



Vol. 26 No. 2

February 2010

## Feb. 17: Tribal Archaeology-Culture & Science in Florida's Interior

At the February 17 SWFAS meeting in Bonita Springs, Hope Hawkins from the Ah-Tah-Thi-Ki Museum will talk about the field work conducted last summer on the Big Cypress Reservation, looking for the site of Seminole War Fort Shackelford. The meeting begins at 7:30; coffee and snacks are available at 7.

The Tribal Historic Preservation Office (often referred to by the acronym THPO) of the Seminole Tribe of Florida was formally created in late 2006 through agreement with the National Park Service and is responsible for the management of all the cultural resources located on the tribe's reservation lands. Situated on the Big Cypress Reservation at the edge of the Everglades the THPO has emerged rapidly as a regional center for research in South Florida. Employing a professional staff of more than twenty five cultural resources specialists (including archaeologists, cultural advisors, GIS specialists, and a architectural historian) the office completed more than 400 separate archaeological investigations during 2009. The relative youngness of the office has allowed the concept of "technological leapfrogging" to be usefully applied and has arguably resulted in cutting edge science being conducted in the swampy and challenging field conditions of Florida's interior. Several new research initiatives, including the Seminole Site File and the



*Archaeologist Paul Backhouse and two students at the Fort Shackelford field school.*

recent investigations at Fort Shackelford, are reported and the preliminary results discussed.

Hope B. Hawkins was one of two crew chiefs at the Fort Shackelford field school in 2009. She has a B.A. in Anthropology from Western Kentucky University and has worked as an archaeological field technician in Ohio, Illinois, Indiana, Kentucky as well as Florida.

## Coming Up at SWFAS

### *March*

*Irish Settlement and Identity in Nineteenth Century Texas*  
-- The March 17 SWFAS meeting will feature a presentation on Irish Settlement and Identity in Nineteenth Century Texas by Julie Richko Labate, M.A. R.P.A. Labate focuses on the circa-1830 migration of Catholic families from Ireland to the then-Mexican province of Texas. Many of the settlers shifted allegiance to the short-lived Texas Republic and then to America and many died at the Alamo. Julie is a Ph.D. candidate with University College Dublin in Dublin, Ireland. More info in upcoming SWFAS newsletters

*Archaeology Day* -- On March 20, SWFAS will participate in Archaeology Day at the Collier County Museum.. FPAN's Steve Archer is helping to coordinate the program. The lab will be open and have displays and some show-and-tell material, and there will be speakers. Check the March newsletter for more details!

*April* -- *Work at Randell Research Center* -- Michael Wylde from Pineland's Randell Research Center will be the speaker at SWFAS' April meeting.

*May* -- *FAS Meeting in downtown Fort Myers* -- Please plan to attend this year's event, hosted by SWFAS.

# Digital Archaeology: Seeing Shapes

By Jack Harvey

We've been talking about "Seeing the Unseeable" and "Seeing Underground". "Seeing Shapes" seems easy, but is it? A South Florida archaeologist picks up a whelk shell and looks for signs it was used as a tool. Wear marks, hafting holes and notches are found by rotating the shell to see it from varying angles. The archeologist doesn't just look at the whelk on the ground or a tray; *he picks it up* so he can turn it and see all sides.

A multi-directional view is so important that many predators have brains that can fuse the images from two eyes to show depth. A popular 19<sup>th</sup> century parlor device was the *stereoscope*. Two photographs were taken of a scene from slightly different angles. The stereoscope displays these so that the left eye sees only the left image while the right eye sees only the right one. Our brain fuses the two to produce an illusion of depth. This illusion can be quite striking and often useful, but viewing with the stereoscope, you can't turn an object around to see the back of it. You're strictly limited to the viewpoint of the original stereo photo.

*Unless you use a computer.*

If the full shape, all sides, of the object is stored in a computer database, software can generate a stereo view of the object as seen from *any* direction. You can then rotate the object image and examine all sides as though you were holding the real object in your hand.

If an archaeologist has such a shape database of a puzzling artifact, he can email it to a colleague in, say, Mexico to get her opinion. If her computer is equipped with compatible software, she can examine the artifact almost as well as if she picks it up and holds it in her hand.

