APPENDICES

APPENDIX 1
Noncultural Radiocarbon Dates from St. Catherines Island[a]

Lab no.	Location	Material	Contexts	^{14}C age B.P. (± 1σ)	^{13}C / ^{12}C	^{13}C adjusted age B.P.	Radiocarbon age calibrated (± 2σ)	Reference[b]
Pitt–831	Core 3 (783–799 cm)	Shell	Subtidal marine	22,600 ± 310	*	—	—	1
Pitt–685	Core 5 (15–35 cm)	Organics	Marsh peat	Modern	—	—	—	1
Pitt–686	Core 5 (68–83 cm)	Organics	Low marsh *Spartina*	1600 ± 40	—	—	A.D. 380–560	1
Pitt–687	Core 5 (489–508 cm)	Organics	*Spartina* in mud clast	2590 ± 40	—	—	830–550 B.C.	1
Pitt–733	Core 6 (133–151 cm)	Organics	Marsh, point bar	1720 ± 50	—	—	A.D. 170–430	1
Pitt–734	Core 6 (480–516 cm)	Organics	*Spartina* in mud clast	4290 ± 80	—	—	3270–2620 B.C.	1
Pitt–735	Core 6 (653–689 cm)	Shell	Subtidal marine	24,220 ± 500	*	—	27890–25780 B.C.	1
Pitt–736	Core 8 (317–334 cm)	Organics	*Spartina* in mud clast	3100 ± 50	—	—	1490–1220 B.C.	1
Unknown	Core 13 (494–500 cm)	Organics	Disseminated carbon	4370 ± 120	—	—	3370–2670 B.C.	1
GX-16792	Core 14 (275–285 cm)	Organics	Disseminated in mud	14,090 ± 640	—	—	166500–13220 B.C.	1
Pitt–926	Core 17 (494–508 cm)	Organics	Marine lag deposit	4450 ± 50	—	—	3340–2930 B.C.	1
Pitt–926a	Core 17 (494–508 cm)	Shell	Mixed marine shell bed	7870 ± 90	***	8280 ± 90	7340–6760 B.C.	1
Pitt–927	Core 20 (27 cm from bottom)	Shell	—	4370 ± 120	***	4780 ± 120	3570–2930 B.C.	—
GX–16791	Core 20 (72–84 cm)	Organics	North side of McQueen	2450 ± 150	—	—	900–200 B.C.	—
GX–16708	Core 20 (34–38 cm)	Shell	North side of McQueen	550 ± 120	***	340 ± 120	A.D. 1620–1950	—
GX–13966	Eroding tidal scar	Wood	2 in. below peat surface	730 ± 80	—	—	A.D. 1060–1410	—
UGA–6267	Core 9005051 (502–512 cm)	Organics	Freshwater peat	28,370 ± 340	*	—	31640–29610 B.C.	1
Pitt–925	Core 9005051 (502–512 cm)	Organics	Freshwater peat	33,510 ± 530	*	—	37580–34800 B.C.	1
Pitt–645	Station 26 (surface)	Organics	Relict *Spartina*	840 ± 50	–0.10	1080 ± 50	A.D. 820–1030	1
Pitt–645A	Station 26 (surface)	Shell	*Geukensia*	1570 ± 60	0	1980 ± 60	360 B.C.–A.D. 10	1
Pitt–646	(surface)	Organics	Disseminated in mud	1060 ± 60	0.1	1300 ± 60	A.D. 640–880	1
GX–13966	(surface)	Wood	Palmetto in mud	730 ± 80	—	—	A.D. 1060–1410	1
UGA–6160	South of line 43 south	Wood	In relict mud	470 ± 90	–27.52	430 ± 100	A.D. 1300–1660	2
UGA–6161	South of line 43 south	*Ostrea*	In relict mud	100 ± 80	–0.63	500 ± 80	A.D. 1500–1890	2

APPENDIX 1 — (*Continued*)

