

Friends of the Randell Research Center

September 2012 • Vol. 11, No. 3

A Tour of the Islands of Pine Island Sound: A Geological, Archaeological, and Historical Perspective

Part 2 in a series: Part Island

by Denége Patterson

Visitors to Pineland can view Part Island directly from the observation pier at the Randell Research Center. It is visible 2½ miles across open, shallow water. At an extremely low tide, it might be possible to “walk” to Part Island; that is, if you don’t mind getting stuck in the mud or falling into a hole!

Part Island is actually *two* islands separated by a narrow mangrove tunnel and a lagoon. *East Part Island* faces the Pineland complex. It consists of 100 acres of mangroves with a clearing on the north end. The ruins of an old cottage with an active artesian well lie near a rickety pier that extends into the lagoon. A small open space marks where fruit trees once stood. East Part Island is privately owned and protected.

West Part Island faces Useppa Island across a ten-foot-deep channel in Pine Island Sound. A private pier of recent construction enters the Sound. West Part Island is ¾ mile long from north to south, and consists of 120 acres fringed with mangroves. West Part Island has at least five acres of uplands. It is also privately owned and protected.

The surrounding waters are managed by the Pine Island Sound Aquatic Preserve, which protects mangroves, sea grasses, salt marshes, oyster communities, and tidal flats. The islands immediately east and south of Part Island are known as Black Key, Cove Key, and Coon Key, and they are under federal protection by the Pine Island National Wildlife Refuge.

Archaeologists ask a compelling question: Is the history of Part Island connected to the Pineland site? It is certainly geologically connected. According to studies soon to be published in a new book edited by William H. Marquardt and Karen J. Walker, *The Archaeology of Pineland: A Coastal Southwest Florida Site Complex A.D. 50–1710*, one period of relatively low water occurred between A.D. 200 and 300, another between A.D. 400 and 450, and another between A.D. 600 and 900. The most recent period of low water occurred from about A.D. 1050 to 1100. During those dry periods, native people could have either walked to Part Island or paddled their canoes through a channel leading there. In 2003, Dr. John Worth, then the coordinator at the Randell Research Center, and Dr. Ernest D. Estevez, former Director of the Center for Coastal Ecology, Mote Marine Laboratory, searched the watery muck for a submerged terminus of the



The western terminus of the 2.5-mile-long Pine Island Canal, looking west. Part Island is visible on the right.
(Photo by D. Patterson.)

Pine Island Canal. After many soundings they determined that the canal extended toward Part Island for several hundred more yards than is apparent today. The westernmost boundary of the observed canal was marked by oyster bars that are now hidden below the surface.

Historically, in 1899 an island shaped like Part Island appeared on a chart prepared by the U.S. Engineer Office. It formed the northernmost boundary of a group of islands called the Barras



Pine Island Sound during an exceptionally low tide.
(Photo by W. Marquardt.)

Tour of the Islands *Continued on page 2*

A Tour of the Islands *Continued from page 1*

Islands. *Barras* is Spanish for *bars*. This group of islands appeared to have been oyster bars colonized by dense thickets of mangroves, separated from Pine Island and from one another only by very shallow water.

The first documented archaeological exploration of the Part Islands occurred in 1895 by Frank Hamilton Cushing of the Smithsonian Institution. He described “shell banks that rose to platforms that ascended to heights of extensive mounds that surrounded a lake or central lagoon.” Cushing also described steep embankments of shell walls surrounding a settler’s complex. He observed “graded ways that led to canals extending northwest and northeast.” He said that other extensive mounds “radiated easterly and southerly” from the central lagoon. He found potsherds and tools made of shell.

After visiting the island, Cushing wrote in his journal the first mention of his famous hypothesis that bands of ancient key dwellers, the “primeval fisherman of nature,” built huts on stilts over shell and established mound cities. He wrote that their discarded food shells reinforced the stilts below grade and stabilized the foundation. He thought that perhaps these stilt complexes existed around the margins of lagoons. He ventured that the island he explored “is an exceptional example of an ancient city with all of the aspects of artificial construction.”

