

TEXAS A & M UNIVERSITY RADIOCARBON DATES III

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This date list is composed of the ages of tests of fossil populations of the foraminiferal species, *Amphistegina gibbosa*, and algal nodules collected from submerged banks in the N Gulf of Mexico. A Shipek grab sampler was used to collect the *Amphistegina gibbosa* and a few of the algal nodule samples. Algal nodules from the West Flower Garden Bank were obtained from cores at various intervals as indicated in Sec III.

All samples were acid leached to remove possible surface contaminants. Samples, analyzed using standard procedures (Kim *et al*, 1969; Mathews *et al*, 1972), were counted from 2000 to 3000 minutes. Ages are calculated using a ^{14}C half-life value of 5568 years and 0.95 of the present day activity of the NBS oxalic acid standard. All ages have also been corrected for the isotopic fractionation occurring in nature. Variations in the isotopic ratio, $\delta^{13}\text{C}$, are reported as the per mil (‰) deviation from the Chicago PDB Standard. Indicated errors refer to one standard deviation calculated from a statistical analysis of sample, standard and background count rates.

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I. INTERLABORATORY CHECK SAMPLE

TAM-184. West Flower Garden Bank, Gulf of Mexico **4200 ± 150**
2250 BC

Calcium carbonate tests of fossil *Amphistegina gibbosa* populations from the West Flower Garden Bank (27° 52' N, 93° 49' W), coll from water depth 60m. Dated by Texas Radiocarbon Lab as 4160 ± 110, TX-1769 (S Valastro, written commun).

II. AMPHISTEGINA GIBBOSA SAMPLES

Samples were coll with a shipek grab sampler unless noted otherwise.

Sample no.	Bank	Water depth (m)	Location	$\delta^{13}\text{C}$ (‰)	^{14}C date BP (1950) AD/BC
TAM-190	Claypile	42	28°20'N, 94°10'W	+1.1	Modern
TAM-212	WFG**	60	27°52'N, 93°49'W	+1.2	4200 ± 150 2250 BC

* Present address: US Geological Survey, Woods Hole Oceanographic Institution, Woods Hole, Massachusetts 02543.

** West Flower Garden

Sample no.	Bank	Water depth (m)	Location	$\delta^{13}\text{C}$ (‰)	^{14}C date BP (1950) AD/BC
TAM-186	—	60	28°38'N, 89°33'W	+0.9	4780 ± 130 2830 BC
TAM-191	—	65-70	27°58'N, 92°23'W	+0.6	3690 ± 120 1740 BC
TAM-201	Flying Dutchman	71	27°58'N, 92°02'W	+0.8	3990 ± 130 2040 BC
TAM-193	Applebaum	77	27°50'N, 94°15'W	+0.7	3830 ± 120 1880 BC
TAM-195	WFG	77	27°52'N, 93°49'W	+0.1	6370 ± 170 4420 BC
TAM-188	WFG	77	27°52'N, 93°49'W	+0.5	7490 ± 150 5540 BC
TAM-197	WFG	86	27°52'N, 93°49'W	+1.1	2540 ± 110 590 BC
TAM-199	—	87	28°01'N, 92°28'W	+1.1	3690 ± 110 1740 BC
TAM-192	WFG	86	27°52'N, 93°49'W	+1.0	11,830 ± 490 9880 BC
TAM-200	WFG	86	27°52'N, 93°49'W	+1.0	14,790 ± 650 12,840 BC
TAM-196	WFG	95	27°52'N, 93°49'W	+1.0	6220 ± 110 4270 BC
TAM-211	WFG	105	27°52'N, 93°49'W	+0.9	7140 ± 160 5190 BC
TAM-187	Sweet	132	27°51'N, 91°49'W	+1.0	12,570 ± 510 10,620 BC
TAM-189	Phleger	190	27°50'N, 91°54'W	+0.9	13,490 ± 560 11,540 BC

III. ALGAL NODULE SAMPLES

Sample no.	Bank	Water depth (m)	Location	$\delta^{13}\text{C}$ (‰)	^{14}C date BP (1950) AD/BC
TAM-209	—	53	28°06'N, 91°02'W	+1.3	1190 ± 120 AD 760
TAM-203	—	62	28°03'N, 92°28'W	-33.9*	17,920 ± 710 15,970 BC
TAM-213	—	90	28°03'N, 92°28'W	-0.5	11,360 ± 250 9410 BC

Sample no.	Bank	Water depth (m)	Location	$\delta^{13}\text{C}$ (‰)	^{14}C date BP (1950) AD/BC
TAM-208	WFG core 45-55cm	91	27°52'N, 93°49'W	-4.1	19,300 ± 440 17,350 BC
TAM-207	WFG core 145-155cm	91	27°52'N, 93°49'W	-18.6	16,970 ± 380 15,020 BC
TAM-206	Alaminos	115	28°01'N, 91°46'W	+1.1	10,470 ± 260 8520 BC
TAM-210	Sweet	140	27°51'N, 91°49'W	+0.7	10,000 ± 200 8050 BC
TAM-219	WFG core 510-520cm	119	27°52'N, 93°49'W	+2.1	28,780 ± 1500 26,830 BC
TAM-220	WFG core 140-150cm	82	27°52'N, 93°49'W		>30,000
TAM-221	WFG core top	64	27°52'N, 93°49'W	+2.7	Modern
TAM-223	WFG core 55-65cm	119	27°52'N, 93°49'W		24,700 ± 1950 22,750 BC
TAM-224	WFG core 250-260cm	81	27°52'N, 93°49'W	+2.9	26,870 ± 1100 24,920 BC
TAM-225	WFG core top	82	27°52'N, 93°49'W	+3.1	1970 ± 110 20 BC

* Sample enriched with iron.

REFERENCES

- Kim, S M, Ruch, R R, and Kempton, J P, 1969, Radiocarbon dating at the Illinois Geological Survey: Illinois State Geol Survey Environmental Geol Note 28, p 1-19.
 Mathews, T D, Fredericks, A D, and Sackett, W M, 1972, Texas A&M University radiocarbon dates II: Radiocarbon, v 14, p. 452-455.