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The ABC of Shell Tools topic of June meeting

By Corbett Torrence

Coastal peoples have long made use of shell as a durable material for tool production. In southwest Florida shell was an important local material in tool production due to a lack of metamorphic and igneous rock; the stone types used typically to manufacture axes, knives, scrapers, hammers, spear points, and other expedient and durable tools elsewhere. Fifty years ago, John Goggin

introduced an alphabetic (ABC) typology for shell tools in south Florida. Since then, George Luer, William Marquardt, and others have provided supplemental information on shell tool classification and production in the region. This hands-on workshop, guided by Corbett Torrence, provides a review of previous investigations of shell tools, and provides additional insights based on recent archaeological investigations.

Swimming pool excavation underway!

by Theresa Schober

Mound House Co-Directors Corbett Torrence and Theresa Schober are off the deep end. The swimming pool placed in the shell mound in the late 1950s is now the location of an ongoing archaeological excavation aimed at examining human activity patterns over a large area within the mound. Most excavations into mounds have been characterized by small units or narrow trenches driven deep into the mound. These vertically-oriented excavations enable archaeologists to determine when and how mounds accumulate.

See POOL, page 5

Theresa Schober points out the undulating stratigraphy in the swimming pool excavation to the Warm Mineral Springs/Little Salt Springs Archaeological Society.

Photo by Steve Koski.



Mound House to Receive \$349,650 to Restore to ca. 1921

by Theresa Schober

On Thursday, May 25, Governor Jeb Bush signed the 2006-2007 budget > approving approximately \$14.5 million dollars in grant assistance to 49 historic restoration and major archaeological excavation projects across the state. Included in these 49 projects is the restoration of the main structure at the Mound House to its ca. 1921 appearance when the property was occupied by Captain Jack DeLysle who also built a casino and 50-room hotel on the Gulf of Mexico.

Over the next year and a half, post-1920s additions to the structure will be removed and the early 1906 kitchen will be recreated. The restored structure will house a lecture/community room and permanent exhibits on the historical development of Estero Island (Fort Myers Beach) and the connection of this



development to broader changes occurring in southwest Florida and the United States. These exhibits will complement the archaeological history of the property as viewed below ground in the shell mound exhibit. The restoration project will also include a limited amount of archaeological excavation in the area of the earliest house that is currently covered by a ca. 1950s concrete floor.

Theresa Schober is an archaeologist and the Co-Director of the Mound House for the Town of Fort Myers Beach.

Useppa Island's Long Tradition of Shell Tool Manufacture Under Additional Study

by John Dietler

Archaeologists and volunteers from UCLA, the Randell Research Center, and the Useppa Island Historical Society spent the spring exposing what may be a 1,200 year old shell axe workshop on Useppa Island. In sharp contrast to the mixture of food remains and pottery found in most shell middens in the region, one layer of this site consists almost entirely of the large lightning whelks shells from which shell axes were made.

Volunteers excavated thousands of whole and broken lightning whelks, along with the shell hammers and sandstone fragments that may have been used to manufacture tools. The precise location of each tool and large shell was recorded, and all of the excavated lightning



See USEPPA, page 8

Photos above and right by John Dietler

TO DO IN JUNE

Mark your calendars for the **Little Salt Spring open house and lecture symposium** planned for Saturday, June 10 and Sunday, June 11. Saturday will feature small group tours of the archaeological site and ecological preserve by scientists conducting research at the facility.

Artifacts recovered from the spring's underwater deposits will also be on display. Open house hours are between 9 am and 4 pm. On Sunday, a free lecture series focused on the significant underwater archaeological research conducted at Little Salt Spring and across the state will be held at the North Port High School's Performing Arts Center. The symposium program brings together an impressive array of underwater archaeology experts and will be held twice during the day - from 9 am to noon and between 1 and 4 pm. For more information, or directions to Little Salt Spring or the Performing Arts Center, please contact Hilda Boron at 941.426.1719.

Symposium Program

- Ray McAllister, Florida Atlantic University - "Half a century of underwater archaeology in Florida"

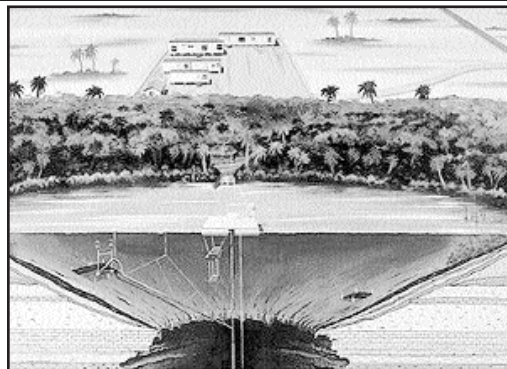


Illustration provided by Little Salt Spring

- Roger Smith, Bureau of Archaeological Research - "Florida Underwater Archaeology Today"
- Dan Hughes, Sarasota County-Archaeologist "Paleoindian Archaeology in Sarasota County"
- Dr. John Gifford, University of Miami - "Little Salt Spring: An Overview"
- Steve Koski, University of Miami - "Current Research at Little Salt Spring"
- Rick Gomez, University of Miami & Casey Coy - "Exploring the depths of Little Salt Spring" Florida Aquarium, Tampa
- Richard Deadman, FL Dept of Community Affairs "Protecting Florida's Springs"

