



Vol. 24 No. 10

November 2008

November 19 Lecture by Margo Schwadron at FGCU *No SWFAS Meeting in Bonita Springs*

Shell Work Landscapes & Emergent Complexity in the Ten Thousand Islands

Archaeologist Margo Schwadron of the Southeastern Archaeological Center will be speaking at Florida Gulf Coast University on Wednesday, November 19



Margo Schwadron

at 7:30 p.m. on "Shell Work Landscapes and Emergent Complexity in the Ten Thousand Islands." The talk is co-sponsored by the Southwest Florida Archaeological Society (SWFAS) and the FGCU Anthropology Club.

She will be speaking at the Sugden Welcome Center at FGCU; it's in Building 18, which is near the campus entrance. The lecture is free.

Margo Schwadron has worked as an archaeologist with the Southeastern Archaeological Center in Tallahassee for the past 18 years. She is currently engaged in a National Historic Landmark study of shell work sites in the Ten Thousand Islands. This research recently earned National Geographic attention and funding.

The prehistoric coastal foragers of the Ten Thousand Islands engineered a complex landscape of shell work sites, ranging from small, architecturally simple sites to massive sites with complex, monumental architecture. How do changes in shell work sizes and features over time reflect the development of social complexity? What role did demographic changes, subsistence strategies, and corporate labor play in the construction of these features? Archaeological testing, GIS and data visualization are used to interpret spatially and temporally variable shell work landscapes, working towards an understanding of the regional settlement pattern and its underlying social structure.

FPAN Exec. Director & Mound House FPAN Candidates Speak on Nov. 17-18

The Mound House and Town of Fort Myers Beach are hosting two nights of public lectures by candidates for the position of Director of the Florida Public Archaeology Network SW Regional Center located at the Mound House. (See below for more info on FPAN at the Mound House.)

To encourage a diverse public audience, the talks will be held at accessible venues, with the FPAN Executive Director and one candidate speaking on Monday, November 17 at the Lakes Regional Library in Fort Myers and two candidates on Tuesday, November 18 at the Sanibel-Captiva Conservation Foundation on Sanibel.

There will be an informal reception at SCCF following

the Tuesday lectures. See below for directions.

Monday, November 17

Lakes Regional Library, 15290 Bass Road, Fort Myers

William Lees, Ph.D., & Theresa Schober, M.A. - 7 p.m.

The Mound House and the Florida Public Archaeology Network: A Partnership in Public Archaeology

The Florida Public Archaeology Network (FPAN) is a new direction for the protection and preservation of cultural resources and for involving the public in the study of our

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FPAN Lectures -- from page 1

collective past. Since 2004 FPAN has established seven regional centers around Florida that serve as places for learning, training, and study and as headquarters for public participation in archaeology and historic preservation. The newest FPAN center is located at the Mound House, an almost 3-acre archaeological site owned and operated by the Town of Fort Myers Beach. The property is comprised of a 15-foot high Calusa shell mound with the oldest remaining house on the island that is currently under restoration to its 1921 grandeur, and will house an archaeological and historical museum when completed. Exhibits on the grounds and within the mound will provide a glimpse of the nearly 2,000 years of continuous use of the property.

Dr. William Lees is the Executive Director of the Florida Public Archaeology Network, based from the Coordinating Center at University of West Florida in Pensacola. Theresa Schober is the Director of Cultural Resources for the Town of Fort Myers Beach.

Darrin Lowery, M.A. - 7:30 p.m.

The Value of Archaeological Survey: Selected Examples from the Chesapeake Bay Region and Coastal North Carolina

Darrin Lowery will summarize the value of archaeological survey and documentation of archaeological sites. Examples of survey projects will include the attempt to locate an archaeological site first recognized in 1607 by John Smith, the lost colony of Roanoke Island and general survey of archaeological sites of coastal areas threatened by shoreline erosion to illustrate how archaeological survey is used and how it is goal oriented.

Mr. Lowery received a master's degree from Temple University in Anthropology & Archaeology. He has documented over 1600 archaeological sites in Maryland, Virginia, and Delaware through systematic archaeological surveys and has excavated and tested numerous archaeological sites spanning the Middle Atlantic region's prehistory and history.

Tuesday, November 18

Sanibel Captiva Conservation Foundation Nature Center,
3333 Sanibel-Captiva Road, Sanibel Island

Amy Kowal, Ph.D., RPA - 7 p.m.

