



**WMS/LSS ARCHAEOLOGICAL SOCIETY NEWSLETTER**

**Vol. 29, No. 5, November/December 2018**

*A 501(c)3 Corporation and Chapter of the Florida Anthropological Society*

The Warm Mineral Springs/Little Salt Spring Archaeological Society meets the second Tuesday of the month (except June, July and August) at 7:00 pm. General meetings are held at the North Port Community United Church, located at 3450 S. Biscayne Blvd. September dinner prior to the meeting will be held at the Old World Restaurant, 14415 Tamiami Trail, at 5:00 PM. Meetings are free and open to the public.

**NOTABLE GEOLOGIST TO DISCUSS FLORIDA SPRINGS AT THE NOVEMBER 13 MEETING**

Dr. Anthony Randazzo, Professor Emeritus of Geological Sciences at the University of Florida, will present a program titled "Geologic History and Significance of Warm Mineral Springs and Little Salt Spring" at the November 13 meeting of the WMS/LSS Archaeological Society.

Warm Mineral Springs and Little Salt Springs are well known for their warm, mineralized water and importance ecologically, archaeologically and recreationally. The intimate relationship between land and sea has sculpted these features, which represent unique geologic entities whose histories are recorded in their rocks and strata. This presentation attempts to "playback" nature's recording of the rock record of these springs to gain an appreciation for the significance of these precious sites. The sinkholes in which these springs formed developed some 12,000 years ago, but the rocks that provided the template for them date back some 50 million years. Countless changes in sea level, climate, depositional [Cont'd, Geology, p. 2]



*November Speaker Dr. Anthony Randazzo*

**PALM BEACH COUNTY ARCHAEOLOGIST TO SPEAK AT OUR DECEMBER 11 MEETING**

Palm Beach County Historic Preservation Officer and Archaeologist Christian Davenport will speak at our December 11 meeting of the WMS/LSSAS. He will give an overview of the prehistory of Palm Beach County in relationship to the sites he has worked on and recorded and the projects he has participated on in his position administrating the county's Historic Preservation Ordinance. His responsibilities include identifying, protecting, and promoting archaeological sites and historic structures throughout unincorporated Palm Beach County.

Similar to Sarasota County, Palm Beach County has a Historical Preservation Element in their Comprehensive Plan and includes an Archaeological and Historic Preservation Ordinance, Article 9, of the Unified Land Development Code.

Mr. Davenport's job allows him to conduct site visits to lands proposed for development with known archaeological sites and can require Cultural Assessment Surveys at those sites. [Cont'd]



*December Speaker Christian Davenport.*

He also oversees the Historic Resource Review Board and Historic Preservation Officer Internship Program that offers a variety of opportunities for students and the public to learn about the historic preservation process at the local government level, participate in field work, learn archaeological laboratory techniques, prepare historic designations, assist in the preparation of historic property-tax exemptions and text for historic markers, and much more.

Mr. Davenport has a BA in anthropology from Franklin Pierce University, New Hampshire, where he specialized in the identification of human and animal remains from archaeological sites. He spent several years in the private sector in the field of Cultural Resource Management (CRM), working on archaeological investigations throughout the mid-Atlantic states.

After two years in CRM, he entered graduate school at the University of Tennessee-Knoxville, where he earned a Masters degree, again specializing in the identification of human and animal remains from archaeological sites. During and after grad school, he worked for the Tennessee Valley Authority (TVA), identifying thousands of historic resources (sites) within TVA's property. In 1999, he took another CRM job in his home state of Maryland, teaching part time at the University of Baltimore and Johns Hopkins University.

He moved to Palm Beach County in 2005 and has been teaching night school at Florida Atlantic University since 2009. Since joining the county, he was the lead archaeologist on projects and recorded 33 new archaeological sites in Lake Okeechobee during the 2007–2009 drought. In 2010, he led excavations on a portion of a buried sand mound in Dubois Park and is currently researching the large prehistoric Native American mound complexes around the Everglades. This should prove to be another meeting you don't want to miss!

