

WEEDEN ISLAND SUMMER EXCAVATIONS

This summer, among the mosquitoes and no-see-ums and the rising temperatures and humidity, a group of students from USF and Eckerd College excavated a floor dating to a thousand years ago. They worked under the supervision of Dr. John Arthur (USF, AWIARE President) and Dr. Kendal Jackson (University of Tampa, AWIARE Treasurer). The floor contains artifacts indicating the Indigenous people were crafting beautiful shell beads for possible trade. Other material items of pottery, bone and shell, associated with hearth features, indicate that they were cooking and eating as they were manufacturing their shell beads. After each excavation, the students would join Dr. John Arthur in his USF St. Petersburg lab to sort, clean, and label the artifacts. We would like to thank Rachael Kangas, Director for the West Central and Central Regions of the Florida Public Archaeology Network and Amanda Malerba (FPAN) and Dr. Christopher Kiahtipes (USF Herbarium) for joining the excavations.



AWIARE

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INTERNATIONAL ARCHAEOLOGY DAY CELEBRATION!

Sat, Oct 17, 2026 - 10am - 3pm
Weedon Island Cultural and Natural History Center

Join us for International Archaeology Day!

Drop by during this family-friendly event with interactive activities, hands-on pottery workshops, expert artifact identifications, and more!

Enjoy ancient pottery making workshops! Learn to make pottery by forming a small-coiled pot using early techniques.

Explore a one-day exhibit of pre-Columbian artifacts from the Tampa Bay region and beyond! Archaeologists will illustrate the use of early stone and shell tools and their importance to Indigenous people. Bring in found or inherited items such as spear

points, tools, and pottery sherds for expert identification.

Discover how Indigenous Floridians used native plants in the pop-up “Florida Native Plants Through Time” exhibit. Experts will demonstrate how to make fiber-thread from our native yucca plant! Enjoy native plants, books, and resources on sustainable design and the importance of pollinators. 2 - 3p

Join us at 2p for Lost Cities of the Cloud Forest: Using archaeology to overturn old assumptions in Eastern Peru, a lecture by Dr. Anna Guengerich, Associate Professor of Anthropology at Eckerd College.

The following organizations will be on-site with information on their archaeology programs and how to get involved:

- Alliance for Weedon Island Archaeological Research and Education
- Florida Public Archaeology Network
- Central Florida Gulf Coast Archaeological Society
- University of South Florida Public Archaeology Network - West Central Region

www.explore.pinellas.gov/pinellas/programs

ARCHAEOLOGY DAY AT WEEDON ISLAND



CELEBRATING INTERNATIONAL ARCHAEOLOGY DAY

PRECOLONIAL MAIZE IDENTIFIED AT THE SAFETY HARBOR SITE (8O12), FLORIDA

The recovery of maize from a precolonial archaeological context—especially a single maize cob fragment—would hardly merit notice in much of the Mississippian Southeast. But the recovery of maize is noteworthy when it comes from peninsular Florida, on the southern-most margins of the Mississippian world. In the current issue of the journal *Southeastern Archaeology*, Board members Drs. Tom Pluckhahn and Kendal Jackson, along with collaborator Dr. Liz Horton, report the recovery of a maize cob fragment from the Safety Harbor site (8PI2), in Pinellas County.

Up to now, the evidence for precolonial corn from the Florida peninsula has been ambiguous and inconclusive. For example, some sixteenth-century Spanish accounts of La Florida suggest maize was grown as far south as Tampa Bay, while others are conspicuously silent on the matter. In terms of archaeology, a few isotopic studies of human bone have suggested the possibility of maize consumption by precolonial Native peoples of the region, others found no evidence for this. The famous finding of maize pollen from precolonial contexts at the Fort Center site near Lake Okeechobee has been contradicted by reassessments of the context and dating. Maize starch grains have recently been identified on pottery from sites on Cape Canaveral by archaeologists at the University of Central Florida, but imprecise dating leaves the possibility of later (colonial-period) associations. Similar problems with dating plague the chronological placement of the cob-marked pottery traditions of the northern Florida peninsula. Most important, macrobotanical studies—although limited in number—have consistently yielded a lack of evidence for precolonial maize.

