



Friends of the Randell Research Center

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

Part 13: Buck Key

by Dené Patterson

Buck Key is a former barrier island, now isolated from the Gulf of Mexico by the southern part of Captiva Island. The two islands are separated by Roosevelt Channel. Its topography consists of beach ridges, flat, open sunny areas in the center of the island, and lowland mangrove forests at its edges. Three archaeological sites exceed ten feet in elevation. Its tropical hardwood hammocks include rare, endangered, and threatened species of plants and animals growing far more lushly than they would in other environments, including the tropical habitats of the Florida Keys.

Geologists describe Buck Key as a "relict emergent barrier island," where relict means surviving from an earlier period. The northern part of Buck Key has the typical characteristics of a barrier-island washover fan while the southern end has apparent finger ridges, also known as storm ridges. According to geologists, the Buck Key land formation accumulated mainly between ca. A.D. 440 and 1010.

Three habitation sites show evidence of discrete, functional areas that could have been a Calusa village, including a living area, a possible ceremonial area, and an activity area for toolmaking. The native people left evidence of post hole locations, recognized from differences in color, texture, and constituents of the soil compared with the surrounding soil. They also left evidence of cooking activities with burned shell, ash, and animal bone, along with sand-tempered plain and Glades Tooled potsherds. These occupational deposits were



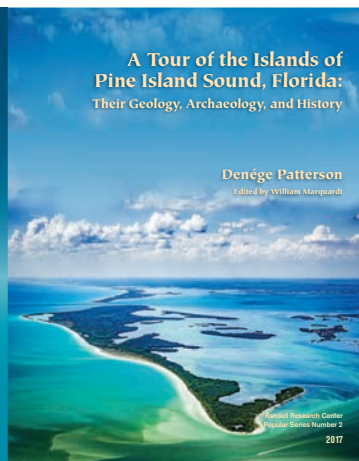
Captiva Island, left, and Buck Key, right center. In the foreground is the western tip of Sanibel Island and the Sanibel-Captiva bridge spanning Wulfert Channel. (Photo by R. Mayhew.)

eroded and covered with what appeared to be storm-derived shell. One activity area showed evidence of shell tool production in various stages. A radiocarbon date for that area yielded a range between A.D. 610 and 845, a time when a similar shell tool-manufacturing site is known on Useppa Island. Animal bone artifacts were also found, some related to fishing. Comparing these samples to other pieces of worked bone from sites in Pine Island Sound helped archaeologists develop a classification system for bone artifacts in fishing cultures.

The archaeobotanical finds at Buck Key revealed a great deal of variety for such a small island, with at least five plant communities represented. Remains of edible fruits of sea grapes indicate a coastal strand habitat. Charred twigs of red, black, and white mangrove trees, along with buttonwood, indicate that a mangrove zone was visited by island inhabitants. Tropical hardwood hammocks are represented by mastic trees. Some cultures use mastic sap for glue, and its ripe fruits are prized for their flavor. Myrsine was also recovered. Miccosukee and Creek Indians blend it with tobacco, though its use by Calusa people is uncertain. Transition area plants, including nicker bean, were represented, as were upland pineland habitats.

Buck Key's occupation between A.D. 660 and 1430 means that people may have traded with, visited with, or made decisions about their homeland along with people living at the same time on Pine Island, Josslyn Island, Burgess Island, Mason Island, Useppa Island, Demere Key, and Galt Island. The burial ground at Buck Key was looted for many years by local residents in the Fort Myers area. Dozens if not hundreds of human remains were removed during the twentieth century.

This brief article is excerpted from the forthcoming book, *A Tour of the Islands of Pine Island Sound, Florida*, by Dené Patterson, the second volume in the RRC's "Popular Series." This colorfully illustrated book will feature 24 of Pine Island Sound's most interesting islands, describing their geology, archaeology, and history. (ISBN 1-881448-19-3; viii + 150 pages, with bibliography and index, \$29.95, available February, 2017.)



Continued on page 4

Heritage Monitoring Scouts at Pineland

by Sara Ayers-Rigsby and Rachael Kangas

On Thursday November 10, 2016, volunteers from the Randell Research Center met at Pineland with Florida Public Archaeology Network's (FPAN) Southwest Region to learn about FPAN's Heritage Monitoring Scouts. This program is a citizen science initiative to verify archaeological site information and to monitor sites at risk due to sea level rise. The workshop was led by Rachael Kangas, Public Archaeology Coordinator for FPAN Southwest, and Sara Ayers-Rigsby, Director of FPAN Southeast/Southwest regions, and facilitated by Cindy Bear, Coordinator of Programs and Services at the Center. Twelve long-time volunteers attended.

