



# Southwest Florida Archaeological Society (SWFAS)

## OUR 45th YEAR

### January 2025 Newsletter

<https://swflarchaeology.org/>

#### **PRESIDENT'S CORNER** By *John F. Furey M.A., RPA*, [jffurey@charter.net](mailto:jffurey@charter.net)



Happy New Year to all from SWFAS. We trust that 2025 will be another great year for archaeology and history in Southwest Florida. As editor of the SWFAS Newsletter, I invite you to recommend articles that you feel would be of interest and that we should include in the Newsletter. We welcome original written articles submitted by our friends and members. We hope that you continue to enjoy our Newsletter. SWFAS has prepared a series of interesting in-person presentations this year as well as scholarly archaeological articles, historical articles, and the new recent research section in our 2025 Newsletter for you. Enjoy!

Birds have recently been the focus of extensive scientific research, and this month we have captured three aspects of this research: bird songs analyzed by AI, an ancient pattern of bird feather arrangements that predicts flight, and an article on feathers on dinosaurs. It is unusual that these three topics all emerged at the same time but it is an example of the depth of research that is ongoing today in academia.

In March of 2024, we began a new section in the SWFAS Newsletter entitled Recent Research. We hope that these recently published brief extracts of articles have been of interest to you and cause you to search out additional information on these topics. Since its inception we have published a total of 15 items in 2024 and plan to continue this monthly section if interesting recent research is available. We hope that you find these topics interesting and thought provoking.

An adult archaeology camp at Weedon Island sponsored by AWIARE is being held on February 24-28 and March 3-7. Learn how to conduct archaeological field and lab work, performing, excavation, screening, collecting artifacts and bones. Cost is \$550 per week and includes daily lunch and a field trip to a local archaeological site. For more information visit the AWIARE website at <https://awiare.org/>. Space is limited so sign up early.

Intense heat and heavy tropical rain have caused a portion of a pyramid in Mexico's Ihuatzio Archaeological Zone to collapse. Located in western Mexico, the 50-foot tall 1,000-year-old structure cracked from drought and allowed water to erode it from the inside. Does this portend the future for some of these other majestic structures?

## **RECENT RESEARCH**

### ***BIRD SONGS AND AI***

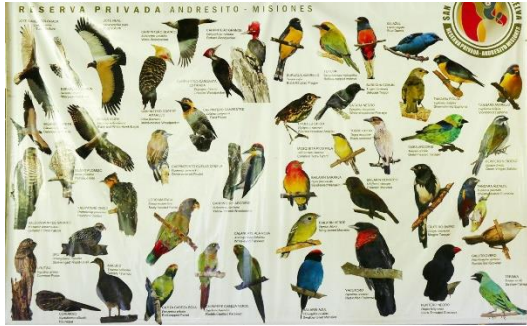


*Credit: National Audubon Society*

We all love to hear birds sing, but what do these songs really mean? Is there a "Factor X" hidden in these bird melodies? Recent research of male zebra finches' songs using an AI (artificial intelligence) algorithm indicates that there are sounds in these songs that are too subtle for humans to hear. AI was used to create maps of their songs' syllables. These songs are used to attract female finches, and females preferred songs with wider statistical gaps on these maps. These types of songs are much harder to learn and, therefore, indicate the fitness of the singer. Newer songs are especially attractive to females, and some males sing only the same old songs, never learning new ones. All the songs sound the same to the human ear says neuroscientist and study co-author Todd Roberts. They are not

sure what this means yet, but without AI, we would not even be aware of the subtle differences within these songs. Source: Journal *Nature* at <https://www.nature.com/>.

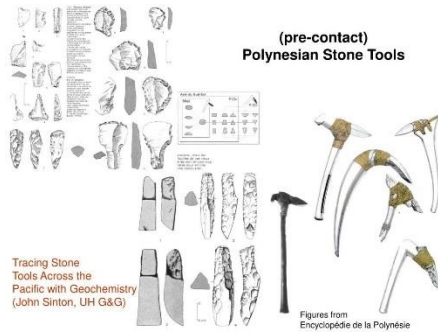
### **DISCOVERED: AN ANCIENT PATTERN IN BIRD FEATHERS**



Credit: National Audubon Society

Examining wing feathers of 346 different species of birds from museums around the world, Field Museum of Natural History ornithologist Yosef Kiat discovered an interesting trend. From the tiniest hummingbird to the fiercest eagle, all flying birds had 9 to 11 asymmetrical flight feathers called primaries. The number of primary feathers in flightless birds varied immensely. Emus lack them completely while penguins have 40. Kiat was amazed that no one had noticed this before. Looking at extinct birds, the right number of primaries indicated whether they could fly or not and this seems to indicate that flight only evolved once in dinosaurs. Source: *PNAS* at <https://www.pnas.org/>.

