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February 15 Speaker Dr. Rachel Wentz

Exploring Ancient Florida



Millions of years ago the peninsula that would become Florida broke from the west coast of Africa, settling into its present location. Since then, its landscape has gone from an African-like savannah to a tropical paradise. Ancient mega-fauna that once roamed the forests and grasslands disappeared as humans arrived. On Feb. 15, SWFAS hosts Dr. Rachel Wentz who will speak on what Florida was like for the earliest Native Americans.

Dr. Wentz received her PhD from Florida State University where her master's and doctoral theses examined the skeletal population of the Windover site in Titusville. She has taught courses in physical anthropology, human osteology, and forensic anthropology. Dr. Wentz is currently the director of the Florida Public Archaeology Network's East Central Region. Dr. Wentz's book *Chasing Bones* gives the reader a first-hand glimpse into the world of bioarchaeology, where skeletons hold the clues to past lives and the ancient civilizations from which they came. Dr. Wentz will bring copies of her book for purchase and signing.

February's meeting will be held at the Bonita Springs Community Hall, 27381 Old U.S. 41 (by the banyan tree). The Board of Directors meets at 6:30 p.m.; refreshments served at 7:00 p.m.; speaker begins at 7:30 p.m. The public is welcome.

March 21 at Florida Gulf Coast University, Speaker Lee Bloch Unsettling Silence: Community Archaeology at the Lake Jackson Site

In March SWFAS, in partnership with the FGCU Anthropology Club, will host speaker Lee Bloch at FGCU (campus location to be announced). Lee graduated from New College of Florida in May 2011 with a concentration in anthropology and gender studies. He wrote his senior thesis on the intersections of decolonizing and queer anthropology in the study of North Florida's past. His research on gender diversity at the Lake Jackson site, which was recognized by the Student Paper Awards from Time Sifters Archaeological Society and the Florida Anthropological Society (FAS), brought him into contact with a descendant Muskogee (Creek) tribal town. Ongoing collaborative research with this community served the basis for reconstructing an alternative history of the site, named *Okeeheepkee* in Muskogee, and was again recognized by the FAS Student Paper Award in 2011. Focusing on ambiguously gendered copper iconography excavated from the Mississippian-era Lake Jackson Site (located in modern-day Tallahassee, FL), Lee will address how transforming the social organization of research can empower Native traditions and develop a more nuanced understanding of history.

Digital Archaeology: Digging Underwater By Jack Harvey

We know all about this, right? We've been on field trips to Little Salt Springs and Warm Mineral Springs near North Port, FL and heard lectures by John Gifford or Steve Koski of the University of Miami about underwater archaeology. And we've read about the exploits of William Royal and our late Jean Belknap exploring these great sinkholes. Fabulous stuff.

Fabulous, like John Carter of Mars? Pulp master Edgar Rice Burroughs created Carter in 1912, the same year he gave us Tarzan of the Apes. We are fascinated by people in strange dangerous places. Mars is pretty hard to get to, but in Florida, we are surrounded by water and going under it can be strange and dangerous too. Scuba diving requires special equipment and professional training. While diving a few dozen feet is fairly safe and easy to learn, when one goes deeper, it

gets tricky and a human can't stay long because of the great pressure. Nitrogen dissolves in our blood causing narcosis. And then when we try to surface quickly, the nitrogen fizzes out causing "the bends" and severe tissue damage.

One thing that helps is to eliminate nitrogen and carbon dioxide, breathing a mixture of oxygen and helium but this only helps a

little. Humans simply can't survive the high pressures of depths below a hundred feet longer than a few minutes. Pressure protection suits that permit the diver to remain in a surface-like atmosphere are extremely heavy and expensive while greatly limiting the wearer's mobility and dexterity. The underwater oil well industry used such suits until they developed the ROVs (remotely operated vehicles) that were the eyes and hands of the historic BP Deepwater Horizon disaster recovery effort in 2010. Unfortunately, the costs for such ROVs run to tens of thousands of dollars per day!

Another scheme for humans to work below the surface for extended periods of time is the underwater habitat. This is a pressurized air-filled tank that divers can live in for several days at a time. Being at the same pressure as the sea outside, scuba divers can exit and return through openings in the bottom without hatches.

Starting in the 1960s, several experiments and facilities were tried by Jacques Cousteau. The US Navy and other government groups tried various approaches. All high-budget experimental programs, none resulted in continuing working facilities.

DIY hobbyists have had some success with home-made deep-diving ROVs using remote controllers adapted from model aircraft.