Is this possible? All the pieces needed exist today. One of the primary tools needed has been pioneered for archaeology by Lori Collins and Travis Doering at the University of South Florida in Tampa. Their "Alliance for Integrated Spatial Technologies" (AIST) has used ultra-precise laser distance measuring equipment (and others) to map important archaeological objects, such as the Miami Circle, so that their 3D shapes are stored in a database and can be examined at will. To learn much more about this important work, see their terrific Web site at:

<http://aist.cas.usf.edu/>

Displaying rotatable digital images of shapes takes much more than a parlor stereoscope. The Collins and Doering AIST site links to:

[http://research.famsi.org/3D\\_imaging/index.php](http://research.famsi.org/3D_imaging/index.php)

Visit this to see an animated example of how an archaeological object can be rotated, and the lighting shifted to show fine detail and shapes on all sides, top and bottom. Software to try this

on YOUR (robust) computer is available from the commercial software firm Geomagic, Inc. The FAMSI site above includes a link to the free demo software at Geomagic.com.

The shape you will see on your computer is NOT a photograph of the object. It is an image generated from precise laser measurements of the object's shape. It appears to be a solid object, having surface indentations, curvature and projections for the facial features (eyes, nose, mouth, etc.) with shadows.

But those shadows are software generated, not real. By adjusting the program, you can move the apparent light source causing the shadows to shift, just as an archaeologist might rotate a real object in a bright light to best see its shape aided by moving shadows. You can't do that with a photograph. This is not an animated movie, either, where the changes are pre-recorded. You choose the changes you want.

The database file describing the object's shape is far larger than the usual .JPG photograph – too large for most email systems. So a casual email to the Mexican colleague won't happen today. The needed digital bandwidth is coming though.

The future for Seeing Shapes is bright. A significant market is developing for "eBooks", computer files offered over the Web for millions of popular texts. As digital reader devices such as *Kindle* (Amazon) and *Nook* (Barnes & Noble) improve, we will see full color, animation and stereo images and eventually rotatable shapes like Geomagic offers today. An eBook guide to Giza will allow you to stroll leisurely around the Great Sphinx as the sun rises over the Nile.

The *Florida Anthropologist* will be published this way, allowing each of us to "pick up" and examine notable artifacts in its academic reports. Yes, there will be much wailing about abandoning traditional Gutenberg-era printing, but since a major part of the FAS budget supports this obsolete machinery, simple economics will dictate modernization. Society newsletters are leading the way with instant Internet distribution cutting costs while adding color. How did you get your newsletter?



*See 3D image of the Whelk hammer by crossing your eyes slightly to merge the two photos until a clear stereo view is seen between them. Vary the page distance for eye comfort.*

## Honoring One of SWFAS's Founders, John Beriault

John Beriault along with a few friends founded the SWFAS in September of 1980. The organization was a result of John gathering concerned people together to conduct salvage archaeology (as he did many times throughout the years) at the Bay West site. As bones were dredged up from a muck pond, John and others scrambled to save what they could from the archaic period mortuary site.

Over the next decades, John stayed a driving force of the SWFAS. He served as President for many terms and was editor of the Society's newsletter for many more. Serving as field director, John was instrumental in the Society's many excavations, usually conducted as salvage operations due to the area's rapid development growth. As a result of his reputation, John was able to secure and help create the Craighead Laboratory at the Collier County Museum.

Seeking neither fame nor fortune from his efforts, John has published a wealth of information on Southwest Florida archaeology. His field experience



and knowledge in Southwest Florida archaeology is unmatched. Perhaps his greatest accomplishment has been in the arena of sharing of his knowledge with

others. And for that willingness and ability, many of us are thankful.

### SWFAS Newsletter by E-Mail

If you're online, you can get the SWFAS newsletter (with color photos!) sent to you as a PDF via e-mail. Many SWFAS members have already made the switch -- it saves quite a bit on printing and postage costs. If you would like to get the newsletter by e-mail, please note it on the sign-in sheet or let Charlie Strader, Theresa Schober or Karen Nelson know at the next meeting.

### Ann Cordell at January SWFAS Meeting

*By Jim Oswald*

At our January meeting, SWFAS was privileged to have Ann Cordell of the Florida Museum of Natural History of the University of Florida as our speaker. Ann is a staff archeologist at the museum and has twenty years of experience in conducting pottery analyses of prehistoric and historic aboriginal pottery from Florida, the Southeastern United States and the Caribbean.

Ann's talk was titled "Paste Variability and Clay Resource Utilization in 16<sup>th</sup> Century Aboriginal Pottery from the Fountain of Youth Park site, St. Augustine, Florida." Impetus and direction for the study were provided by Dr. Kathleen

Deagan, Florida Museum of Natural History.