Pots and the Past: The Importance of Ceramics for Archaeological Interpretation of Human Behavior

Pottery is one of the most abundant and most important types of artifacts recovered from archaeological sites. Why do we find so many potsherds and what can they tell us about our past? How people made pottery and what it was used for reveals much about prehistoric and historic cultures, from what food was consumed and how it was prepared to

what were peoples' religious beliefs and artistic abilities. Archaeologists use pottery to interpret many aspects of our human past.

Amy Kowal is currently a visiting professor in Anthropology at Florida State University and an adjunct professor at Tallahassee Community College. Her recent research includes a comparison of ceramic assemblages of Charles Pinckney Historic Site with other plantation sites of the Charleston area of South Carolina. Dr. Kowal received doctorate and master's degrees in anthropology from Florida State University.

Sandra Forney, MA - 7:30 pm

Passport in Time: A U.S. Forest Service Volunteer Program

Established in 1991, Passport in Time, affectionately referred to as PIT, is an archaeology and historic preservation program of the U.S. Forest Service that emphasizes public outreach through volunteerism. Over the years volunteers have assisted throughout the U.S. in accomplishing a number of diverse projects and activities such as archaeological survey and excavation, artifact analysis and curation, archival research, oral history documentation, and historic building restoration. Ms. Forney will discuss the PIT program and share examples of past projects from the Eastern Region which encompasses 15 national forests from Maine south to West Virginia, west to Missouri and north to Minnesota.

Sandra Forney received a master's degree in Anthropology/ Archaeology from Florida State University. She recently returned to Florida after retiring from a 33 year career with the U.S. Forest Service where she served as Regional Heritage Program Leader for the Eastern Region in Milwaukee, WI.

FPAN at the Mound House

Several months ago, the Mound House announced its selection as the Southwest Florida Regional Center of the Florida Public Archaeology Network.

Established by the Florida legislature in 2004, the network strives to "stem the rapid deterioration of this state's buried past and to expand public interest in archaeology." Each of the network centers across the state is staffed with a public archaeologist and outreach coordinator whose primary role is to increase awareness of Florida's rich heritage by fostering visible public outreach programs and partnering with other educational organizations, assisting local governments in their efforts to preserve archaeological resources, and raising awareness of state programs by providing venues for regional training and assisting in the identification of sites eligible for listing on the National Register. The Southwest Regional Center will serve Charlotte, Glades, Lee, Hendry, and Collier Counties.

Directions:

Lakes Regional Library is at 15290 Bass Road (at the corner of Gladiolus Drive) in Fort Myers. From I-75, take

More on the December 13 SWFAS Picnic at Roberts Ranch

On Saturday, December 13, SWFAS will meet at 10 a.m. at the Roberts Ranch in Immokalee. Lee Mitchell will give a short talk and lead a tour, and then members will break to enjoy a picnic lunch (bring your own). There will be chairs.

There will be more info in upcoming issues of the newsletter.

Directions to the Roberts Ranch

From Immokalee Road

- Take Immokalee Road to the intersection of Main and State Road 29
- Turn left on Main Street

- Go one (1) mile north to the junction of Main and Roberts Avenue
- Turn right onto Roberts Avenue (at Popeye's Chicken)
- Entrance to museum is on the right

From CR 846

- Take CR 846 east to downtown Immokalee.
- Continue straight- through first traffic light (Main Street) along North 1st Street
- Take second left hand turn and continue along Roberts Avenue West for nine (9) blocks until you reach the parking area for the ranch on the left hand side of the road.

Wentz on Ancient Pond Cemeteries in October

By James Oswald

The Southwest Florida Archaeological Society speaker for the October monthly meeting was Rachel Wentz, PhD, RPA. Dr Wentz is the director for the East Central Region of the Florida Public Archaeology Network. "Beneath The Surface: Exploring Florida's Ancient Pond Cemeteries" was the title of Dr. Wentz' talk.

Dr. Wentz has studied Florida's mortuary ponds and has spent the last seven years studying the skeletal remains from the Windover site, the largest and most interesting in terms of number of burials and preservation of artifacts. The Windover site dates back 7000 years and was in use for 1000 years. Many other sites have been excavated haphazardly and subjected to novice collecting, resulting in loss of context of the items recovered. The controlled excavation at Windover required draining of the pond. Only 50% of the pond was

excavated. 168 individuals were recovered and radiocarbon dated.

The preservation of the remains is extremely good. Some were wrapped in textiles. Sufficiently preserved human brain tissue allowed DNA analysis which showed a link to Asian populations. Researchers were able to identify some gut content and determine its plant I makeup.

Grave goods recovered included a few stone tools (probably indicating trade with people farther north), bone tools, wood and textiles.

