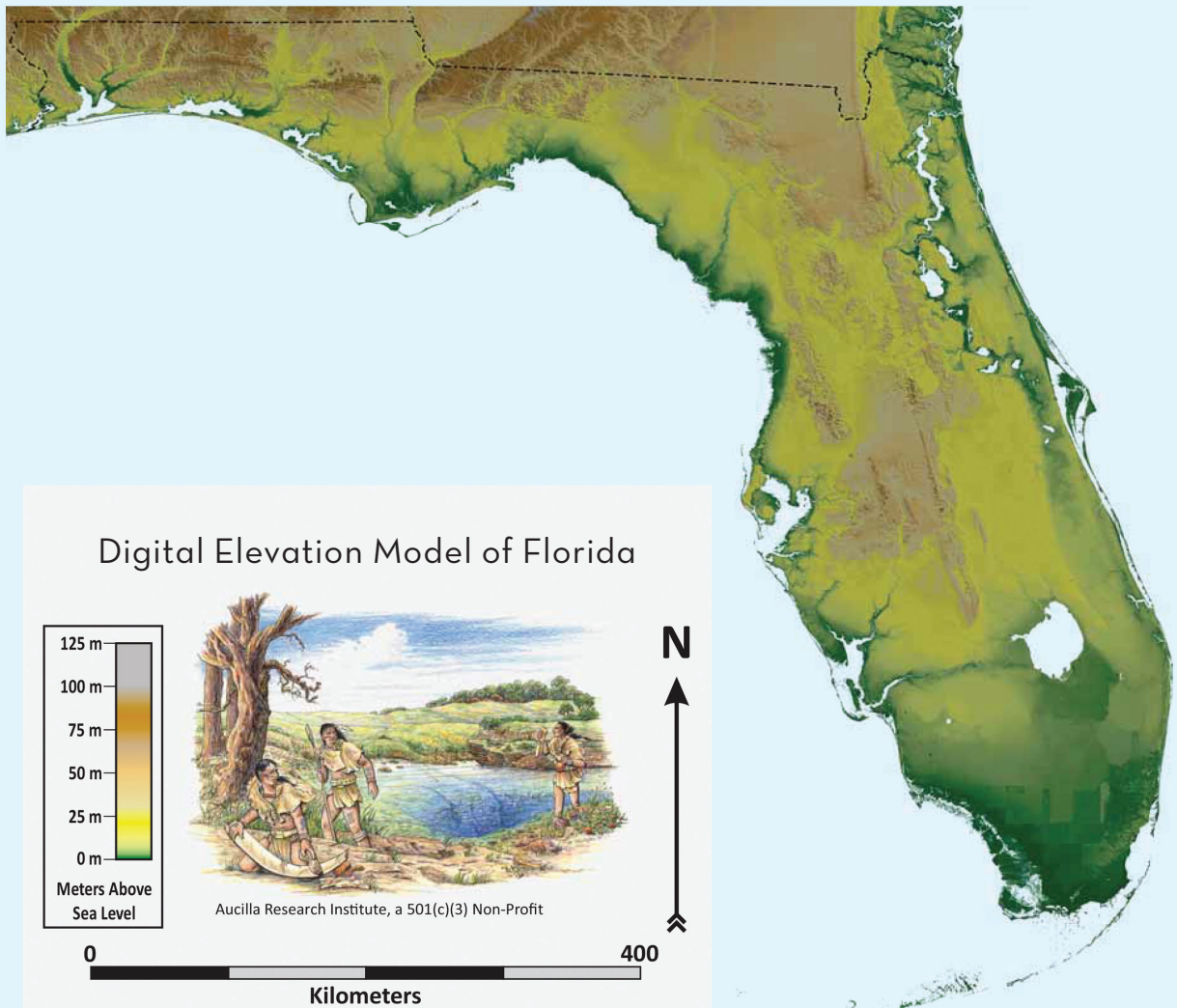


MONTICELLO, FL

OCTOBER 13-14, 2023

ARROWHEADS TO AEROSPACE

Floridians and Their Environment over Time



Public conference sponsored by the Aucilla Research Institute

THE AUCILLA RESEARCH INSTITUTE AND THE *First Floridian Conference Series*

Welcome!

