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April 2007

This month at SWFAS

From Cow Pasture to Interpretive Trails: Developing the Calusa Heritage Trail at Pineland

At the April 18 SWFAS meeting, at the Bonita Springs Community Center, Dr. John Worth will talk about the development of the Calusa Heritage Trail at the Randell Research Center.

The Calusa Heritage Trail, which opened in 2004, represents the culmination of several decades of archaeological research and associated public education



programs centering on the Pineland archaeological site. This presentation reviews the development of the Trail, including exhibit

content and visitor infrastructure.

John Worth is currently the Assistant Director of the Randell Research Center, and has spent the last 15 years developing public archaeology programs in Georgia and Florida. His predominant research interests center on the ethnohistory and archaeology of Native Americans in and around colonial Spanish Florida.



Above: A school group tours the Randell Research Center. Left: The view through Captiva Pass from the top of Randell Mound and a Heritage Trail sign explaining the importance of fishing to the Calusa.

John Worth heading to Pensacola

John Worth has recently been hired as Assistant Professor in Historical Archaeology at the University of West Florida's Department of Anthropology in Pensacola. After nearly six years as local administrator of the Randell Research Center's Pineland facility, and another 9 previous years of public archaeology administration prior to that in Georgia, John has decided to shift his career focus to university teaching and research. Though he and his family will be moving to Pensacola this summer, his research interests in Spanish colonial Florida will continue to include the Calusa domain of Southwest Florida, as well as the story of immigrant Cuban fishermen and Creek Indians along the Gulf coastline through the 19th century. He also plans to finish a number of writing projects, which include a book of translations of all major 16th-century Spanish narratives regarding Florida's lower Gulf coast, including the expeditions of Juan Ponce de León, Pánfilo de Narvaez, Hernando de Soto, Luis Cancer, Hernando de Escalante Fontaneda, and Pedro Menéndez de Avilés.



Storyteller Carrie Sue Ayvar in Bonita Springs

The Bonita Springs Historical Society will present an evening lecture series funded by a grant from the Florida Humanities Council. The monthly event, open to the public, will take place at the Community Hall on Old 41 from January through April beginning at 7 p.m., with social time starting at 6:30 p.m. The theme of the series is, "The Front Porch & Stories of Florida's Unique People and Landscape." The society's goal is to educate and entertain the public about the historical and timely events that shape the culture of Florida. They hope to appeal to a broad range of citizens with outstanding guest speakers from a variety of disciplines.

Carrie Sue Ayvar, a nationally acclaimed bilingual storyteller will present on Thursday, April 19.

Ayvar is dedicated to preserving and promoting the art of storytelling. Sharing her stories in both Spanish and English, she believes that stories are one of the best means of explaining and passing on the beliefs, traditions and history that individuals or communities wish to keep alive. Ayvar connects people, languages and cultures through her stories. Blending entertainment and education, her extensive training includes Kennedy Center Seminars for the Performing Arts such as "Artists As Educators: Planning Effective Workshops for Teachers. Ayvar travels extensively throughout Florida telling stories about famous Floridians. Her appearance is the last of a monthly series offered free to the public.

Horr's Island Revisited

By Betsy Perdichizzi

Mike Russo, Southeast Archaeological Center, National Park Service, spoke on the significance of Horrs Island Indian mounds and shell rings to a large crowd of 150 people gathered



Jerry Tsandoulis, Lee Lindberg, Bill Perdichizzi, Mike Russo, Helmet Nichel, and Betsy Perdichizzi disregarded ground scorpions and sidestepped turtle holes to stand on the Shell Ring of an ancient Horrs Island Village. "These were the first people to make tools out of shells 5,000 years ago," said Mike Russo.



at Mackle Park for a Marco Island Historical Society MIHS lecture on April 3, 2007. Horrs Island was renamed Key Marco by Ronto Development company causing a great deal of confusion between Cushing's Key Marco (now Old Marco) and Horrs Island Key Marco

Russo excavated Horrs Island for the University of Florida Foundation in 1989 at the request of Ronto. The major focus at the time was to determine whether the village site was seasonally or permanently occupied and what resources provided the base subsistence for the Archaic inhabitants.