In the morning, the focus was on laws that provide protection of archaeological sites and how sites statewide will be impacted by sea level rise and major



weather events. Rachael and Sara also presented modules on photography and artifact identification, although many of this group of volunteers were already well versed due to their years of service with the RRC.

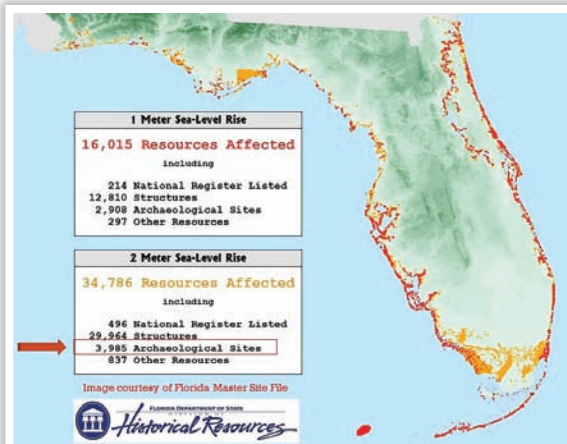
As of 2013, the State of Florida had identified 16,015 historical resources to be impacted by a 1-meter rise in sea level and 34,786 with a 2-meter rise. Of these, 2,908 are archaeological sites (3,985 in the 2-meter scenario). The remainder include historic cemeteries and structures. Pineland is one of many sites in southwest Florida with both archaeological sites and historic buildings that will be impacted by sea level rise.

In the afternoon, volunteers practiced field data gathering and recording at Old Mound. They took photographs, checked the area for signs of erosion and presence of visible artifacts, noted any impacts of visitor traffic, and documented potential threats to the site. These variables, indicators of the site's condition under the HMS protocol, were

New scouts ready to monitor! (Photo by S. Ayers-Rigsby.)

recorded into FPAN's digital database system.

After evaluating Old Mound together, volunteers gathered similar data on their own at other Pineland sites. Three datasets were recorded. At the end of the day, volunteers were given information about other publicly accessible sites. Information contributed by these and other Scouts will be critical to monitoring the impact of sea level rise on Florida archaeological and historical sites and for establishing baseline data for comparison in the event major weather events impact those sites. These RRC volunteers are now ready to be Scouts. Additional trainings will be presented in 2017, with notice of these provided in advance to volunteers and members of the Randell Research Center.



Historical resources in Florida that will be impacted by sea level rise. (Image courtesy Florida Division of Historical Resources.)

Would you like to get involved with FPAN's Heritage Monitoring Scouts Program? Visit <http://fpangoingpublic.blogspot.com/2016/09/hms-florida-now-accepting-volunteers.html> or email us at southwest@fpan.us !

New and Renewing Friends of the RRC

September 1, 2016 to November 30, 2016

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

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* = donated goods and services.



An Update on the New Property

by Cindy Bear

As I described in our September newsletter, crews working on the parcel containing the Smith and Low Mounds have successfully taken down invasive trees that rendered the five acres low in biodiversity. I wrote that we were watching for the emergence of natives and highlighted the comeback of several native plant species including pond-apple (*Anona glabra*) and coontie (*Zamia integrifolia*).

What we did not anticipate was the response of herbaceous plants and vines to the sunlight and open space. In the photo you can barely see me amid the Caesar weed (*Urena lobata*) and balsam apple (*Momordica charantia*) that blanketed at least two acres of the parcel and went to seed in little more than 8 weeks.

As with other invasive exotic plants, these two were thwarting the growth of native herbaceous plants. Those native plants, American beautyberry (*Calacarpa americana*), hogplum (*Ximenia americana* L.), and white indigo berry (*Randia aculeata*), among others, have multiple benefits to wildlife. Evidence of Calusa use of hogplum comes from excavated remains that date back more than a thousand years, showing that the Calusa collected and



Cindy Bear engulfed by recently sprouted exotic invasive plants. (Photo by C. O'Connor.)

those that cannot be pulled. These targeted methods minimize the risk of spreading the plants to other areas

and decrease the need for herbicides. The four-day process was successful and we are now entering a monitoring and maintenance phase.

