



Southwest Florida Archaeological Society (SWFAS)

April 2019 Newsletter

<http://swflarchaeology.org/>

PRESIDENT'S CORNER by *John Furey, M.A., RPA*



There is no SWFAS meeting in May because the 71st FAS Annual Meeting will be held in Crystal River, Florida. We hope to see you there. The archaeological sites at Crystal River have been long noted as highly exceptional. I will, however, publish a May SWFAS Newsletter. Remember that SWFAS needs volunteers to help at the 2020 FAS Annual Meeting next year that we are hosting in Naples and Marco Island, Florida. Please contact me if you are able to help in May for FAS 2020. This your opportunity to attend a locally hosted FAS Annual Meeting and you should plan to attend.

I have been reading extensively, for some time now, on the depopulation of the New World by the European Invasion and recently encountered an interesting article by Lauren Kent about a paper by UCL Geography Professor Mark Maslin. His research equates the cause of the Little Ice Age with the massive depopulation of the New World. A highly interesting read. Please see the article below.

Another article I have included is by Dr. Margo Schwardron, an archaeologist with the National Park Services Southeast Archaeological Center. Her research has been in the Ten Thousand Islands region of Southwest Florida and her paper is titled: *Constructing Shell Landscapes in Southwest Florida*. This is a transcription of a speech she made in October 2015 at a symposium at the University of Wisconsin-Madison and Dr. Schwardron discusses how the Native-Americans in this area built their sites with shells.

I have included a recent article from the Ft. Myers News Press that reports on ongoing salvage excavations at Cape Canaveral to capture the archaeological information from sites that are subject to erosion.

I was honored to get to visit John Beriault in February with Charlie Strader. Please see my interview with him below. John was one of the founders of SWFAS and a major figure in local archaeology for years.

PLEASE REMEMBER TO PAY YOUR 2019 DUES BY CHECK OR PAY PAL

A VISIT AND INTERVIEW WITH JOHN BERIAULT: A FOUNDER OF SWFAS



On Tuesday February 26, 2019, Charlie Strader and I visited John at his home. I had never met John before but we had communicated by e-mail several times when I had questions concerning the early days of SWFAS. In assembling the historical information for SWFAS on-line, I got to read most of the old newsletters and it was only then that I recognized the tremendous amount of himself that John had infused into SWFAS in those early years. It made me wish that I had been there to experience the camaraderie and the enthusiasm of the excavations that SWFAS was involved in. There were so many individuals then involved in SWFAS that are, to me today, only names, and I did not want those people to ever be forgotten. Accordingly, when I read through the old newsletters, I assembled all the names of the officers and trustees of SWFAS and they will soon appear on our on-line archive.

John graduated from the University of Miami in 1970 with a B.A. in History. He was discouraged from pursuing a graduate degree in anthropology/archaeology by the resident archaeologist as a paying career. He went to work in the family business of hardware, lumber and contracting until 1998, 28 years later, when he sold it. During all this time he 'dabbled in archaeology' (his words) as an avocational archaeologist and was a driving force in SWFAS. With the close of

the business, John went to work for Bob Carr at the Archaeological and Historical Conservancy as the West Coast Project Representative. John said that he had worked all over Florida, in parts of the Bahamas and he traveled with other SWFAS members to Central and South America on several trips.

In the Fall of 1979, John Beriault and a number of others started meeting to discuss archaeology and ended up salvage excavating two transitional/archaic campsites called Bay Head Camp and the Firebreak Site in the Pelican Bay Area of North Naples, not far from the Ritz Carlton. This was the impetus to form the Southwest Florida Archaeological Society (SWFAS) as a part of the Florida Anthropological Society (FAS). This coincided with the Bay West Site 8CR200 which was the first site that was excavated as SWFAS. In the 1980s, John and Art Lee were two of the main drivers of the organization and they were assisted by many others who were interested in archaeology and our archaeological