### **POLYNESIAN SEAFARING CONNECTIONS**



Polynesian indigenous oral histories are replete with vast ocean voyages. These oral histories indicate continuing contact between many of these distant islands, but proving these contacts archaeologically has been very difficult. Recently, an international team analyzed stone artifacts from archaeological excavations from outlier islands. Geochemical analysis of the stones enabled them to trace these stone tools to the exact same quarry in Samoa, a thousand miles away. Source Herman et al., journal *Science Advances*.

### **THIS MONTH'S ARTICLES**

#### **The Watsons Brake Site, Ouachita Parish, Louisiana**

The Southeast U.S. is noted for its many large sites with burial and temple mounds and was a major focus of the Mississippian Culture area. But, where did this mound building cultural tradition start? Many will name the Poverty Point site in Louisiana as the beginning point of this large complex Southeast U.S. earthworks tradition which is dated at 1500 BCE. However, less than 100 miles to the Southwest of Poverty Point, lies the site of Watsons Brake that is 1,900 years older than Poverty Point. The site has a total of eleven mounds in a circular pattern and is located on the Ouachita River. The site predates Stonehenge and the Egyptian pyramids. See below.

#### **Parsons Island, Maryland**

What is a pre-Clovis site doing on Parsons Island one mile off the coast of Maryland in the Chesapeake Bay? Geologist Darrin Lowery located this site while investigating the sediments on the rapidly eroding island and, to date, 286 artifacts have been excavated there. Is this another site that challenges the timeline of humans in the Americas? See below.

#### **Were Dinosaurs Covered in Scales or Feathers? The Answer is Both!**

Researchers examined the skin of the feathered dinosaur from the early Cretaceous period (135 million years to 120 million years) and found “zones” of reptile-style scales as well as “zones” where feathers were present. The early Cretaceous marks the period where some dinosaurs were evolving into birds. The findings help explain how some dinosaur species transitioned from reptiles to more bird-like creatures. See below.

## SWFAS MEMBER CITED IN AMERICAN ARCHAEOLOGY MAGAZINE

SWFAS member Bruce Kennedy noticed a reference to a 14,000-year-old rabbit bone bead at the La Prele Creek Mammoth Site in Wyoming indicating that it was the “oldest bead found and was the first evidence of the use of hares by clovis foragers”. While it is the oldest bead found, Kennedy rightly cited that hundreds of rabbit bones have been excavated at the pre-Clovis component at the Meadowcroft Rock Shelter in Southwest Pennsylvania. His letter was published in the Fall 2024 issue. Great work Bruce.

## SWFAS OFFICERS AND BOARD FOR 2025

Each January SWFAS must present a listing of our Board and Officers for the coming year. Our new listing for 2025 is below. We encourage anyone interested in promoting education and preservation of our archaeological and historical heritage in Southwest Florida to join our board of directors. If you are interested, please contact me at [jffurey@charter.net](mailto:jffurey@charter.net) or. I look forward to hearing from you.

### Officers

President: John Furey  
Treasurer: Charlie Strader  
Secretary: Susan Harrington  
Editor: John Furey  
Craighead Lab Director: Susan Harrington

### Directors

First of 3-year term:  
Dr. Tiffany Bannworth  
Amanda Townsend  
Second of 3-year term  
Theresa Schober (Chapter Rep.)  
Mary Southall  
Third of 3-year term:  
*open*

## SWFAS DUES REMINDER 2025

SWFAS dues for 2025 are due in January, and your support of archaeology, history, preservation, and education in Southwest Florida is critical. Our sole source of income is your dues and your gifts, and SWFAS is a 501(c)(3) registered Florida non-profit organization. Thanks to everyone that has already renewed their 2025 tax deductible membership. If you have not done so, we have two ways, you can renew online electronically with a credit card at <https://swflarchaeology.org/>, go to “Donate”, or send a check to: Charlie Strader SWFAS Treasurer, 27655 Kent Road, Bonita Springs, FL 34135.

