

TABLE 1. NEW RADIOCARBON DATES FROM VIBRACORES
ON THE INNER CONTINENTAL SHELF OF MAINE

Laboratory no.	Location	Latitude longitude	Material	Depth below mean high water (m)	¹⁴ C age (ka)
OS-1837	Saco Bay	43°30'19"N 70°20'58"W	<i>Macoma balthica</i> *	17	7.060 ± 0.035†
OS-2092	Casco Bay	43°42'48"N 70°10'15"W	Wood	19	7.610 ± 0.105†
BETA-63124	Kennebec R. paleodelta	43°42'05"N 69°49'27"W	<i>Mytilus edulis</i>	24	7.490 ± 0.090
BETA-63125	Kennebec R. paleodelta	43°42'05"N 69°49'27"W	<i>Mytilus edulis</i>	24	7.310 ± 0.070
OS-1862	Kennebec R. paleodelta	43°42'25"N 69°47'39"W	<i>Macoma balthica</i> *	25	8.610 ± 0.040†
OS-1860	Kennebec R. paleodelta	43°42'25"N 69°47'39"W	<i>Macoma balthica</i> *	25	8.710 ± 0.035†
BETA-69336	Penobscot Bay	44°24'52"N 68°51'24"W	<i>Mya arenaria</i> *	26	8.730 ± 0.070†
BETA-69337	Penobscot Bay	44°24'52"N 68°51'24"W	<i>Mya arenaria</i> *	26	8.730 ± 0.060†
BETA-69338	Kennebec R. paleodelta	43°42'31"N 69°43'25"W	Wood	53	10.310 ± 0.060†
BETA-63126	Kennebec R. paleodelta	43°42'46"N 69°42'53"W	<i>Balanus balanoides</i>	57	10.680 ± 0.160
OS-1861	Kennebec R. paleodelta	43°42'46"N 69°42'53"W	<i>Nucula tenuis</i>	60	10.850 ± 0.045†

*Salt-marsh foraminifera in core, closely associated with sample.
†Accelerator Mass Spectrometry (AMS) ¹⁴C date.

TABLE 2. RADIOCARBON DATES ON SEA-LEVEL INDICATORS
FROM SALT-MARSH DEPOSITS ON THE SOUTH-CENTRAL COAST OF MAINE.

Laboratory no.	Location	Latitude longitude	Material	Depth below present mean high water (m)	¹⁴ C age (ka)	Calibrated age ± 1σ range (ka)	Paleo-mean high water elevation (m)
AA-8212	Sprague River marsh	43°44'34"N 69°50'01"W	B. detr. p.f.	6.09-6.16	4.945 ± 0.075†	5.599-5.742	-0.08-0.53
BETA-50161 ETH-9084	Morse River marsh	43°45'06"N 69°49'17"W	B. detr. <i>S.a.</i>	6.53	4.980 ± 0.060†	5.648-5.849	0.07-0.60
AA-8939	Morse River marsh	43°45'07"N 69°49'09"W	B. detr. <i>S.a.</i>	2.72	4.270 ± 0.070†	4.660-4.868	0.32-0.88
AA-8937	Morse River marsh	43°45'07"N 69°49'09"W	Detr. <i>D.s.</i>	0.25	0.990 ± 0.060†	0.933-1.057	0.07-0.65
AA-8938	Morse River marsh	43°45'07"N 69°49'09"W	Detr. <i>S.a.</i>	1.52	2.675 ± 0.070†	2.751-2.853	0.02-0.86
AA-8940	Sprague River marsh	43°44'35"N 69°49'57"W	Detr. <i>S.p.</i>	1.34	2.770 ± 0.065†	2.789-2.950	-0.03-0.85
SI-6617	Damariscotta River estuary	43°58'58"N 69°33'43"W	BHHM	14.92-14.96	6.295 ± 0.055	7.099-7.225	-0.30-1.00
BETA-52188	Morse River marsh	43°45'07"N 69°49'09"W	BHM	2.61-2.71	3.760 ± 0.060	3.991-4.227	0.02-0.68
PITT-0965	Morse River marsh	43°45'15"N 69°49'22"W	BHHM	3.74-3.78	4.840 ± 0.095	5.471-5.654	0.02-0.68
PITT-0968	Morse River marsh	43°45'15"N 69°49'19"W	BHM	1.91-2.01	3.435 ± 0.045	3.628-3.800	0.02-0.68

Note: The associated foraminifera population was identified to obtain the altitudinal relation between the fossil peats and former tide levels, a relation that is well known on the modern salt-marsh surface. B. detr. p.f. = Basal unidentified detrital plant fragment; B. detr. *S.a.* = Basal detrital *Spartina alterniflora* fragment; Detr. *S.p.* = detrital *Spartina patens* fragment; Detr. *D.s.* = detrital *Distichlis spicata* fragment. BHM = basal high marsh peat. BHHM = basal higher high marsh peat. †Accelerator Mass Spectrometry (AMS) ¹⁴C date.

Sources:

Gehrels, W.R., 1994, Holocene sea-level changes in the northern Gulf of Maine: Regional trends and local fluctuations determined from foraminiferal analyses and paleotidal modeling [Ph.D. thesis]: Orono, Maine, University of Maine, 337 p.

Shipp, R.C., 1989, Late Quaternary sea-level fluctuations and geologic evolution of four embayments and the adjacent inner shelf along the northwestern Gulf of Maine [Ph.D. thesis]: Orono, Maine, University of Maine, 832 p.