heritage here in SW Florida. They were a pair; John and the group would do the archaeology and Art Lee would write it up and have it published. SWFAS was only three years old when, in 1983, John was elected President of the Florida Anthropological Society for a one year term. This was quite an honor as most of the FAS presidents at that time were PhDs and professors at Florida universities. His service to SWFAS, however, was immense: from 1980 to 2010 John served as President for 11 years, 10 years as Editor of the Newsletter, and as a Trustee for 14 years. Between 1984 and 2011 John made 26 presentations to SWFAS, no other individual has this kind of a record. After the Bay West Site, SWFAS went on to conduct 15 more site excavations in Lee and Collier Counties and several of them

resulted in not one, but two or three papers being written and published in The Florida Anthropologist. This is quite a record for one person and it attests to the staying power and the dedication of many people through the years that SWFAS has had as members as it nears its 40th anniversary in 2020. Also in 2020 SWFAS will be the host of the 72nd Annual Meeting of The Florida Anthropological Society here in Naples and Marco Island, Florida. John is pretty semi-retired now but I'm sure that he would like to hear from some of the 'old' SWFAS members and I look forward to visiting him again.

Before leaving, I presented John with a 2019 SWFAS Golden Trowel Award. This is an award that John and Art Lee created in 1984 for the SWFAS President to recognize members that had made an outstanding contribution to SWFAS. John actually was a recipient of this award in 1986, 33 years ago. As a SWFAS founder, it seemed highly fitting that we do it again.



IN MEMORIAM: WALTER BUSCHELMAN

We recently received news that Walt Buschelman passed away. His daughter and son-in-law visited the Craighead Archaeology Laboratory at the Collier County Museum and mentioned it to the SWFAS staff. They said that they had to visit the lab because Walt spoke about it so much and the great times he had at the lab and excavating with the SWFAS crew. Walt and his wife Mary were SWFAS members in the late eighties to the mid -nineties and Walt was a SWFAS Trustee from 1989 to 1994. Our condolences go out to his family.

MIDDENS IN THE MUCK: EVIDENCE OF LATE ARCHAIC TREE ISLAND COMMUNITIES IN THE EVERGLADES

Dr. WILLIAM LOCASCIO



At our April meeting at the Collier County Museum in Naples, Florida we were treated to a highly interesting presentation by Dr. William (Bill) Locascio, Assistant Professor of Anthropology at FGCU. For many years we have heard that the Everglades area had either a low population or no population, however, Dr. Locascio has shown that the tree islands in the Everglades were populated during the Archaic Period for thousands of years. Carbon 14 dating shows an occupation period of over 3,000 years with at least three major occupations over time. These were the people of the beginning of the 'Belle Glade' culture. Based on the excavated faunal remains, they subsisted on a

wide range of mammals, reptiles and fish; with reptiles representing a full forty percent of the diet. Their ceramics were 'chalky ware' (St. Johns Plain), sand tempered plain (Glades Plain) and Belle Glade Plain. The site is located in a sugar cane field that had been leveled several times to even out the fields which exposed surface artifacts. The owners notified Christian Davenport, the Palm Beach County Archaeologist and Chris alerted Dr. Locascio. The support of the landowners was a critical factor in securing permission to excavate and their support was greatly appreciated. During the excavation Bill had a film of the site made and it was an excellent tool to show how an excavation takes place and everyone especially enjoyed it.

THE GOLDEN TROWEL AWARD



At the beginning of the meeting the Golden Trowel Award was presented to Dr. Locascio by SWFAS President, John Furey. Bill is a SWFAS member and a member of the Board of Directors. His excavations, while scientifically based, are designed to teach the next generation of archaeologists. The Golden Trowel Award is an award presented by the President of SWFAS to recognize contributions to SW Florida



archaeology and SWFAS, and as John Furey pointed out, "Bill is the only one of us currently excavating".