Lab no.	Location	Material	Contexts	^{14}C age B.P. (± 1σ)	^{13}C / ^{12}C	^{13}C adjusted age B.P.	Radiocarbon age calibrated (± 2σ)	Reference[b]
UGA–6162	South of line 43 south	*Mercenaria*	In relict mud	290 ± 90	–1.90	670 ± 90	A.D. 1350–1690	2
UGA–6163	South of line 43 south	*Geukensia*	In relict mud	190 ± 90	–1.13	580 ± 90	A.D. 1440–1810	2
Unknown	(surface)	Organics	*Spartina* in relict mud	480 ± **	—	—	A.D. 1310–1620	3
Unknown	(surface)	Organics	*Spartina* in relict mud	1830 ± **	—	—	A.D. 60–340	3
Unknown	(surface)	*Crassostrea*	In relict mud	1040 ± **	—	—	A.D. 1070–1330	4
UGA–6442	Cracker Tom Hammock	*Crassostrea*	Zone C	3200 ± 70	–1.51	3590 ± 50	1870–1540 B.C.	5, 6
USGS #WW-1197	Cracker Tom Bridge	Peat	Zone A	47,620 ± 2500	*	—	—	5, 6
USGS #WW-1262	Cracker Tom Bridge	Shell	Zone B	4060 ± 50	***	4450 ± 50	3000–2670 B.C.	5, 6
USGS #WW-1198	Cracker Tom Bridge	Charcoal	Zone B	6020 ± 50	—	—	5040–4790 B.C.	5, 7
Beta-115910	Beach Pond (214 cm)	Wood	Zone B	1210 ± 40	—	—	A.D. 690–940	5
Beta-217245	South Beach	*Mercenaria*	Relic marsh	780 ± 50	–1.4	1170 ± 50	A.D. 990–1230	8
Beta-217246	South Beach	*Crassostrea*	Relic marsh	620 ± 50	–1.7	1010 ± 50	A.D. 1120–1350	8
Beta-217823	St. Catherines Shell Ring	Composite shell	Vibracore #3, 3.5 m below surface	—	–0.6	>44,800	—	8
Beta-217824	St. Catherines Shell Ring	Peat sample	Vibracore #2, 4.1 m below surface	39,130 ± 660	–26.2	39,110 ± 660	42420–40400 B.C.	8, 9
Beta-217825	St. Catherines Shell Ring	Peat sample	Vibracore #2, 4.1 m below surface	29,440 ± 260	–26.2	29,410 ± 260	32710–31410 B.C.	8, 9
Beta-223509	St. Catherines Shell Ring	Composite shell	Vibracore	—	–2.0	>38,290	—	8, 9
Beta-223511	St. Catherines Shell Ring	Composite shell	Vibracore	—	–2.0	>44,840	—	8, 9
Beta-244621	North Beach	Organic sediment	—	13,650 ± 40	–27.5	13,610 ± 40	15000–14630 B.C.	10
Beta-244622	North Beach	Organic sediment	—	22,800 ± 130	–23.8	22,820 ± 130	26080–24980 B.C.	10
Beta-260790	King New Ground Marsh	*Crassostrea virginica*	Modern sample	110.2 ± 0.4 pMC[c]	–2.6	105.3 ± 0.4 pMC[c]	—	—
Beta-260791	King New Ground Marsh	*Mercenaria*	Modern sample	117.1 ± 0.4 pMC[c]	–2.2	111.8 ± 0.4 pMC[c]	—	—
Beta-261655	CraneYard Pond 2A	Organic sediment	—	15030 ± 60	–24.5	15040 ± 60	16600–16070	—
Beta-263588	St. Catherines Island	Peat sample	2009F 4.6	1900 ± 40	–26.4	1800 ± 40	A.D. 130–340	11
Beta-262151	St. Catherines Island	Wood	2009H 4.5	1720 ± 50	–25.4	1720 ± 50	A.D. 170–430	11
Beta-262150	St. Catherines Island	Wood	2009F 12.1	NA	–24.8	>43000	—	11
Beta-261351	St. Catherines Island	Organics	2009H 6.3	6320 ± 60	–24.2	6330 ± 60	5470–5210 B.C.	11

APPENDIX 1 — (*Continued*)

Lab no.	Location	Material	Contexts	^{14}C age B.P. (± 1σ)	^{13}C / ^{12}C	^{13}C adjusted age B.P.	Radiocarbon age calibrated (± 2σ)	Reference[b]
Beta-259900	St. Catherines Island	Wood	2009H 14.1	20550 ± 110	–24.8	20550 ± 110	23010–22260 B.C.	11
Beta-253537	Jekyll Island	Wood	2008C JEKYLL	3300 ± 40	–25.6	3290 ± 40	1680–1460 B.C.	11
Beta-230798	—	Organics	2007A 13-6	31850 ± 320	–27.9	31800 ± 320	34910–33310 B.C.	11
Beta-230797	—	Organics	2007A 5-2	1790 ± 40	–15.1	1950 ± 40	40 B.C.–A.D. 130	11
Beta-220145	Jekyll Island	Wood	JEKYLL 2003C	45680 ± 3300	–16.5	45820 ± 3300	48050–41930 B.C.	11
Beta-220144	Jekyll Island	Shell	JEKYLL 2002D	870 ± 40	–0.7	1270 ± 40	A.D. 890–1120	11
Beta-220143	Jekyll Island	Shell	JEKYLL 2002B	1080 ± 40	–0.5	1480 ± 40	A.D. 680–890	11
Beta-255650	—	Organic sediment	STCAT3A2A	10780 ± 60	–24.3	10790 ± 60	10900–10620 B.C.	12
Beta-255651	—	Organic sediment	STCAT2A2A	6440 ± 40	–24.8	6440 ± 40	5480–5330 B.C.	12
Beta-255652	—	Charred material	F44B HORSTCAT	6260 ± 40	–24.5	6270 ± 40	5320–5080 B.C.	12

[a]All marine dates corrected for reservoir effect, per Thomas, 2008, chap. 13; "cal" omitted throughout.

[b]References: (1) Linsley (1993: appendix), (2) Bishop and Rich (1990), (3) Pemberton and Frey (1985), (4) Fierstein and Rollins (1987), (5) Booth (1998), (6) Booth et al. (1999a), (7) Booth and Rich (1999), (8) Thomas (2008), (9) Booth et al. (1999b), (10) Vento and Stahlman (2008), (11) Chowns (chap. 9), (12) Vento and Stahlman (chap. 4).