According to Russo in a 1994 article describing Horrs Island, "Over one million faunal specimens were identified and seasons of capture were determined for the most important specimens. The analyses determined that a year round settlement existed in the Archaic village without the benefit of agriculture. Prior to analyses conducted at Horrs Island no year-round settlements or large pre-ceramic Archaic sites were known anywhere in coastal North America. It was widely thought that the few known settlements represented seasonal visits and that most Archaic sites had been destroyed by rising seas. Large settlements were not predicted until later ceramic producing periods. Horrs Island had four conical mounds with radio carbon dates from 4100 to 7600 B.P."

His recent work and new understandings on the



Scenes from SWFAS March 17 CalusaFest



The March 17 SWFAS CalusaFest was held for the first time at the Railroad Depot Museum in Naples. The charming location provided the added bonus of an elegantly styled club car for the end-of-the-day reception.

Left: John Beriault spoke about his work at Margood on Marco Island.

Below right: Mound House Director Theresa Schober shared plans for the walk-in shell mound exhibit currently under construction.



Betsy Perdichizzi, Lee & Dee Lindberg with museum model and informational brochures. Betsy & Bill Perdichizzi gave a presentation about the history of Marco Island and need for a museum.

Below: CalusaFest reception in the Club Car.



SWFAS present at Marco's Otter Mound opening

The Otter Mound Preserve on Marco Island opened to the public on March 7. SWFAS volunteers had helped in the site restoration, culling artifacts - under the guidance of John Beriault - during the planting of native plants.

Otter Mound is at 1831 Addison Court, at the southern end of Marco Island.



Ribbon cutting at the Otter Mound Preserve: (from left:) Alex Sulecki, unidentified, Commissioner Dona Fiala, Councilwoman Terri DiScuillo, unidentified.



SWFAS members provided a display of Calusa artifacts for the opening ceremony.

Archaeological Currents: The Crying Child

By John G. Beriault

Archaeology can be and frequently is a mix of science, perception and insight. I guess the trend in the profession is toward more and more science and an interdisciplinary approach -- archaeology compartmentalized into smaller and smaller boxes with one or two of the leading researchers eventually presenting the "Big Picture" of a project to the media. The computer and Global Positioning and a lot of clever highly technological advances and procedures have -- in just the last ten years -- profoundly changed how archaeology is performed and who does the performance. Even the size and scope of projects have been impacted. Smaller physical areas of sites are investigated, and very tightly defined and reasoned questions are proposed prior to work being performed. And, yes, much of this is good. The old "grab a shovel and let's go at it" has long been replaced and by "what questions are we answering?" and "how, specifically can these questions be answered, and by what technique?" There's less and less "romance" and more and more hard science, and again this is good. Archaeology has become a discipline of facts, but facts can be "spun," different interpretations created. Archaeologists of rival "camps" argue most famously at conferences, or through the media, and years can elapse before one viewpoint or another prevails. It still seems "force of character" or "presentation" often plays a large role in who prevails in these debates, so archaeology is still a little more supposition than absolute hard science.

Many archaeologists see themselves as still reaching toward the light of science while perched on a sometimes shaky and badly constructed ladder of hard facts. Most archaeologists would like to disassociate from the hunch, the insight, the calculated guess, deny arranging facts to fit preconceived conclusions. How more so then do archaeologists try to avoid unexplained incidents, what I term the "archaeological ghost story." In order to hear some of these stories you generally have to be at an archaeological conference, or, more specifically, the tiki bar next to the conference hall. A few rounds or drinks need to have been done and the right mood established. Someone, preferably an esteemed colleague, needs to have told the first tale of "something strange" having occurred during a project, and then the others begin vying to "one up" that person. Archaeologists are great "one-upsmen," and always have a discovery or observation to trump the previous offerings. I've been a witness to a few of these sessions and have heard of a few

strange and unexplained phenomena to which long-practicing archaeologists are privy.