## SWFAS 7 DECEMBER KORESHAN FIELD TRIP



The 20 participants in the SWFAS field trip to Koreshan State Park (KSP) on December 7 were lucky to have a beautiful weather day and a great guide for the private tour. Our guide for the almost two-hour tour was Annalinda Ragazzo. She has volunteered at the park for about 10 years and you could tell it by her presentation and guiding skills. She encouraged and was prepared for questions.

Much of her talk and walk featured 3 main people involved with the historic site: starting with Gustave Damkolher the landowner who sold the Koreseshans their first piece of land in Estero; of

course, Cyrus Teed, the messiah founder of the cult; and lastly, Hedwig Michel who as one of the last 4 remaining Koreshans negotiated deeding the property to the State of Florida for preservation and public use in 1961 - AND for that we all are so lucky! All three led fascinating lives.

The Koreshan Unity was a utopian communal organization, led by Cyrus Teed (who took on the biblical name for Cyrus of Koresh). Annalinda discussed their ideals of celibacy, community, and equality of the sexes. Utopian cults were not uncommon in the late 1800s, however the Koreshans had some of the more “unique” beliefs.

The Koreshans started out with 320 acres along the Estero River in 1893 to serve as the center of the New Jerusalem to be built for 10 million people. Over time they amassed nearly 8,000 acres or so in our area. When they incorporated as the Town of Estero, it was by far the largest town by size in Lee County, but was later unincorporated (another intriguing story). Our guide explained the historical relationships to our area while the group toured the remaining historic buildings.

The park itself is a must see! Not only to learn about the complex Koreshans, their stories and built environment, but to enjoy the park’s lovely riverside setting. It is also one of the few state parks that maintains exotic plant species (that were brought in by the Koreshans).

For a deeper historical background of the Koreshans, the must read is the excellent 2015 book, *The Allure of Immortality: An American Cult, a Florida Swamp, and a Renegade Prophet*, by Lyn Millner (professor of journalism at Florida Gulf Coast University). Other resources for overviews are:

<https://www.floridamemory.com/learn/exhibits/koreshan/utopia/>  
<https://www.floridastateparks.org/parks-and-trails/koreshan-state-park>

Special thanks go to Robert Hughes, the Curator of KSP for graciously offering the SWFAS the free tour. Also thanks go to SWFAS President John Furey for organizing the event and of course, our lovely and knowledgeable guide, Annalinda.



**JANUARY PRESENTATION: WEDNESDAY, JANUARY 15, 2025, 7:00 PM**  
**FORT MYERS, IMAG HISTORY & SCIENCE CENTER**  
**TOPIC: THE MOUND HOUSE**



Join archaeologist Theresa Schober as she weaves together an entertaining history of Mound House with its idiosyncratic development into the cultural and environmental learning center operating today. Located on Fort Myers Beach, the 3-acre portion of the Calusa shell mound on which the historic William H. Case house was built was acquired with grant funds by the Town of Fort Myers Beach soon after incorporation. The site was subsequently transformed from a residential enclave to a small museum and grounds interpreting the 2,000 year history of the site, including a walk-in exhibit space within the Calusa shell mound known as “Stories Beneath Our Feet.”

From 2002 to 2011, Theresa Schober worked with the Town of Fort Myers Beach – ultimately as Director of Cultural Resources – to develop Mound House and Newton Beach Park. In addition to heritage resource management, Ms. Schober works with Indigenous communities and institutions to support repatriation and rematriation of ancestral remains and cultural belongings to First Nations and federally-recognized Tribes through her museum practice.



**TO GO TO THE IMAG:**

**FROM THE SOUTH:** Take the 75 fwy North toward Ft. Myers, then take the FL-82 exit, EXIT 138, toward ML King Jr Blvd/Ft Myers/Immokalee. Turn left onto FL-82/State Road 82. Continue to follow FL-82. Go 3.60 miles, then turn left onto Cranford Ave. Go 0.09 miles, and the IMAG is on the right.