[c]In radiocarbon reports, the terms "%Modern," or "pMC" are used interchangeably to denote the absolute "percent modern carbon" (with the term "modern" meaning 1950).

* Beyond the currently available calibration curve.

**Estimate of variability unavailable; for calibration purposes will assume ± 60 radiocarbon years.

***Fractionation estimate (^{13}C ratio) unavailable; for calibration purposes will add 390 years (per Thomas, 2008, chap. 13).

APPENDIX 2
Vibracores and Artesian Wells Located on St. Catherines Island, Georgia
Most locations accurate within ± 3 m (approximate locations enclosed in parentheses); older sites are approximated by using latitudes or longitudes from Google Earth™; well sites without casings are shown in brackets.

Vibracore	Location	Longitude W Latitude N	Total depth	Geology	Researchers
North Beach Transects (Linsley [1993], with H.B. Rollins), University of Pittsburgh Transect A-A′, cores 1, 4, 2, and 3 (described in Linsley, 1993; Linsley et al., 2008; fig. 3.5; Thomas et al., 2008).					
Post-Hugo core 1: North Beach; Yellow Banks Bluff, September (21), 1989	In relict mud near south end of Yellow Banks Bluff; 2.5 m east of bluff, 37 m south of station 1, high tide swash zone of modern beach, (Morris and Rollins, 1979), elev. about 2.1 m above MLT.	(31.67562) (81.13687)	2.1 m	Spuded in relict marsh mud.	N. Hamilton H. Rollins G. Bishop D. Linsley
Post-Hugo core 2: North Beach; Yellow Banks Bluff, September (21), 1989	In relict marsh mud, modern beach, 22 m E of core 1; 37 m south of station 1, 7 m E of sand/mud contact; 0.4 m above MLT.	(31.67567) (81.13668)	5.3 m	Spuded in relict marsh mud.	N. Hamilton H. Rollins G. Bishop D. Linsley
Post-Hugo core 3: North Beach; Yellow Banks Bluff, September (21), 1989	Approximately 13 m east of core 2; spuded in relict mud; elev. ~0.9 m	(31.67569) (81.13652)	8.4 m	Dated intervals: shell bed at 783–799 cm depth in core, mixed subtidal marine (*Anadara, Mulinia, Donax*) and marsh shell (*Ilyanassa, Tagelus, Crassostrea*) assemblage dated at 22,600 ± 310 yr B.P. (Pitt 831).	N. Hamilton H. Rollins G. Bishop D. Linsley
Post-Hugo core 4: North Beach: Yellow Banks Bluff, September (21), 1989	Modern beach swash zone, 14 m east of core 1, elev. 1.5 m above MLT, between core 1 & 2; 2 m west of sand/mud contact.	(31.67562) (81.13700)	4.0 m	—	N. Hamilton H. Rollins G. Bishop D. Linsley
North Beach Transects (Linsley [1993], with H. B. Rollins), University of Pittsburgh Transect B–B′, cores 5, 6, 7, and 8 (described in Linsley, 1993; Linsley et al., 2008, fig. 3.7; Thomas et al. 2008). [GPS location by estimation on Feb. 3, 1993, aerial photography and map in Linsley et al., 2008]					
Post-Hugo core 5: North Beach; Seaside Marsh meadow: September (21+), 1989	Modern beach, surface elev. of 1.2 m above MLT, immediately seaward of high tide wrack line; ~25 m S of station 20 and ~30 m E of baseline; 10 m N20°W from Hydra Tree; in sandy *Spartina* elev.	(31.67163) (81.13669) Transect B	5.2 m	Dated intervals: stacked lag deposits with a gradational fining-upward sequence of tidal creek channel point bar deposits and consisting of coarse to very coarse sands, and containing cm-size mud clasts with organics were dated at 15–35 cm deep (Pitt 685), organics (marsh peat) dated as modern; 68–83 cm deep (Pitt 686), organics (low marsh) dated at 1595 ± 40 yr B.P.; 489–508 cm deep (Pitt 687), organics (*Spartina* in mud clast) dated at 2585 ± 40 yr B.P. (stated as 2590 ± 40 yr B.P. in Thomas, 2008: table 29.1).	N. Hamilton H. Rollins G. Bishop D. Linsley
Post-Hugo core 6: North Beach; Seaside Marsh meadow: September (21), 1989	On top of washover sands (15 cm thick), landward from core 5 behind vegetated beach dune ridge. 105 m N12°W from core 5, in barren overwash fan 22 m; elev. 1.3 m.	(31.67143) (81.13777) Transect B	7.9 m	Dated intervals: 133–151 cm depth (Pitt 723), organics, marsh point bar deposit, dated at 1720 ± 45 yr B.P. 480–516 cm depth (Pitt 734), organics, *Spartina* in mud clast dated at 4285 ± 80 yr B.P. 653–689 cm depth (Pitt 735), organics (Linsley, 1993: appendix 1) or shell (Thomas, 2008: table 29.1)? Subtidal marine, dated at 24,220 ± 500 yr B.P. N.B. Linsley et al., 2008: fig.3.7, p.34 (in Thomas, 2008, v. 1) erroneously states that core 6 contains a date of 22,600 ± 310 yr B.P. That date is actually 4285 ± 80 yr B.P. (see above). The incorrect date was apparently inadvertently transposed from the figure depicting core 3, transect A–A′.	N. Hamilton H. Rollins G. Bishop D. Linsley