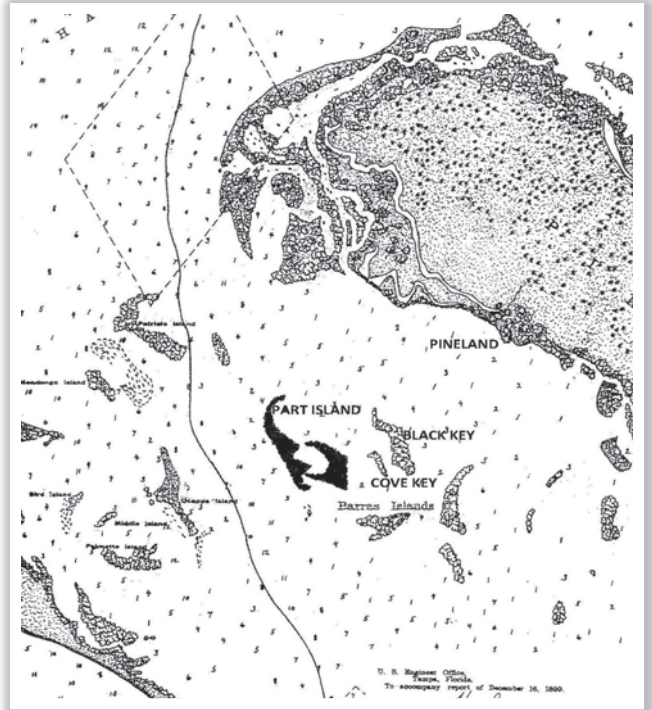
Back in Washington, D.C., his notes and his hypothesis captured the imagination of many of his colleagues. It evoked ridicule from others. How could ancient peoples undertake artificial construction projects using only shells? Cushing bolstered his argument with direct observations of local topography and compared it with portions of the Bahamas, Antilles, Cuba, the Yucatán, and other Gulf Coast sites. Large shells appeared to Cushing to have been arranged in an orderly manner. Extensive shell and sand structures were separated by canals. Although Cushing was certain that Part Island was a perfect example of an ancient shell city, archaeologists now understand that the shell middens in Pine Island Sound formed from a combination of human activities and changing environmental conditions.

Lacking knowledge of sea-level fluctuations that played a prominent role in the deposition of discrete shell layers, Cushing imagined that episodic deposits of shells were entirely caused by people constructing “foundations.”

Frank Cushing was a pioneer in Southwest Florida archaeology, and many of his observations have proven to be well justified. He died before publishing his remarkable manuscript. After his death, his notes, maps, and field journals were organized by his good friend and colleague, John Wesley Powell, the famous explorer of the Grand Canyon; however, they were not completed at the time of Powell’s death. The manuscript was lost for 110 years.

In 2003, archaeologist Phyllis Kolanos discovered Cushing’s lost manuscript and journals at three diverse locations: the National Anthropological Archives at the Smithsonian, the Southwest Museum of Los Angeles, and the Brooklyn Museum. The lost manuscript and journals were published in 2005 in two volumes, *The Florida Journals of Frank Hamilton Cushing*, and *The Lost Florida Manuscript of Frank Hamilton Cushing*, edited by Kolanos and Dr. Brent Weisman. (These books can be purchased at the RRC gift shop.)

Today’s archaeologists have asked whether the island that Cushing described was indeed Part Island. In his manuscript, Cushing described the exact route that his sailing vessel followed. “Descending the channel which leads from the northern portion of Charlotte Harbor into Pine Island Sound down past Patricio Key to a point some two miles southwestwardly from there, and about a mile and a half to the eastward of Useppa Island, one encounters in the very middle of the Sound one of the most remarkable of these keys. It is known as Caseys or Gardens Key and forms the northernmost of the so-



An 1899 chart showing the Barras Islands; Part Island is indicated in black. (Source: Bureau of Survey and Mapping, Florida Division of State Lands.)