**SWFAS PRESENTATION SCHEDULE 2025**

**JANUARY 2025**

**Newsletter**

**JANUARY 15, 2025, 7:00 PM, FT. MYERS, IMAGINARIUM MUSEUM**

**Theresa Schober, Archaeologist & SWFAS Member**  
The Mound House

**FEBRUARY 2025**

**Newsletter**

**FEBRUARY 19, 2025, 7:00 PM, FT. MYERS, IMAGINARIUM MUSEUM**

**Ron Westcott, Koreshan State Park Docent**  
The Koreshans

**MARCH 2025**

**Newsletter**

**MARCH 19, 2025, 7:00 PM, FT. MYERS, IMAGINARIUM MUSEUM**

**Theresa Schober, Archaeologist & SWFAS Member**  
Archaeology of Mt. Elizabeth  
**John Furey, RPA, Archaeologist & SWFAS Member**  
Shark Tooth Tools at Mt. Elizabeth

**APRIL 2025**

**Newsletter**

**Calusa Coast 2025 Celebration Month**

**APRIL 16, 2025, 7:00 PM, NAPLES, COLLIER COUNTY MUSEUM AT GOVERNMENT CENTER**

**Bob Carr, Executive Director, The Archaeological and Historical  
Conservancy, Inc.**

Topic The Miami Circles and the Rise of the Tequesta Chiefdom

**MAY 2025**

**Newsletter**

**MAY 9-11, 2025, GAINESVILLE**

**Florida Anthropological Society (FAS) 77th Annual Meeting Meeting  
& Conference**

**JUNE-AUGUST 2025**

**Summer Sabbatical No Newsletters/Presentations**

**SEPTEMBER-OCTOBER 2025**

**Newsletters**

**NOVEMBER 2025**

**Newsletter**

**(PRESENTATION SCHEDULE – continued)**

**NOVEMBER 19, 2025, 7:00 PM, NAPLES, COLLIER COUNTY MUSEUM AT GOVERNMENT CENTER**

**Jacob Winge, Local Historian**

Topic: TBA

**DECEMBER 2025**

**Newsletter**

**DECEMBER 2025**

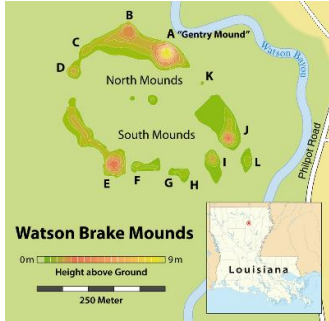
**Field Trip - TBA**

**ARTICLES**

**WATSON BRAKE**

By: Wikipedia at [https://en.wikipedia.org/wiki/Watson\\_Brake](https://en.wikipedia.org/wiki/Watson_Brake)

(Also see <https://www.cambridge.org/core/journals/american-antiquity> *American Antiquity* Vol 70 No. 4)



Watson Brake is an archaeological site in present-day Ouachita Parish, Louisiana, from the Archaic period. Dated to about 5400 years ago (approx. 3500 BCE), Watson Brake is considered the oldest earthwork mound complex in North America.[1] It is older than the Ancient Egyptian pyramids or Britain’s Stonehenge. Its discovery and dating in a paper published in 1997 changed the ideas of American archaeologists about ancient cultures in the Southeastern United States and their ability to manage large, complex projects over centuries. The archeologists revised their date of the oldest earthwork construction by nearly 2000 years, as well as having to recognize that it was developed over centuries by a

hunter-gatherer society, rather than by what was known to be more common of other, later mound sites: a more sedentary society dependent on maize cultivation and with a hierarchical, centralized polity.

The arrangement of human-made mounds at Watson Brake was constructed over centuries by members of a hunter-gatherer society. It is located near Watson Bayou in the floodplain of the Ouachita River, near present-day Monroe in northern Louisiana, United States. Watson Brake consists of an oval formation of eleven earthwork mounds from three to 25 feet (7.6 m) in height, connected by ridges to form an oval nearly 900 feet (270 m) across.[1] Watson Brake is dated to 1,900 years before the better-known Poverty Point in northern Louisiana; begun about 1500 BCE, it was previously thought to be the earliest mound site in North America. Mound building in the Americas started at an early date.

The discovery and dating of Watson Brake as a Middle Archaic site demonstrate that the pre-agricultural, pre-ceramic, indigenous cultures within the territory of the present-day United States were much more complex than previously thought. While primarily hunter-gatherers, they planned and organized large work forces over centuries to accomplish the complex mound and ridge constructions. Monumental constructions have marked the rise of social complexity worldwide. The earthen mounds of Eastern North America are part of mankind’s monument tradition.