APPENDIX 2 — (*Continued*)

Vibracore	Location	Longitude W Latitude N	Total depth	Geology	Researchers
Post-Hugo core 7: North Beach, Seaside Marsh meadow; September 21, 1989	Sited on a low elev. (2.1–2.8 m above MLT) "marsh" hammock (veneer over marsh sediments, as opposed to an erosional remnant hammock), vegetated with longleaf pine and palmetto.125 m N35°W from core 6 on N side of palm tree, west side of North Beach hammock.	(31.67210) (81.13838) Transect B	5.0 m	Dated intervals: none.	N. Hamilton H. Rollins G. Bishop D. Linsley
Post-Hugo core 8: North Beach; Seaside Marsh meadow; September 21, 1989	Marsh behind and northwest of core 7, adjacent to a promontory of island core.109 m N15°W from core 7; 30 m from island core; elev. 1.2–1.3 m. Near core 7.	(31.67335) (81.13875) Transect B	6.7 m	Dated intervals: 317–334 cm depth (Pitt 736), *Spartina* in mud clast, dated at 3100 ± 50 yr B.P.	N. Hamilton H. Rollins G. Bishop D. Linsley
North Beach Transects (Linsley [1993], with H.B. Rollins), University of Pittsburgh Transect D–D′, cores 9004211, 13, 9003231, 16, 15, 14, 22. Described in Linsley (1993), Linsley et al. (2008), and Thomas et al. (2008)					
Core 9004211 April 21, 1990	Beach Pond core, eastern side of island in low elev. area between beach dune ridges. Easternmost core of transect D–D′, surface elev. approx. 1.5 m above MLT, within 200 m of modern beach. Base (depth of approx 370 cm) of core contains abundant marine shells (*Donax* and *Mulinia*).	(31.59947) (81.14896)	—	(see Booth et al., 1999b)	G. Bishop
Core 13, August 1990	South Beach Road, high marsh tidal flat between two beach ridges. Elev. of top of core: ~1.45 m core taken 410 m NW of core 9004211 on modern high marsh in a wide area of salt marsh separating two areas of beach ridge complexes.	—	—	Dated intervals: 494–500 cm depth (lab no. unknown?), organics, disseminated carbon, full marine shells dated at 4370 ± 120 yr B.P. (shells from lag bed at 3.45 m below MLT). Shells dominantly *Mulinia*, *Donax*, *Tellina*, and *Anadara*. Marine base directly overlain by 1.5 m of marshlike deposits.	D. Linsley H. Rollins R. Busch R.West C. Maples B. Cecil
Core 9003231	South Beach Road in a swale between two dune ridges 800 m SW of core 13; surface elev. approx. 1.6 m above MLT.	—	—	Well-defined marine interval at base of core.	G. Bishop F. Rich
Core 16, August 1990	South Beach Road, on beach ridge dune crest. Elev. top of core 3.7 m above MLT on a vegetated surface with live oak and palmetto, 675 m NW of core 9003231.	—	—	—	D. Linsley H. Rollins R. Busch R. West C. Maples B. Cecil

APPENDIX 2 — (*Continued*)