called Barras Islands” (*Lost Florida Manuscript*, p. 46). The 1899 chart shows the shape and location of the northernmost island to be consistent with the shape and location of Part Island as it appears today on modern charts. Modern charts also show that West Part Island is directly east of Useppa. In addition, Cushing surveyed the area around the lagoon and estimated that the expanse was $5/8$ mile long by $3/8$ mile wide. This estimate corresponds with the modern dimensions of East Part Island. Cushing described the remains of a long-abandoned settler’s dwelling with fruit trees on one of the north platforms, mapping the locations of the “abandoned home, well sunk, lemon tree, shell mounds surrounding a lagoon, club heads, and pottery sherds.” Today, the ruins of a similar settlement with a well and a clearing are easily visible on a modern aerial photograph of East Part Island.

Since Cushing’s first exploration, no formal archaeological survey of Part Island has been attempted. Was Part Island occupied by the Calusa? Was it an extension of the Pineland complex? Did it predate the mounds at Pineland? These are intriguing questions. Only a systematic, professional archaeological exploration can provide the answer.



Coastal Module, Florida Master Naturalist Program Offered

The Florida Master Naturalist Program (FMNP)

is an adult-education, University of Florida/IFAS Extension program for persons interested in learning more about Florida's ecosystems or wishing to increase their knowledge for use in education programs as volunteers, employees, ecotourism guides, and others. Three modules are offered: Upland Habitats, Freshwater Wetlands, and Coastal

Systems. **The Randell Research Center is pleased to offer the Coastal Systems module beginning on Friday, October 26.**

Through classroom, field trip, and practical experience, this 6-day module will provide instruction on the general ecology, habitats, vegetation types, wildlife, and conservation issues of Coastal Systems in Florida, specifically Coastal Upland, Estuarine, and Nearshore Marine environments. Further, the class will address naturalist interpretation skills, environmental ethics, and the role of humankind in shaping our past and determining our future.

Classroom learning includes four instructional videos and 12 presentations. Field learning will include a wading



trip in the Pine Island Sound estuary, a salt marsh meander at the Pine Island Flatwoods Preserve, a visit with a local commercial fishing operation, and seashore explorations at Ft. Myers Beach and Lover's Key State Park.

Classes begin on Friday, October 26 (8:30 a.m. – 4 p.m.) and continue on October 31 (8:30 a.m. – 4 p.m.), November 2 (8:30 a.m. – 4 p.m.), November 7 (8:00 a.m. – 4 p.m.), November 9 (8:30 a.m. –

4 p.m.), and November 16 (9 a.m. – noon). Field trip details will be provided during the first class.

The cost for the course is \$225, which includes all field trips, 40 contact hours of instruction, a comprehensive student reference workbook, and, upon completion, registration in the UF FMNP database as a Coastal Naturalist. A UF-IFAS certificate of achievement, embroidered FMNP patch, and FMNP Coastal lapel pin also will be provided at completion. The only requirements of students are enthusiasm, attendance, and completion of group final projects.

Register on-line at www.Master-Naturalist.org, "Course Offerings." Additional information about the program and other modules are also

available on the website. Please call Cindy Bear, our FMNP Coastal Module instructor, at 239-283-6168 if you have additional questions.



Coming Events

Project Archaeology: Investigating Shelter Teacher Workshop, Co-hosted with the Florida Public Archaeology Network

Time: 8:00 am - 5:00 pm on Saturday, October 13th and Saturday, October 20th

Location: The Randell Research Center, Calusa Heritage Trail Classroom, at Pineland on Pine Island in Lee County, Florida

"Project Archaeology: Investigating Shelter" is a supplementary curriculum for grades 3 through 5. Participants will receive archaeology education guides that take students through an archaeological investigation, including accounts from oral history, use of primary documents, and interpreting the archaeological record. The workshop is free, and reservations are first-come, first-serve with a cap of 25. To register, please contact Melissa Timo at (239) 590-1476 or mtimo@fgcu.edu.

New and Renewing Friends of the RRC

May 16, 2012 through August 15, 2012

(Please let us know of any errors or omissions. Thank you for your support.)