## **GEOLOGY** [Cont'd from p. 1]

environments, and hydrologic regimes are represented in their history.

This talk will include insights about limestone formation, sinkholes, and springs, as well as the geologic investigative tools that are employed to discover them. Projected sea-level rise and their impact on these springs will also be discussed.

Dr. Randazzo is Professor Emeritus of Geological Sciences at the University of Florida, where he has worked since 1967. He has written more than 50 technical papers in professional scientific publications, as well as numerous formal research abstracts, reports, and special works for governmental agencies and private clients. Most noteworthy is his co-editorship of *The Geology of Florida*, a book published by the University Press of Florida (1997). He has received numerous research grants from federal and state agencies to investigate subjects related to hydrogeology, sedimentology, and the geology of Florida. Dr. Randazzo has more than 40 years' experience in professional evaluations of home sites, commercial properties, roadways, tunnels, bridges, and dams involving geological hazards.

He was named a Senior Fulbright Research Scholar in 1995 with the Hungarian Geological Survey. He was recognized as a College of Liberal Arts & Sciences Teacher of the Year in 1999–

2000. In 2001, Dr. Randazzo was appointed an Astor Visiting Lecturer at the University of Oxford, England, where he lectured on environmental issues associated with water resources and sinkhole formation. He is a Fellow of the Geological Society of America.

Dr. Randazzo was appointed by both Governor Martinez and Governor Chiles to serve on Florida's State Licensing Board of Professional Geologists and is a Registered Professional Geologist in the State of Florida and the State of Georgia.

Come to the November 13 meeting and learn about Florida springs and the importance of protecting these precious resources.

## **LOYALIST PLANTATIONS IN THE BAHAMAS TOPIC OF SEPTEMBER MEETING**

*By Judi and John Crescenzo*

On September 11, 2018, WMS/LSSAS board member and archaeologist Kathy Gerace presented "Historic Archaeology of Three Loyalist Plantations San Salvador Island, Bahamas." Her talk was based on her archaeological studies in the 1970s and included architectural drawings, maps, and photos of plantation ruins. Ms. Gerace holds an MS in anthropology/archaeology from Michigan State and served as Assistant Director of the Bahamian Research Station on San Salvador Island, founded by her and her husband.

Three plantations discussed were established by Loyalists who escaped to Florida during the American Revolution. San Salvador was an under populated British Colony, so land grants were offered. Forty acres were given to each male household owner, with 20 acres to each family member and slave. The plantations were settled at Sandy Point, Prospect Hill, and Fortune Hill.



*WMS/LSSAS President Steve Koski presents Kathy Gerace with our World Famous tee-shirt*

Sandy Point was the most well known and was located on a ridge overlooking French Bay, so it was visible from a distance. The land was originally granted to Bud Cade Mathews, but by the 1830s was owned by John Storr, Jr. The plantation included the main house, kitchen, industrial buildings, latrine, and well. The house was three stories high, with a basement cut into the ridge. There were two rooms on top, with windows and slits to let in light and air. Industrial buildings had cement floors where crops were secured from animals. Cotton was grown only briefly because the soil was thin and insects were problematic. The

latrine was destroyed by road construction. Steps at the bottom of the walk-in well led to fresh water.

Among the artifacts were stoneware and pearlware pottery from the 19th and early 20th centuries, fragments of glass bottles, nails, a brass door lock, metal button, kaolin pipe-stem pieces, and bone fragments. Slave quarters were twelve houses made of piled rocks that were plastered inside to hold them together. Because this area was overgrown, people could not see to loot the artifacts, so larger pieces were found. Glass-bottle pieces, a blue glass bead, metal buttons, kaolin bowls, and a red clay pipe with a face were discovered.

Prospect Hill was the result of a land grant to Charles Farquharson of Scotland. His journal from 1831–32 described daily life. Upon emancipation in 1834, land was given to slaves and churches or used by tenant farmers. Prospect Hill had a bakery, industrial buildings, main house, kitchen, latrine, barn, stables, slave quarters, and graves. The house was one-story Scottish-style, with wooden frames and louvers in the windows. The kitchen next to the house had a fireplace large enough to roast a whole cow, and a smaller fireplace had a brick oven for baking. The latrine was located on the edge of a hill on bedrock, not over a pit. Slaves probably cleaned wastes from boxes under the seats.

