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## MARINE RESOURCES RESEARCH INSTITUTE RADIOCARBON DATES IV\*

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The results presented in this date list are from the same sampling program previously reported (R, 1978, v 20, p 436-440). Each sample reported herein was geologic in origin and, in most instances, represents a single shell date.

As discussed earlier (R, 1978, v 20, p 436-440), wide age ranges were found at some sites due to reworking and the incorporation of other deposits into younger ones. Not all sites had such extreme ranges, since the age range at one location was approx 800 yr as opposed to 18,000 yr.

Analytic procedures and age calculations were performed as previously reported (R, 1976, v 18, p 202-204). All ages were based on a <sup>14</sup>C half-life of 5570 years, using 0.95 NBS oxalic acid as the modern standard. Each sample was counted a minimum of 2000 min, with calculations based on sample, standard, and background statistics to  $\pm 1\sigma$ .

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## A. South Carolina coastal samples

#### Charleston 1

Samples coll from tidal flat sand ca 1m above MLW ( $32^{\circ} 39' 00''$  N, 79° 59' 35'' W).

MRRI-216.	Shell (Mercenaria sp)	$4420 \pm 100$
MRRI-217.	Shell (Dinocardium robustum)	$5600 \pm 110$
MRRI-219.	Shell (D robustum)	$6130 \pm 100$
MRRI-220.	Shell (D robustum)	$8250\pm120$
MRRI-221.	Shell (Mercenaria sp)	$4230\pm90$
MRRI-222.	Shell (D robustum)	$18,500 \pm 390$
MRRI-223.	Shell (Anadara brasiliana)	$1240 \pm 100$
MRRI-224.	Shell (Mercenaria sp)	$8390 \pm 160$
MRRI-226.	Shell ( <i>Mercenaria</i> sp)	$4560 \pm 140$
MRRI-227.	Shell (D robustum)	$4150 \pm 130$
MRRI-258.	Shell (D robustum)	$5870 \pm 130$

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MRRI-261.	Shell ( <i>A brasiliana</i> with periostracum ligament on hinge)	4170 ± 140
MRRI-262.	Shell (A brasiliana with periostracum ligament on hinge)	$4370 \pm 170$
Samples coll	from clay bed ca 70cm above MLW.	
MRRI-254.	Shell (right valve of articulated <i>Mercenaria</i> sp)	4270 ± 90
MRRI-256.	Shell (left valve of MRRI-254)	$4450 \pm 120$

# **Charleston 2**

Samples coll from tidal flat sand ca 10 to 40cm above MLW (32° 39' 52" N, 79° 59' 35" W).

MRRI-228.	Shell (left valve of articulated <i>Mercenaria</i> sp)	$4310 \pm 100$
MRRI-229.	Shell (right valve of MRRI-228)	$4490 \pm 100$
MRRI-230.	Shell (Mercenaria sp)	$4380 \pm 100$
MRRI-231.	Shell (A ovalis)	$5390 \pm 120$
MRRI-232.	Shell (Busycon carica)	$4810 \pm 110$
MRRI-233.	Shell (B carica)	$17,400 \pm 470$
MRRI-234.	Shell (D robustum)	$6180 \pm 100$
MRRI-235.	Shell (B carica)	$5600 \pm 110$
MRRI-236.	Shell (D robustum)	$23{,}300\pm560$
MRRI-237.	Shell (Trachycardium egmontianium)	$4450\pm150$

#### **Charleston 3**

Samples coll from shell bed 1 to 1.5m above MLW (32° 37' 14" N, 80° 01' 53" W).

<b>MRRI-249</b> .	Shell (D robustum)	$2850\pm80$
MIRICI-2T/	Shen (D rooustant)	

MRRI-250.	Shell (D rob	ustum)	$3730 \pm 120$
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Samples coll from tidal flat sand 0 to 70cm above MLW.

MRRI-238.	Shell (articulated Dosinia discus)	$3660 \pm 140$
MRRI-239.	Shell (articulated A brasiliana)	$2920\pm220$
MRRI-240.	Shell (Mercenaria sp)	$3770 \pm 80$
MRRI-241.	Shell (D robustum)	$18,500 \pm 440$
MRRI-242.	Shell (A brasiliana)	$4240 \pm 170$

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MRRI-243.	Shell (A brasiliana)	$3400 \pm 160$
MRRI-244.	Shell (B carica)	$3980 \pm 170$
MRRI-246.	Shell (B carica)	$3630\pm200$

## Folly Island, Charleston Co

Samples coll from sand bed 1 to 2m above MLW (72° 39' 38" N, 79° 57' 16" W).

± 80
± 80
± 70
± 110
± 90

B. Georgia coastal samples

## Ossabaw Island, Bryan Co

Samples coll from clay layer ca 1.2m above MLW (31° 46' 50" N, 81° 05' 41" W).

MRRI-264.	Shell (articulated Mercenaria sp in life	
	position at top of clay bed)	$2960\pm100$
MRRI-266.	Shell (left valve of articulated	
	Mercenaria sp)	$3030\pm70$
MRRI-267.	Shell (right valve of MRRI-266)	$2890 \pm 90$

Sample coll from sand unit above clay layer ca 2 to 2.5m above MLW. *Comment* (FWS, Jr): sample may be reworked from lower clay layer.

