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UNIVERSITY OF MIAMI RADIOCARBON DATES VIII

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The following radiocarbon measurements are a partial list of projects and samples dated since January 1975. The technique used is described in R, v 16, pp 402-408 and R, v 18, pp 210-220. Dates are calculated using ^{14}C half-life of 5568 yr and errors are reported as one-standard deviation.

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SAMPLE DESCRIPTIONS

I. ARCHAEOLOGIC SAMPLES

Garfield series

Freshwater shell and corn samples from the Garfield site, 9-Br-99 Bartow Co, Georgia (34° 11′ 48″ N, 84° 58′ 04″ W). Coll 1970 by J Chapman and 1972 by J T Milanich: subm 1975 by J T Milanich, Univ Florida and T Clark, Univ Miami. *Comment* (JTM): the site is a single component village occupied by the Kellog culture, known to have existed from ca 500 BC to AD 1.

UM-445. Garfield Sq 23, Level C — **4690 ± 140** / **2740 BC**

Freshwater shell from midden.

UM-446. Garfield Sq 23, Level D — **4950 ± 80** / **3000 BC**

Freshwater shell from midden.

UM-447. Garfield Sq 500N, 565E, Feature 5 — **5270 ± 80** / **3320 BC**

Freshwater shell from large bell-shaped storage pit.

UM-448. Garfield corn — **890 ± 75** / **AD 1060**

Corn from same provenience as UM-447. Corn kernels from here were previously dated at Univ Georgia at AD 700 and AD 1000.

UM-449. Garfield charred nuts — **2070 ± 240** / **120 BC**

Charred nuts and wood from same provenience as UM-447, -448.

Red Willow Creek series

Charcoal and freshwater shell samples from 2 levels of occupation on North bank of Red Willow Creek. Samples come from a Woodland

period house in Red Willow Co, Nebraska (40° 20′ 41″ N, 100° 38′ 42″ W) and from the Upper Republican site in Frontier Co, Nebraska (40° 22′ 50″ N, 100° 43′ 52″ W). Coll 1962 and subm 1975 R T Grange Jr, Univ South Florida, Tampa.

1370 ± 100

UM-466. Red Willow 25RW28 **AD 580**

Charcoal from refuse pit, 76 to 91cm above house floor from Woodland period.

4950 ± 120

UM-469. Red Willow 25RW28 **3000 BC**

Freshwater mussel shell from refuse pit 46 to 61cm above house floor.

1940 ± 80

UM-470. Red Willow 25RW28 **AD 20**

Charcoal from refuse pit, 61 to 76cm above house floor.

1920 ± 70

UM-549. Red Willow 25RW28 **AD 30**

Duplicate run of UM-470.

General Comment (RTG): dates should give a better understanding of Woodland period culture in Plains archaeology and show possible relationships to the Massacre Canyon site and/or Kieth focus sites in the region. Charcoal from this site was previously dated 1430 ± 45 (SE-68) R, v 7, p 246.

1380 ± 180

UM-467. Upper Republican 25Ft80 **AD 570**

Charcoal from several locations in the same general occupation zone, 0 to 46cm below surface.

3395 ± 295

UM-468. Upper Republican 25Ft80 **1445 BC**

Freshwater mussel shell from several locations in same occupation zone, 0 to 46cm below surface.

General Comment (RTG): the Upper Republican site is on upper level of terrace in Red Willow Creek Valley. Dated to provide a better basis for comparative studies of cultures in the region. Charcoal from this site was previously dated 440 ± 40 (SI-72) R, v 7, pp 247.

St Simons Island series

Seven shell samples from middens of various locations on St Simons I. Glynn Co, Georgia. Coll 1974 and subm 1975 by J T Milanich, Univ Florida and A Machover, Univ Miami.

General Comment (JTM): dates correspond to Deptford and Wilmington cultures and are to check, and, if necessary, revise ceramic and cultural sequence for central coast of Georgia.

990 ± 80

UM-667. St Simons I. Test B-C **AD 960**

Busycon from shell midden (31° 17′ 8″ N, 81° 19′ 42″ W) 35cm below surface.

1130 ± 70

UM-668. St Simons I. Test D **AD 820**

Busycon from shell midden (31° 16′ 30″ N, 81° 19′ 47″ W) 18cm below surface.

1240 ± 90

UM-669. St Simons I. Test F **AD 710**

Busycon from shell midden (31° 16′ 4″ N, 81° 20′ 22″ W) 10cm below surface.

710 ± 70

UM-670. St Simons I. Test G **AD 1240**

Oyster shell from midden (31° 17″ 4″ N, 81° 19′ 42″ W) ca 30cm from surface.

