



Vol. 24 No. 11

December 2008

December 13 Field Trip to Roberts Ranch - Immokalee *No SWFAS Meeting in Bonita Springs*

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. Directions to the Roberts Ranch are on Page 2.

January 21: Kolianos on Early Tampa Bay Travel and Habitation

Phyllis E. Kolianos, Environmental Education Coordinator of the Weedon Island Preserve Cultural and Natural History Center will talk about "Early Maritime Travel and Coastal Habitation on Old Tampa Bay," at the January 21, 2009 SWFAS meeting in Bonita Springs at 7:30 p.m.

The vast natural resources of Old Tampa Bay, part of the largest open water estuary in Florida, enabled the development of "fairly large precolumbian populations." Recent research by Weedon Island Preserve Cultural and Natural History Center in partnership with other professionals and volunteers



Phyllis Kolianos



Continued on page 2 *1,100-year-old Gulf Coast open-water canoe*

Directions to the Roberts Ranch -- from page 1

Directions to the Roberts Ranch on Page 2.

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.

Upcoming Programs of Interest

Marco Island Historical Society

- January 13, 2009 -- DeVere Burt will speak to us about the history of Audubon Birds and show his beautiful artwork.
- March 31 -- Bill Marquardt of the Florida Museum of Natural History talks about collections and the preservation policies for a museum.

Talks are at 7 p.m. at Mackle Park, 1361 Andalusia Curt on Marco Island. Contact Betsy Perdichizzi for more info (betsyperd@naples.net).

- 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.

Upcoming SWFAS Programs

- 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

Digital Archaeology: The New Tools

By Jack Harvey

Computers have been seen at the pyramids. No, I don't mean the encrusted bronze mechanical gadgets the ancients used to forecast solstices and perhaps navigate their galleys. I mean modern electronic machines with Intel Inside and Windows on the monitor. They are one of the new digital tools available to archaeologists now and, I think, are destined to become as vital as the shovel and sifting screen.

Computers certainly won't replace shovels and sifting screens; they are new tools bringing new capabilities. The capabilities enhance and greatly speed some analysis tasks

Lee County Fossil Show -- Dec. 6

The Fossil Club of Lee County is having a Fossil Show on Saturday, December 6th 2008 at the Calusa Nature Center in Fort Myers.

Hours are 9am to 5pm. Admission is \$2.00 for adults and \$1.00 for children. The Show features a kids dig (keep what you find), silent auctions, numerous raffles of great specimens, games, and talks about fossil sharks and other extinct animals and shells of Florida. Also featured are numerous exhibits and several well known Florida vendors will be offering fossil shark teeth, animal and shell fossils, beads, bottles, authentic indian artifacts, unique fossil jewelry, books, diving information and fossil hunting trips. Additional information is available at the Club website www.fcolc.com or contact Bill Shaver, Club President at 239-834-0694.

Kolianos -- from page 1

has led to new information about early occupation sites and subsistence, and an exciting investigation into a discovery of the first open-water Gulf coast dugout canoe. This talk will focus first on the Shoreline Midden (8Pi11569) public archaeology restoration project and then reveal the unique find of the Shoreline Canoe (8Pi11624), a 1,100 year old, pine dugout canoe documented to be more than 40 feet long.

but many still require human eyes and brains. Pottery sherd identification is one example where computers are (currently) useless.

Every professional archaeologist I know has begun to use computers in some way, at least for email. Certainly a large fraction of the SWFAS non-professional membership is now comfortable with email and perhaps a majority receives this Newsletter that way. But this isn't just an archaeology trend; all sciences are doing the same. Some think there may be a major revolution coming in how science is done, triggered by just email. More about that later.

While computers can't tell the difference between a

Digital Archaeology -- from left

Sanibel Incised rimsherd and a Lightning Whelk hammer (yet), they're great for keeping track of those we identify. All the human has to do is write down what it is and pertinent data about it, such as weight, size, color or hafting as needed to summarize what has been found. This is data and it is keyed into the computer, along with other relevant information such as provenience and storage location.