My own strange tale, of which I was one of four observers, spread over a score of years, occurred in the Big Cypress Swamp. The specific site was a tall sand mound at a "crossing" of a deep cypress slough, so designated by soldiers in the Third Seminole War in pursuit of the elusive Seminoles. People had mentioned seeing strange things at the top of the mound near a pair of oddly crossed cabbage palms, the vision of a crying Indian child, dirty, blood smeared, softly sobbing. One of these people was an avocational archaeologist who changed his mind about pothunting there; the other two were professional archaeologists, rather reluctant to recount what was obviously a hallucination. All saw the same phenomenon at widely separated times. All found out about the others' sightings by the sharing of stories. My own incident happened years before I had heard these stories and was heading to the same site blissfully ignorant of the crying child. We had hiked/waded across three miles of wet grass prairie to reach the large cabbage palm/live oak hammock island. At the edge of the hammock, without preamble, the ground rose upward, and I realized we were on the edge as well of a tall, scarcely disturbed sand mound. We climbed to the top of the mound, which -- in a surrounding country of low, wet terrain -- seemed like a veritable mountain. Here, at the summit of the mound, were two crossed palms, leaning together to form a giant "X." I felt a strange "rising of hair," something... We walked down the other side of the mound along a trail, where recent bear tracks and scat were evident, through the hammock toward an even deeper pond apple slough extending to the east. I turned back toward the mound and reached in my knapsack for a wide-angle lens to take a picture. I discovered the knapsack compartment partially unzipped and the lens missing. An expletive crossed my mind as I realized the lens must have fallen out somewhere into the three-mile long knee-deep watery grass marsh. My odds of finding the lens on the return walk were not only slim to none, but, if I could, the lens would be ruined by the watery bath. Looking back toward the mound in that instant, I saw a movement at the top, appeared to be a small child ducking beneath the two cabbage palms. Walked back toward the mound on the trail and found at its foot my lens case and lens sitting upright in the exact center of the trail as if someone had carefully placed it there just moments ago. I didn't go up to find the child, too many goose pimples...

Horrs Island, from page 2

significance of shell rings led him to revisit the Horrs Island site. He was delighted to discover that the Horrs Island shell ring is still mostly intact.

He asked the Marco Island Historical Society, a 501(c)3 not-for-profit organization, if they would be interested in leading the effort in getting the community involved behind a nomination as a National Historic Landmark. His work in 1989 is the first step toward nomination. MIHS accepted the challenge and began contacting residents and officials of the Horrs Island/Key Marco Community.

At the invitation of Jerry Tsandoulis, President of the Key Marco Civic Association, Mike Russo met with MIHS

members: Lee Lindberg, President, and Helmut Nickel, Betsy and Bill Perdichizzi, and Eileen Ward, horticulturalist in the community center to discuss the matter.

Following the discussion, Russo offered to lead the group on an impromptu tour of Mound A, Mound D and the Shell Ring. Mound D is located in the middle of Blue Hill Creek Drive with the road curving around on either side. Russo pointed to the spot where his dig ended near the top of the mound and said that one day he would like to continue the dig right through the mound to find all the mound's secrets.

