

UNIVERSITY OF MIAMI RADIOCARBON DATES III

K L ELDRIDGE, J J STIPP, and S J COHEN

Department of Geology, University of Miami, Coral Gables, Florida

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
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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 Shackelford Banks.

UM-187. Shackelford SH-1	12,280 ± 370 10,330 BC
From 14m water.	

UM-188. Shackelford SH-13	24,535 ± 800 22,585 BC
From 23m water.	

Snapper Point series

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

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.

- UM-190. Lake Okeechobee, LO-1** **12,050 ± 210**
10,100 BC
 Marl from Lake Okeechobee bottom sediments, S lake Okeechobee, Florida (26° 52' N, 80° 45' W).
- UM-191. Lake Okeechobee, Core 11:0-2** **860 ± 120**
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.
- UM-192. Lake Okeechobee, Core 11:103-107** **5000 ± 90**
3050 BC
 Peat from 262 to 272cm, same as UM-191. *Comment* (PJG): age is minimum for onset of peat deposition.
- UM-193. Lake Okeechobee, Core 11:108-109** **6470 ± 120**
4520 BC
 Calclitic marl from 274 to 276cm, same as UM-191. *Comment* (PJG): date represents end of marl deposition.
- UM-194. Lake Okeechobee, Core 12:18-20** **3055 ± 80**
1105 BC
 Sandy peat from 46 to 51cm, NE conservation Area 3, Broward Co, Florida (26° 15' N, 80° 30' W).
- UM-195. Lake Okeechobee, Core 13:24-27** **1445 ± 75**
AD 505
 Sandy peat from 61 to 69cm, N conservation Area 2B, Broward Co, Florida (26° 12' N, 80° 24' W).
- UM-196. Lake Okeechobee, Core 14:9-11** **3460 ± 80**
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 ¹⁴C 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.

- UM-61. GS-7102-5, 32 to 69cm** **12,925 ± 200**
10,975 BC
- UM-60. GS-7102-5, 132 to 169cm** **18,390 ± 205**
16,440 BC

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

		+550
		25,035
		-590
UM-313.	GS-7102-9, 490 to 510cm	23,085 BC
		+860
		27,560
		-965
UM-314.	GS-7102-9, 510 to 530cm	25,610 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). <i>Mercenaria</i> 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.		
		+1350
		30,120
		-1650
UM-206.	Edingsville C-1	28,170 BC
<i>Mercenaria</i> valves from recrystallized calcarenite. Calcarenite is substrate for vermetid reef.		
UM-207.	Edingsville C-2	>32,380
<i>Mercenaria</i> valves. <i>Comment</i> (FWS): UM-206 and -207 date formation of vermetid substrate.		
		560 ± 100
UM-225.	Edingsville R-1	AD 1390
Vermetid-serpulid tubes.		
		575 ± 75
UM-226.	Edingsville R-2	AD 1375
Vermetid-serpulid tubes.		
		800 ± 90
UM-227.	Edingsville R-3	AD 1150
Vermetid-serpulid tubes.		
		3990 ± 90
UM-251.	Edingsville R-4	2040 BC
Vermetid-serpulid tubes.		
		680 ± 80
UM-252.	Edingsville R-5	AD 1270
Vermetid-serpulid tubes.		
		835 ± 75
UM-255.	Edingsville R-5b	AD 1115
Outer chalky fraction of UM-252. <i>Comment</i> : less radiogenic than apparently unaltered inner fraction.		