When keyed into a computer, the archaeological data from identification of artifacts or material becomes a *database*. One dictionary defines a database as: "a comprehensive collection of related data organized for convenient access, generally in a computer". A critical word here is "organized", and note the word "generally", hinting that a computer isn't always required. In fact we all have a large database in our homes that we use frequently without a computer. It's the white pages phone directory.

The conventional directory of residential phones is "organized" by last name, meaning they are sorted alphabetically. When you get to the Smiths, they are all sorted by the first name and middle initial. So this database can be easily searched by eye if you know the person's name. Computer not required.

Ah, but suppose you only have a residential street address and want the name and phone of the family living there. The printed phone book by your telephone is nearly useless. However if that same phone number database is in a computer, the computer can find the name and phone number in an eye blink. Similarly, it can find all the people with first name Cleopatra.

In a Florida archaeological database, analogous *queries* (searches) might be made to find all hammers made of Fighting Conch. Although such queries are easily done, computer database query systems can answer much more general and comprehensive questions. We'll talk about this later.

The new digital tools aren't limited to computers with keyboard and mouse. The Global Positioning System (GPS) instantly solves a long standing puzzle of archaeological field work: Where am I? Simple pocket GPS units for about \$100 will locate you to within ten or twenty meters, sufficient for recording your find in the Florida Master Site File. Differential GPS equipment can be much more accurate. Even simple measurements such as weight have gone digital, speeding work and reducing error.

Email is just one of the tools the Internet has brought. The net has suddenly enabled instant access to vast literature libraries and unlike conventional libraries with their tediously maintained card catalogs, the on-line library of billions of documents is more easily searched using one of the great engines such as Yahoo!, Ask Jeeves or Google. The Florida Anthropological Society has recognized the importance



Computerized Calusa Hammer? Read the column to see what this is about.

of Internet access by putting much of its archeological literature on line. We'll go into these impacts in depth at a future time.

As commonplace as digital cameras have become, they are also important new tools for archaeology. Combined with image processing software in computers, they enable detailed photos of very long contiguous stratigraphy profiles in narrow excavation trenches. Since a digital camera works by converting an image to numbers, it can also measure the color of potsherds.

A related tool is the digital imaging microscope, eliminating the need to peer into an eyepiece, one person at a time. Instead, the live image is displayed on a computer monitor, or projected onto a large screen for a classroom of students.

The revolutionary new digital tools aren't entirely problem-free. One that's already bitten SWFAS is technology obsolescence. Early issues of this Newsletter were formatted for software that no longer works with newer computers. And for some, the digital file has been lost and only hardcopies exist. (Fortunately, we were able to find a conversion program that reformatted the early versions for access by current software systems, but where only hardcopy exists, tedious text scanning and proofreading will be required to restore those issues.)

Technical obsolescence of recording media (floppy disk, CD-ROM, DVD, Blu-Ray, etc.) is an industry-wide problem, however, and not unique to archeology. There are several

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industry efforts addressing the issue and goals of essentially unlimited lifespan for digital databases appear realistic.

Earlier, I suggested that computers may someday be able to identify decorated pottery sherds and that may happen. However, the hard question is when. Back in 1958, when it appeared that Soviet ICBM technology was well ahead of ours, we were desperately short of people to translate Russian engineering documents to English. Great efforts were made to get computers to do the job, to no avail. Now, 50 years later, language translation by computers is still very poor. Identifying people by images of their faces is coming along but still nowhere as good as our own eyes. But I think we can usefully describe what has to happen before a computer can tell Fort Drum Incised from Gordon Pass Incised.

Digital Archaeology is a very new topic in the broad field of computers, where I have more experience. I would like to hear what you think of this topic and ideas you may have about the possibilities. Send suggestions for topics to:

jakharve@earthlink.net



Every home has a database. You don't need a computer for your phone directory.

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

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Perdichizzi, Jack Thompson

SWFAS Committees:

Field - John Beriault

Lab - Jack Thompson

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).

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