Vibracore	Location	Longitude W Latitude N	Total depth	Geology	Researchers
Core 15, August 7, 1990	"First" (northernmost) causeway on South Beach Road; cored in a 50 m wide slough between beach ridges. Surface vegetation of short *Spartina*. Elev. of top at 1.50 m above MLT; core sited 260 m NW of core 16.	—	—	—	D. Linsley H. Rollins R. Busch R. West C. Maples B. Cecil
Core 14, August 7, 1990	Elev. 1.45 m above MLT; high marsh *Spartina* immediately adjacent to Pleistocene island core, 990 m west of core 15 (100 m east of old house owned by John Toby Woods, acc. to Linsley core log description).	—	—	—	D. Linsley H. Rollins R. Busch R. West C. Maples B. Cecil
Core 22	Westernmost end of transect D–D′; elev. 1.35 m above MLT; high marsh on the cut bank of a tidal creek levee, 35 m from the island core and 260 m SW of core 14. Johnson Creek situated 400 m to the west of core 22. Core 22 reached depth of 5.64 m below MLT, as such is one of deeper cores recovered by Linsley project.	—	5.64 m	The lower portion of core 22 preserved a series of lag deposits similar to core 17, interpreted to be a progradational sequence adjacent to a tidal estuary (Linsley, 1993. p. 118).	D. Linsley H. Rollins R. Busch R.West C. Maples B. Cecil
Georgia Southern University Early Probing with UGA Okefenokee Rig—G.A. Bishop, F.J. Rich, and Royce Hayes.					
Terrain 6; Zapala Sound margin core 3/23/90	So. of large live oak in east-west salt swale	31.59936 81.16061	4.97 m	Also known as core 4. (See Bishop et al., fig. 10.4, this volume).	G.A. Bishop R.H. Hayes
State Road Pond core 6.08/99	On edge of freshwater pond.	31.63800 81.15375A	4.15 m	Also known as core 5 Laminated heavy mineral sand (HMS) at -2.5 m. (See Bishop et al., fig. 10.5, this volume).	G.A. Bishop R.H. Hayes
Island Ecology Program; North Beach, North Oxbow core 16.2 6/06/95	On east edge of North Oxbow along line of GAB stand pipes.	(31.68551) (81.13601)	4.81 m	Also known as Core 3 9506061. Peat date: shell lag at –4.66 m. (See Bishop et al., fig 10.3, this volume).	B. Potter T. Keith-Lucas IEP students
Cracker Tom Transect Described in Booth et al., 1999: fig. 4; Bishop et al., 2007: fig. 36; Linsley et al. 2008: figs. 3-4 and 3-9.					
Cracker Tom Island core	—	(31.61821) (81.16097)	—	—	—
Cracker Tom Scarp core 6/08/99	—	(31.61705) (81.16021)	5.0 m	Ghost shrimp at 3.3 m.	G. Bishop R. Petkewich R. Hayes
Cracker Tom Hammock core	—	(31.616111) (81.15878)	5.52 m	Dated interval: oyster bed at 194–225 cm; 3200 ± 50 B.P.	G. Bishop R. Petkewich R. Hayes
Cracker Tom Bridge core	—	(31.61483) (81.15626)	5.03 m	Dated intervals: 487–503 cm shells at 4060 ± 50 B.P. and charcoal 6020 ± 50 B.P.; Pollen/spore assemblages described; dense Pteridophyte peat at 500–502 cm.	G. Bishop R. Petkewich R. Hayes

APPENDIX 2 — (*Continued*)

Vibracore	Location	Longitude W Latitude N	Total depth	Geology	Researchers
Cracker Tom Rosetta core	—	(31.61491) (81.15644)	—	—	R. Boothe F. Rich
Island Ecology program core 6/23/00	—		4.95 m	—	B. Potter T. Keith-Lucas IEP students
St. Catherines Shell Ring Cores					
Island Ecology Program – Long Field 2 SCSR-1	Northernmost core of St. Catherines Shell Ring transect; 30 ft N and ~5 ft east of AMNH station VB-001	31.65545 81.16959	4.13 m	(See Bishop et al., figs. 6 and 8, this volume).	B. Potter T. Keith-Lucas IEP students
Island Ecology Program – Long Field 1 SCSR-2	Second northern core of St. Catherines Shell Ring transect; ~30 ft south and 3 ft W of AMNH station VB-001.	31.65533 81.16960	3.68 m	Do	B. Potter T. Keith-Lucas IEP students
Island Ecology Program – Long Field 3 SCSR 3	Third core along transect; ~22 ft north and on grid line of AMNH station VB-001.	31.65525 81.16592	3.60 m	Do	B. Potter T. Keith-Lucas IEP students
AMNH & SCISTP Aka: 20061102-1 SCSR-4	Fourth core of St. Catherines Shell Ring transect.	31.65526 81.16959	4.75 m	Do	G. Bishop M. Sanger A. Semon G. Mahar
AMNH & SCISTP SCSR-5	Fifth core in St. Catherines Shell Ring transect; in shell ring.	31.65497 81.16952	—	Do	G. Bishop M. Sanger A. Semon G. Mahar
AMNH & SCISTP SCSR-6	Sixth core of St. Catherines Shell Ring transect; inside shell ring.	31.65475 81.16959	—	Do	G. Bishop M. Sanger A. Semon G. Mahar
Georgia Southern University Central Depression Research Group The topographic low near road jct. 61 trends N35–40°E and coincides with a synformal subsurface feature. The topographic "trough" spreads out into Gator Pond marsh to the NE and into marshy area around the crane yard to the SW as this drainage bends into an E-W trend approaching the crane yard wetlands. Circular depressions were observed along the margin of the trough on the NE and SW side of the road near jct. 61. Site 3 sits in one of these. *Coordinates taken with Garmin e-trex unit. Values shown here include a 1.3 sec correction (based on road junction coordinates on map) added to each latitude. Longitudes generally good except core 9, which appeared to be off by 1.3 sec.					
Georgia Southern University (GSU) core 1 2008-05-27/31	Located in drainage adjacent to road jct. 61, northeast side of the road between jct. 61 and jct. 60 coincides with synformal subsurface feature in road area. Original upper meter may have been removed by pond and road excavation at this site.	31.684639 81.145806	—	See Bishop et al., chap. 10: "Gator Pond," this volume, for log summary of GSU cores 1–9 and palynological analysis.	R.K. Vance G. Bishop S. Ferguson J. DeLaMater N. Wieclaw
GSU core 2 2008-05-27/31	In Gator Pond marsh, ~ 7 m from SW margin of marsh	31.685528 81.145806	—	—	R.K. Vance G. Bishop S. Ferguson J. DeLaMater N. Wieclaw

APPENDIX 2 — (*Continued*)