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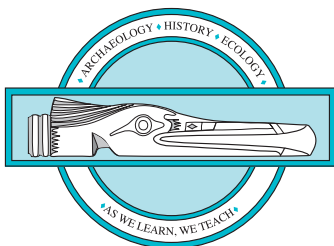
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Pineland Community Celebrates 110 Years

Series of "Parlor Chats" Planned

The Great Freeze of 1894-1895 devastated citrus trees in north Florida, prompting many people to establish new groves in South Florida, including Pine Island. One of the immigrants was Thomas Moore Stafford, a Civil War veteran who had lost his groves to the freeze and who moved to Pine Island to start again. Stafford was the father of Minta Martin, who established the first post office—and the Pineland place name—on September 6, 1902. Thus, on September 6, 2012, the Pineland community will be 110 years old. The Randell Research Center will celebrate this anniversary throughout the year by hosting a series of "parlor chats" focused on Pineland's early years. These will be held at the historic Ruby Gill House. Details will be posted on our web site as they become available: www.flmnh.ufl.edu/RRC/events.htm.

SAVE THE DATE

Eighth Annual

CALUSA HERITAGE DAY

at the Randell Research Center
Pineland, March 9, 2013

Where Has Your Hat Traveled?

Cindy's Hat Travels to Ecuador and Peru

by Cindy Bear

The RRC hat of Program Coordinator Cindy Bear was spotted this summer along the Napo River in Ecuador and in the Andes of Peru when she and her husband Charles O'Connor spent time deep in verdant riverine jungles, high up in cloud forests, and at remote archaeological sites. Pictured with Cindy near the Yasuni National Park are guide Domingo Gualinga and assistant guide Humberto Greta with a green anaconda accidentally captured in a fishing net stretched across a river tributary. Domingo and Humberto are members of the Sani Isla Comuna and are fluent in Kichwa, Spanish, and the "languages" of animals of the jungle; they released the anaconda unharmed. Many legends about anacondas exist among South American indigenous groups,



Cindy Bear (right, with RRC hat) observes a young anaconda being rescued from a fishing net. Local fishermen place nets in tributary streams to take advantage of currents to catch fish. But the snakes sometimes go after the captured fish and become entangled in the nets.

including one that places them as guardians of all plants and animals of Amazonian lakes and another that gives credit to a one-eyed Anaconda for placing the sun in the sky. The journey provided a remarkable glimpse at the relationships between environmental conditions and cultural practices, both past and present. 🐍

RRC News

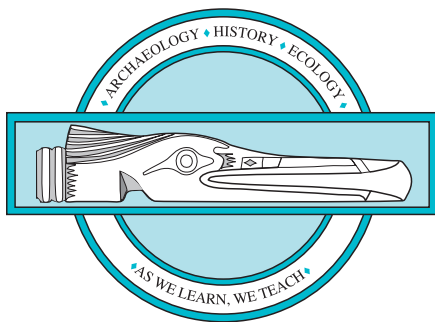
Editor: Bill Marquardt
Writers: Cindy Bear
Dené Patterson
Production: GBS Productions
Gift Shop & Tour Information:
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Send questions or comments to:

Randell Research Center
PO Box 608
Pineland, FL 33945-0608
Telephone: (239) 283-2062
Fax: (239) 283-2080
Email: randellcenter2@rancercenter.comcastbiz.net
Website: www.flmnh.ufl.edu/RRC/



Friends of the Randell Research Center

Pineland, Florida • September 2012
Phone 239/283-2062
Email: randellcenter2@rancenter.comcastbiz.net

Dear Friend,

You are cordially invited to join, or renew your membership in, the RRC's support society, *Friends of the Randell Research Center*. All Friends of the RRC receive a quarterly newsletter and free admission to the Calusa Heritage Trail at Pineland. Supporters at higher levels are entitled to discounts on our books and merchandise, advance notice of programs, and special recognition. Your continuing support is vital to our mission. It means more research, more education, and continued site improvements at the Randell Research Center. Thank you.

Sincerely,

William H. Marquardt
Director
Randell Research Center



Please check the membership level you prefer, and send this form with your check payable to U. F. Foundation, to:

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Photo by A. Bell



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