510 ± 75

UM-701. St Simons I. Test G **AD 1440**

Duplicate of UM-670.

1240 ± 70

UM-671. St Simons I. Test A **AD 710**

Oyster shell from shell heap (31° 17′ 8″ N, 81° 19′ 40″ W). Level III, 34 to 49cm below surface.

1190 ± 70

UM-672. St Simons I. Test A **AD 760**

Oyster shell from Level IV, 49 to 64cm, of same shell heap as UM-671.

1015 ± 70

UM-673. St Simons I. Test E **AD 935**

Oyster shell from midden (31° 16′ 20″ N, 81° 19′ 50″ W) 15 to 30cm below surface.

St John's II series

Duplicate runs on *Donax variabilis* shell coll from a midden 8km S of Jacksonville Beach, Florida (30° 16′ 47″ N, 81° 23′ 09″ W). Coll and subm 1975 by J Miller, Tallahassee, Florida.

General Comment (JM): helps date occupation, as ceramic markers are vague.

1000 ± 70

UM-702. St John's II **AD 950**

1175 ± 70

UM-703. St. John's II **AD 775**

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II. GEOLOGIC SAMPLES

A. United States

Everglades Marsh series

Periphyton samples coll alive as cylindrical encrustations on *Eleocharis* stems (a sedge), from various locations in the Everglades marsh, Florida. Coll and subm 1975 by P Gleason and P Stone, Central and S Florida Flood Control Dist.

General Comment (PG): dated to determine hard water effect, and to develop a correction factor for dates on calcitic mud derived from *Periphyton* from similar environments.

UM-656. Everglades Marsh BC6 134.9 ± 0.9% modern

Carbonate fraction of *Periphyton* (25° 50′ N, 80° 50′ W) 2.4m above MSL. *Comment* (PG): hard water in contact with surface limestones and marls.

UM-657. Everglades Marsh BC7 135.2 ± 1.1% modern

Same as UM-656.

UM-658. Everglades Marsh 2-17CP 129.2 ± 1.0% modern

Carbonate fraction of *Periphyton* (26° 16′ 50″ N, 80° 25′ 10″ W) 3.4m above MSL. *Comment* (PG): hard water due primarily to agricultural runoff and hard ground water from canals.

UM-663. Everglades Marsh 2-17AP 127.8 ± 1.0% modern

Same as UM-658.

UM-659. Everglades Marsh 3-28AP 137.3 ± 1.1% modern

Carbonate fraction of *Periphyton* (25° 48′ 55″ N, 80° 43′ 15″ W) 2.3m above MSL.

UM-660. Everglades Marsh BC2,3,4,8 132.9 ± 0.9% modern

Carbonate fraction of *Periphyton* (25° 50′ N, 80° 50′ W) 2.4m above MSL. Similar to UM-656 and UM-657.

UM-661. Everglades Marsh BC2,3,4,8 130.4 ± 1.2% modern

Organic fraction of UM-660.

UM-662. Everglades Marsh BC2,3,4,8 126.1 ± 1.1% modern

Duplicate run of UM-661.

Everglades Tree Island series

Peat samples from 3 piston cores in Everglades tree-islands, small *Persea* type, in Conservation Area I, the Everglades, Florida. Continuation of a study on tree-island formation (R, v 18). Coll and subm 1975 by P Gleason and P Stone and D Piepgras.

General Comment (DP): results of core 20 suggest tree-islands may form *in situ,* contrary to hypothesis that they break loose during flooding and settle over a younger area.

UM-681. Core 20(3): 146 to 156cm **930 ± 90 AD 1020**
(26° 26′ 55″ N, 80° 17′ 10″ W) 5.0m above MSL.

UM-687. Core 20(3): 156 to 166cm **910 ± 70 AD 1040**

UM-682. Core 20(3): 166 to 175cm **1290 ± 70 AD 660**

UM-683. Core 20(3): 179 to 188cm **1460 ± 70 AD 490**

UM-684. Core 20(4): 198 to 206cm **2070 ± 80 120 BC**

UM-685. Core 20(4): 217 to 226cm **2690 ± 90 740 BC**

UM-825. Core 20(4): 217 to 226cm **2110 ± 70 160 BC**
Duplicate run of UM-685.

UM-686. Core 20(4): 307 to 315cm **4640 ± 130 2690 BC**
Comment (DP): basal peat to determine onset of peat deposition.

UM-557. Core 20: 91cm **780 ± 70 AD 1170**
Comment (PG): wood dates appearance of trees on islands.

UM-651. Core 17(3): 300 to 305cm **4590 ± 100 2640 BC**
Basal peat to determine onset of peat deposition (26° 26′ 55″ N, 80° 17′ 10″ W). Collected at 5.0m above MSL.

