October 19 Speaker Matthew Betz
Lost & Found: The Search for 19th Century Homestead Sites in Rookery Bay

Rookery Bay will host October's SWFAS meeting with archaeologist Matthew Betz speaking on "Lost and Found: The Search for 19th Century Homestead Sites in Rookery Bay National Estuarine Research Reserve". Betz's talk will focus on his extensive archival research of the early homesteading families of the Little Marco settlement, which included the areas of Rookery Bay and Henderson Creek in the late 19th century. He will highlight the steps taken to research the original settler families through deed and census records at the county, state and national level, and the use of GIS, historic aerial photos, and LiDAR technology to create a map of the reserve to identify areas to survey to find the homesteads. Betz will also share the results of several field surveys where remnants of the home sites were found to exist.

Matthew Betz is a project archaeologist for Southeastern Archaeological Research, Inc. He has worked for six years as a professional archaeologist in Florida on prehistoric and historic sites. Mr. Betz has a bachelor's degree in Classics from the University of Florida and a master's degree in Archaeology and Heritage from the University of Leicester, UK. His dissertation research was on prehistoric Glades-era ceramics in Southwest Florida. Betz is on the Board of SWFAS and the Collier County Historic Preservation Board.

October's meeting is at Rookery Bay, 300 Tower Road, Naples, Florida 34113. Refreshments at 7 p.m.; speaker at 7:30 p.m.

November 16 Speaker Michele Cotty Loger

Investigations into The Cape Haze Shell Mounds

At the November 16 SWFAS meeting Charlotte Harbor Preserve State Park Archaeologist Michele Cotty Loger will present the methods and some of preliminary findings of two DHR grant projects aimed at better understanding the Cape Haze shell mounds in southern Charlotte County. Loger will discuss profiling, mapping, and sampling methods, what is hoped to be discovered in the analysis; and what comes next in broadening our knowledge of the past people who inhabited sites in the Charlotte Harbor area.

Michele Cotty Loger has been an archaeologist for Charlotte Harbor Preserve State Park, working with George Luer, for three years now. Before moving to Florida, Michele spent the past dozen years as a shovelbum in the northeast, and participated in a number of field schools and an internship in the southwest. Despite the mosquitoes and the heat, the Charlotte Harbor area has quickly become Michele's favorite research focus and she intends on staying here and investigating the local archaeology long into the future.

November'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.

In Memory of Jean Belknap

by Liz Clement, Jack Harvey and Betsy McCarthy

Jean Belknap, long-active SWFAS member and Lab Rat, died on June 19, 2011. She is survived by her children Ruth, Harmon, Nora and Toni, sister Doris and brother Paul.   Husband Bob died in 2002.

Early SWFAS member Jean was always in the thick of archaeology digs and helped with much of the organization and outfitting of Craighead Laboratory at the Collier County Museum. With the late Art Lee, she dug the trench that brought a much-needed water line to the Lab.   Museum records show her as one of the most consistently active workers supporting Lab projects. Although her interest in archaeology and paleontology began long before SWFAS, under Art's guidance she became expert in Florida ceramics identification and managed the Lab's extensive collection of representative pottery sherds, shell and bones.

Teenager Jean traveled the Midwest with her family's business: carnival entertainment. This included magic and exotic reptile shows. She was the snake charmer, appearing on stage with snakes wrapped around her costume. This familiarity allowed her to quickly identify snake and other reptile bones in archaeological material. At Craighead Lab, she expanded her bone knowledge to all of the fish, reptile and mammal species commonly found in southwest Florida digs. She also became expert at pottery sherd identification. And she always shared her considerable knowledge with all of us.

Swimmer Jean became a scuba diver when the equipment was first introduced. She did much of her diving in the Gulf of Mexico and Florida Key reefs but also was attracted to our deep sinkholes and underwater caves. This led her to meet and dive with Bill Royal ("The Man Who Rode Sharks") in Warm Mineral Spring and Little Salt Spring near Northport long before the University of Miami got interested. Jean's scuba skill also resulted in work with "Shark Lady" Eugenie Clark at what is now called Mote Marine Laboratory.

Quiet, dependable Jean was always the first to arrive at Craighead Laboratory to make coffee and welcome the other Lab Rats. We recall one morning in 2002 when she was a little late. Apologizing, she explained that her husband Bob had died the evening before. With a sad smile, she then went about her usual work identifying the difficult items the less-experienced (and stunned) Rats needed help with. Her death is not only a difficult personal loss for each of us, but leaves a large gap in technical expertise at the Lab. It's hard to imagine Craighead Lab without Jean.

Honored Jean received awards from the Florida Anthropology Society, the Collier County Museum, and most recently, SWFAS for her many years of service to the Lab as well as her work toward the preservation of Florida archaeology.

Artist Jean made copper plate etchings and gaily decorated gourds, popular items at Collier County Arts and Crafts fairs.   Her art spilled over into her annual hand-painted Christmas cards, which we will sadly miss.

History Buffs Lose a Friend

by David Southall, Collier County Museum

Professional snake-charmer, magician, fossil hunter, and amateur archeologist Jean Belknap passed away Sunday, June 19th., 2011.

Born Jean Allen, in October 1930, to a circus family known as "Belfonte's Royal Marionettes" Jean described her childhood as "pretty exciting." Billed as "the youngest snake charmer in America" by the Beers & Barnes Circus, for whom her parents worked, Jean pursued a live-long interest in archeology and geology. Jean married Robert Belknap, a GM executive in 1950 who preceded her in death nine years ago.

An original member of the "Lab Rats" that operate the Craighead Archeology Lab at the Collier County Museum, Jean excelled in identifying Native American pottery and animal bones. A founding member of the Southwest Florida Archeology Society, Belknap was a leading force behind many of the club's most successful excavations and subsequent scientific reports.