ARTICLES

EUROPEAN COLONIZERS KILLED SO MANY NATIVE AMERICANS THAT IT CHANGED THE GLOBAL CLIMATE

By Lauren Kent, CNN

When Europeans arrived in the Americas, they caused so much death and disease that it changed the global climate, a new study finds. European settlers killed 56 million indigenous people over about 100 years in South, Central and North America, causing large swaths of farmland to be abandoned and reforested. The increase in trees and vegetation across an area the size of France resulted in a massive decrease in carbon dioxide (CO₂) in the atmosphere. Carbon levels changed enough to cool the earth by 1610; Columbus arrived in 1492.

CO₂ and climate had been relatively stable until this point, said UCL Geography Professor Mark Maslin, one of the study's co-authors. "So, this is the first major change we see in the earth's greenhouse gases". Before this study, some scientists had argued the temperature change in the 1600's, called the Little Ice Age, was caused only by natural forces. But by combining archaeological evidence, historical data and analysis of carbon found in Antarctica ice, the UCL researchers showed how the reforestation – directly caused by the European's arrival – was a key component of the global chill. "For once we've been able to balance all the boxes and realize that the only way the Little Ice Age was so intense is.... because of the genocide of millions of people."

THE METHODOLOGY AND IMPLICATIONS: Researchers analyzed the Antarctic ice which traps atmospheric gas and can reveal how much carbon dioxide was in the atmosphere centuries ago. The ice cores showed that there was a larger dip than usual in CO₂ in 1610, which was caused by the land and not the oceans. A small shift in temperatures—about a 10th of a degree in the 17th century—led to colder winters, frosty summers and failing harvests. The implications of the study go beyond climate science and also contribute to research in geography and history and these indigenous deaths contributed to the success of the European economy. Natural resources and food shipped from the New World helped Europe's population to expand. It also allowed people to stop farming for sustenance and begin working in other industries for spare money. "The really weird thing is, the depopulation of the Americas may have inadvertently allowed the Europeans to dominate the world," Maslin said. "It also allowed for the Industrial Revolution and for Europeans to continue that domination."

To read more on the depopulation of the New World I recommend the following three books:

Their Number Become Thinned, 1983, By Henry F. Dobyns

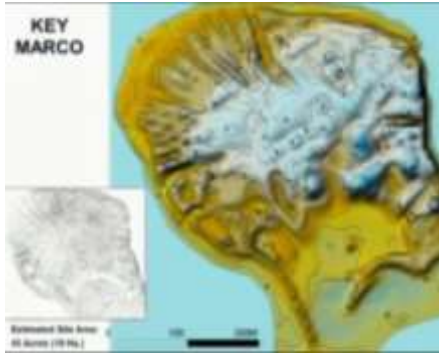
Red Gold: The Conquest of the Brazilian Indians, 1972, John Hemming

The Colombian Exchange, 2003, Alfred W. Crosby

CONSTRUCTING SHELL LANDSCAPES IN SOUTHWEST FLORIDA

Posted by Ryan Ware On June 27, 2017 · In Exclude, Historic Landscapes, Videos

<https://www.ncptt.nps.gov/blog/constructing-shell-landscapes-in-southwest-florida/>



This presentation is part of the Proceedings of the Maritime Cultural Landscape Symposium, October 14-15, 2015, University of Wisconsin-Madison.

James Moore: To conclude this session we have Margo Schwadron, Dr. Schwadron is an Archaeologist with the Nation Park Services Southeast Archaeological Center and is the regional NAGPRA coordinator and division chief for NAGPRA and applied science. Her research takes a landscape approach to archeology, integrating paleo-environmental and paleo-climate research and applying science to document and protect vulnerable sties from climate change impacts. When she concludes I will ask that our other speakers from this session go up to the stage for a Q and A session, thank you.