UM-665. Core 15(3): 170cm **1280 ± 70 AD 670**
Basal hammock peat dates onset of hammock peat deposition (26° 31′ 10″ N, 80° 19′ 40″ W). Collected at 5.3m above MSL.

Everglades marl series

Peat and marl samples from 2 cores in the Everglades, Florida (25° 48′ 55″ N, 80° 43′ 15″ W). Coll and subm 1975 by P Gleason and P Stone, CSFFCD and M Kirschbaum, Univ Miami.

General Comment (PG): marl deposition correlates to a dry period in the history of the Everglades. Peat samples bracket marls to serve as a cross-check to marl dates. Collected at 2.3m above MSL.

UM-695. Core 26-2: 47 to 53cm **3180 ± 80 1230 BC**
Peat sample serves as a lower bracket to marl (UM-697).

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2040 ± 80

UM-696. Core 26-7: 27 to 33cm **90 BC**

Peat sample serves as upper bracket to marl (UM-697).

2440 ± 90

UM-697. Core 26-4,5: 37 to 44cm **490 BC**

Periphyton marl with mullosk and gastropod shells.

2430 ± 100

UM-698. Core 27-3,4: 36 to 43cm **480 BC**

Periphyton marl with mullosk and gastropod shells.

3210 ± 80

UM-699. Core 27-1: 45 to 52cm **1260 BC**

Peat sample serves as lower bracket to marl (UM-698).

2080 ± 70

UM-700. Core 27-6: 27 to 34cm **130 BC**

Peat sample serves as upper bracket to marl (UM-698).

4520 ± 160

UM-664. Everglades peat **2570 BC**

Basal peat from Everglades marsh dates onset of peat deposition. The Everglades, Florida (25° 48′ 55″ N, 80° 43′ 15″ W), 100 to 105cm. Coll and subm 1975 by P Gleason and P Stone.

UM-556. The Everglades **>37,550**

Shells (*Chione cancellata*) from a peat core, 196 to 210cm, in Conservation Area 2A, The Everglades, Florida (26° 20′ N, 80° 24′ W). Dates last marine influence in area. Coll 1974 by P Gleason and P Stone; subm 1975 by P Gleason.

2500 ± 80

UM-666. Lake Okeechobee Core 11(3) **550 BC**

Mucky peat from a core at depth 175cm from Kreamer I., Lake Okeechobee, Florida (26° 46′ 00″ N, 80° 43′ 30″ W). Dates end of peat deposition or erosional surface. Coll and subm 1975 by P Gleason and P Stone. *Comment* (PG): Sample collected at 4.9m above MSL.

4720 ± 90

UM-635. Corkscrew Swamp CS-1: 173 to 183cm **2770 BC**

Basal peat sample from Corkscrew Swamp Sanctuary, W of Immokalee, Florida. Dates onset of peat deposition in swamp. Coll 1975 by P Gleason and P Stone; subm 1975 by M Deuver, Natl Audobon Soc.

970 ± 80

UM-653. Adams Beach salt marsh **AD 980**

Sandy peat from a core in a salt marsh at Adams Beach, Taylor Co, Florida (29° 52′ 30″ N, 83° 38′ 18″ W). Date may correlate to sea level rise. Coll and subm 1975 by C Wayne and R S Murali, Florida State Univ, Tallahassee, Florida.

Baker's Haulover and Cape Florida series

Marine carbonate sediments coll by hand scooping of surface sediments at Baker's Haulover Beach (25° 54′ N, 80° 07′ W) and Cape Florida (25° 40′ N, 80° 10′ W). Coll and subm 1975 by R Goldstein, Univ Miami. *General Comment* (RG): dated to compare sediment transports and to correlate sediment size with age.

UM-674.	**Cape Florida, A: 250 to 5000μ**	**3660 ± 100** **1710 BC**
UM-675.	**Baker's Haulover, B: 250 to 500μ**	**5090 ± 110** **3140 BC**
UM-676.	**Cape Florida, A: 125 to 250μ**	**2700 ± 80** **750 BC**
UM-677.	**Baker's Haulover, B: 2000 to 4000μ**	**5550 ± 100** **3600 BC**
UM-678.	**Baker's Haulover, B: 125 to 250μ**	**5180 ± 160** **3230 BC**
UM-679.	**Cape Florida, A: 2000 to 4000μ**	**6320 ± 130** **4370 BC**
UM-680.	**Baker's Haulover, B: 2000 to 4000μ/B**	**12,515 ± 360** **10,565 BC**

Central Delaware shelf series

Shells from 2 cores off Delaware coast. Dates sedimentation rate during Holocene transgression. Coll 1973 by R E Sheridan; subm 1974 by M S Lipp and W L Stubblefield, NOAA.