Jean had many interests and talents. A member of the Naples Art Crafters for more than fifteen years, Jean was known to many as the "Gourd Lady" for the imaginative painted gourds she sold at art shows.

Over the past twenty five years Jean has been a reliable volunteer at the museum's lab patiently explaining their work to museum visitors and groups of school children. Her determination and sparkling enthusiasm was contagious. She had a positive influence on everyone she encountered. Her keen knowledge and infectious curiosity was an inspiration to all of us. She will be gravely missed!

Digital Archaeology: Moore's Law

By Jack Harvey

Since this series on Digital Archaeology started 30 months ago, remarkable growth has occurred in electronic gadgetry. This is because of Moore's Law, an observation by Gordon Moore in 1965. He didn't call it that and it's certainly not a law of nature; it's simply techno-babble for the fact that the number of components in digital chips doubles every two years, while chip size stays pretty much the same. And it has been doing that for 50 years.

To see the effect of this, think of a component on a digital chip as a horseless carriage rider. Let's start with the 1885 Benz Motorwagen that carried two archaeologists to a field site. If Moore's law governed its growth, the 1887 Benz would carry 4 archaeologists. By 1889, the archaeologist count would be 8, and in 1891, 16, etc. If you carry out that growth for 50 years the 1935 horseless carriage carries 67 million archaeologists on a field trip.

But wait, there's more. While able to carry more than 33 million times as many archaeologists, the 1935 horseless carriage (now a truck) weighs only about 10 times as much as the 1885 model. The fuel consumption per hour is up only about 10 times as much. Quite an engineering feat, right?

But wait, there's more! The 1885 horseless carriage zipped along at the reckless speed of 12 miles per hour. However every couple of years, its speed increased by 25 percent: 15, 19, 23, 29 mph, etc. So by 1935, the horseless truck cruised along at over 3,000 miles an hour carrying 67 million archaeologists while using only 10 times as much fuel. How's that for solving the energy crisis?

The reason for this absurdity is there's a fundamental difference between ordinary things like onions, rocks and archaeologists, and information or data. While onions, rocks and archaeologists have size and weight, information apparently doesn't. Although we talk about "big ideas", we can't measure their size or put them on scales except metaphorically. Data bits are like ghosts. What does a ghost weigh?

This is why such a remarkable and sustained growth in electronic data processing has been possible. In order to handle more data, you add more components to the computer chip by making them smaller. But this step makes the cost per component plummet and also makes the computer run faster because they are closer together. To do this just requires applying more science and engineering to the chip manufacturing process.

About every two years, this work doubles the number of components and makes the computer about 25 percent faster.

There's a caveat with this industrial miracle. It only works provided you make millions of identical computer chips. The first new model chip may cost $100 million dollars just to get the design right. The next 1000 might total another $700 million to equip the special new factory required to make the new model. But after this $800 million startup cost the chips are practically free. While these cheap chips are pouring out the door for a couple of years, the scientists and engineers are spending another $800 million dollars on the next generation chip design.

During those two years about 400 million digital computers are manufactured, world-wide. The huge investment needed to get manufacturing started is spread over the huge number turned out so that the development cost per computer is about $2. And this is why we will never have a computer specifically designed for archaeology use.

There's an App for That!®

The reason the world buys about 200 million computers a year is that there are many tens of thousands of different applications for them. Apple Computer trademarked "There's an App for That!" to help sell one of their computer models, the iPhone. "App" of course in techno-babble for application software, the incredibly detailed recipe that makes a computer do useful things.

For example, word-processing software has turned my computer into a very advanced typewriter that allows me to easily correct typos in this article without a bottle of "Wit-Out". It even corrects some of them automatically as I type. And the next instant, the exact same computer may be cropping, enlarging and printing digital camera photos using image-processing software and it does both jobs superbly. The computer doesn't have separate components dedicated to words or images; all it ever handles are numbers. The letter A may be the number 65 and pink may be three numbers: 244, 48 and 240 for red, green and blue brightness of a spot on the screen. The microscopic components on the chip don't care.

Archaeologists and anthropologists could benefit from the Moore's Law explosion now being wasted on tweets, texting caused traffic accidents, flash mobs, and other phenomena of the hand-held digital wonder-world toys.

In addition to iPhones and iPads, there are Xooms, Blackberrys and a variety of smartphones. To use these, we must learn how to exploit apps. Access, Excel and iWork are decades-old mind-numbing apps we currently use. But we need simple apps like the iPhone "Keyboard" that corrects, punctuates and completes raw text as we type.

How about an app that records provenience data for every bag of material at a dig site? The app issues a unique number you write on each bag and then prompts you to enter provenience and other necessary or optional info about the material in the bag, insuring it's complete and in the same format as all other bags from the dig. Since most hand-held digital devices now include a camera and GPS receiver, it also prompts you to photograph the bag with your scribbled number and appends it with the GPS location to your keyed data for the bag, texted to a database in your lab computer. Lab analysis (species, types, count, weight) is added later, all linked by the unique number the app issued.

What's your idea for an archaeology app?

History Boat Tour Offered

Captiva Cruises is offering *Discover Southwest Florida History* boat tour from Captiva to Pineland 10 a.m. Fridays starting Nov. 4th. Trip will include the history of fishing in Pine Island Sound and a tour of Randell Research Center. For reservations call 239-472-5300.

Mark Your Calender!

Nov. 16: SWFAS Meeting - Speaker Michele Cotty Loger
December: Holiday Picnic (stay tuned for details!)
Jan. 18: SWFAS Meeting - Speaker Karen Walker
Feb. 15: SWFAS Meeting - Speaker Jeff Ransom

About SWFAS

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).

October 2011 Newsletter

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