SWFAS Volunteer Database

SWFAS is setting up a database of those interested in volunteering for archaeological field work and/or lab work. Details are still being worked out but experience is not necessary and training will be provided. There are opportunities at the Craighead Lab (at the Collier County Museum) and other ongoing projects in Lee and Collier counties. If you are interested in volunteering, please sign up at the June 21 meeting or e-mail Charlie Strader at CESXplor@aol.com or Karen Nelson @ knelsonislander@yahoo.com. Please provide name, contact info and whether you would be available to work in Lee or Collier counties (or both).



Volunteers working on Useppa island.

Remembering John Dante

Funeral services were held May 31 in Naples for John Henry Dante, who for several years contributed professional-level skills to bone identification and curating at the Craighead lab. He was 93 and had been in ill health for several years.

John attended grade schools at Washington, D.C. where he was born, earned a BA from Holy Cross college at Worcester, MA and a master's degree at Catholic University in Washington. He also attended the University of Texas in Austin. He worked

as a geologist for the Federal Power Commission in Washington from 1954 to 1873, when he retired to Naples

A lifetime hobby, which he put to good use in his work at the Craighead lab, was otoliths, of which he collected so large and important a collection that when he bequeathed it to the Florida State Museum at Gainesville that organization sent a large station wagon to Naples to collect it.

He is survived by his wife of 52 years, Rosalia, five children, five grandchildren, and three great-grandchildren.

POOL, from page 1

Horizontal excavations reveal activity areas and enable archaeologists to evaluate such things as shell tool manufacturing techniques, the size and shape of house structures, and how people organize space within a time period. To date, a checker board of one-meter by two-meter excavation units have been placed across the floor of the former pool to trace the stable earthen surfaces across the mound. These earthen

surfaces, seen in profile in the photograph below, have revealed ash features, bone and shell tools, and large sections of Sand-tempered Plain cooking pots. The excavation will continue throughout June and part of July, Tuesdays through Saturdays. Interested public are welcome to stop by and view the progress. Field volunteers will be welcome in a few weeks after some of the building construction has progressed. Please call Theresa at 239/765.0865 if you are interested in signing up.

58th Annual FAS meeting in Stuart

SWFAS members Theresa Schober, Liz Clement and Karen Nelson headed over to Stuart for the lectures presented on Saturday, May 13. Hosted by the Southeast Florida

Archaeological Society, topics ranged from the work at Little Salt Spring (see To Do in June) to St. Johns pottery to shamanism to the management of the Calusa mounds in Charlotte Harbor to searching for Ft. Caroline.

What's happening in the Lab: *The Rat Report*

By Liz Clement

April has a volunteer week;
Our museum gave a luncheon.
The rats were in attendance
And enjoyed the lovely "munch-on."
When the awards were given out,
There was silence in the hall.
Presidential honors were declared,
The rats — they swept them all!

We also had a visit
From Bob (Carr) and from John (Beriault),
Who looked at our Margood project,
Said, "Good job" and "Carry on."

To rats Jan and Marilyn,
Who have gone North for a while:
"We think of you often
And send hugs and a smile."

Josh Toney Ignites SWFAS with Living Archaeology

By Corbett Torrence

The SWFAS audience could not resist asking questions of Josh Toney throughout his presentation. The enthusiasm was sparked by his images of present day Xinguano Indians living largely traditional lifestyles and his comparisons of their culture to spatial patterns observed archaeologically in the Caribbean. It is sometimes overlooked that archaeology is anthropology. By studying the spatial distribution of material remains (artifacts and features) in the ground, archaeologists attempt to reconstruct the social lives of people. This is a difficult and complex task. Historic documents provide valuable, although often biased, insights... but imagine observing directly the descendants of a culture steeped in tradition.

On May 17, Josh Toney discussed the Arawakian Diaspora into the Caribbean. Around 500 B.C. a horticultural and fishing culture, possessing a red-on-white painted pottery known as Saladoid people, spread through the Antilles. Josh is quick to point out that pots are not people, and he looks for evidence of human migration as opposed to just cultural diffusion. For instance, just because someone drives a



Photo provided by Josh Toney

Toyota does not necessarily mean they speak Japanese, eat at low-situated tables, and live in pagoda roof-style houses. For archaeologists it is often difficult to distinguish between the movement of artifacts, ideas, and people. Josh offers a holistic solution: evaluate archaeological, linguistic, economic, and architectural avenues.