The maize cob was recovered from recent testing of the Safety Harbor site, which included geophysical survey and the excavation of 68 shovel test pits and two test units. For expediency of time and expense, macrobotanical analysis has thus far limited to 54 handpicked samples from the 1/8-inch screening of selected contexts from five shovel tests and one test unit. The single maize cob fragment, with two attached cupules, was recovered from the lower depths of the midden layer in one of the shovel tests. The maize fragment was submitted for radiocarbon analysis and produced a conventional age of 500 ± 20 BP, calibrated to cal AD 1408-1442 (at 95.4% probability) and cal AD 1417-1436 (at 68.3% probability). Since the first recorded European expedition to the Florida Gulf Coast came with Ponce de Leon's voyages in 1513 and 1521, the maize is unambiguously precolonial. The Carbon isotope value is within the range of C4 plants, corroborating the identification as *Zea mays*.

Does this mean that people of the Safety Harbor culture were growing corn? Not necessarily. It is conceivable that they obtained maize through trade with agricultural societies elsewhere; sixteenth-century Spanish sources indicate that Native peoples of Tampa Bay area were aware that maize was more plentiful among Native groups to the east and north of Tampa. We might expect a low frequency of charred remains if maize grains were obtained through exchange. The same might also be expected if maize was cultivated only for ceremonial purposes, as some have suggested.

However, as noted above, Spanish colonialists described seeing fields of maize in the vicinity of Tampa Bay; Cabeza de Vaca, who travelled the region with the expedition of Pánfilo de Narváez in

1528, reported seeing “a good-sized plot of sown maize...ready to be harvested,” as well as more that had been dried and stored. The identification and dating of a maize cob from the Safety Harbor site corroborates this account and suggests corn was being grown here at least a few decades prior to arrival of Spanish colonizers. Pluckhahn and his co-authors favor the hypothesis that precolonial residents of the village grew maize for subsistence purposes, albeit at a low level of production.

Growing corn would not have been easy, especially for people who had no experience with the crop—or with farming more generally. The deep, sandy soils characteristic of much of the Florida peninsula promote rapid drainage, leaching, and poor nutrient retention (especially nitrogen). However, after several centuries of settlement, the midden at Safety Harbor had developed into a 30-50-cm deep sandy loam that likely could have supported maize cultivation; the inclusion of significant quantities of shell may have further improved soil productivity by balancing pH and increasing the retention of nitrogen and other nutrients.

Seasonal fluctuations in temperature and rainfall also presented challenges for precolonial maize cultivation on the Florida peninsula. Maize yields decline at temperatures above 86°F, while the normal summer high temperature for Tampa in the modern era is around 91°F. Contemporary Florida farmers grow corn when daily high temperatures are lower, from January to April in central Florida. Precolonial horticulturalists of the Florida peninsula would have likely followed a similar schedule. However, this presents a related challenge with regard to rainfall, which falls mainly in the wet season from May to October. Contemporary Florida farmers rely heavily on irrigation to grow maize during the drier winter and early spring months; precolonial maize growers would likely have needed to hand irrigate corn plants, especially at crucial points in the growing cycle.

The limitations of soil, temperature, and rainfall probably kept maize cultivation at Safety Harbor at a modest scale—certainly more like horticulture or gardening than agriculture. Does this mean that archaeologists should not regard Safety Harbor as “Mississippian”? Gordon Willey and Richard Woodbury, in their formal definition of Safety Harbor as a period in a 1942 publication, described it as “obviously of mixed origins, Mississippian and local Floridian.”

The recovery of maize, combined with other recent research, bears out this perspective. Recent ceramic studies by Trevor Duke and colleagues, with partial support from AWIARE and the Leavitt Foundation, has revealed the presence of nonlocal vessels that the authors interpret as heirlooms brought to Tampa Bay by Mississippian migrants. These migrants likely also brought both maize and the knowledge of how to grow and process it. As with pottery production, Safety Harbor peoples probably learned how to adapt maize cultivation to local conditions and scheduling.

Ultimately, the presence of a single fragment of maize cob out of a relatively small sample of microbotanical specimens from recent testing at the Safety Harbor site suggests both that maize was not intensively farmed and that more maize will be identified as additional samples are analyzed. Pluckhahn and colleagues call for future analyses, not only of additional samples from Safety Harbor but also from other Safety Harbor-period settlements.