Now in its sixth iteration, this conference series began in 2012 and led to the formation of the Aucilla Research Institute (ARI) in Monticello, Florida. In the spring of 2012, a group of scientists and educators recognized the immense public interest in local history and heritage. They also had a corps of volunteers willing to share these concepts with the public. The First Floridians Conference was conceived and well-received through this combination of resources.

After the event, organizers, presenters, and volunteers reviewed its success. Someone commented, “Scholars coming here because of the research potential need a facility and equipment to support their work.” That was the impetus for forming the Aucilla Research Institute, now a 501c3 nonprofit organization. ARI was established “to attract and promote original research in the earth sciences and the natural and cultural history of the Big Bend area of Florida, and to act as a center for innovative thinking and activity about these disciplines.”

The second *First Floridians First Americans Conference* in 2015 drew speakers from research institutions across the country. They included Dr. Michael Waters, Center for the Study of the First Americans at Texas A&M University; Dr. Dennis Stanford, Smithsonian Institution; Dr. Vance Holliday, University of Arizona; Dr. Ervin Garrison, University of Georgia; Dr. Chris Moore, University of South Carolina; and Dr. Jessi Halligan, Florida State University.

ARI’s *Spanish Missions and the Borderlands Conference* in October 2017 focused on current mission-era research in North America. Featured speakers included Dr. Rochelle Marrinan, Florida State University; Dr. Eliot Blair, University of Alabama; Dr. Keith Ashley, University of North Florida; Dr. Mariah D. Wade, University of Texas; Dr. John Worth, University of West Florida; Dr. Willet Boyer, Aucilla Research Institute; and Dr. George Broadwell, University of Florida. A conference highlight was the attendance of members of the Apalachee native tribe of the Talimali Band of Louisiana, the descendants of Florida’s original Native American culture here in the Big Bend area of the state.

The fourth conference in 2019 was titled *Old Stories and New Discoveries*. Speakers contrasted perspectives about early research efforts vis-a-vis modern approaches. Within any regional population, residents cannot fully understand where they are going unless they understand how the traditions and approaches began. Learning about the methods and results of gaining such a perspective was interesting and informative.

With the fifth conference, ARI broadened its horizons, focusing on *Cultural Heritage, Natural Resources, and Land Stewardship—The Significance of Apalachee, Chesapeake, and Galveston Bays*. These bays are far enough apart geographically to have had dissimilar annual climate cycles and biota, but possibly similar coping mechanisms. Their geological histories also differ, which allowed regional adaptations. The Pleistocene coastline of 21,000 years ago is far offshore from today’s coastline, which occupies vast bays and estuary systems with inland waterways. Within these parameters, an understanding of human adaptation and technological development over time was explored and compared through geology, paleobotany, paleontology, archaeology, technology, and past and future conservation efforts.

ARI is delighted by the public interest in its objectives, planning, educational outreach, and research. Many have supported the conference series with volunteer work, equipment, and money. Through the years, conference attendees have been eager to learn about the scientific discoveries and work being conducted by ARI. Our conference venue is the historic Monticello Opera House, but ARI headquarters can be contacted at aucillaresearchinstitute.org or (850) 933-6286.

CONFERENCE SCHEDULE

Friday, October 13, 2023

9:00 a.m.	Registration and Coffee
10:00 a.m.	Welcome and Introduction
10:05 a.m.	SPEAKER Dr. Yixin “Berry” Wen
10:35 a.m.	Q & A session
10:45 a.m.	SPEAKER Dr. James Adovasio
11:15 a.m.	Q & A session
11:25 a.m.	BREAK
11:35 a.m.	SPEAKER Dr. Nancy White
12:05 p.m.	Q & A session
12:15 p.m.	SPEAKER Dr. Colin Polsky
12:45 p.m.	Q & A session
12:55 p.m.	Lunch around town
2:30 p.m.	SPEAKER Shane Wellendorf
3:00 p.m.	Q & A session
3:10 p.m.	SPEAKER Dr. Neill Wallis
3:40 p.m.	Q & A session
3:50 p.m.	BREAK
4:00 p.m.	SPEAKER Dr. Rochelle Marrinan
4:30 p.m.	Q & A session
4:40 p.m.	Dinner around town
7:00 p.m.	KEYNOTE SPEAKER Dr. Brian Fagan