The Caribbean peoples encountered by Europeans in the fifteenth century spoke dialects belonging to the Arawak language family. By comparison, Spanish, French, and Italian belong to the Romance language family (English is more closely related to German and is part of a Western Germanic language family). The Arawak language is believed to have originated in the central

Amazon. Linguistically, the indigenous Caribbean peoples were part of a South American language group evidences further their place of origin.

Josh notes that Saladoid people selected forested environments similar to those found in the Amazon and Orinoco River valleys. In addition, their economy, based on fishing and manioc, was also similar to that practiced in their homelands. In fact, even the design of villages were the same (See figure 1). According to Josh, these traditions prevailed into times of hemispherical interaction, and the anthropological question is to investigate the social, economic, political and religious lives of these people. To do so, Josh makes

See ARAWAK, page 6

Randell Center Will Host New Public Archaeologist

by Bill Marquardt

Soon the RRC will add a second full-time professional archaeologist to its staff, funded by the new Florida Public Archaeology Network (FPAN). The Florida Legislature has established FPAN to promote and facilitate the conservation, study, and public understanding of Florida's archaeological heritage through regional centers. Each center will serve a several-county region, and each center will receive a yearly grant to pay for a public archaeologist, his or her staff, and supplies and equipment to assist in the public education mission.

The first year (2006) will see the establishment of a coordinating office at the University of West Florida in Pensacola, and three charter regional centers. Up to five additional centers will be started in 2007. These will be chosen based on geographic balance, regional need, and feasibility of the host institution's proposed programs and plan, and potential for success.

The Randell Research Center has been

chosen as one of the three charter regional public archaeology centers. The other two are in St. Augustine and Tampa. The RRC's new public archaeologist will be headquartered in Pineland at the RRC main office, but will bring archaeological knowledge to Charlotte, Collier, Glades, Hendry, and Lee counties.

Specifically, the PFAN archaeologist will operate a public outreach program, promote heritage tourism, disseminate information to the public, assist teachers with lesson plans, promote existing regional heritage events and programs, develop regional heritage exhibits, and assist local governments in their efforts to preserve and protect archaeological resources. We are excited about this new program, which will allow the RRC to reach a much wider audience in southwest Florida.

Reprinted with permission from Friends of the Randell Research Center newsletter, Volume 5, Number 1, March 2006. Bill Marquardt is the Director of the Randell Research Center at Pineland and Curator of Archaeology at the Florida Museum of Natural History.

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a long journey into the most reclusive regions of the Amazon, where these traditions originated and continue to prevail. Here Josh observes the lives of modern Indians, who have maintained many of their traditional lifeways. His photographs of Xinguano Indians ignited many questions from the crowd.

"Do they always go naked?" One person asked. "Interesting question," Josh replied. In the village, wearing a waist belt of shell beads distinguishes what we define as clothed versus naked. A Xinguano would not permit a photo to be taken of themselves without the shell bead belt about their waist, as this would, in essence, be a naked photo. Yet, to the average U.S. citizens, the shell belt does little to

conceal what we call nudity. "But they wear clothes when they go to city" Josh adds. The Xinguano are remote, but not isolated: The chief has traveled to major world cities, has a generator, and likes to watch the evening news on satellite television. Numerous other questions flowed from the crowd about Xiguano lifeways. The design (layout) of their village is traditional and symbolizes elements of their social structure and religious beliefs. It is this symbolic meaning and tradition that Josh aims to bring to life in the Caribbean, and he certainly did so for SWFAS this May. The crowd invited Josh back again next fall to report on his upcoming field season, as all were enthralled and anxious to learn more of his studies. Thank you Josh!

Geology Rules: Tarzan's Kingdom

By Jack Harvey

How deep is the ocean? Oceanographers talk about the "broad, relatively flat expanse of sea floor lying 3-6 km (2-4 mi) below sea level." Seamounts and continental shelves are shallower exceptions while trenches down to 11 km (6.8 mi) exist. Much of the Gulf of Mexico is about 3 km (2 mi) deep. But if we drained the oceans away into space, Florida would look drastically different.

If we were on safari on the dry Gulf floor about 400 km (250 mi) west of Naples/Fort Myers we would see the gigantic Florida Escarpment roughly paralleling the current west coast of the peninsula. This two-mile high nearly sheer scarp rises from the abyssal plain of the Gulf. Tarzan's kingdom could be at its top and it's one of the longest and highest escarpments on the planet. A gentler rise continues east between South Florida and Cuba, then north along the Atlantic coast. The new land of South Florida is a high plain about 650 km (400 mi) wide at an altitude of 10,000 feet. If we drained the oceans away into space.