MRRI-265. Shell (articulated A brasiliana)  $3330 \pm 90$ 

C. Florida coastal samples

# North Captiva Island, Lee Co

Samples coll from beach ridge sand and poorly lithified calcarenite 0 to 1m above MSL (26° 35′ 50″ N, 82° 13′ 10″ W).

MRRI-213.	Shell (Busycon sp)	$5620 \pm 160$
MRRI-214.	Reef (Vermetus nigricans Dall)	$6890 \pm 140$
MRRI-215.	Shell (Mercenaria sp)	$6410 \pm 120$
MRRI-245.	Reef (V nigricans Dall)	$5650 \pm 120$
MRRI-248.	Reef (V nigricans Dall)	$6310 \pm 130$

MRRI-251.	Reef (V nigricans Dall)	$6140 \pm 110$
MRRI-252.	Reef (V nigricans Dall)	$5490 \pm 120$
MRRI-253.	Reef (V nigricans Dall)	$6330 \pm 110$
MRRI-255.	Reef (V nigricans Dall)	$6160 \pm 100$
MRRI-291.	Shell (Mercenaria mercenaria)	$6540 \pm 100$
MRRI-295.	Shell (Noetia ponderosa)	$5740 \pm 200$
MRRI-296.	Shell (Busycon sp)	$4670 \pm 110$
MRRI-297.	Shell (D robustum)	$5150 \pm 240$
MRRI-298.	Shell (Mercenaria sp)	$4540 \pm 110$
MRRI-299.	Shell (D robustum)	$7430 \pm 160$
MRRI-300.	Shell (D robustum)	$5440 \pm 150$
MRRI-301.	Shell (M mercenaria)	$4280\pm90$
MRRI-302.	Shell (Mercenaria sp)	$7250\pm290$
MRRI-303.	Shell (M mercenaria)	$6940 \pm 120$

# La Costa Island, Lee Co, Pejuan Point

Samples coll from beach ridge with poorly lithified calcarenite 0 to 80cm above MLW (26° 37' 11" N, 82° 13' 36" W).

MRRI-257.	Shell (8 to 10 <i>Spisula raveneli</i> Conrad, some articulated, possibly in growth position)	$4360 \pm 120$
MRRI-259.	Shell (S raveneli Conrad)	$4440 \pm 120$
MRRI-260.	Shell ( <i>S raveneli</i> Conrad)	$4900 \pm 120$
MRRI-268.	Shell ( <i>S raveneli</i> Conrad)	$5100\pm90$
MRRI-269.	Shell (Mercenaria sp)	$2130 \pm 130$
MRRI-270.	Shell (S raveneli Conrad)	$3040\pm80$
MRRI-271.	Shell (S raveneli Conrad)	$3370\pm90$
MRRI-272.	Shell (S raveneli Conrad)	$3570 \pm 130$
MRRI-273.	Shell (S raveneli Conrad)	$4000 \pm 110$
MRRI-280.	Shell (articulated <i>S raveneli</i> Conrad)	$5140 \pm 170$
MRRI-281.	Shell (articulated <i>S raveneli</i> Conrad)	4910 ± 90
MRRI-282.	Shell (S raveneli Conrad)	$5650 \pm 120$

MRRI-294. Shell (D robustum)

 $5130 \pm 90$ 

# North Tip of Island

Samples coll from layer of quartz sand and shell fragments 0.5m above MSL (26° 42′ 30″ N, 82° 15′ 00″ W). Comment (FLK): MRRI-283, -285, and -286 were not acid etched in pretreatment.

MRRI-283.	Shell (articulated <i>S raveneli</i> Conrad)	$5170 \pm 100$
MRRI-285.	Shell (articulated <i>S raveneli</i> Conrad)	$5790 \pm 140$
MRRI-286.	Shell (articulated <i>S raveneli</i> Conrad)	$4850 \pm 110$
MRRI-287.	Shell (articulated <i>S raveneli</i> Conrad)	$5600 \pm 170$
MRRI-288.	Shell (articulated <i>S raveneli</i> Conrad)	$5560 \pm 190$
MRRI-292.	Shell (articulated <i>S raveneli</i> Conrad)	4990 ± 90
MRRI-293.	Shell (D robustum)	$5400\pm90$

## Gasparilla Island, Lee Co

Samples coll from drainage ditch ca 1m below ground level in spoil from ditch composed of quartz sand and shell fragments (26° 47' N, 82° 16' N).

MRRI-289.	Shell (articulated S raveneli	
	Conrad)	$4550 \pm 160$

# MRRI-290. Shell (articulated *S raveneli* Conrad) 4700 ± 370

#### REFERENCES

Mathews, T D, 1976, Marine Resources Research Institute radiocarbon dates I: Radiocarbon, v 18, p 202-204.

1978, Marine Resources Research Institute radiocarbon dates II: Radiocarbon, v 20, p 436-440.

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