Saturday, October 14, 2023

9:00 a.m.	Registration and Coffee
10:00 a.m.	Welcome and Introduction
10:05 a.m.	SPEAKER Dr. Bruce J. MacFadden
10:35 a.m.	Q & A session
10:45 a.m.	SPEAKER Dr. Debra Willard
11:15 a.m.	Q & A session
11:25 a.m.	BREAK
11:35 a.m.	SPEAKER Dr. Chris Werner
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12:15 p.m.	SPEAKER Dr. Joseph Donoghue
12:45 p.m.	Q & A session
12:55 p.m.	Lunch around town
2:30 p.m.	SPEAKER Dr. Andy Hemmings
3:00 p.m.	Q & A session
3:10 p.m.	SPEAKER Dr. James Dunbar
3:40 p.m.	Q & A session
3:50 p.m.	Closing Remarks and Thanks

SESSION DESCRIPTIONS AND SPEAKER BIOS

Friday, October 13, 2023

Session 1: Technology Today: Sky High to Sea Deep

“Satellite Archaeology”—Dr. Yixin “Berry” Wen

Weather observation plays a crucial role in understanding and forecasting meteorological phenomena. In recent years, remote sensing technologies such as satellite and radar systems have revolutionized the ability to monitor and study weather systems. This presentation highlights the significance of remote sensing in weather observation and its applications. It focuses on the use of satellite imagery to visualize large-scale weather patterns and the use of radar to track and analyze localized weather events. By harnessing the power of remote sensing, researchers gain valuable insights into weather dynamics, enabling more accurate and timely forecasts for enhanced disaster preparedness and resource management.

Biography

Dr. Wen is an Assistant Professor in the Department of Geography, University of Florida. She also is affiliated with NASA/Goddard Earth Sciences Data and Information Services Center User Working Group as an expert in AI and data fusion. She previously was a research scientist at NOAA/National Severe Storms Laboratory. She earned a PhD in meteorology from the University of Oklahoma, followed by a postdoctoral research tenure at NASA/Jet Propulsion Laboratory, California Institute of Technology. Her primary research interests are ground validation of remote sensing products; exploration of the synergy between multiple remote sensing products; and use of remote sensing data to monitor and forecast natural hazards.

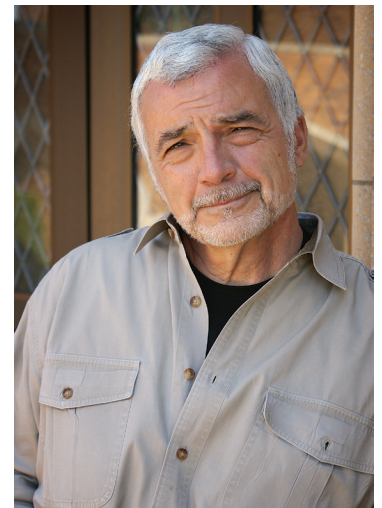


“Inundated Features in the Gulf”—Dr. James Adovasio

In 2008 and 2009, seminal research sponsored by the National Oceanic and Atmospheric Administration was conducted in the Gulf of Mexico by co-principal investigators Adovasio and Dr. Andrew Hemmings beyond the inundated Clovis shoreline. The rationale for this pioneering research was simple and straightforward. The eastern Gulf of Mexico had been proposed as an ideal locus for the identification and exploration of inundated coastal environments because the gradient of the tidal and wave patterns in this part of the Gulf would have preserved the coastal riverine and karst topographic features with minimum sediment overburden. This exploratory fieldwork is summarized and more recent research in the Gulf of Mexico is presented.

Biography

Dr. Adovasio is Director of Archaeology at the Senator John Heinz History Center in Pittsburgh, PA. His specialties include non-durable technology, geoarchaeology, and the application of high-tech protocols in the excavation of archaeological sites. He has worked in most of the United States and seven foreign countries. He has published some 600 scholarly works, more than half of which are on perishable technology.