The barn had a gable roof and wooden window frames with bars, and inside were three stalls. A circular area of plastered stones could indicate cotton-ginning activity. The walk-in well was in a sinkhole. Slave quarters were used through the 19th century. The fourteen buildings were made of cut stone with plaster inside and out, and connected by walls. Most buildings could accommodate a family. Six buildings had fireplaces. There were also cookhouses and pens. Artifacts include glass, ceramics, and metal, along with a large number of conch shells, possibly used to make lime cement.

Fortune Hill was settled by Alexander Muir of Great Britain, who received a land grant in 1789. In 1804, the plantation was sold to Burton Williams, who owned 300 slaves. He unsuccessfully tried to grow cotton, but by 1821 accepted a land grant on Trinidad and moved there with his slaves. A map of Fortune Hill shows cement floors, library, walk-in well, whipping post, large barn, cotton gin, latrine, industrial buildings, and stone piles. Fortune Hill manor house had two stories made of cut stone, then plastered inside and out. Inside tabby walls became brittle, and a cement bench probably offered support. The octagon-shaped library was made of cut stone and situated in the front yard near the whipping post. The plaster shows evidence that there was once a desk and bookshelves. The walk-in well is not in a sinkhole because water can be found close to the surface here.

Two industrial buildings had doors, windows and holes for air and light. There is a cotton-ginning circle and platform of cement, perhaps used for processing cotton or produce. The gin in the middle of stone pillars had a roof, with rails between posts to keep out animals. The six-sided latrine is over a deep sinkhole; it was also used as a refuse dump. A pigeon walk of flat rock juts out over stonelattice work on the outside. The slave quarters were distant from the main house and consisted of thirty limestone and mortar buildings.

The latrine held ceramic and glass sherds, a horseshoe, thimble, sewing pin, metal buckle, etc. The stone pile had 557 glass and 78 ceramic items, along with pieces of crystal goblets and a large teacup. Bottle seals were stamped “cognac” and one was dated 1820. Cannonballs were discovered, and two cannons were shipped to the Smithsonian.

This was a very interesting account of Loyalist plantation life in the Bahamas, and we greatly appreciate Kathy’s willingness to share her research with us!

## RESEARCH ON CLAY SOURCING OF FLORIDA PREHISTORIC POTTERY BY EDUCATOR TED EHMANN PRESENTED IN OCTOBER

*By Judi and John Crescenzo*

On October 9, 2018, WMS/LSSAS member Ted Ehmann presented “Investigating the Existence of Clay Beds Sourced by Aboriginal People for Ceramic Production in South Florida.” Mr. Ehmann studied at the Philadelphia College of Art before preparing archaeological artifacts for the NJ State Museum. In 1990, he enrolled in the College of NJ, where he minored in anthropology and majored in art. After obtaining his BA, Mr. Ehmann earned an MA in teaching in 1992. He later studied ceramics at the Apache Pottery in NJ and Nyack Ceramics in NY. In 2016, he began pottery studies on Pine Island.

South Florida and the Western Gulf Coast south of Big Bend is fairly large clay-less area. Mr. Ehmann’s studies showed that 21 of the previously classified Glades/South Florida ceramics were not produced locally, so either the clay or finished pieces were a product of trade. *The Geology of Florida*, published in 1994 by the University Press of Florida, states, “Florida clay lacks the mineralogy, purity, and quantity for commercial mining and use in ceramics.”



*WMS/LSSAS President presents Ted Ehmann with our world-famous tee-shirt.*

Mr. Ehmann consulted the Florida Geological Survey, US Geological Surveys, State Geologist of South Florida Water Management, and Reference County Mining Data. Clay must have plasticity, like the finest ball clay from Marion County, which contains kaolinite. Clay beds close to the surface are usually found on the sides of creeks, rivers, ponds, and lakes. Kaolin exists only in northeast and northwest Florida west of the Apalachicola River. Secondary clay deposits and kaolin can be found in the west panhandle and from Polk to Marion Counties.