*Discovery and dating*

In the early 1980s, Reba Bamburg Jones, a local resident, brought this site to the attention of professional archaeologists. By 1981, after logging had revealed more of the site, Jones identified the pattern of eleven mounds connected by ridges, a complex that was 280 yards across. In 1983, Jones and John Belmont published the site in a survey of pre-history in the Ouachita River Valley. Around this time Joe W. Saunders, then regional archaeologist for the state, was shown the site.[2] The site had been privately controlled since the 1950s. Approximately half the site is still owned by several family members, who have allowed archaeological excavations and associated work, but do not permit public viewing.[1] Recognizing the site’s significance, in 1996 The Archaeological Conservancy purchased half the site and later sold it to the state for preservation.[2]

Since the 1990s, radiocarbon dating by a team from Northeast Louisiana University established the great antiquity of the site. The team of Joe W. Saunders et al. published a paper in *Science* in 1997 that established

the age of the mound complex.[3] The analysis of 27 radiocarbon dates indicates that the site was initially occupied around 4000 BCE during the Middle Archaic period. Mound construction began at approximately 3500 BCE, and continued for approximately 500 years.[1] During that time period, the mounds were enlarged in several stages. Excavations indicate that there was sufficient time between building episodes for midden deposits of residents to accumulate on top of the mounds and ridges. In addition, teams from the University of Texas at Austin and the University of Washington dated the site by using sand grains and organic acids in the soils.[4]

Evidence of the middens indicate that Watson Brake may have been used as a "base by mobile hunter-gatherers from summer through fall." [4] Saunders and his team suggest that the building episodes at Watson Brake coincide with periods of unpredictable rainfall caused by El Niño-Southern Oscillation events. They may represent "a communal response to new stresses of droughts and flooding that created a suddenly more unpredictable food base." [1] Midden remains showed the population relied on fish, shellfish, and riverine animals, supplemented by local annuals: goosefoot (*Chenopodium berlandieri*), knotweed (*Polygonum* spp.), and possibly marshelder (*Iva annua*). Over time, the people consumed more terrestrial animals, such as deer, turkey, raccoon, opossum, squirrel, and rabbits, which was likely related to changing habitat and waterway conditions.[3] The site appears to have been abandoned around 2800 BCE.[4] This may have been caused by a "decline in the main channel, gravel/sand shoal habitats, backwater swamps, and small-stream habitats" near the site.[3]

Together with other Middle Archaic sites in Louisiana and Florida, Watson Brake shows the development of complex societies among hunter-gatherer peoples. They occupied the site only on a seasonal basis, but were capable of planning and organizing complex monumental construction over a period of several hundred years.[3] In contrast to Poverty Point, where residents made projectile points with materials traded from distant locations, including Wisconsin and Tennessee, the artifacts of Watson Brake show local materials and production. The projectile points are Middle to Late Archaic in age, and were produced more casually than those at Poverty Point. The people heated local gravel for cooking stones to steam some of their food. They created and fired earthenware items in a variety of shapes, but researchers have not yet determined their functions.[3]

#### *Ownership and management*

Eight members of the Gentry family have owned most of the site since the 1950s. One member declines to sell property to the state, so the site is not available for public viewing. The family has granted specific permission to individual archaeologists to conduct research on site.[5]

*Note: For references and notes, go to the site listed at the beginning of this article.*

## **INVESTIGATING PARSONS ISLAND**

*By Adam Thomas*

*November 05, 2020*

*From University of Delaware at <https://www.udel.edu/udaily/2020/november/researching-parsons-island-geology-archeology/>*



*Credit: Michael O'Neal*

Neeshell Bradley-Lewis was completing an undergraduate double major in both archaeology and geology at Appalachian State University when she met Michael O'Neal, a professor in the University of Delaware's Department of Earth Sciences, at the 2018 Geological Society of America conference. O'Neal had earned a degree in archaeology before completing his doctorate in geology, and he let Bradley-Lewis know that she could pursue a master's degree at UD that would combine both of her passions. Bradley-Lewis jumped at the opportunity. Now entering her second year at UD, Bradley-Lewis combines her love of archaeology

with her love of geology by conducting research on Parsons Island in the Chesapeake Bay. On Parsons Island, she works with O’Neal and Darrin Lowery, a geologist and an affiliated professor at UD, who also works as a research associate in archeology at the Smithsonian. Lowery earned his doctorate from UD in 2010, having studied with O’Neal while combining geology and archeology much as Bradley-Lewis is doing today.