SESSION DESCRIPTIONS AND SPEAKER BIOS

Friday, October 13, 2023

Session 2: Habitation and Changing Land Use Patterns

“Archaeology of 14,000 years in the Apalachicola-Lower Chattahoochee Valley Region”—Dr. Nancy Marie White

New archaeological synthesis shows Paleo-Indian evidence extends to the coast. Post-Pleistocene sea-level rise pushed the river eastward; Archaic peoples adapted to climate change with estuarine shell middens and the earliest ceramics (4500 BP). Middle Woodland ceremonialism gave way to agriculture inland; Fort Walton chiefdoms emerged (AD 1000). Then Old-World invaders brought depopulation and a confused protohistoric record. Creeks moved in, becoming Seminoles. Their settlements, and the largest U.S. Maroon community, were destroyed by the new America. Recent research includes lost Civil War forts; the short-lived antebellum boomtown of St. Joseph; other sites, and the landscape after Hurricane Michael.

Biography

Dr. White is a Professor of anthropology at the University of South Florida, Tampa. She studies and teaches prehistoric and historic archaeology, archaeological method and theory, public archaeology and cultural resources management, and gender in cross-cultural perspective. She has done archaeological research in the Apalachicola-lower Chattahoochee River valley of northwest Florida/southwest Georgia/southeast Alabama for decades, as well as fieldwork throughout the eastern (and western) U.S., Mexico, southwest France, and Borneo (East Malaysia)



“Climate Change in Florida”—Dr. Colin Polsky

Climate change is one of the quintessential scientific topics to be politicized along partisan lines. Yet this partisan divide appears to be diminishing. Several organizing questions motivate this presentation, including: What are the roots of this divide? What has sustained it, and what appears to be reducing it? Do we risk the divide re-hardening? What are the implications of the divide, and of its lessening? The discussion will draw on theory and data from the U.S. and Florida.

Biography

Dr. Polsky is Professor of Geosciences and Founding Director of the Florida Atlantic University School of Environmental, Coastal, and Ocean Sustainability. The mission of this multidisciplinary and multi-unit School is to elevate teaching, environmental research, and community engagement across the university. Dr. Polsky is a climate social scientist who examines how people create, perceive, and respond to climate challenges. His training is in mathematics, humanities, French, geography, and science and international affairs from the University of Texas, Penn State, and Harvard. As ECOS Director, he also leads program-building, fundraising, staffing, and communicating efforts to benefit students, faculty, and the broader community.



SESSION DESCRIPTIONS AND SPEAKER BIOS

Friday, October 13, 2023

Session 3. Human Adaptations to Global Conditions

“Stewardship of Sensitive Lands”—Shane Wellendorf

Public land acquisitions and private land conservation easements ensure the conservation of our natural habitats and productive farm and forest lands, and they protect our archaeological, historical, and cultural sites. Unprecedented funding opportunities for land conservation throughout Florida and the greater Red Hills region are now available. Tall Timbers works with landowners who wish to become eligible for conservation programs such as Florida Forever, Rural and Family Lands Protection Program, and NRCS-RCPP. The recent acquisition of a parcel of archaeological significance in Madison County is an excellent example of regional partners working together to permanently protect important cultural resources.

Biography

Shane Wellendorf is the Land Conservancy Director with Tall Timbers Research Station and Land Conservancy, an accredited land trust that works on conservation easements, landowner extension services, regional planning, and legislative advocacy in north Florida and south Georgia. He has been affiliated with Tall Timbers since 1996, working for many years as a research biologist with the Game Bird Lab, moving to the Land Conservancy in 2011. He holds a bachelor of science in wildlife biology from Iowa State University and a master of science in wildlife science from North Carolina State University. He also is a Certified Wildlife Biologist with the Wildlife Society.



“The Rise and Fall of Early Civic-Ceremonial Centers along the Big Bend Gulf Coast”—Dr. Neill Wallis

The earliest civic-ceremonial centers in the American Southeast were founded nearly 2,000 years ago on Florida’s northern peninsular Gulf Coast. Featuring multiple earthen or shell mounds and extensive village midden surrounding a central plaza, these sites marked a regional transition to permanent aggregated villages connected by shared ritual traditions. This presentation will share research results from two such sites in the Big Bend region, Garden Patch and Spring Warrior, that show parallel chronologies of mound building, house construction, village aggregation, site abandonment, and reoccupation correlated with trends in climate and the regional social landscape over the course of 600 years.