See Horrs Island, page 6

Geology Rules: Stunning Oxygen

By Jack Harvey

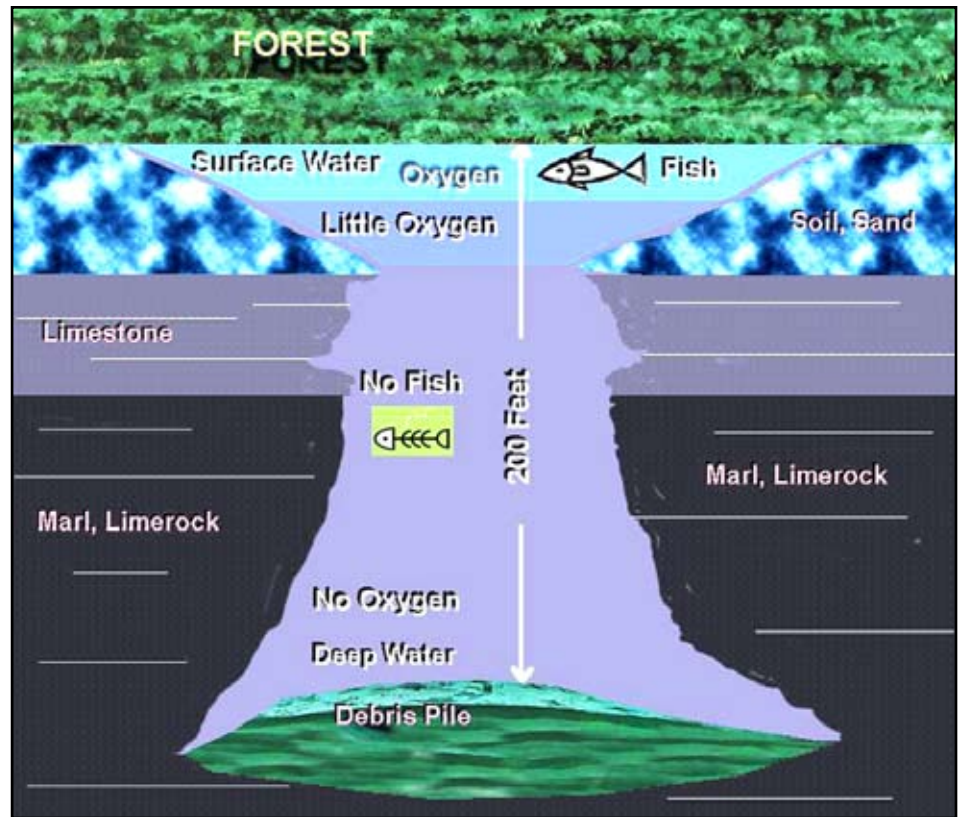
Oxygen must be a knockout gorgeous atom because all the other atoms want to hook up with it. Okay, I'm sure a chemist will have a much more scientific explanation but my point is that although our planet has plenty of the stuff, it's almost all hooked up with other atoms forming complex and stable compounds.

The first that comes to mind is water: two atoms of hydrogen and one of oxygen. Next might be carbon dioxide with two atoms of oxygen and one of carbon. Then we South Floridians might think of limestone, a party of calcium, carbon and oxygen atoms. And of course we can't forget the broad smear of compounds called petroleum, ranging from bitumen asphalt through gasoline to naphtha, all of which require oxygen in their molecules.

Without oxygen, we wouldn't have explosives, computer chips, most medicines, clothes and animal life as we know it. And animal life requires free oxygen not hooked up with other atoms. A large amount is available in the atmosphere.

But you knew all that; what you may have forgotten is that there was a time when no free oxygen was available on the planet. It was virtually *all* combined with other atoms and our atmosphere consisted mostly of carbon dioxide and nitrogen. But atoms just love to hook up with each other and in ever-increasingly complex ways, each way making possible yet more complex molecules until a sort of molecular reproduction starts. A precursor of the chlorophyll molecule was one of the more successful of gazillions of hookups. It was able to use the energy photons of sunlight to break apart carbon dioxide and water molecules yielding free oxygen and sugar-like molecules. So evolved blue-green algae releasing free oxygen into the atmosphere.