Among the diversity of native plants emerging are golden canna lilies (*Canna flaccida*), which have been blooming profusely in the lower, wetter parts of the parcel. Golden canna is also called Bandana of



Mangrove rubber vine has long, narrow, dark green leaves and lovely white flowers. (Photo by C. O'Connor.)

used them, along with other varieties of plants.

To combat the Caesar weed and balsam apple, we hired a professional who employs a team of workers trained to pull and stack those plants that do not have seeds and to appropriately treat with herbicide

the Everglades, and is native to Florida. Mangrove rubber vine (*Rhabdadenia biflora*) has sprouted and gone to seed once already. With its striking yellow center, the white flower stands out in the green vegetation of buttonwood and mangrove that is also recovering.

Much remains to be accomplished, including additional fencing, before we can share the parcel with our members and visitors. We look forward to the first public tours in the area on Calusa Heritage Day, March 25, 2017. 🏺



Golden canna grows in the newly cleared property near the burial mound. (Photo by W. Marquardt.)





Randell Research Center

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A small, undisturbed portion was investigated by archaeologists, revealing that intact burials had been mindfully placed in small, diffuse groups on a sand ridge, then covered with sand between A.D. 1000 and 1160. The Buck Key burial site is now under protection of Florida Statute 872.02, which prohibits disturbance of unmarked graves. All Buck Key sites, whether disturbed or undisturbed, are under federal and state protection.

The Seminole Wars and the Civil War of the 1800s may have turned Buck Key into a hideout, or at least a hunting ground, as military vessels sailed, patrolled, and traded along routes in Pine Island Sound and at ports up the Peace, Myakka, and Caloosahatchee rivers. The George Ormsby family homesteaded the southern end of Buck Key in 1897, planting citrus and other tropical fruits. George's brother William homesteaded 67 adjoining acres. The Ormsbys were largely responsible for organizing the first Buck Key school. It opened in 1897 with Fannie Porter teaching, and attracted twelve students from Buck Key, Captiva Island, and Wulfert on Sanibel Island. It was the only public school available in the area until 1901. The family left the island after 1914.

Today residents and visitors can canoe the mangrove creeks and wade the nearby grassflats of Buck Key, knowing that most of the island has been protected, allowing native plants and animals to thrive. 

Calusa Heritage Day Returns!

Popular Festival Scheduled for March 25, 2017

Calusa Heritage Day will be back on Saturday, March 25, 2017 from 10 a.m. to 4 p.m. The event will include the first public tours on the parcel that contains the Smith (burial) mound.

Here is what you can expect:

- Harbor History boat tours with Captiva Cruises and Denége Patterson are scheduled at 10:30 a.m. and 1:30 p.m. The fee for these tours is \$35 per adult and \$25 per child under 12, in addition to the festival entry fee. Make your reservation now by calling Captiva Cruises: (239) 472-5300.
- Speaker's tent:
Dr. Torben Rick (Smithsonian Institution); 10:15 a.m. and 2:30 p.m.
Ms. Rachel Kangas (Florida Public Archaeology Network); 11:30 am
Dr. Bill Marquardt, Randell Research Center Director; 12:30 p.m.
Mr. Merald Clark, anthropologist and graphic artist; 1:30 p.m.
- Historic preservation, conservation, and other organizations will be on hand to share information.

- Calusa Tastings: Sample shellfish and fruit enjoyed by the Calusa at Pineland over 1,000 years ago.
- Local replicators will help you learn how to twine, make baskets, and more.
- Children will enjoy Calusa-inspired crafts.
- Artists Peter Sotong, Felix Rodríguez, and Marty Haythorn will have their works for sale.
- Classroom displays will feature findings from recent archaeological investigations.
- Food will be available from Little Lilly's Island Deli and The Perfect Cup.
- Free water will be available. Please bring a refillable water bottle.
- Admission is \$5 per person, and free for RRC members and children under 12.
- It takes place on the grounds of the Calusa Heritage Trail at 13810 Waterfront Drive, with parking on-site. Please consider carpooling with your friends, family, and neighbors.
- For more information, call 239-283-2062 and visit <http://www.flmnh.ufl.edu/RRC/>.



RRC News

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Gift Shop & Tour Information:
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Friends of the Randell Research Center

Pineland, Florida • December 2016
Phone 239/283-2062
Email: rrc@flmnh.ufl.edu

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,

Bill Marquardt

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:

Membership Coordinator • Randell Research Center • PO Box 608 • Pineland, Florida 33945

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|---|---|
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Photo by A. Bell