UM-338. 15(MG:G-NOAA) **+ 985**
10,710
−1125
8760 BC

340 to 346cm from top of core (34° 55′ 00″ N, 75° 57′ 00″ W).

UM-339. 16(MG:G-NOAA) **11,000 ± 240**
9050 BC

575 to 585cm from top of core (34° 56′ 30″ N, 75° 53′ 42″ W). *Comment* (WLS): previously dated by Teledyne Isotopes, Inc (unpub) at 12,400 BP.

Desoto Canyon series

Core of calcareous mud from continental slope, Desoto Canyon, Gulf of Mexico (29° 00′ N, 87° 36′ W). Continuation of a study on paleoclimatology of Quaternary sediments from NE Gulf of Mexico (R, v 17, p 241-242; Emiliani *et al*, 1975). Coll 1974 by S Gartner; subm 1975 by C Emiliani and L Ling, Univ Miami.

UM-688. GS7102-7, 3 to 8cm **4910 ± 140**
2690 BC

8965 ± 180
UM-689. GS7102-7, 72 to 77cm **7015 BC**

16,660 ± 500
UM-690. GS7102-7, 161 to 163cm **14,710 BC**

+470
19,020
−510
UM-691. GS7102-7, 211 to 219cm **17,070 BC**

+590
21,850
−640
UM-692. GS7102-7, 221 to 228cm **19,900 BC**

15,560 ± 420
UM-693. GS7102-7, 341 to 349cm **13,610 BC**

+1320
22,570
−1590
UM-694. GS7102-7, 351 to 358cm **20,620 BC**

B. Italy

20,290 ± 710
UM-548. Tyrrenian Sea, T71-3 16 **18,340 BC**

Siderite ($FeCO_3$) from top of core from the Tyrrenian abyssal plain (39° 45′ N, 14° 30′ E). Dated to determine origin of siderite. Coll 1974 by R Sartori, CNR Bologna, Italy; subm 1975 by E Bonatti, RSMAS, Miami, Florida.

C. St Croix

2155 ± 170
UM-420. Westend Saltpond **205 BC**

Peat from core taken at Westend Saltpond, St Croix, Virgin Islands (17° 41′ 13″ N, 64° 53′ 21″ W). Date for Holocene sea level records. Coll 1974 by L C Gerhard, West Indies Lab, St Croix; subm 1975 by L C Gerhard and E Swietelsky, Univ Miami.

D. Bahamas

Tongue of the Ocean series

Coral, sclerosponge, and sediment samples blasted from reef wall at various locations along the Tongue of the Ocean, Bahamas. Coll and subm 1976 by W Schlager, RSMAS, Miami.

125 ± 80
UM-708. 76-5-4 **AD 1825**

Sclerosponge in 82.3m water (24° 02′ 00″ N, 77° 10′ 45″ W). Date for stratigraphy of reef wall.

4460 ± 90
UM-709. 76-5-7 **2510 BC**

Coral (*Porites*) from same location as UM-708.

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8310 ± 80
UM-710. 76-6-1 **6360 BC**

Coral (*Montastrea annularis*) from same location as UM-708, at depth 137m.

10,000 ± 85
UM-713. 76-14-1 **8050 BC**

Coral (*Montastrea annularis*) from depth 95.1m (23° 29′ 42″ N, 76° 34′ 06″ W). *Comment* (WS): UM-709, -710, and -713 are shallow water corals that probably grew during a lower stand of sea level.

770 ± 60
UM-711. 76-9-2A **AD 1180**

Oolites from depth 82.9m (24° 02′ 24″ N, 77° 11′ 12″ W).

3490 ± 85
UM-712. 76-9-2B **1540 BC**

Lithified skeletal and ooid sand from same location as UM-711. *Comment* (WS): UM-711 and -712 date sediment accretion rate on reef wall.

Fresh Creek series

Carbonates from Andros I. adjacent to runway at Fresh Creek (24° 41′ 53″ N, 77° 48′ 37″ W). Dated to determine if marine sediments are a source of $CaCO_3$ in freshwater sediments deposited by Fresh Creek. Coll 1974 and subm 1975 by P Gleason and P Stone.

14,560 ± 230
UM-631. Fresh Creek 1 **12,610 BC**

Oolitic limestone bedrock coll at surface.

2900 ± 120
UM-632. Fresh Creek 2 **950 BC**

Brackish marine carbonate, surface sediment.

1040 ± 120
UM-633. Fresh Creek 3 **AD 910**

Silt size freshwater calcitic mud coll in a living algal mat.

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