The Windover pond was in use for possibly up to 1000 years but DNA shows a more or less constant population rather than itinerant groups.

Thank you, Dr. Wentz, for an interesting and educational talk.

FPAN Lectures -- from left

the Daniels Parkway exit and head west. Turn left at the light at the intersection of Ben C. Pratt Six Mile Cypress and follow that to U.S. 41. Continue straight across 41. The road changes to Gladiolus Drive. Go through two traffic lights, Old Gladiolus/Lakes Park and Maida Lane. At the third light, stay straight and cross Summerlin Road (do NOT take the "bridge" that exits to the left and heads to the beaches).

At Winkler (the first light) the road narrows. from three lanes to one lane (the lefthand lane). Go through a second light (Parker Lakes is on the right). At the third light, Bass Road, turn right. The library is on the corner.

For the Sanibel-Captiva Conservation Foundation, follow the above directions until you reach the intersection of Gladiolus and Summerlin. Take the left exit at Summerlin to head to the beaches. Follow Summerlin to the Sanibel Causeway (\$6 toll). Once over the Causeway, you'll come to a 4-way stop at Periwinkle Way. Turn right onto Periwinkle and follow it til it ends at a 4-way stop (there will a shopping center across the street), where Periwinkle "T's" at Tarpon

Bay Road.

Turn right onto Tarpon Bay. Follow to a 4-way stop at Sanibel-Captiva Road. Turn left. You'll pass the Bailey-Matthews Shell Museum on the left; SCCF is on the left near Mile Marker 1, about a 1/4 mile beyond the Shell Museum. You'll see a big blue-and-white sign. If you walk up the ramp (there is a kiosk at the base) you'll arrive at the entrance to the SCCF Nature Center.

If you need directions, call Karen Nelson at 472-2329 or (cell) 292-7858. For program questions, call Theresa Schober at 765-0865.

Upcoming SWFAS Programs

- December 13th – Annual Picnic at Roberts Ranch in Immokalee.
(more info on the Roberts Ranch picnic above)
- January 21st, 2009 – Phyllis Kolianos, "Early Maritime Travel and Coastal Habitation on Old Tampa Bay"
- February 18th – Franklin P. Adams
- March 21st – Trail Speaker Event at the Collier County Museum

Geology Rules: Sea Level

By Jack Harvey

Sea level is a matter of law, used to calculate the taxable area of beachfront property and legal insurance rates. It's often considered to be the zero point for any elevation measurement. California's Death Valley is "below sea level" so its elevations are negative numbers.

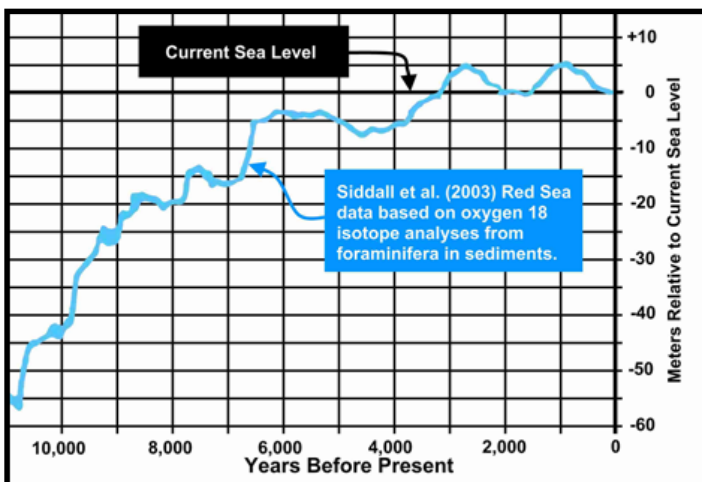
But for a legal standard, sea level is amazingly variable. First of all, it has fairly random waves, usually at least a foot and often as much as 30 feet or more. Second, the moon causes very regular tides about twice a day, as does the sun. Solar and lunar tides occur at slightly different times and sometimes they stack up and sometimes they cancel each other somewhat causing tide height to vary. Tidal variations are also very much influenced by the contours of the seashore and the bottom. And let's just forget about storm surges and tsunamis.

But there's one thing about our waters that is nicely constant: the total amount. True, a little water leaks away into space but a little is still boiling out of the primeval rock in the mantle beneath the planet crust. Every drop that evaporates from the sea surface turns into precipitation that eventually runs back into the sea. So our total water remains very constant.

Waves and tides can be averaged out by clever gauge tricks and diligent recording but our aboriginals weren't good record keepers. Yet it might help a great deal in our interpretation of archaeological evidence if we knew where the shore was when that evidence was deposited.