Biography

Dr. Neill Wallis is Associate Curator of Florida Archaeology, Bioarchaeology, and the Ceramic Technology Laboratory at the Florida Museum at the University of Florida. He has conducted field- and laboratory-based archaeological projects throughout much of Florida and adjacent states, and the Bahamas. For the past twenty years, his primary research effort has been devoted to uncovering the histories of early villages and regional social networks during the Woodland Period (ca. 1000 BC–AD 1000). He is the author of *The Swift Creek Gift: Vessel Exchange on the Atlantic Coast* (2011, UAP) and co-editor of *New Histories of PreColumbian Florida* (2014, UPF).



SESSION DESCRIPTIONS AND SPEAKER BIOS

Friday, October 13, 2023

“Contact to Conversion”—Dr. Rochelle Marrinan

The ancestral Apalachee homelands lie between the Aucilla River in the east and the Ochlockonee River in the west. When first direct contact occurred in 1528, the Apalachees were an agrarian society practicing maize agriculture, augmented by hunting and gathering. They were a sedentary society with ranked chiefs. They were matrilineal and leadership roles were determined by the matrilineage. They were fierce in defense of their homelands. In this presentation, I consider the Apalachees, who they were and how they responded to European contact. I use the documentary and archaeological records to detail their circumstances in the last years of their existence as a once-dominant culture in northwest Florida.

Biography

Dr. Rochelle Marrinan is an associate professor, and the former chair, of the Department of Anthropology at Florida State University. She received a PhD from the University of Florida in 1975 and has had a distinguished career as an educator and researcher in the field of archaeology. Her primary areas of interest are North American and Caribbean archaeology; Spanish missions in Florida; material culture; and zooarchaeology and faunal analysis relating to prehistoric foodways. Between 1984 and 2002, she directed field schools for students that focused on mission research. In 2013, Marrinan received a Lifetime Achievement Award from the Southeastern Archaeological Conference, awarded for excellence in the study of the archaeology of the Southeastern United States.



Session 4. Evening Keynote Presentation— Dr. Brian Fagan

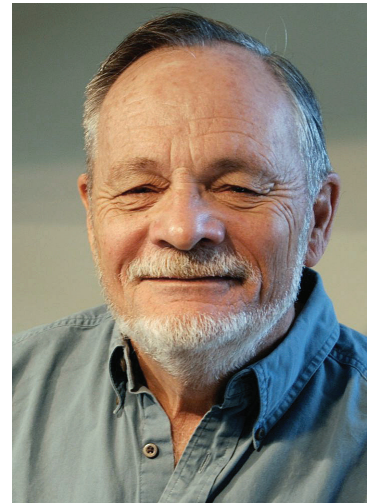
“And on That Day the Earth Will Be Burnt to Ashes, or An Archaeologist Looks at Climate Change”

This is a journey through 30,000 years of ancient climatic shifts. How did our forebears survive the last great cold snap of Ice Age times? How did climate affect the first human settlement of the Americas? In Southeastern Türkiye, we visit some of the earliest farming villages in the world. El Niños and megadroughts affected Ancient Egyptian civilization, the collapse of the Roman Empire, and the demise of Classic Maya civilization. Our journey ends with Europe’s Little Ice Age and the effects of volcanic eruptions on global climate, as well as the implications of ancient climate change for today and the future. What is the significance of what we know about ancient climatic shifts for today and the short- and longer-term future?

Biography

Brian Fagan is a Distinguished Emeritus Professor of Anthropology at the University of California, Santa Barbara. He studied archaeology and anthropology at Pembroke College, Cambridge, then spent seven years in Zambia and East Africa, working on prehistoric societies of the past 2,000 years.

Most of his career has been devoted to lecturing and writing about archaeology for the general public. His many books include widely used undergraduate texts, also *The Rape of the Nile*, *The Adventure of Archaeology*, and a series of books on ancient climate change, including *The Little Ice Age*, *The Great Warming* and *Climate Chaos: Lessons on Survival from Our Ancestors*.