AWIARE APPRECIATES PINELLAS COUNTY COMMISSIONERS SUPPORT FOR WEEDON ISLAND

AWIARE would like to send our appreciation to the Pinellas County Commissioners for their continued support and funding of the Weedon Island Preserve and Cultural and Natural History Center for the next fiscal year. Earlier this summer, it was proposed by county administrators that the county eliminate funding of the preserve and the Cultural and Natural History Center. However, the Pinellas County Commissioners listened and read the many responses from the public in support of the preserve and the Cultural and Natural History Center. We applaud the county for their support of protecting our rich cultural heritage and natural environment.

LIGHTHOUSE OF PINELLAS

This past June, the organization Lighthouse of Pinellas (<https://lhpfl.org/>), who’s mission is “to advance the independence and quality of life for individuals in Pinellas County who are blind or visually impaired” visited the Weedon Island Cultural and Natural History Center. AWIARE’s Board of Director’s member, Sheila Stewart, and President John Arthur, had the honor of presenting different types of artifacts to the children and teach them about the important Indigenous history of Pinellas County. We presented the children with different types of ancient shell tools, pottery, and shell beads as well as similar modern tools to feel, and they succeeded in being able to identify many of the tools. We believe we gave them a better understanding how the Indigenous people in the past shaped their world.



MEET OUR NEWEST BOARD MEMBER

Anna Guengerich is an Associate Professor at Eckerd College, where she has taught since 2020. She received her B.A. and Ph.D. from the University of Chicago, and between degrees had her first archaeological experience in the Southeastern U.S. while working as a field technician for Brockington and Associates cultural resources management. Since 2011, she has co-directed an interdisciplinary research program in Chachapoyas, Peru, which focuses on long-term management of cloud forest environments before and after the Inka and Spanish conquests. This project entails close collaboration with local stakeholders, including the development of a community-based ethnobotanical garden circuit (www.jardinesleynebamba.com/). Guengerich also maintains research interests in Tiwanaku, Bolivia, focused on monumental stone sculpture. Since moving to St. Petersburg, Anna has been developing educational programming at Eckerd College on local heritage and archaeology, especially at the Maximo site. In her free time, Anna enjoys gardening, crafting, and paddleboarding with her dog. She is excited to join the board of directors at AWIARE as a way to combine her enthusiasm for public-facing archaeology with her new home in St. Petersburg.



NEW ADVISORY BOARD MEMBER

AWIARE is pleased to announce Loren Blakeley as our new Advisory Board member. Loren previously served as a founding Board of Director for AWIARE from 2008 to 2013. Loren writes, “Archaeology has been a sustaining passion of mine since very early childhood; an innate interest and life-long study. I’m a great believer in public archaeology. AWIARE is a unique regional organization that encompasses public archaeology, and I am proud to once again belong to such an endeavor. I look forward to assisting AWIARE in meeting it’s continuing mission of education and discovery.” Welcome back aboard Loren!



ADULT ARCHAEOLOGY CAMP

AWIARE's Adult Archaeology Camp for this Fall is sold out.

We hope you will consider joining us in discovering the prehistory of the Tampa Bay region in the Spring.

With each camp, participants experience hands-on archaeology at Weedon Island Preserve, one of Florida's preeminent archaeological sites. Work with professional archaeologists and researchers to uncover clues about the culture and lifeways of the early people who inhabited the Tampa Bay region. With our small groups, participants are able each week in assisting AWIARE researchers in

excavation, recording data, screening sediment, and collecting artifacts, bone, and samples. There is also the opportunity to help sort and process artifacts from the excavation and other sites in the Tampa Bay area.

AWIARE Archaeologists will give talks about the site and local Indigenous history, as well as a field trip to a bay area archaeological site.

For more information about future camps, visit: <https://awiare.org/2026-adult-archaeology-camp/>



AWIARE ENDOWMENT CAMPAIGN



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Making History**

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premiere research facility fostering
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**To learn more, please visit us
at: www.awiare.org**

BECOMING AWIARE



The Alliance for Weedon Island Archaeological Research and Education Inc. is a 501(c)(3) non-profit organization that has as its goals to promote and facilitate long-term archaeological research, scientific exploration and public education at the Weedon Island Preserve and the adjacent gulf coast regions. Our Officers and Advisory Board include professional archaeologists and interested lay persons.

If you are interested in making a donation, please visit us at: www.awiare.org or click [HERE](#).

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