70

UM-211. Bay Point B-2 **AD 560**

Mercenaria valves from 1 to 2m beneath surface. Sample from 2nd oldest area of beach-ridge plain.

2525 ± 90

UM-212. Bay Point B-3 **575 BC**

Mercenaria shells from 1 to 2m beneath surface. Sample from 2nd oldest area of beach-ridge plain.

1550 ± 70

UM-213. Bay Point C-1 **AD 400**

Mercenaria shells from 2 to 3m beneath surface. Sample from 2nd youngest area of beach-ridge plain.

1685 ± 100

UM-214. Bay Point C-2 **AD 265**

Mercenaria shells from 2 to 3m beneath surface. Sample from 2nd youngest area of beach-ridge plain.

1915 ± 105

UM-231. Bay Point C-2b **AD 35**

Outer chalky fraction of UM-214. *Comment*: less radiogenic than apparently unaltered inner fraction.

+1370
31,915
−1650

UM-215. Bay Point C-3 **29,965 BC**

Mercenaria shells from 2 to 3m beneath surface. Sample from 2nd youngest area of beach-ridge plain. *Comment*: date anomalously older than expected.

990 ± 65

UM-216. Bay Point D-1 **AD 960**

Mercenaria shells from 1 to 2m beneath surface. Sample from youngest area of beach-ridge plain.

330 ± 65

UM-217. Bay Point D-2 **AD 1620**

Mercenaria shells from 1 to 2m beneath surface. Sample from youngest area of beach-ridge plain.

9145 ± 160

UM-220. Botany Bay **7195 BC**

Large pelecypod and gastropod shells.

3600 ± 85

UM-221. Botany Bay **1650 BC**

Small pelecypod and gastropod shells.

4830 ± 90

UM-218. Botany Bay **2880 BC**

Small pelecypod and gastropod shells.

8915 ± 170

UM-219. Botany Bay **6965 BC**

Small pelecypod and gastropod shells.

2475 ± 70

UM-247. Botany Bay **525 BC**

Anadara valves.

3480 ± 70

UM-248. Botany Bay **1530 BC**

Anadara valves.

3125 ± 80

UM-254. Botany Bay **1175 BC**

Outer chalky fraction of UM-248. *Comment*: more radiogenic than apparently unaltered inner fraction.

1200 ± 75

UM-249. Botany Bay **AD 750**

Dinocardium valves.

3030 ± 110
UM-250. Botany Bay **1080 BC**
Dinocardium valves.

5280 ± 110
UM-222. Seabrook Island Beach Ridge 1 **3330 BC**

+825
26,300
−920
UM-223. Seabrook Island Beach Ridge 2 **24,350 BC**

1250 ± 70
UM-224. Seabrook Island Beach Ridge 3 **AD 700**

1365 ± 75
UM-244. Seabrook Island Beach Ridge 4 **AD 585**

1170 ± 60
UM-245. Seabrook Island Beach Ridge 5 **AD 780**

+1370
31,920
−1650
UM-246. Seabrook Island Beach Ridge 6 **29,970 BC**

B. Territoire Français des Afars et des Issas

6565 ± 235
UM-228. Afar Depression **4615 BC**

Shell from Afar Depression, Territoire Français des Afars et des Issas (11° 35′ N, 42° 28′ E). Coll 1972 and subm 1974 by C G A Harrison and E Bonatti, RSMAS, Miami, Florida. *Comment* (EB): dates desiccation of this section of Afar Depression. Area is center of active extension and spreading, genetically connected to Sheba Ridge in Gulf of Aden. Hyaloclastites coll indicate an underwater eruption.

References

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