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Maya enthusiasts providing public education for 46+ years

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Inside this issue:

Unique Maya Jadeite Gouge with Wooden Handle Discovered Underwater in Belize, featuring LSU's Heather McKillop 2,6

Survey Reveals New Discoveries in the Northern Sector of Calakmul Biosphere: Interview with Ivan Šprajc, by Teena Clipson, (cont. from May) 3,5

Paleoclimate of Florida, with Mark Brenner, (cont.) 4

IMS Public Presentation; Membership Application 7

Unbundling the Past: Events in Ancient and Contemporary Maya History for June, by Zach Lindsey; Upcoming Events 8



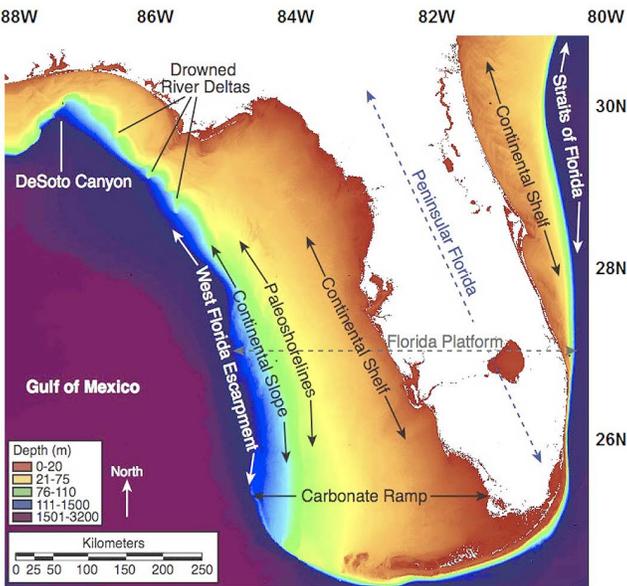
June 19, 2019 • Maya Ceremonial Era Long Count: 0.0.6.10.11 • 9 Chuwen 19 Sotz' • G4

Editor's note: The following is drastically edited down from Chapter 15 in the book: *Florida's Climate: Changes, Variations, & Impacts*, and is from Florida State University's Digital Repository. The four authors are Albert C. Hine, Ellen E. Martin, John M. Jaeger, and Mark Brenner. For a downloadable PDF of the full chapter, see the hyperlinks at the end of this report. **▶ Mark Brenner will be our speaker on June 19.** Be there!

Paleoclimate of Florida with Mark Brenner

Abstract: We present our understanding of Florida's paleoclimate for the past ~50 million years (Myr). The paleoclimate of the Florida Platform is closely linked to global paleoclimate. Global climate change over the past 50 Myr is a record of declining atmospheric carbon dioxide, decreasing temperature, and progressive addition of ice sheets. The overall global climate narrative is one of transition from a greenhouse Earth (warm temperatures with higher sea levels) to an icehouse Earth (colder temperatures with lower sea levels).

The early 21st century has been a period of extreme climate conditions in Florida, in that we have already seen very low lake levels, including complete drying of some water bodies for the first time in recorded history. Such complete drying was never reported previously and suggests that we have entered a new climate regime in this millennium.



Key messages:

- The peninsular morphology of Florida, created during the near-simultaneous tectonic opening of the Gulf of Mexico, Caribbean Sea, and western North Atlantic Ocean starting ~200 million years ago has always played a fundamental role in Florida's climate. When a large fraction of the peninsular land mass was exposed during sea level lowstands, huge thunderstorms formed, thus defining a unique component of Florida's climate.
- The topographically low and flat morphology of the Florida Platform has

Exposed and submerged portions of the Florida Platform. Geologists consider the Florida Platform to be a single entity that includes the emerged state of Florida, as well as the vast area that today lies under water. The size of the exposed portion of the Platform changed dramatically over geologic time as sea level rose and fell. Source: From Hine 2013; *Geologic History of Florida: Major Events That Formed the Sunshine State* by Albert C. Hine. Gainesville: University Press of Florida, 2013. Modified from USGS Open File Report 2007-1397; courtesy of Dr. L. Robbins.