Vibracore	Location	Longitude W Latitude N	Total depth	Geology	Researchers
GSU core 3 2008-05-27/31	In depression on NE side of road that runs from jct. 61 to jct. 60. (From jct. 61, the site is 55.5 m NW of jct. 61 along the road, then 12.8 m into depression in woods on NE side of road.) Site 3a and 3b ~2 ft apart.	31.684861 81.146028	—	Circular depressions were observed along the margin of the trough on the NE and SW side of the road near jct. 61. Site 3 sits in one of these. Site within or on the margin of the synformal feature shown on the GPR profile	R.K. Vance G. Bishop S. Ferguson J. DeLaMater N. Wieclaw
GSU core 4 2008-05-27/31	Located on SE side of road jct. 61. The site is 19 m east of jct. 61 measured along road from jct. 61 toward jct. 10, then 6.9 m on the south side of the road in a small clearing in the trees and palmetto. This site is on the higher ground on the SE side of the topographic low containing the gator ponds.	31.684389 81.145556	—	—	R.K. Vance G. Bishop S. Ferguson J. DeLaMater N. Wieclaw
GSU core 5 2008-05-27/31	Location is ~25.3 m SE (along road) of jct. 61 and approximately 11.3 m on W side of road between jct. 61 to and the Windmill Pond Road intersection. This site is on the high ground on the SE side of the drainage.	31.684139 81.145889	—	—	R.K. Vance G. Bishop S. Ferguson J. DeLaMater N. Wieclaw
GSU core 6 2008-05-27/31	Located near road on high ground on the NE side of road between jct. 61 and jct. 60.	31.685250 81.146917	—	—	R.K. Vance G. Bishop S. Ferguson J. DeLaMater N. Wieclaw
GSU core 7 2008-05-27/31	New pond site in crane yard area — measured ~1 m sect in pond walls, then set up vibracore at ~1.3 m below ground surface in the bottom of the pond below the hardest part of the humate "hardpan."	31.683167 81.151806	—	—	R.K. Vance G. Bishop S. Ferguson J. DeLaMater N. Wieclaw
GSU core 8	On SE side of road jct. 10, ~14.5 m W of current jct. 10 and 12.8 m S of the E–W road.	31.685694 81.145806	—	—	R.K. Vance G. Bishop S. Ferguson J. DeLaMater N. Wieclaw
GSU core 9	SE of road jct. 60, ~ 24 m on SW side of road between jct. 60 and 61.	31.686028 81.148806	—	—	R.K. Vance G. Bishop S. Ferguson J. DeLaMater N. Wieclaw
Georgia Southern University Kim Hargett Northern Terrain Thesis Cores 6/05 and 6/06/2010 A series of cores drilled off the Island Core in the northern accretionary terrains north of Engineers Scarp.					
GSU Kim Hargett core 1	Not recovered	31.6956 81.1469	—	—	K. Vance B. Meyer B. Nelson K. Hargett

APPENDIX 2 — (*Continued*)