Margo Schwadron: Thank you very much, I'm honored to be here, thank you for inviting me. I'm going to bring us back down south to the Everglades. This case study details a new, important example of prehistoric hunter-fisher-gatherers from the Ten Thousand Islands region of the Everglades, Florida. As the largest subtropical wilderness in the US, the Everglades are an unparalleled landscape which provides important habitats for numerous rare and endangered species. The Everglades are an international treasure recognized as a World Heritage Site environmentally, an International Biosphere Reserve and a Wetland of international importance. While the natural and environmental significance of the Everglades have long been recognized, the human history of the Everglades is much less understood. This study fills an important gap in understanding the role of humans within this rich ecosystem and stands as an excellent example of a prehistoric Maritime Cultural Landscape.

Studies have shown the new sites typically focus on diet, subsistence and paleo-environmental studies with a normative and long standing view of shell middens as domestic refuse, simply the remains of daily meals discarded in garbage piles. However recent work by some researches have challenged this idea and discussed today by Jeff and Matt and Ken, we've expanded our interpretations to beyond these strictly garbage pile contexts. This case study examines a little known but significant type of shell middens site called shell works which are among the world's largest, most-complex, prehistoric shell built landscapes ever known. They deserve far more consideration beyond the simple garbage pile perspective.

Shell works are complex sites and were socially constructed landscapes that reflect a unique maritime-hunter-gatherer adaptation and tradition of shell construction. These shell works sites represent some of the world's best examples of prehistoric Maritime Cultural Landscapes as their preservation is unparalleled. Preserve in almost their entirety, the Ten Thousand Islands region is a vast prehistoric domain of waterways, islands, seascapes and shellscapes that stretch for some hundred miles along the southwest Florida coast.

South Florida contains an immense wetland of marshes, swamps, rivers and estuaries dominated by the Everglades, the largest sub-tropical wetland in North America. The lower southwest coast contains the Ten Thousand Islands, a vast maze of lagoons, mangrove swamps and marine meadows comprising one of the most productive sub-tropical estuaries in North America. The region contains over 400 recorded shell middens sites. Shell middens take many forms including small heaps, linear or mounded accumulations and are traditionally viewed as either primary or secondary refuse, the results of daily refuse from domestic garbage accumulations.

Another type of site are shell works, a parallel term to earth work. Shell works are more than just large, happenstance shell middens accumulations, they were purposefully constructed features, intentional borrowed, piled, arranged and formed into mounds, ridges, rings, platforms and depressions. Shell Works suggest planned landscapes and terraforming to define public, domestic, sacred and ceremonial spaces suggesting that organized labor, community planning and the ideological constructs of monumentality and ceremonialism shaped these complex Maritime Cultural Landscapes.

This investigation offers the first large scale settlement pattern of the region and employs the only holistic maritime landscape approach. To date, 15 shell work complexes have been investigated with over 200 radiocarbon dates generated for the region. Sites range from very small, less than half an acre, to architecturally non-complex ring shaped middens, to massive sites comprising entire islands constructed from elaborate shell work features measuring up to 100 acres in extent. Comparison of shell work forms throughout the region demonstrates significant similarities including several recurring site forms such as ring shape features, mounds and linear ridges.

There are 13 major shell work sites ranging in size from 30 to 100 acres in extent which likely represent large, nucleated villages. These sites occur with a regular spacial frequency. 8 of the largest sites occur every 3 to 4 miles within the northern part of the region and become less frequent toward the southern end of the region. 31 small shell work sites and 12 shell rings are also present. The most well-known and northern most of shell work sites in the region was the Key Marco site. Unfortunately now mostly destroyed by development. Here is Cushings 1890s map digitized and brought into ARC-GIS which shows the site's occupants engineered the island landscape with shell, creating features such as radiating finger ridges, water courts, flat top mounds, plazas and canals. These shell work constructions suggest organization and that of a planned maritime community.