Archaeological site stratigraphy might be clarified considerably if we knew that it had been under the sea surface since artifacts were left there. Sea level was much lower before humans arrived in South Florida, but has it been higher than today's level since? Have older sites near the present shore been under water?

Our aboriginals left no records but that shouldn't matter too much since the oceans are all connected. If a glacier melts and raises sea level an inch, this happens all over the world.



Holocene Sea Levels? Mark Siddall published this new sea level data in 2003. Note the peaks about 1100 A.D. and 700 B.C. that are above our current sea level.



Florida Coastline with 5 Meter Sea Level Rise. This is approximately where the South Florida Coastline would have been if Siddall's data is correct.

So we simply have to see what the ancient Greeks recorded for Athens Harbor 3,000 years ago, right? Surely the Romans who engineered superb aqueducts kept sea level records?

Wrong, the earliest known sea level records started in 1682. Holland's growing population and shipping industry had a vital interest in even tiny sea level changes over their lowland country. So thanks to the Dutch, for the last few centuries, we know what the sea level has been to about an inch, maybe. That's not much help, however, if we need the sea level at Pine Island three thousand years ago.

Geologists have been puzzling this problem for a long time and there is extensive literature. There are several past sea level indicators that can sometimes be seen. One is preserved ancient coral. Certain species grow only in a narrow range of depth beneath the sea surface. If a reef of the species is then found inland, above the current sea level, it shows that at one time, the sea was high enough to allow the coral to grow there. Carbon dating the coral (or shell with the coral) can then show when the sea level was at this higher level.

There are some sedimentation patterns that are formed only on beaches at high tide levels. If a storm buries these with a sudden layer of sand, they may be preserved for millennia and if carefully identified, show where the sea level was before burial occurred. Again, carbon dating of shells buried with the sediment shows when this sea level occurred.

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LSS Receives National Geographic Research Grant

By Steve Koski

July 2008 was an exciting month at Little Salt Spring! The University of Miami/Rosenstiel School of Atmospheric Science recently received a grant from the National Geographic Society, Committee for Research and Exploration. Dr. John Gifford, Director of Research at Little Salt Spring wrote the grant entitled "Underwater excavation on the 27-meter ledge, Little Salt Spring, Florida." The fieldwork was conducted from July 7 to July 30, 2008 and undertaken to continue work on the 27 m ledge where original researcher, Carl Clausen conducted excavations in the mid- to- late 1970s.

While numerous artifacts dating to the late Paleoindian period have been recovered in the basin of the spring, only one artifact representing the early Paleoindian period c. 12,000 RCY BP has been recovered, the wood stake and associated tortoise. Over the years, the find has been the subject of controversy over its association, dates of the tortoise and stake, whether it was carbonized, and some have questioned the artifact itself. The current research on the ledge will help resolve the controversy of early Paleo visitation at Little Salt Spring.

The last three days of the project, National Geographic documentary producer Dave Porfiri and film crew were on site to film the progress and are planning a short

documentary to air on the National Geographic channel. A longer documentary may result from as research continues and the analysis of data unfolds.

LSS Exhibit at Charlotte County History Center Closes Nov. 15

The Charlotte County History Center of Charlotte Harbor is hosting "Dive into the Past: the Archaeology of Little Salt Spring through November 15.

Brought to you by the Sarasota County History Center, Charlotte County History Center and the University of Miami, the exhibit provides and tantalizing look at the region dating back to the first Floridian's 6,000 to 12,000 years ago.

Guest curator Steve Koski and Don Dubrul, CCHC exhibit designer set up the exhibit. The exhibit consist of seven educational posters on archaeology, underwater archaeology, Little Salt Spring, the Environment surrounding Little Salt Spring, the Paleoindian and Archaic components, and the Little Salt Spring slough, which served as a cemetery site in the Middle Archaic 6,000 to 7,000 year ago. The exhibit also features a variety of stone, bone, shell artifacts recovered over the years and a 10,500 year old wooden stake, one of several identified driven into the lower slope of the 40-foot basin.

For more information, call the CHHC at 941/629-7278.