But an atmosphere rich in oxygen didn't follow instantly. It took about 2 billion years for algae and higher plants to produce enough free oxygen to allow multicelled oxygen-breathing creatures



Above: Little Salt Spring oxygen zones. Below left: the Marco Cat

to evolve. Why so long? For just one thing, there were trillions of tons of metallic iron in the early crust that had to rust into iron ore first. After all the eager atoms were hooked up with oxygen, it began to accumulate in the atmosphere. Eventually, a stable *oxygen cycle* developed with the plant kingdom using solar energy to make free oxygen, followed by many other physical and biological processes converting it into myriad other compounds that are nutrients for the plant kingdom, closing the cycle. More plants, more oxygen, more decay, more plant nutrients, more plants -- round and round it goes: The circle of life.

Last time, I spoke about how Steve Koski finds ancient wooden stakes in Little Salt Spring. How does all this explain why the wooden stakes haven't rotted? The reason is that the oxygen cycle is broken in the spring.

The cycle is broken because water in the deep part of the spring has lost contact with the atmosphere. And most of the oxygen freed by the plant kingdom is released into the atmosphere.

This also explains why Cushing's Marco Cat didn't rot away. The Marco Island muck pond in which it was buried broke the oxygen cycle by preventing rainwater or air from reaching the elegant wooden carving. In the spring, layers of sediment around the stakes act like the Marco muck, further blocking oxygen access.

But all of this doesn't directly explain *why* the oxygen cycle is broken in the springs and other Florida caves. The answer lies in the collision of two facts: first that oxygen readily combines with many other things and second that oxygen-bearing water moves very slowly (relative to a river) when traveling underground. So incoming oxygen, like a dreamboat at a party, gets hooked up with others as soon as it arrives.

Why water travels so slowly underground seems obvious. Impervious rock traps it, right? But any miner knows rock leaks like a sieve and Thomas Newcomen developed his steam engine 300 years ago to deal with the problem. The leakiness of rock is important to understanding springs, caves, artesian wells and what is right under our feet. South Florida aborigines needed to know some of the story we'll crack open next time.

Horr's Island, from page 4

Mound A rests on an easement off the side of the road. The group went through brambles, briars, brush, and sidestepped gopher holes to find it. The mound is covered with trees, vines, and vegetation and cannot be seen in aerial photos. The impressive Shell Ring next to Mound A measures approximately 150 meters long and 50 meters wide in some places. The Ring is bisected by Blue Hill Creek road going over it, leaving the shell ring relatively undisturbed. One side of the Ring rest on three prime lots and the other side of the ring remains Native Habitat Park.

Before leaving Marco Island to drive back to Tallahassee, Russo and the MIHS party met with City officials to discuss the matter and to determine the first steps to be taken in acquiring the City of Marco Island support.

Russo returns next season as he has agreed to be the scholar of Horrs Island for the MIHS series 2007-2008 "Art Interprets History."

-- Reminder --
SWFAS membership dues were
due January 1.

Individual - \$20
Sustaining - \$50
Family - \$35
Student \$15

About SWFAS*The Directorate:*

*President - Theresa Schober
1st VP - Karen Nelson
2nd VP - Tom Franchino
Recording Secretary - Jo Ann Grey
Treasurer - Charlie Strader
Membership - Charlie Strader
SWFAS Committees:
Field - John Beriault
Lab - Jack Thompson*

*Hospitality - Jeanne Sanders
Education - Dr. John Worth
Publicity - Kara Bridgman Sweeney
Newsletter - Karen Nelson*

*If you would like to join SWFAS, please
address your check to: The Southwest Florida
Archaeological Society; P.O. Box 9965; Naples,
FL 34101*

*Dues are: Individual - \$20; Sustaining - \$50;
Family - \$35; Student \$15*

*Board meetings are the second Wednesday of the
month at 6:45 p.m. at the Hampton Inn in Bonita
Springs (except Dec. 2006, as noted above). All wel-
come. Member meetings are the third Wednesday
at 7:30 (coffee served at 7) at the Bonita Springs
Community Hall on Old 41 (by the banyan tree).*

**The Southwest Florida Archaeological Society
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