also allowed climate-driven sea level changes to leave a robust stratigraphic record. From these rocks and sediments, the paleoceanography and, to a lesser extent, the paleoclimate of *continued on page 4*

IMS Presentation: June 19, 7:30 pm



Mark and Edzna

Dense Human Populations, Overexploitation of Resources, and Protracted Severe Droughts: A Recipe for Classic Maya "Collapse"

with Mark Brenner
University of Florida



Jim Reed, Editor

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L) The jadeite gouge after discovery. R) Wooden handle for the gouge. Both photos by Heather McKillop.

Unique Maya Jadeite Gouge with Wooden Handle Discovered Underwater in Belize

Friend of the IMS, Heather McKillop and her teams have created quite a stir in the academic world of Maya Studies!

Jadeite artifacts at Maya sites are normally associated with ritual and ceremonial locations, with high-quality jadeite reserved for elite objects. The discovery of a jadeite gouge with a wooden handle at a Classic Maya saltworking site submerged by sea-level rise – Ek Way Nal, Belize – is therefore unexpected and provides new information about the utilitarian use of this stone. The extremely high quality of this jadeite tool is particularly surprising, offering new insight into the Classic Maya exchange systems and the role of salt makers in the coastal economy.

Note: This report is drastically reduced from a scholarly paper by five authors that appears in *Antiquity*, April 2019. See the full citation and link to the PDF at the end of the article.

The ancient Maya used jadeite objects in burials, caches, and other ceremonial contexts from the Middle Preclassic to Postclassic periods (1000 BCE – 1500 CE). During the Classic Period (300–900 CE), the use of high-quality translucent jadeite was typically reserved for unique and elaborate jadeite plaques, figurines and earplugs (earrings) for royalty and other elites.

Craft workers closely affiliated with Maya royalty probably finished making these jadeite objects in either palace workshops or household workshops in lowland Maya cities.

Ancient Maya stone tools are seldom recovered with their original wooden handles,

as organic preservation is dependent on specific environmental conditions.

This article presents the first report of a Maya jadeite tool – a gouge – found with its associated wooden handle. The tool was recovered from Ek Way Nal, an underwater site in southern Belize – one of 110 sites comprising the Paynes Creek Salt Works (below).

The discovery of a jadeite tool in a utilitarian context is noteworthy, as high-quality translucent jadeite is normally associated with ritual or ceremonial contexts in the Maya area. This jadeite tool comes from a salt kitchen, a location that contrasts with the more typical Maya burial and cache contexts for translucent blue-green jadeite artifacts. The Ek Way Nal tool is made of exceptionally high-quality jadeite, which is surprising given its utilitarian context. This article describes the archaeological context of the jadeite gouge and its wooden handle, as well as geological and use-wear analysis wood-species identification and the method used to conserve the handle.

The Paynes Creek Salt Works comprised dozens of wooden salt kitchens built by the Classic Maya along the shoreline of seasonally hyper-saline Punta Ycacos Lagoon (at left). Brine was boiled in ceramic containers over fires to make salt, leaving behind briquetage. The thatched, wooden salt kitchens allowed for year-round production, as well as the storage of wood fuel, pots and salt.

Following their abandonment sometime after the end of the Classic Period, rapid sealevel rise flooded the salt works, sites leaving them underwater and invisible in the modern mangrove landscape. The sites are concentrated in a 5km² area in Punta Ycacos Lagoon, with evidence of contemporaneous settlement elsewhere in the coastal area from the Middle Preclassic through the Postclassic.