The specific goals of the study were to document variability in terms of the relative number and kinds of clay resources and explore the origins of the paste categories.

Eighty-nine sherds and nine clay samples were analyzed. The samples were analyzed by standard microscopy, experimental refiring and petrographic analyses of sherds that were thin-sectioned.

The study documented variability in pottery an use during the 16<sup>th</sup> century at Fountain of Youth, but generated other question which must be resolve through further research efforts. Our thanks to Ann Cordell for an informative presentation.

**REGISTRATION FORM**  
**2010 Florida Anthropological Society Meeting**  
**May 7-8, 2010**  
**Historic Fort Myers, Florida**

Name (please type or print): \_\_\_\_\_

Institution: \_\_\_\_\_

Address: \_\_\_\_\_

Work phone: \_\_\_\_\_ Home or cell phone: \_\_\_\_\_

E-mail address: \_\_\_\_\_

FAS member? Yes \_\_\_\_\_ No \_\_\_\_\_ Chapter Affiliation: \_\_\_\_\_

1. Full Registration (until April 7, 2010\*) \_\_\_\_\_ \$50  
 Student registration (until April 7, 2010\*) \_\_\_\_\_ \$30

2. FAS Reception at Mound House  
 Friday Evening, May 7, 2010, 6:30p.m.-8:30p.m. \_\_\_\_\_ Free  
 FAC Stewards of Heritage Awards Presentation  
 Bus departs from Harborside, Downtown Fort Myers

3. FAS Banquet in Historic Fort Myers  
 Saturday evening, May 8, 2010  
 Keynote speaker: Dr. Jerald T. Milanich \_\_\_\_\_ \$50

4. Workshop on Flatbed scanner use for artifact imagery, led by Louis Tesar  
 Friday Afternoon, 1:30p.m. -6:00p.m. \_\_\_\_\_ Free  
 Seven Seas, Southwest Regional FPAN Center, Fort Myers Beach

5. Calusa Heritage Trail, Randell Research Center at Pineland  
 Sunday Morning, May 10, 9:00-Noon  
 Bus Departs from Harborside, Downtown Fort Myers \_\_\_\_\_ \$15

6. Ah-Tah-Thi-Ki Museum, Big Cypress Seminole Reservation  
 Sunday, May 10, 9:00a.m.-3:00 p.m.  
 Bus Departs from Harborside, Downtown Fort Myers \_\_\_\_\_ \$20  
 (includes box lunch)

Registration and payment due by April 7, 2010

7. Donations to FAS 2010 Annual Meeting are most welcome. Thank you! \$ \_\_\_\_\_

8. Total Amount Enclosed \$ \_\_\_\_\_

Mail form with check payable to SWFAS to:

Southwest Florida Archaeological Society

Attn: FAS 2010 Conference

P.O. Box 9965, Naples, FL 34101

E-mail questions to: [thesec@fortmyersbeachfl.gov](mailto:thesec@fortmyersbeachfl.gov)

\* For on-site registration, \$5 will be added to the conference registration fee.

**NOTE: You can also register on-line at: <http://www.fasweb.org/meeting.htm>**



## 2010 FAS Annual Meeting To Be Hosted by SWFAS

The Southwest Florida Archaeological Society (SWFAS) is excited to host the 62nd annual FAS meeting on May 7-9, 2010 at the Harborside Event Center in Fort Myers. Accommodations for FAS 2010 will be at the new Hotel Indigo, just a block from the Harborside Event Center and a short walk to the Caloosahatchee River. The Hotel Indigo is a 67-room boutique hotel that opened in 2009, with a bar, restaurant and rooftop pool and fitness center located at 1520 Broadway, Fort Myers, FL 33901. Reservations should be made directly with the hotel at 877-270-1389 or [www.hotelindigo.com/fortmyersfl](http://www.hotelindigo.com/fortmyersfl). Special conference room rates for FAS attendees start at \$99 a night for Thursday and Friday and \$89 on Saturday, plus applicable taxes. Street parking is available at no cost or \$14 per night in the parking garage. Please mention the Florida Anthropological Society room block when calling for reservations. Room rates are held through April 7, 2010.