Another larger shell work site, Dismal Key, is a massive crescent shaped shell work island measuring 75 acres, containing shell mounds, ridges, plazas, canals, water courts, finger ridges and sea walls. At the northern edge of the site is a small crescent-shaped shell ring, similar in size and shape to other southeastern shell rings like we talked about this morning. South of the ring is the main portion of the site which contains elaborate shell work architecture including extensive shell fields and a central district of shell mounds and ramps and canals. Two 6 meter tall flat top shell mounds are bisected by a long central canal leading into the center of the site, suggesting a high amount of coordinated labor to build and maintain a functioning canal.

Archaeological testing determined that Dismal Key's inner shell ring is the earliest component of the site, was built rapidly and dates to the terminal archaic. Testing of 4 of the largest flat top shell mounds suggests that intensive mound building occurred between 580 and 900 AD, a series of shell midden finger ridges at the west margins of the site are the most recently built features, dating from AD 990 to 1290. Terminal radiocarbon dates and ceramic chronology suggest Dismal Key became abandoned just prior to AD 1300.

Fakahatchee Key is a massive 98 acre shell work site with several curvilinear or ring shaped shell middens ridges. Investigation determined it contained elaborate shell works including mounds, platforms, water courts, canals and radiating finger ridges. The curvilinear site plan of the site appears to be oriented towards the interior of the site, facing a low central area of shell fields and a large, flat, plaza like area. Much like the Dismal Key site, the nested inner ring shaped middens of the site were determined to be the earliest dated components of the site from BC 350 to AD 260. Also the radiating finger ridges are the most recent features of the site, dating from AD 710 to 1280. Yeoman's Mound is an isolated shell mound complex that appears to be purposefully separated from the main portion of the site and is to be discussed later. In tandem with Dismal Key, Fakahatchee Key appears to be abandoned just prior to AD 1300.

Survey mapping of Sandfly Key show a series of large nested crescents and rings. The earliest components of the site are the northern most ring arms and 2 isolated sand and shell mounds, one of which dates to the transitional period between the late archaic and early woodland. At the southern end of the site, Sandfly Key contains some shell work features including flat top mound, possible house platforms, fish traps, canals, water courts and extensive shell fields. The shell work features date most recently, suggesting that over time Sandfly Key residents shifted from constructing simple ring shape middens to construction of more elaborate shell work features suggesting an expanding community population and perhaps an increasingly complex social organization.

Russell Key is a 60 acre site and like other shell work islands, it's composed almost entirely of oyster shell. Like Dismal and Sandfly Keys, the northern end of the site contains a large, low shell ring almost completely buried under Mangrove Swamp, suggesting a post occupational sea level rise. Testing of the shell ring suggests the ring is the earliest component of the site and likely has much deeper and earlier deposits, probably dating to late archaic. South of the shell ring is the main portion of the site. It displays bilateral symmetry with a central plaza like area. The central plaza is flanked on the east, west and south sides of the site with a series of radiating shell finger ridges. The ridges occur in distinct groupings

suggesting that they were constructed as part of a planned, organized activity areas, residential zones or habitation areas. Archaeological testing of these features indicated that they were built rapidly and are contemporaneous.

As is the pattern at all other shell work sites, the radiating finger ridges at the southern edge of the site were determined to date most recently, from about AD 900 to 1200. This suggest a regional, temporal significance to these feature in that over time, Russell Key inhabitants continually expanded the site in a southern seaward direction, constructing additional habitable landscape by continuing to build new site area out of shell.

One of the most perplexing of shell work features are basins or depressions found around the margins of many sites. Collectively called water courts, it is not yet know what these features functioned for. These features are almost always in association with finger ridges, suggesting, perhaps, some type of fish or shell fish storage or fresh water impoundment structure. Along the southern edge of the site is one single, large water court, the largest found on Russel Key, measuring 15 by 50 meters. Radiocarbon dating places construction of this feature around AD 1030 to 1290. The presence of one large water court may suggest a shift towards a centralization or control of resources, whether fish storage, water or another function. Like the other large shell work sites, Russell Key was abandoned by AD 1300.