Their goals are usually returning digital photos and video from as deep as 10,000 feet. The National Geographic Channel has a series called "How Hard Can It Be?" A recent episode described the attempt by hobbyists to build and test a DIY Robo-Sub. While their main goal of a maneuverable vehicle failed for lack of time, they did succeed in returning video from

a low cost static
platform lowered
to great depths.
Google "DIY robosub" to find the
hobbyists.

Underwater archaeology, similar to what Steve Koski does with scuba gear in Little Salt Spring, can be done with a simple lumber frame lowered into place over a test unit. The frame has pressureproof video cameras

Power and Control Cable to Surface

Video Vacuum
Camera Excavator
Manipulator

Test
Unit

Excavator
Inot shown

Video Vacuum
Camera Frame
Frame
Frame

Lumber
Frame
Inot shown

and lights to view progress and locate artifacts. It supports and manipulates the vacuum hose that Steve uses to remove silt from the dig. Small artifacts go up the vacuum hose to be recovered in a filter screen on the surface. A scuba diver makes a quick trip down for large and important items. The big advantage of such a frame over ordinary scuba diving is that the frame can stay in place and work as long as archaeologists on the surface want to control it. And it works continuously at depths where scuba diving is extremely difficult with useful time limited to a few minutes a day.

Initial versions of this underwater archaeology frame can be constructed of ordinary lumber, weighted to sink. The hobbyists have shown how to build lowcost pressure housings for video cameras and lights. They fill electric motors with light oil for operation at extreme depth without special pressure protection.

(continued on page 5)

Upcoming Events for Florida Archaeology Month

March 1, 7 p.m.: FPAN Speaker Series – Irvin Winsboro, FGCU Professor "Race and Civil War in Southwest Florida" SW Florida Museum of History, Ft. Myers. (Book signing to follow).

March 8, 7 p.m.: FPAN Speaker Series – Tara Giuliano, UWF Grad. Student "Legend of the Field Stones in Old Bethel Cemetery: Using Archaeology to Explore Social Memory" Pieter Westergaard House, Moore Haven.

March 10 & 11, 10 a.m. - 5 p.m.: Old Florida Festival at the Collier County Museum. Admission: Adults \$5, Children (8 to 18) \$2, children under 8 free. Come relive the past with brand new excitement, from live reenactments of war battles to performances by Ed WindDancer, Native American dancer and flutist. This celebration features the state's finest historical re-enactors, craftworkers and performers all set on the Museum's native gardens and grounds. (County Courthouse Complex, 3331 Tamiami Trail East, Naples). SWFAS volunteers will also have the Craighead Lab open to the public. For more information see http://www.colliermuseums.com/festival/index.php.

March 10, 10 a.m. - 4 p.m.: Calusa Heritage Day at the Calusa Heritage Trail, Randell Research Center, 13810 Waterfront Drive, Pineland. Adult admission \$5; children free. Featured speakers: 11 a.m.: Shell Tools by Dr. Bill Marquardt, 12 p.m.: Wetlands Preservation by Dr. Robin Brown, 1 p.m.: "Future directions in Southwest Florida Paleoclimatology" by Dr. Joanne Muller, 2 p.m.: "How the Environment Shapes War: Environmental Impacts on Seminole Combat Behaviors" by Nathan Lawres, 3 p.m.: Keynote speech by Karen Walker. Other activities include a narrated archaeological boat tour through Pine Island Sound, Native plant sale, artists, storyteller Gerald Hausman, Calusa-inspired arts and crafts, face painting, live reptiles, narrated tours of the Calusa Heritage Trail, atlatl throwing, and loaned exhibits on zooarchaeology, recent excavations and Seminole collections. For more information see http://www.flmnh.ufl.edu/rrc/.

March 15, 7 p.m.: FPAN Speaker Series – Jacqueline Brown, Charlotte Co. Historical Center "Charlotte County in the Civil War" Charlotte County Historical Center, Port Charlotte.

March 21, 7 p.m.: SWFAS Meeting and Speaker Lee Bloch on Unsettling Silence: Community Archaeology at the Lake Jackson Site. Florida Gulf Coast University (campus location to be announced).

March 22, 7:30 p.m.: FPAN Speaker Series – Bill Mack, FGCU Adjunct Professor "Between Two Fires: The Civil War in SW FL" Clewiston Museum.

March 29, 7 p.m.: FPAN Speaker Series – Duane and Holly Shaffer "The Battle of Fort Myers and the Cow Cavalry" Collier County Museum, Naples.