SESSION DESCRIPTIONS AND SPEAKER BIOS

Saturday, October 14, 2023

Session 1: Evolving Ecosystems

“Florida Fossil Horses”—Dr. Bruce J. MacFadden

Some people think that horses (Family Equidae) were first introduced into North America by the Spanish about 500 years ago. However, an extensive fossil record on our continent documents that horses were widespread and native to North America for 55 million years. In Florida, horses have existed for 30 million years since the beginning of formation of the peninsula. This talk will review the fossil evidence of horses in Florida, with particular emphasis on the latter part of the record, including the origins of the modern genus *Equus*, its extinction, and if humans and horses coexisted in the late Pleistocene.

Biography

Bruce MacFadden is Distinguished Professor at the Florida Museum and Director of the Thompson Earth Systems Institute, University of Florida. On the UF faculty since 1977, Bruce is the author of 200 peer-reviewed articles primarily focusing on fossil mammals in the Americas. He also has authored two books on *Fossil Horses* (Cambridge 1992) and *Broader Impacts of Science on Society* (Cambridge 2019). He was the President of the Society of Vertebrate Paleontology (1986 to 1988) and the Paleontological Society (2018 to 2020). His current passion is promoting science through education and outreach, particularly in Florida.



Drivers of Vegetation Change in Florida: A Paleoeological Perspective—Dr. Debra Willard

The Florida landscape was shaped by Pleistocene oscillations in sea level and climate before European colonization modified the system for agriculture and urbanization. Pollen from Everglades and Tampa Bay sediments documents vegetational changes over the last 20,000 years and highlights how warming climates, rising sea levels, and human activities have shaped Florida ecosystems since the Last Glacial Maximum (~21,000 years ago). Data on past ecosystem changes are used to develop sustainable habitat and hydrology targets for critical Florida ecosystems.

Biography

Debra Willard has been a research geologist at the Florence Bascom Geoscience Center at the U.S. Geological Survey in Reston, VA, since 1991. She is a palynologist, specializing in the use of pollen and other palynomorphs to reconstruct vegetational response to a range of environmental and climatic stressors in Paleogene, Neogene, and Holocene sediments. She has conducted extensive research in the Everglades and Tampa Bay, and her current research is focused on the response of Atlantic and Gulf Coastal Plain wetlands to changing sea level and climate from the Last Glacial Maximum to the present.



SESSION DESCRIPTIONS AND SPEAKER BIOS

Saturday, October 14, 2023

Session 2. Climate Transitions and Sea Level Change

Underwater Cave Exploration, Paleo Sea Levels, and Depositional Environments—Dr. Christopher Werner

Underwater cave exploration within the western Woodville Karst Plain (WKP) has been ongoing since the mid-1950s. Over that time, more than 55 miles (91 km) of underwater cave passage has been surveyed and mapped, with Wakulla Cave as the single largest system at 44.8 miles (72 km). Previous studies have shown a correlation between previous sea level height and cave passage formation and development, given less survey data and less refined sea level curves (Werner, 2001). An update of the most recent cave survey data for WKP underwater caves, modern sea level curve correlations, and geomorphologic evidence of sea level changes will be reviewed. Western WKP caves provide sedimentary records which can help constrain varied depositional environments, age correlations, and provenance inputs and can likely constrain similar environments in the eastern WKP along the Wacissa and Aucilla Rivers. Further underwater cave exploration in the Aucilla River area is likely necessary to help locate and identify sedimentary deposits for future study.

Biography

Christopher Werner is an explorer, researcher, and filmmaker. He holds a Ph.D. in Geophysical Fluid Dynamics and M.S. in Geology from Florida State University. He has served as the Science Director for the Woodville Karst Plain Project since 1999. He has explored underwater caves and conducted scientific hydrogeologic research in the Woodville Karst Plain and Yucatan Peninsula for more than 25 years. He spent 18 years as an exploration geologist in the upstream oil & gas industry leading multidisciplinary teams exploring for new petroleum deposits and evaluation of corporate M&A targets. He now works to chronicle exploration efforts and scientific research providing insightful and thought-provoking documentary films for educational and entertainment outlets.