Today the site is thickly surrounded by mangroves, ARC-GIS spacial analysis is used to model a 2 foot rise in sea level. With this scenario the site appears more approachable by canoe and one can visualize how some of the sites finger ridges and water courts may have looked and functioned. With a 2 meter high sea level rise, the long finger ridges are no longer encased in mangroves and are surrounded by water. The finger ridges likely functioned as canoe docks or jetties or functioned as platforms for people to engage in group fish netting with the nearby water courts functioning as temporary storage ponds.

As this scaled outline of site forms show, the shell works demonstrate similar spacial and temporal patterns. Regionally there are strong temporal similarities and site structures, forms and layouts that imply nearby settlements must have been socially connected communities, sharing similar social, political and ideological characteristics that became manifested within their socially constructed landscapes. These constructed landscapes reflect a dynamic and recursive relationship with the environment, the sea, communities and their shellscapes. Shell works demonstrate not only a Maritime Cultural Landscape that reflects changes in social organization over time but that the landscape itself is a repository for social memory and history and may be imbued with meaning and significance connected to a larger system of monuments and ceremonial landscapes, seascapes and shellscapes.

For example the Fakahatchee key 3 site shows evidence of a possible ritual landscape suggested by the reappropriation of the landscape features with the placement of a conical mound and 2 ramp projections super imposed on top of a much earlier, previously abandoned shell ring. This association or reappropriation of the earlier features suggests that the builders of the conical mound may have viewed their earlier shell ring feature with some kind of significance, perhaps reflecting a material persistence of memory that now marks the landscape. The mound may represent a communal mortuary moment, perhaps to memorialize ancestors or it may mark a boundary, territory or forbidden place for the settlement. A similar association is also found at Russell Key with a flat top mound and ramp superimposed on a much earlier shell ring. These mounds may be suggestive of monuments which may have served a functional role, such as a special structure for elites or religious use or served a more ontological, cosmological or symbolic purpose.

Sandfly Key is also suggestive of a ritualized or ceremonial landscape with it pair of conical burial mounds, out of view and deeply hidden within the Mangrove Swamp, surrounded by an extensive, protective ring of shell midden and separated from the rest of the site by water. The hidden nature of the mounds suggests a sacred context and their placement within a watery swamp may have further symbolic significance as water is often viewed by Native Americans as sacred or protective supernatural barrier or portal to another world.

Lastly the Youman's Mound complex is another example of a ritual or sacred maritime landscape. The site contains a pair of two 6 meter tall conical shell mounds, set along the edge of a ring or bowl shaped midden within an arena like complex. The interior is open and flat and is encircled by a raised ring of shell along it's outer perimeter. At the southwestern edge of the site is a ramp of shell that gradually leads up into the complex, suggesting a directed entrance or perhaps a processional route into the complex. It's isolated position and separation by water also suggest secrecy or symbolic importance. Purposefully separated from the secular, domestic areas of Fakahatchee key. Human remains

reported from the mounds and found within the plaza of the site suggest that it served special mortuary functions for the community.

In conclusion, the shell works of the Ten Thousand Islands represent some of the largest and most complex prehistoric shell constructions in the world and are unique, preserved prehistoric landscapes that reflect important hunter-gatherer-fisher histories. These represent an exceptional example of a Prehistoric Maritime Cultural Landscape. Nomination of these sites as a maritime cultural landscape and as a National Historic Landmark would fill an important gap in documenting and understanding the important histories of prehistoric maritime people of the world. Thank you.

CAPE CANAVERAL ARCHAEOLOGISTS IN RUSH TO SAVE TIMELESS ITEMS

by Antonia Jaramillo, Florida Today

From the News Press

February 25, 2019



Long before Cape Canaveral became home to advanced aerospace technologies, indigenous people and early settlers developed their own tools to live on the beaches and the swampy lands that would eventually become the gateway to space. Now, in a race against time, archaeologists from all over the state are hurrying to uncover and document the undiscovered archaeological sites across the Cape before they are eroded and lost to humankind forever.