Vibracore	Location	Longitude W Latitude N	Total depth	Geology	Researchers
GSU KH core 2	Road jct. in Holocene swale. Same swale as core 5.	31.6956 81.1469	1.72 m	Organic-rich soil and fine to medium sand to 0.42 m, fine sand with HMS to 4%–5% in laminated zones from 0.42–0.9 m. Very fine laminated sand with 8–15% HMS from 0.89–0.93 m. Fine to very fine sands with HMS to 4% in laminated zones, interlayered with poorly sorted fine sand to granules from 0.93–1.72 m. Mica present below 0.9 m. Laminated sands at 1.72–2.11 m contain minor clay. (See core 5.)	K. Vance B. Meyer B. Nelson K. Hargett
GSU KH core 3	At toe of Engineers Scarp, west side of Engineers Rd.	31.6922 81.1470	2.76 m	Gray topsoil and light gray fine to very fine sand to 0.34 m with accessory mica and HMS. Fine to very fine sand with 1%–2% HMS to 1.84 m. Strong goethite pigmentation in mottled zone at 0.65–0.87 m. Sharp contact at 1.84 m with fine to very fine poorly laminated sands with pale green tint, 1%–2% HMS and traces of clay.	K. Vance B. Meyer B. Nelson K. Hargett
GSU KH core 4	Engineers Rd. (north of jct.) in broad Holocene swale.	31.6979 81.1435	2.29 m	Organic-rich soil and fine sand to .77 m, fine to very fine sand with 1–2% HMS and accessory mica from 0.77–1.7 m. Laminated sands with 2%–5% HMS and accessory mica from 1.7–2.29 m. Minor clay in dark laminations near base.	K. Vance B. Meyer B. Nelson K. Hargett
GSU KH core 5	Holocene swale west of jct. on Engineers Rd. (same swale as core 2)	31.6957 81.1470	1.81 m	Organic-rich soil and medium to fine sand to .28 m, fine sand with 2–4% HMS at .28–.56 m; well sorted fine to very fine sand with 4–5% HMS interlayered with poorly sorted fine sand to granules at .56–1.8 m. Muscovite abundant at 1.3 m in coarse zones. Minor clay in fine, laminated sands at 1.8 m.	K. Vance B. Meyer K. Hargett F. Rich
Island Ecology Program Gardner Peninsula Cores 6/06/2010 Taken on the eastern and western sides of Gardner Peninsula					
IEP GP core 1	In marsh east of Gardner Peninsula; over site of hypothesized hammock. In (stranded) marsh west of Gardner Peninsula; behind Gardner Peninsula.	31.6232 81.1553	4.62 m	Well-stratified; horiz. lam. 1.1–1.8 m; disconformity at 2.25 m on top dark brown mottled sand.; hm lam 3.9–4.62 m. Mottled sandy mud 2–2.35 m (? disconformity); 4–5 cm indurated ss at 4.10–4.15 m; coarse sand 4.15–4.62 m.	B. Potter T. Keith-Lucas IEP Students
IEP GP core 2	Holocene Marsh and Beach Ridge, terrain XI.In marsh east of Gardner Peninsula; over site of hypothesized hammock.	31.6232 81.1553	4.62 m	Well-stratified; horiz. lam. 1.1–1.8 m; disconformity at 2.25 m on top dark brown mottled sand.; hm lam 3.9–4.62 m.	B. Potter T. Keith-Lucas IEP Students
West Georgia College Tim Chowns' Projects					
2007 B	St. Catherines Spit Holocene marsh and beach ridge, Terrain XI	31.57710 81.16164	3.4 m	Progradational sequence from beach into marsh.	T. Chowns Sanders Stogner
2009 G Zapala Scarp	Slough within Cracker Tom Terrain III	31.60088 81.16451	4.63 m	Holocene beach facies resting on Pleistocene (Chowns, chap. 9).	T. Chowns G. Bishop
2009 H Zapala Scarp	Long Marsh south of South Beach Road	31.59996 81.16465	5.09 m	Holocene marsh and beach facies (1720±50) resting on Pleistocene (20,550±110) (Chowns, chap. 9).	T. Chowns G. Bishop
2010 A	Long Marsh 20 m south of 2009 H	31.59977 81.16469	5.61 m	Holocene washovers and beach sands resting on Pleistocene.	T. Chowns Kath
2010 B	South Beach Road 34 m north of 2009 H	31.60021 81.16459	5.67 m	Holocene beach ridge resting on Pleistocene.	Madden Albright

APPENDIX 2 — (*Continued*)

Vibracore	Location	Longitude W Latitude N	Total depth	Geology	Researchers
2010 G St. Catherines Scarp	Engineers Scarp (aka St. Catherines Scarp), east of Engineers Road	31.69171 81.14570	3.11 m	Pleistocene sand.	T. Chowns Kath
2010 H	Engineers Scarp (aka St. Catherines Scarp), east of Engineers Road	31.69200 81.14566	5.63 m	Holocene inlet fill.	Madden Albright
SCS 1 Shelby Cores Beach Ridge Terrain VI	Southern Accretional Terrains (aka St. Catherines Spit of Chowns), dune and beach sands	31.59892 81.15864	—	Heavy mineral sand; unsuitable for dating (Chowns, chap. 9).	T. Chowns Sanders Stogner
SCS 2 Shelby Cores Beach Ridge Terrain V	Southern Accretional Terrains (aka St. Catherines Spit of Chowns), dune and beach sands	31.59946 81.15850	2.4 m	osl 1.3 ± 0.5 ka	T. Chowns Sanders Stogner
SCS 3 Shelby Cores Beach Ridge Terrain XII	Southern Accretional Terrains (aka St. Catherines Spit of Chowns), dune and beach sands	31,59947 81.15079	2.1 m	osl 1.5 ± 0.3 ka	T. Chowns Sanders Stogner
SCS 4 Shelby Cores Beach Ridge Terrain XII	Southern Accretional Terrains (aka St. Catherines Spit of Chowns), dune and beach sands	31.59891 81.15185	2.1 m	osl 1.2 ± 0.3 ka	T. Chowns Sanders Stogner
SCS 5 Shelby Cores Beach Ridge Terrain VI	Southern Accretional Terrains (aka St. Catherines Spit of Chowns), dune and beach sands	31.58327 81.15784	2.1 m	osl 1.2 ± 0.1 ka	T. Chowns Sanders Stogner
SCS 6 Shelby Cores Beach Ridge Terrain XII	Southern Accretional Terrains (aka St. Catherines Spit of Chowns), dune and beach sands	31.57685 81.16172	2.1 m	osl 0.9 ± 0.1 ka	T. Chowns Sanders Stogner
SCS 7 Shelby Cores Beach Ridge Terrain XII	Southern Accretional Terrains (aka St. Catherines Spit of Chowns), dune and beach sands	31.57391 81.16314	2.1 m	osl 0.3 ± 0.1 ka	T. Chowns Sanders Stogner
SCS 8 Shelby Cores Beach Ridge Terrain XII	Southern Accretional Terrains (aka St. Catherines Spit of Chowns), dune and beach sands	31.58947 81.15580	2.1 m	osl 0.5 ± 0.1 ka	T. Chowns Sanders Stogner
SCS 9 Shelby Cores Beach Ridge Terrain XVII	Southern Accretional Terrains (aka St. Catherines Spit of Chowns), dune and beach sands	31.56000 81.17280	1.5 m	osl 0.5 ± 0.3 ka	T. Chowns Sanders Stogner
SCS 10 Shelby Cores Beach Ridge Terrain XV	Southern Accretional Terrains (aka St. Catherines Spit of Chowns), dune and beach sands	31.56429 81.16690	1.5 m	osl 1.0 ± 0.1 ka	T. Chowns Sanders Stogner
SCS 11 Shelby Cores Beach Ridge Terrain XIV	Southern Accretional Terrains (aka St. Catherines Spit of Chowns), dune and beach sands	31.57264 81.16246	1.8 m	osl 0.7 ± 0.1 ka	T. Chowns Sanders Stogner