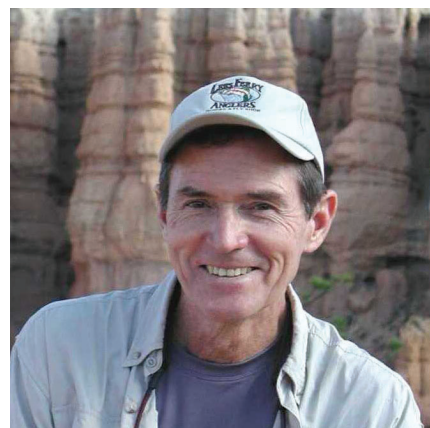


Ups and Downs of Sea Level—Dr. Joseph Donoghue

Dr. Joseph Donoghue is a faculty member of the Planetary Sciences Group in the Department of Physics, University of Central Florida. He is also part of the UCF National Center for Integrated Coastal Research. He received his PhD in geological sciences at the University of Southern California and has served as a Smithsonian fellow and a postdoctoral fellow at the Nuclear Regulatory Commission. He has been a faculty member at Oklahoma State University and Florida State University; a research associate at the Florida Geological Survey; and a visiting scientist at the University of Groningen, the Netherlands. He is an associate editor of the *Journal of Coastal Research*.

Biography

Dr. Joseph Donoghue is a geologist and emeritus faculty member of the Planetary Sciences Program at the University of Central Florida. His research interests include geology and geomorphology



of coastal environments, causes and effects of sea-level change, and Quaternary geology. He has taught graduate and undergraduate courses in coastal processes, marine geology, Quaternary geology, and environmental geology. He has published more than sixty papers and a large number of technical reports. He and colleagues recently have been investigating the geologic and human history of coastal lagoons, and the extent to which human actions are affected by both long- and short-term natural processes. The work has the goal of developing methodologies to prepare for and mitigate the projected environmental changes resulting from global warming.

SESSION DESCRIPTIONS AND SPEAKER BIOS

Saturday, October 14, 2023

Big Bend Coastal Inundation and Migration of the Shore: Discussing Biologic and Cultural Responses to That Shrinking—Dr. C. Andrew Hemmings

Between the Last Glacial Maximum roughly 22,000 years ago and the onset of essentially modern conditions 5,000 years ago Florida shrunk by a solid 50 percent. Because the Florida Continental Shelf is so flat very small rises in water cover surprisingly large areas of land. This inundation of the Florida landscape persistently pushed plant and animal communities landward in a mad dash to adapt or perish. We know people were already present inland when more than 90% of that LGM landscape was still dry land, making them part of the landward push for at least 10,000 years. A few thousand years of relatively stable shorelines has swung back to greater instability recently and confronts us with problems similar to those seen by many of Florida's prehistoric peoples. Various aspects of these problems are concerned in light of current research.

Biography

C. Andrew Hemmings did his undergraduate work at the University of Arizona, received his MA and PhD degrees at the University of Florida, followed by a post-doctoral fellowship at the University of Texas. His primary research interests are focused



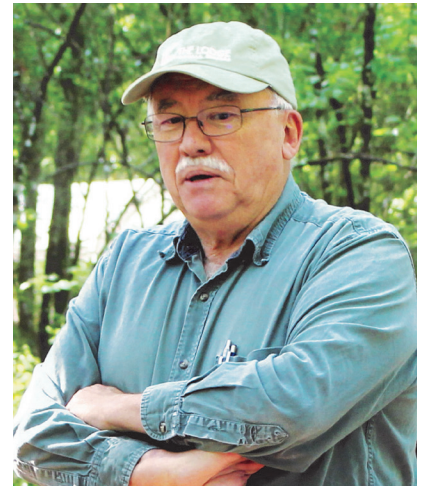
on the Terminal Pleistocene landscape and the biotic communities existing when people first arrived and the material culture, technology, and subsistence activities of those first people in the New World. The last few years have involved much more work with sites occupied by nearly all of the known Big Bend cultures from Early Archaic through the distinct episodes that put so many flags over Florida in the historic era (including Pirates!). Unless something unforeseen has happened, copies of the Old Vero Site book by Adovasio, Hemmings, and Vento should be floating around with the ink barely dry.