- 840 ± 65**
AD 1110
- UM-208. Bay Point A-1**
Mercenaria shells from 1 to 2m beneath surface. Sample from oldest area of beach ridge-plain.
- 1540 ± 75**
AD 410
- UM-229. Bay Point A-1b**
Outer chalky fraction of UM-208. *Comment:* less radiogenic than apparently unaltered inner fraction.
- 1710 ± 85**
AD 240
- UM-209. Bay Point A-2**
Mercenaria valves from 1 to 2m beneath surface. Sample from oldest area of beach-ridge plain.
- 3020 ± 70**
1070 BC
- UM-230. Bay Point A-2b**
Outer chalky fraction of UM-209. *Comment:* less radiogenic than apparently unaltered inner fraction.
- 2635 ± 80**
685 BC
- UM-243. Bay Point A-3**
Mercenaria shells from 1 to 2m beneath surface. Sample from oldest area of beach-ridge plain.
- 2530 ± 75**
580 BC
- UM-253. Bay Point A-3b**
Outer chalky fraction of UM-243. *Comment:* more radiogenic than apparently unaltered inner fraction.
- 1490 ± 70**
AD 460
- UM-210. Bay Point B-1**
Mercenaria valves from 1 to 2m beneath surface. Sample from 2nd oldest area of beach-ridge plain.
- 1390 ± 70**
AD 560
- UM-211. Bay Point B-2**
Mercenaria valves from 1 to 2m beneath surface. Sample from 2nd oldest area of beach-ridge plain.
- 2525 ± 90**
575 BC
- UM-212. Bay Point B-3**
Mercenaria shells from 1 to 2m beneath surface. Sample from 2nd oldest area of beach-ridge plain.
- 1550 ± 70**
AD 400
- UM-213. Bay Point C-1**
Mercenaria shells from 2 to 3m beneath surface. Sample from 2nd youngest area of beach-ridge plain.
- 1685 ± 100**
AD 265
- UM-214. Bay Point C-2**
Mercenaria shells from 2 to 3m beneath surface. Sample from 2nd youngest area of beach-ridge plain.

UM-231. Bay Point C-2b	1915 ± 105 AD 35
Outer chalky fraction of UM-214. <i>Comment</i> : less radiogenic than apparently unaltered inner fraction.	
	31,915 ⁺¹³⁷⁰ ⁻¹⁶⁵⁰
UM-215. Bay Point C-3	29,965 BC
<i>Mercenaria</i> shells from 2 to 3m beneath surface. Sample from 2nd youngest area of beach-ridge plain. <i>Comment</i> : date anomalously older than expected.	
UM-216. Bay Point D-1	990 ± 65 AD 960
<i>Mercenaria</i> shells from 1 to 2m beneath surface. Sample from youngest area of beach-ridge plain.	
UM-217. Bay Point D-2	330 ± 65 AD 1620
<i>Mercenaria</i> shells from 1 to 2m beneath surface. Sample from youngest area of beach-ridge plain.	
UM-220. Botany Bay	9145 ± 160 7195 BC
Large pelecypod and gastropod shells.	
UM-221. Botany Bay	3600 ± 85 1650 BC
Small pelecypod and gastropod shells.	
UM-218. Botany Bay	4830 ± 90 2880 BC
Small pelecypod and gastropod shells.	
UM-219. Botany Bay	8915 ± 170 6965 BC
Small pelecypod and gastropod shells.	
UM-247. Botany Bay	2475 ± 70 525 BC
<i>Anadara</i> valves.	
UM-248. Botany Bay	3480 ± 70 1530 BC
<i>Anadara</i> valves.	
UM-254. Botany Bay	3125 ± 80 1175 BC
Outer chalky fraction of UM-248. <i>Comment</i> : more radiogenic than apparently unaltered inner fraction.	
UM-249. Botany Bay	1200 ± 75 AD 750
<i>Dinocardium</i> valves.	

UM-250. Botany Bay	3030 \pm 110
<i>Dinocardium</i> valves.	1080 BC
UM-222. Seabrook Island Beach Ridge 1	5280 \pm 110
	3330 BC
	+825
	26,300
	-920
UM-223. Seabrook Island Beach Ridge 2	24,350 BC
	1250 \pm 70
UM-224. Seabrook Island Beach Ridge 3	AD 700
	1365 \pm 75
UM-244. Seabrook Island Beach Ridge 4	AD 585
	1170 \pm 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

UM-228. Afar Depression	6565 \pm 235
	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

- Noakes, J E, Kim, S M, and Stipp, J J, 1965, Chemical and counting advances in liquid scintillation age dating: 6th internatl ¹⁴C and ³H dating conf Proc, Pullman, Washington, June 7-11, 1965, p 68-92.