Friday, May 7: Meetings for FAS, FAC and FPAN boards, committees and membership are scheduled for Friday morning and afternoon in Harborside Event Center meeting rooms. On Friday afternoon, Louis Tesar of the Bureau of Archaeological Research will present a workshop on how to prepare high quality digital images of artifacts for publications, posters, and presentations using a flatbed scanner. The workshop will be held at the historic Seven Seas building at Newton Park in Fort Myers Beach, the new home of the Southwest Regional Center of the Florida Public Archaeology Network. The Friday evening reception will be at the Mound House on Fort Myers Beach with an opportunity to view the newly completed walk-

*If you would like to volunteer to help with FAS 2010, we need you! Please call (239-784-3014) or e-mail (katiesbetz@gmail.com) Katie Betz and let her know.*

in shell mound exhibit.

Saturday, May 8: Papers and posters will be presented morning and afternoon at Harborside Event Center. The deadline for abstracts and poster proposals is February 12, 2010. Vendors with books and other wares will be available at the event center. Lunch is on your own on Saturday and many small restaurants are nearby, or pick up a sandwich and stroll by the river. The FAS Annual Business Meeting and FAS New Board Meeting will follow the paper sessions on Saturday. The Saturday night banquet will feature speaker Dr. Jerald T. Milanich, Curator Emeritus in Archaeology at the Florida Museum of Natural History. Please sign up for the banquet when you register by April 7, 2010. Field trips to sites including the Randell Research Center at Pineland and the Ah-Tah-Thi-Ki Seminole Museum are planned for Sunday, May 9.

Any questions or concerns? Contact: Theresa Schober at (239) 765-0865 or [theresa@fortmyersbeachfl.gov](mailto:theresa@fortmyersbeachfl.gov).

The registration form is enclosed within this newsletter. Please observe the deadlines and contact SWFAS at the above mailing and e-mail addresses with any questions concerning these deadlines and possible extensions of the printed dates.

### ***Florida Anthropological Society Student Paper Competition***

Undergraduate and graduate students currently enrolled in degree-granting university programs are encouraged to compete for a prize. The student must submit a paper of original research that contributes to our understanding of Florida's history or prehistory. Contestants must submit three (3) copies of their paper and make an oral presentation at the FAS meeting. The oral presentation must be drawn from the written paper. The written paper cannot exceed 2,500 words and must be typed and double-spaced.

Postmark deadline for student papers is March 15, 2010.

Student papers and oral presentations will be judged on writing quality, overall presentation, quality of arguments and supporting data, and contribution to our understanding of Florida's past. Prizes will be awarded at the awards ceremony during the Saturday evening banquet.

A three-person committee will judge the papers using the following criteria:

#### ***I Written Presentation***

- Organization of paper: Must be clearly written in a coherent, logical and organized format
- Development of ideas/thoroughness of research: Must demonstrate substantive knowledge of topic
- Significance of research / contribution to the field

#### ***II Oral Presentation***

- Organization of presentation: Must present ideas in an organized and coherent format
- Communication skills: Must articulate and express ideas clearly and intelligibly
- Appropriate and effective use of technology, if appropriate

All students entering the competition must complete and submit the meeting registration form by February 12, 2010 accompanied by a check for the \$30 registration fee payable to SWFAS.

## SWFAS 2010 Officers & Trustees

The following slate of officers and trustees was approved at the January 2010 meeting:

### OFFICERS:

President: Annette Snapp  
 1st VP: Tom Franchino  
 2nd VP: James Oswald  
 Recording Secretary: Kathryn Betz  
 Treasurer: Charlie Strader  
 Mbr. Sec: Charlie Strader  
 (Newsletter Editor, not a Board position: Karen Nelson)

- Matthew Betz

Second year of 3 year term:

- Jack Thompson  
 - Betsy Perdichizzi  
 - Liz Clement

Last year of 3 year term:

- Rebecca Austin  
 - Alison Elgart

### TRUSTEES:

First year of 3 year term:

- Theresa Schober  
 - Steve Archer

### About SWFAS

#### The Directorate:

President - Annette Snapp  
 1st VP - Tom Franchino  
 2nd VP - James Oswald  
 Recording Secretary - Kathryn Betz  
 Treasurer - Charlie Strader  
 Membership Secretary - Charlie Strader

#### Trustees:

Steve Archer, Rebecca Austin, Matthew Betz,  
 Liz Clement, Alison Elgart, Betsy Perdichizzi,  
 Theresa Schober, Jack Thompson

#### SWFAS Committees:

Field - vacant  
 Lab - Jack Thompson  
 Hospitality - volunteer welcome!  
 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).

## February 2010 Newsletter

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