Climate Transitions in Florida over Time; Preservation as a Time Machine in the Big Bend Area of Florida—Dr. James Dunbar

An age-old challenge for archaeology and the natural sciences is where to find preserved—and therefore interpretable—evidence of the past. The older, the more challenging because the ravages of time and decay take their toll. A few exceptions exist where organic and other fragile materials are preserved—for example, in dry and saturated environments. The Big Bend area of Florida offers numerous sites where evidence survives from Oxygen Isotope Stage OIS-3 (57 ka years BP), if not earlier. This presentation will focus on the textbook examples of resources in the Aucilla, Wacissa, Cow Creek, and Page Creek drainages—Nature's time machine.

Biography

Jim worked for the Florida Department of State's Bureau of Archaeological Research and participated in research at the Page-Ladson, Alexon Bison, and Ryan-Harley sites. He received several grants, including one from the National



Geographic Society, to investigate sites at Wakulla Springs in Wakulla County. This region has the finest evidence of early human activity in the Southeast U.S. He is a founder and the board chairman of the Aucilla Research Institute, an organization dedicated to regional archaeology, earth science research, and public education about the area's incredible resources. His interests include archaeology and natural sciences research. He is the author of the book, *Paleoindian Societies of the Coastal Southeast*.

PRISCILLA FROM THE AUCILLA: The Story of a Mastodon

By Dr. James Dunbar,
Chair, Aucilla Research Institute Board of Directors

The late Don Serbousek was well acquainted with the Aucilla River and the fascinating features hidden below its waters. Along the river's route to the Gulf of Mexico, there are many land-locked surface channels where dark water upwells to the surface on one end and siphons underground on the other, returning its waters to subterranean conduits. Most interesting to Serbousek at the time, and to Aucilla Research Institute researchers today, is the outstanding quality of preserved late Pleistocene plants, animals, and artifacts left behind as evidence of this area's inheritance. One of Don's legacies is discovering, copying, and reassembling Priscilla the Mastodon's skeleton.

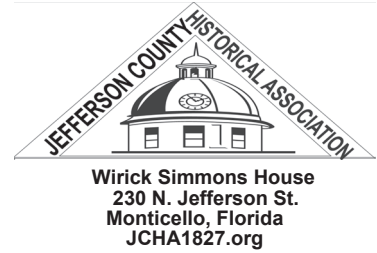
Don investigated the Priscilla site in the late 1960s. Twenty-five years later, when paleontologist Dr. David Webb of the University of Florida wanted to study the area, he asked Don to guide the new group of researchers. Don agreed, and to our surprise, his grid stakes were still in place even though a large hardwood tree had fallen onto the grid lines. Testing of the area revealed a gray silty clay above a dense, highly compacted organic peat. An unusual aspect of the peat stratum is that we found a similar compact peat deposit at the Page-Ladson site. Our brief inspection of the Priscilla site was completed, and in hindsight, we should have collected samples for radiocarbon dating.

Last year, ARI board member Andy Hemmings acquired funding and permission to secure a Priscilla bone sample from the Florida Museum of Natural History in Gainesville for carbon dating. To everyone's surprise, the bone date from Priscilla was older than we had thought: 21,880 calendar years Before Present (cal BP) during the Last Glacial Maximum (LGM). That age is the youngest of two other dates from North Florida that fall within the LGM—a period that spans from 22,900 cal BP to 17,480 cal BP¹. Another surprise was that the older dates gave evidence of a radically lower water table. In contrast, the Priscilla date gave evidence of a near-present higher water table some 520 years later. Priscilla appears to have become stuck in the mud, which also buried the skeleton, leading to its outstanding preservation.

The mission of the Aucilla Research Institute is to do world-class scientific and historical research in the Big Bend region of Florida and to provide and promote education to students and the general public. As a part of our educational objectives, ARI is pleased to present one of the "crown jewels" of its collections for students, educators, and the community—a fiberglass reproduction of Priscilla the Mastodon that is on display in the back courtyard of the Monticello Opera House during the First Floridians Conference.

¹Rasmussen, S. O. et al., A stratigraphic framework for abrupt climatic changes during the Last Glacial period based on three synchronized Greenland ice-core records: refining and extending the INTIMATE event stratigraphy. *Quaternary Science Reviews*, 2014. 106: 14-28.

Thank you to our Conference Sponsors:



ARROWHEADS TO AEROSPACE

Floridians and Their Environment over Time

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