“Every time you lose a piece of the past and a piece of the human story, you’re impoverishing your experience in the present,” University of Central Florida Associate Professor of Archaeology Stacy Barber told FLORIDA

TODAY. Dating back a few thousand years, a three-acre site at the Cape Canaveral Air Force Station faces imminent danger as rising sea levels and coastal erosion in the coming decades threaten to erase the physical history left here. “Every archaeological site is a story,” Barber said. “It’s the story of somebody’s life, or a group of people’s lives, and every time we lose a site, we lose a little chunk of the human story.”

Throughout the area, pottery sherds and pre-Columbian artifacts are only some of the thousand-year-old treasures being unearthed by archaeologists today. With sweat dripping down their faces underneath the Florida sun, teams of archaeology students dig away at a prehistoric dump site, called a midden, as other researchers take measurements and patiently sift through historic relics dating back to about 950. They are surrounded by half-empty water jugs, palm trees and hungry mosquitoes.

A few yards away, another group of scientists set down their ground-penetrating radar, or GPR, equipment to uncover the secrets beneath. The area is rich with prehistoric Native American burial mounds just a few feet underground. The high-tech equipment allows the scientists to see the mounds without having to dig them up, disturbing the lay of the land. “We’re taking millions and millions of measurements every second,” said Lori Collins, co-director of University of South Florida’s Digital Heritage and Humanities Center. The Air Force’s 45th Space Wing has partnered with UCF and USF since 2015 to record and digitally preserve all the prehistoric and historic sites on base. But time isn’t on their side. Over the past four years, the teams have only managed to conduct in-depth surveys of three sites. There are 10 more waiting to be documented and only about two decades to complete the work of recording all the data there before storms and rising seas destroy them, according to Tom Penders, an archaeologist and the 45th Space Wing’s cultural resource manager. “These places tell a story of Florida that in a hundred years I hope we can tell,” said William Lees, executive director of the Florida Public Archaeology Network. “But if we don’t do something now, we won’t be able to.”

Unfortunately, most of the known archaeological sites along Florida’s east coast have never been studied. “There’s a very vibrant Gulf Coast archaeology community doing really great research, but on the East Coast, especially right on the water, it’s basically just Tom,” Barber said. “There’s just nobody else that does it.” There are over 30,000 recorded archaeological sites in Florida, FPAN Central Region Director Jeff Moates said. Of those sites, roughly 3,000 are at risk of a 1-meter or 3-foot sea level rise. If sea levels rise to 2 meters or 6 feet, about 4,000 sites could be eroded or inundated.

According to the National Oceanic and Atmospheric Administration, sea levels are rising at an alarming rate. In 2017, global mean sea level was 3 inches above the 1993 average – the highest annual average in the satellite record, NOAA data shows. NOAA scientists conducted a review of the research on global sea level rise projections in 2012 and predicted global mean sea level will rise at least 8 inches, but no more than 6.6 feet, by 2100. Rising sea levels and storm surges threaten not just archaeological sites in Florida, but all over the world. Unlike people who can move away or objects that can be stored safely, these ancient areas cannot be transported or preserved.

That leaves archaeologists with the difficult task of digitally documenting all the locations before it's too late. But that takes time, especially with thousands of sites in Florida alone and not enough manpower. That's why one of FPAN's projects encourages and invites the public to help track the changes of the archaeological sites most at risk. "We need our citizens to help us understand what is happening to our sites," Lees said.

Through the Heritage Monitoring Scouts program, or HMS Florida, the public can aid archaeologists in the race to record all the ancient areas before they are lost. "The University of Central Florida library has an online archival system, so all the paperwork that we're generating, all the notes, photographs, field drawing anything digital is going to be free and open to the public," Barber said.