APPENDIX 2 — (*Continued*)

Vibracore	Location	Longitude W Latitude N	Total depth	Geology	Researchers
Georgia Southern University South Pasture Disconformity Project Two cores were drilled to test the presence of the GPR disconformity discovered by R.K. Vance (see Vance et al., chap. 11).					
South Pasture 2 Control Core GPR Disconformity	West side of road to South Plantation ~ 700 m south of junction of State Road and South Beach Road.	31.61447 81.17341	1.9 m	(See Vance et al., chap. 11: fig. 11.7, this volume). Structureless, tan, fine- to medium-grained sand (~1% HMS) to 1.8 m, fine to very fine sand with 4–5% HMS at 1.8 to 1.9 m. Charcoal fragments (2–3 mm) noted to depths of ~1 m in both cores.	R.K. Vance
South Pasture 1 Ground Truth Core GPR Disconformity	West side of road to South Plantation ~ 1500 m south of junction of State Road and South Beach Road.	31.61372 81.17422	2.4 m	Structureless, tan to white, fine- to medium-grained sand (~1% HMS) to 1.94 m, gray, fine to very fine sand with 3%–5% HMS to 2.2 m. Contact with waxy blue-gray clay at 2.2 m marks the disconformity. Fe-oxide mottling in and above clay. (See Vance et al., chap. 11: fig. 11.7, this volume).	R.K. Vance
The Artesian and Deep Wells of St. Catherines Island, Georgia Royce Hayes, Jack Waters, and Brock Nelson visited all known artesian well sites on St. Catherines Island on June 16 and recorded GPS coordinates and documented each site. An Oral History of *Artesian Wells on St. Catherines*, from John Toby Woods was consulted during this expedition (by Brock R. Nelson; Royce H. Hayes, Jr., and Jack Waters). (See Thomas, chap. 1: fig. 1.8, this volume for map of well distribution).					
South End boiler well	Located near boiler on the point.	— —	—	—	R. Hayes J. Waters B. Nelson
Flag Pond well	Located on south end of pond near cattle gate.	— —	—	Drilled before 1900	R. Hayes J. Waters B. Nelson
1st King New Ground well	—	31.65283 81.14578	—	Drilled before 1900	R. Hayes J. Waters B. Nelson
Button Gwinnet house well	Located just off south porch under oak tree. Supplied house and pool with water.	31.67237 81.15868	—	Drilled before 1905	R. Hayes J. Waters B. Nelson
Power House/ Bradford Hall well	Located in-between and just north of the two structures	31.66931 81.15868	—	Drilled around 1930—8 in. pipe	R. Hayes J. Waters B. Nelson
Sawmill well	Exact location not known but location is within 100 m of the old mill site and actual well site.	31.68119 81.15474	—	Drilled in 1939	R. Hayes J. Waters B. Nelson
Windmill well	Located directly below the windmill on Windmill Rd.	— —	—	Drilled in 1946	R. Hayes J. Waters B. Nelson
North Pasture well	Approximate location due to missing well pipe.	31.68806 81.14218	—	4 in. well drilled in 1946	R. Hayes J. Waters B. Nelson
Second King New Ground well	Located near the old goat cabin.	31.65188 81.14671	—	Drilled in 1946	R. Hayes J. Waters B. Nelson
Beach Pond well	Located just off South Beach Ramp.	31.59628 81.14946	—	Drilled in 1946	R. Hayes J. Waters B. Nelson
Well	Located east of Back Creek Road.	31.61777 81.16234	—	Drilled in 1946	R. Hayes J. Waters B. Nelson
Greenseed Pond well	Located east of Back Creek Road.	31.65154 81.15917	—	Drilled in 1963	R. Hayes J. Waters B. Nelson

APPENDIX 2 — (*Continued*)

Vibracore	Location	Longitude W Latitude N	Total depth	Geology	Researchers
South End Dock well	Flowed freely only during high tide.	31.60756 81.17761	—	Drilled in 1967	R. Hayes J. Waters B. Nelson
Wamassee Pond well	—	31.63021 81.16800	—	Drilled in 1968	R. Hayes J. Waters B. Nelson
South-West well	Located west of the old slave quarters, used for cattle and water.	31.60958 81.17689	—	Drilled in 1968	R. Hayes J. Waters B. Nelson
Back Creek well	Last free flowing well on the island.	31.62179 81.15593	—	—	R. Hayes J. Waters B. Nelson