Upcoming Programs of Interest

- **Old Florida Festival in Collier County** - For eighteen years, the Friends of the Collier County Museum have transported visitors back in time to 1565, 1776, 1898 as well as a dozen destinations in Southwest Florida's exciting past! The occasion is called the Old Florida Festival and this Fall it will be held on the grounds of the Collier County Museum at the Courthouse – US41 and Airport Rd – on the weekend of *November 15 and 16*. Local history literally comes alive as costumed interpreters, historical re-enactors, craftworkers, storytellers, period vendors and folk musicians gather to accurately recreate 10,000 years of life on the Florida frontier. It is funded entirely through the Museum Friends with a small admission fee for those attending. (Adults \$5, students \$2 with children under 8 free.) Parking is free and under cover in the parking garage located just across the street. The Festival opens each day at 10 a.m. and closes at 5 p.m. Food as well as souvenirs are available. A growing number of period vendors or sutlers attend, offering historic reproductions, handmade crafts and gift items along with southern-style barbeque, Seminole frybread and old fashioned kettle corn.
- **Randell Research Center** on Pine Island is having a **book signing on Nov 20th, from 6-8PM for Tom Joseph, author of a new historical fiction novel**

about the Calusa. The book has received great reviews (including one from former Assistant Director of Randell, Dr. John Worth). Mr Joseph will present a lecture and lead discussion. Refreshments will be provided. For further information contact: Michael Wylde at wyldepineisland@earthlink.net

- **Trail of Florida's Indian Heritage Annual Meeting - Friday, Nov. 21** at the Museum of Florida Art and Culture (MOFAC) on the campus of the South Florida Community College, Avon Park. Everyone interested in promoting visitation to and protection of both ancient and contemporary Native American heritage sites in Florida is cordially welcomed! Schedule includes 9 a.m. and 3 p.m. tours of the Museum of Florida Art and Culture (MOFAC), grant-writing and marketing workshops. If you want lunch, call Anne Reynolds (863/465-3637) by Nov. 14. For info: www.trailoffloridasindianheritage.org.
- February 6 - 8, 2009 -- **2nd Annual Stone Age and Primitive Arts Festival** at Ochlockonee River State Park in Sopchoppy. There will be demonstrations of flint knapping, projectile point fashioning, deer hide brain tanning, bone, wood and antler carving, plus you can observe bow-and-arrow construction, basket weaving and early pottery. Contact Linda Trice, P.S.S., 850/962-2771 or Linda.trice@dep.state.fl.us. Admission \$3 per vehicle.

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Still another past sea level indicator is wave erosion marks left on rock walls in the sea.

These three methods (and others) are all pretty inaccurate and depend on excellent conditions for preservation so we can find usable examples today. This means few good ancient sea level measurements exist. Fortunately, a clear measurement anywhere in the world helps define sea level worldwide. We don't have to find fossil coral in La Belle to know when the sea level was at that South Florida elevation. Coral reefs found at similar elevations in Iberia or Australia work as well.

A complication is that in some regions the land itself may raise or fall due to tectonic movement. Luckily, South Florida, being "passive margin" land, is relatively free of this confusion.

The Florida Geological Survey sponsored a 2004 investigation by James H. Balsillie and Joseph F. Donoghue titled "High Resolution Sea-Level History for the Gulf of Mexico since the Last Glacial Maximum", 78 pages. They review and summarize the extensive previous work as well

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as discuss its accuracy and possible alternatives.

One dataset they valued was developed by Dr. Mark Siddall, University of Bristol in 2003. He and his collaborators, Rohling and Smeed, reconstructed sea levels with high accuracy using foraminifera in Red Sea sediments. Their data is shown in the graph with this column. Note the two shockers in the upper right corner.

Siddall's 2003 data shows two periods, just 900 and 2,700 years ago, when sea level was apparently 5 meters (16 feet) above the current level. If true, the impact on South Florida coastlines would be immense. The accompanying map shows about where this shoreline was relative to today's major roads and cities.

The Tequesta would have had a small island a few miles northwest of their Miami Circle and much of the Calusa coastal lands, as we know them, would have been under water at these times. South Florida archaeology may help resolve the geological puzzle that Siddall's data presents.

Geology is a mature science. We'll look at a young science impacting archaeology, next time in this space.

About SWFAS

The Directorate:
President - Theresa Schober
1st VP - Tom Franchino
2nd VP - James Oswald
Recording Secretary - Jo Ann Grey
Treasurer - Charlie Strader
Membership Secretary - Charlie Strader

Trustees:
Rebecca Austin, Jean Belknap, John Beriault, Liz Clement, Alison Elgart, Betsy McCarthy, Betsy Perdichizzi, Jack Thompson

SWFAS Committees:
Field - John Beriault
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Hospitality - Jeanne Sanders
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

Learn more about SWFAS at:
<http://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 p.m. Regular meetings begin at 7:30 (with coffee served at 7).

November 2008 Newsletter

The Southwest Florida Archaeological Society
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