April 20 SWFAS Speaker Nathan Lawres

On April 20, Nathan Lawres will speak on Muskoghean Warfare in the Contact Era. Throughout the sixteenth and nineteenth centuries, Europeans and Americans employed tactics and instituted laws that sought to subjugate Native Americans and appropriate their lands. The Muskoghean peoples of the southeastern United States resisted this process by employing a distinct set of behaviors during combat. Nathan speaks on how these behaviors provided them with substantial success against both Europeans and Americans.

Nathan Lawres received his B.A. in Anthropology (Honors) from the University of Central Florida and is currently an M.A. candidate in the Department of Anthropology at UCF. Mr. Lawres is an Archaeological Field Assistant for the Seminole Tribe of Florida's Tribal Archaeology Section. Research interests include: the origins of warfare; indigenous warfare patterns; Woodland and Mississippian archaeology; and Native cultures of the Southeast.

7 PM Refreshments, 7:30 PM Speaker. Bonita Springs Community Hall (27381 Old US 41 in Bonita Springs).

December Field Trip

SWFAS Toured Marco Island Historical Museum and Otter Mound

On December 10, 2011 SWFAS held our annual holiday field trip and picnic with a tour of the Marco Island Historical Museum. About 40 SWFAS members and friends attended the informative "backstage" tour from Museum president Alan Sandlin and also got a first look at the museum's newest exhibit, "Against All Odds: The Art of The Highwaymen". After our tour of the museum some of the group continued on to Otter Mound Preserve for a look around this unique site and then enjoyed lunch and conversation on the water at The Little Bar in Goodland. Thank you to those who attended for making our December field trip such a success!



SWFAS Members at Otter Mound on Marco Island December 10, 2011. *Photo Courtesy of Dr. Annette Snapp, SWFAS President.*

Randell Research Center Volunteer Opportunity

Randell Research Center continues to offer the opportunity for volunteers to assist in lab archaeology at Pineland.

WHEN: Wednesdays from 9 a.m. – after lunch

WHAT: Sifting and Sorting of Archaeological materials from the Pineland Site

WHO: Novices are welcome. The work is valuable experience for anyone interested in archaeology and

valuable to the Randell Research Center as they gain additional information about the habitation of

the Pineland archaeological complex.

WHERE: Ruby Gill House at Pineland (Randell Research Center)

CONTACT: Cindy Bear (Coordinator, Programs and Services) at 239-283-2157 or 239-283-6168 (office)

to sign up in advance.

(continued from page 2)

Current scuba-oriented underwater archaeology facilities (such as Little Salt Spring or Mote Marine Laboratory) can fairly easily build and test such a frame. Cost might be only a few thousand dollars. (Hobbyists talk about a few hundred dollars.)

Once a working archaeology frame is proven in an established facility such as Little Salt Spring, it can be dropped from a boat or barge anchored over likely sites in the Gulf of Mexico. Since all underwater archaeology sites are no deeper than the lowest ocean surface during

extreme ice ages, the archaeology frame probably has no need to work more than 400 feet down with about 200 PSI pressure, and most sites are shallower. So there is no requirement to shoot for the 10,000 foot, 5,000 PSI capabilities that some hobbyists are trying to achieve. The main need is for collaboration between university anthropology departments and enthusiasts in engine school studying robotics. Several universities, including two in Florida have active robotics groups. This isn't some futuristic dream; the technology is available today.

What are we waiting for?

SWFAS Newsletter by E-Mail

You can get the SWFAS newsletter sent to you as a PDF via e-mail. Many SWFAS members have already made the switch, saving printing and postage costs. To sign up, contact Charlie Strader (cesxplor@aol.com) or let a board member know at the next meeting.

About SWFAS

The Directorate:
President - Annette Snapp
1st VP - Alison Elgart
2nd VP - Matthew Betz
Recording Secretary - Katie Betz
Treasurer - Charlie Strader
Membership Secretary - Charlie Strader

Trustees:

Paul Backhouse, Liz Clement, Tom Franchino, Maureen Mahoney, Jim Oswald, Theresa Schober, Melissa Timo Trustee Emeritus: John Beriault SWFAS Committees: Field - vacant Lab - Jack Thompson Hospitality - Katie Betz Newsletter - Katie Betz

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

Learn more about SWFAS at: www.explorationsinc.com/swfl-archaeology/index.html

Board meetings are usually held prior to the regular meeting on the third Wednesday of the month at the Bonita Springs Community Hall at 27381 Old U.S. 41 (by the banyan tree). All are welcome. Board meetings begin at 6:30 p.m. Regular meetings begin at 7:30 (refreshments served at 7).

February 2012 Newsletter

The Southwest Florida Archaeological Society P.O. Box 9965 Naples, FL 34101