And it's no accident that the flat top of this high altitude plain is close to current sea level because the sea

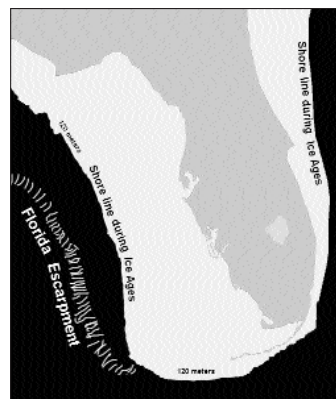
built it.

We learned in "Concrete Florida" about how calcium carbonate dissolved in abyssal seawater under high pressure flows up to shallow depths, where it precipitates out as calcite to form concretions of the clastic powder, sand and gravel washed out of the main continent and carried along the extending peninsula by littoral drift.

The shallow water west of Florida is a classic continental shelf, also called a passive margin by geologists since it is seismically and volcanically quiet. That's our South Florida. These shelves typically slope about 1.75 meters per kilometer, but our shelf is even milder, only half that.

The non-volcanic land forming processes (dunes, sand bars, barrier islands, coral reefs, etc., cemented with calcium carbonate) we saw in "Concrete Florida" happen mostly in shallow seawater shores. So as the shore shifts out and in during an ice age cycle, new terra firma is "painted" across the continental shelf.

When it piles up too steeply near the low water (ice age peak) mark, great underwater landslides occur and the accumulated sedimentary rock, limestone and coral reefs tumble down into the abyssal deep. These



tsunami-generating events stretched the Florida peninsula ever farther south, carrying shallow water shells to the ocean bottom.

The relentless littoral drift southward from the Gulf coast and also southward along the Atlantic coast caused the ever-lengthening Florida peninsula to extend from the far more ancient North American continent.

The Florida peninsula is mostly calcium carbonate based sedimentary stone, but the peninsula didn't grow up from the ocean floor. Instead, it grew south from perhaps the Orlando area. How fast did this peninsula growth occur? Undoubtedly the rate varied greatly depending on global climate conditions. However, we can compute a long-term average. The distance from Orlando to Key Largo is about 395 km (245 mi) and it may have taken about 100

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million years for the peninsula to grow that far. That's about 4 mm (1/8th inch) a year.

The peninsula growth rate looks a little better in terms of an ice age. If (and it's a big if) major ice ages occur, on average, every 50 thousand years, the peninsula extends south by about 200 meters (660 feet) per ice age. At that rate, South Florida might reach Cuba in 25 million years but don't count on it. Cuba may have waltzed farther east by then.

Get Real

This has been a virtual hurricane of numbers - many incomprehensible to real people not used to the geologist's typical time scale. After all, human evidence in South Florida goes back only about ten kiloyears, whereas, South Florida itself is perhaps 65 megayears old and the planet itself is around 4.5 gigayears - but there I go again. Sorry, but numbers are important to understanding our South Florida land. I'll try to put all these ridiculous figures in an understandable perspective next time.

USEPPA, from page 2

whelk fragments were collected for further study. Several unfinished shell tools were also recovered, providing even stronger evidence for on-site tool production. Fully answering the question of whether the lightning whelk deposit represents a shell tool workshop will rely on the laboratory analysis of the shell fragments which will attempt to distinguish among shell breakage caused by meat removal, tool making, and modern site impacts.

Associated pottery suggests a date of A.D. 600-800 for the deposit, indicating that Useppa Island has a very long tradition of shell toolmaking. SWFAS members may recall an excavation of a shell tool manufacturing locale several years ago, directed by archaeologist Corbett Torrence. Although

they share the same island, the two deposits are remarkably different in terms of age and technological goals.

Torrence's 1989 excavation investigated a Middle Archaic period shell columella tool manufacturing locale several hundred meters to the south of the current dig, while the 2006 project is focused on a spatially distinct whole shell cutting-edged tool workshop that was in use over 3,000 years later. The methods employed by the two projects were quite similar, and comparing the density, standardization, and manufacturing skill represented by the two deposits promises to be a productive endeavor indeed.

John Dietler is a PhD student in the Department of Anthropology at UCLA.

ABOUT SWFAS

*For information see our web site:
www.explorationsinc.com/historical*

The Directorate:

*President - Corbett torrence
1st VP - Theresa Schober
2nd VP - Tom Franchiono
Recording Secretary - Jo Ann Grey
Treasurer - Charlie Strader
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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 7 p.m. at the Hampton Inn in Bonita Springs. All welcome. 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).

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