“I was joking that when the three of us were standing on the island, I don’t know if there’s ever been that many people who have degrees in archaeology and geology standing in the same place at the same time doing the same project,” said O’Neal. “It is unique to have people who find the cultural side and the artifacts fascinating and also realize that if you’re digging in the earth but you don’t understand the geology as well, you’re really only getting half the story.”

#### *Research focus on the island*

Parson’s Island is an unusual site that can provide important information to the regional record. Bradley-Lewis, O’Neal and Lowery are interested in researching two key approaches, one archaeological and one geological. Archaeologically speaking, excavations on the island have uncovered artifacts that date to around 20,000 years ago, a period of time during the most recent part of the Pleistocene Epoch, when ice covered much of North America and it is thought that there wasn’t much human activity happening on the East Coast.

Bradley-Lewis is digging a pit on the island about a meter and a half below the surface that already has produced dozens of artifacts, with plans to start digging another pit in the near future. While a lot of these artifacts — about 100 in total — have been found closer to the surface in soil that dates around 13,000 years old, the hole that Bradley-Lewis is examining has a soil profile of around 20,000 to 24,000 years old. “We’re essentially digging into the ground nearly two meters deep to find those artifacts in place. Most of the time you see them, they are eroded out of a bank but that doesn’t really give you that much meaning,” said Bradley-Lewis. “We’re trying to find them in the ground in place and then hopefully find something to date so that we can attach an age to them.” The geological interest comes from the stratigraphy, a branch of geology concerned with the study of rock layers, on the island offers a window into what was happening in the Delmarva region during the late Pleistocene. O’Neal and Lowery said that the area is kind of a Rosetta Stone of the late Pleistocene geology, and they will get a lot of mileage out of setting up the site as an example of what that stratigraphy looks like.

The research team has kept moving forward, even during the coronavirus (COVID-19) pandemic. Because their research is so isolated, O’Neal explained that they are able to stay socially distant while conducting their research on the island. The team uses Ground Penetrating Radar (GPR) to map the stratigraphy of the subsurface, which gives them an idea of what’s hidden beneath the island’s surface. The GPR uses imagery to reflect the changes of the underlying stratigraphy at different intensities, and that also helps the researchers look for buried surfaces and anomalies that could have cultural meaning. “The main part of Parsons Island is kind of up from the sea level and then there’s a steep embankment that has really interesting stratigraphy with at least four ancient soils,” said Bradley-Lewis. “Another goal of ours is to look at the changing stratigraphy around the entire island because in such a small area, it changes four or five times, which is not something you typically see in such a small, compact region.”

Bradley-Lewis said that getting the opportunity to conduct research on the island has expanded her skill set, particularly when it comes to studying the geomorphology of the island. She also said that she enjoyed being able to jump right into research as a graduate student at UD. “Mike (O’Neal) had some research options available and laid them out and said, ‘Pick what you like,’ ” said Bradley-Lewis. “It was pretty soon that we first went out to Parsons and I said, ‘This is the one.’ And we really haven’t stopped the research since.”

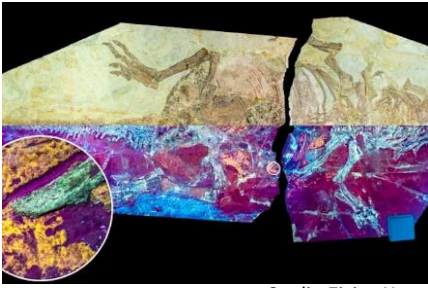


## ***SOME DINOSAURS SPORTED SCALES AND FEATHERS AS AN EVOLUTIONARY ADVANTAGE***

By Paul Smaglik

May 21, 2024

From Discover Magazine at <https://www.discovermagazine.com/the-sciences/some-dinosaurs-sported-scales-and-feathers-as-an-evolutionary-advantage>



Credit: Zixiao Yana

The question of whether some dinosaurs were covered with either scales or feathers has a new answer: both. Researchers examined the skin of the feathered dinosaur Psittacosaurus from the early Cretaceous period (135 million years to 120 million years ago) and found “zones” of reptile-style scales as well as “zones” where feathers were present, according to a study in Nature Communications. The early Cretaceous marks the period when some dinosaurs were evolving into birds.