Though future generations will be unable to visit the ancient spots, the meticulous 3-D models will provide viewers with the opportunity to learn more about our early ancestors. "This is going to provide information to the general public on their prehistory," Penders said. "I mean this is our history, we should try to learn as much about the prehistoric occupants of this site and this is important history to Brevard County and to Florida."

SWFAS OFFICERS AND BOARD MEMBERS FOR THE 2019 CALENDER YEAR

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President: John Furey
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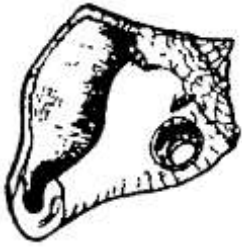
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Jan Gooding
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Find us on Facebook at Southwest Florida Archaeological Society!

Check out our website at <http://swflarchaeology.org/>

SWFAS AND FAS MEMBERSHIP APPLICATIONS

We encourage those interested in Florida archaeology to become members of The Florida Anthropological Society (FAS) and The Southwest Florida Archaeological Society (SWFAS). Annual dues are due in January and membership applications to both organizations are attached. Membership in the FAS provides you with four annual volumes of *The Florida Anthropologist* and occasional newsletters on anthropological events in Florida in addition to the annual statewide meeting. More information on FAS can be found online at: www.fasweb.org. Membership in SWFAS offers you a local series of talks on archaeological and anthropological subjects that you can attend. The SWFAS monthly newsletter keeps you up to date on local events as well as other important archaeological topics. We urge you to support both with your membership. All of the SWFAS Lecture Series are open to the public at no charge.



JOIN US!

The Southwest Florida Archaeological Society

<http://swflarchaeology.org/>

The Southwest Florida Archaeological Society (SWFAS) was founded in 1980 as a not-for profit corporation to provide a meeting place for people interested in the area's past.

Our goals are to:

- Learn more of the area's history
- Create a place for sharing of this information
- Advocate for preservation of cultural resources

Its members include professional and amateur archaeologists and interested members of the general public. Members come from all walks of life and age groups. They share a lively curiosity, a respect for the people who preceded them here, and a feeling of responsibility for the conservation of the places and objects they left behind.

The Society holds monthly meetings between October and April, attracting speakers who are in the forefront of archaeological and historical research. Occasionally members join in trips to historical and archaeological sites.

A monthly newsletter, Facebook page, and website keep members abreast of our events and happenings.

The organization is a chapter of the Florida Anthropological Society, a statewide organization that publishes quarterly newsletters and a journal, *The Florida Anthropologist*, and holds an annual conference.

I want to help The Southwest Florida Archaeology Society preserve and interpret Florida's heritage!

Name (please print) _____

Address _____

City/Town _____ State _____ ZIP _____

Phone _____ Email _____

Check One:

Individual (\$20) _____ Sustaining Individual (\$50) _____ Family (\$35) _____

Student (\$5) _____ Life (\$500) _____

Donation to Support SWFAS Speakers and Programs _____

Skills, training, interests: _____

I hereby agree to abide by the rules and bylaws of the Southwest Archaeological Society. I further release from any and all liability due to accident and injury to myself, dependents and any property owners cooperating with the society.

Signature: _____ Date _____

Please make your check out to SWFAS and mail to:

Charlie Strader
SWFAS Treasurer
27655 Kent Road
Bonita Springs, FL 34135

REV. 12052017

FAS Membership

Membership in the Society is open to all interested individuals who are willing to abide by the [Florida Anthropological Society Statement of Ethical Responsibilities](#), which can be found on our website: [fasweb.org](#). Membership is for one year.



MEMBERSHIP CATEGORIES

Student*	\$15
Regular	\$30
Family	\$35
Institutional	\$30
Sustaining	\$100
Patron	\$1000
Benefactor	\$2500

Student membership is open to graduate, undergraduate and high school students. A photocopy of your student ID must accompany payment

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To submit your membership form electronically and pay with PayPal, go to the Membership form page on our website: [fasweb.org](#).

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