In the 1980s, George C. Matson of the US Geological Service compiled *Clays of Florida*, covering the Gulf Coast plain.

The Deptford Culture was the earliest in northern Florida to create pottery. Petrography and Instrumental Neutron Activation Analysis were used to determine the physical makeup of clay and match it to an area where pottery was made. Sample slices were used to find the clay's "geological footprint." Mining References verify where clays were mined. The most famous source of clay is in Tennessee, where it is still mined. All cultures from that area are known for their ceramics.

South Florida Water Management has never found clay. However, in 1987, La Belle gray-green clays were found 50 feet deep in the Tamiami Formation. Clay has been found in Little Salt Spring and the Gulf of Mexico, but it has not been tested. Vessels must be constructed and fired to see if the clay can be used for ceramics.

In 1896, Frank H. Cushing's Pepper-Hearst Expedition explored the Safford Mound near Tarpon Springs, which lacked ceramics. In 1904, Clarence B. Moore found ceramics in northern Florida. New research states that the lack of pottery in southern sites was because these cultures had no source of clay. John M. Goggin of Miami was living in New Mexico when he wrote about South Florida ceramics.

Twenty-one ceramic types previously considered South Florida or Glades culture were not produced locally. Among those were the Glades Tooled Plain, Belle Glade Plain, and Goodland Plain, which were made from red clay that does not exist in South Florida. This means that exchange networks for trading ceramic items once existed.

Mr. Ehmann concluded that Safety Harbor culture was closer to clay production areas, which is why Philippe Mound has numerous ceramic artifacts. The Sand Hills Ceramics study by Bishop and Neff analyzed ceramics for "chemical and mineral mapping" of their makeup and to identify clay sources.

Pottery had been used by Florida Native Americans for nearly 4,000 years, with many distinct pastes, temper, manufacture techniques, forms, types, applications, and design elements that have been studied by archaeologists for decades. They have been used to define regional cultures, time periods, and population distributions, but few have specifically focused on clay sourcing. Mr. Ehmann's contribution to this area of research is a fascinating study of where clays are available for use. His studies are sure to create controversy and stimulate additional studies into clay sourcing and analytical techniques for looking for local clays and the sourcing of various clays used to manufacture Florida pottery both regionally and through time.

## **A GOOD TURNOUT FOR INTERNATIONAL ARCHAEOLOGY DAY HELD OCTOBER 20 AT BAYSHORE PARK**

The WMS/LSSAS participated in an IAD event at Bayshore Park in Port Charlotte. The event was sponsored by the Florida Public Archaeology Network and Charlotte Harbor Historical Resources. Several other organizations were present, including the Randell Research Center on Pine Island in Lee County, the Southwest Florida Fossil Society of Charlotte County, Florida Gulf Coast University, the newly formed Charlotte County Anthropological Society, and others.

Sarasota County Archaeologist, Steve Koski, and volunteers from the WMS/LSSAS set up three information tables under a 10x10 tent for the event, and Koski gave a 30-minute presentation on Underwater Archaeology in Sarasota County, focusing on Warm Mineral Springs and Little Salt Spring, where he intermittently spent more than 30 years working at the sites. It was an absolutely beautiful day for the family event and everyone enjoyed the day.

## **2019 WMS/LSSAS SPEAKER LINE-UP**

On January 8, 2019, we will welcome forensic anthropologist Heather Walsh-Haney, Florida Gulf Coast University; February 12 we welcome archaeologist Theresa Schober, Manager of the Immokalee Pioneer Museum; and March 12 (Florida Archaeology Month) we welcome archaeologist Bob Carr, Director of the Archaeological and Historical Conservancy, Miami Dade County. Information on these and April and May presentations will be provided in upcoming newsletters! Thank you all for your support and interest!

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