### *Rare Skin Sample*

The finding was as unusual as the conditions that prompted it: the skin tissue was preserved in an unusual way that made it more receptive to imaging technology. The team who unearthed the Psittacosaurus specimen in China were initially unaware that skin cells were present. “The fossil truly is a hidden gem,” Zixiao Yang, a paleontologist at the University of Cork in Ireland who led the research team, said in a press release. “The fossil skin is not visible to the naked eye, and it remained hidden when the specimen was donated to Nanjing University in 2021. Only under UV light is the skin visible, in a striking orange-yellow glow.”

Yang worked with Maria McNamara of UCC’s School of Biological, Earth and Environmental Sciences, and scientists based in Nanjing University, China, to investigate the dinosaur skin. The team first used ultraviolet (UV) light to identify patches of preserved skin. Once they identified skin patches, the team turned to X-rays and infrared light to expose details of preserved cellular structures. The findings help explain how some dinosaur species transitioned from reptiles to more bird-like creatures, McNamara, said in a press release. “The evolution of feathers from reptilian scales is one of the most profound yet poorly understood events in vertebrate evolution,” McNamara said. “While numerous fossils of feathers have been studied, fossil skin is much more rare.”

### *Dinosaur Evolutionary Advantage*

Soft skin supporting feathers combined with other areas covered by scales probably provided an evolutionary advantage. “This zoned development would have maintained essential skin functions, such as protection against abrasion, dehydration and parasites,” McNamara said. “The first dinosaur to experiment with feathers could therefore survive and pass down the genes for feathers to their offspring.”

Those imaging techniques revealed another surprise — this time about the Psittacosaurus skin’s chemistry. “It is composed of silica – the same as glass. This type of preservation has never been found in vertebrate fossils,” said Yang. “There are potentially many more fossils with hidden soft tissues awaiting discovery.”

## **SWFAS OFFICERS AND BOARD OF DIRECTORS FOR THE 2025 CALENDAR YEAR**

### **Officers**

President: John Furey  
Treasurer: Charlie Strader  
Secretary: Susan Harrington  
Editor: John Furey  
Craighead Lab Director: Susan Harrington

### **Directors**

First of 3-year term:  
Dr. Tiffany Bannworth  
Amanda Townsend  
Second of 3-year term  
Theresa Schober (Chapter Rep.)  
Mary Southall  
Third of 3-year term:  
*open*

*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](http://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 Categories

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](http://fasweb.org). *Membership is for one year.* SELECT LEVEL BELOW.

<input type="checkbox"/> Student*	\$20	<input type="checkbox"/> Institutional	\$50
<input type="checkbox"/> Regular	\$40	<input type="checkbox"/> Sustaining	\$100
<input type="checkbox"/> Family	\$45		

\*Student membership is open to graduate, undergraduate and high school students. A photocopy of your student ID must accompany payment. \*\*Add \$25 for foreign addresses.

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Member Name: \_\_\_\_\_

Email: \_\_\_\_\_

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

City: \_\_\_\_\_ State: \_\_\_\_\_ ZIP: \_\_\_\_\_

Phone: \_\_\_\_\_ FAS Chapter: \_\_\_\_\_

**Please choose how you wish to receive the quarterly journal, *The Florida Anthropologist*.**

Digital Only (via a password protected web link) Note: Student members only receive digital access.

Both Digital and Printed

**This is a Gift Membership from:** \_\_\_\_\_

In addition to this Membership, I also wish to make a donation to:

\$ \_\_\_\_\_ Dot Moore/FAS Student Grant Fund      \$ \_\_\_\_\_ Florida Archaeology Month Account

\$ \_\_\_\_\_ Florida Anthropologist Monograph Fund      \$ \_\_\_\_\_ Florida Anthropologist Endowment Fund

**Total Enclosed: \$** \_\_\_\_\_

I agree to abide by the Code of Ethics of the Florida Anthropological Society.

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Signature

Date

**Send Membership Form and Dues Payment to:**

**Florida Anthropological Society, P O Box 1561 Boynton Beach, FL 33425**

*You can join online or pay Membership dues renewals via PayPal on our website [fasweb.org](http://fasweb.org).*

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