Jadeite outcrops and quarries have been identified along both sides of the Motagua River in Guatemala. Canoe trade down the Motagua River and along the Caribbean coast of Belize provided direct access to jadeite for coastal

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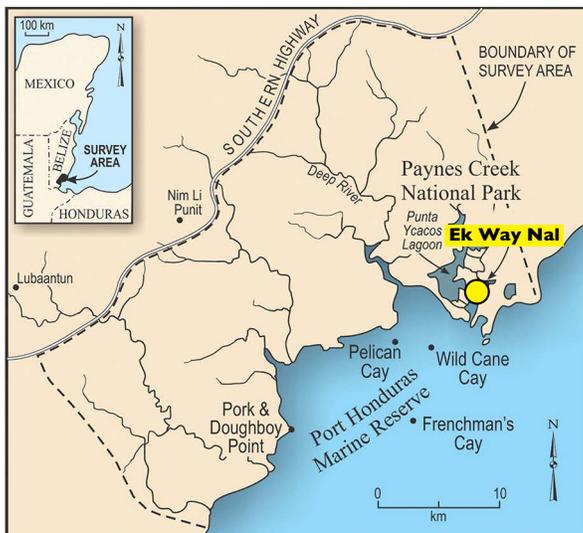
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The southern Belize survey area showing the location of Ek Way Nal. Map by Mary Lee Eggart.

continued on page 6

Survey Reveals New Discoveries in the Northern Sector of Calakmul Biosphere

Interview with Ivan Šprajc by Teena Clipson

continued from the May IMS Explorer

Unraveling the Mysteries of Peculiarities

Ancient history has always teased us with mystery. The ancient Maya, one of the most extraordinary peoples of our past, still intrigue us today. They are particularly known for their sophisticated hieroglyphic writing that used a complex logo-syllabic script, their majestic art and grand architecture as well as their proficiency in mathematics, calendar systems and understanding of astronomy.

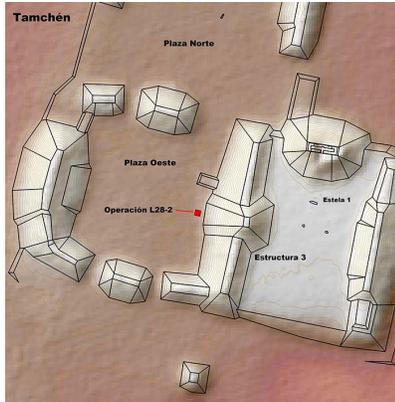
Archaeologists are still learning about this ancient civilization, and sometimes, new discoveries invite more questions than they answer. In Campeche, the recent discoveries made by Ivan Šprajc and his team highlight that we still have much to learn about the Maya and how their lives differed from site to site.

“We found stelae with stucco on them, which is unique. There are many other stelae in the Maya area that have stucco like plaster, but none with glyphs modeled in stucco attached to the stone. We also found modified monuments, ceramics, and Postclassic offerings.”



A strange deposit of stone spheres was found in the deepest layer under the plaza floors in a test pit excavated in a small patio group, in a relatively small architectural group several kilometers away from Tamchén.

“The density of archaeological remains is remarkable in this area. Some architectural groups are quite large, and again we observed a large number of vaulted buildings, stairways, stepped slopes reminiscent of Río Bec false stairways, several ball courts... Fine masonry façades are quite common (right). A building of relatively modest size has two Chac (or earth deity) masks at one corner.”— Ivan Šprajc



Location of test pit in Tamchén. The rather large test pit during excavation.

A unique well-preserved stela with stucco glyphs was first discovered in 2013 at the Chactún site, revealing a Long Count date of 751 CE. (See photo on page 3 of the May IMS Explorer.) Other less well-preserved stelae with stucco fragments have also been discovered which suggests this to have been common practice for the area, but nothing similar has yet been discovered in surrounding areas.

One of the most common finds in the excavation of sites are ceramics. From these ceramics, we can glean a wealth of information about the people who used them. Not only from the type and attributes of the ceramic such as in the clay, color, or glaze, but also from how the ceramics were used – from plates and cups used in everyday life to vessels used in offerings in tombs, or as gifts to foreign elite. Many ceramics, in certain periods, also include painted scenes and hieroglyphs that depict the life of the Maya in those times.

“We knew that the site (Chactún) was early because the surface ceramics that we found back in 2013 were Early Classic and Late Preclassic.

“Last year we made two test pits in Tamchén; we now have that stratigraphic information. In one of those excavations, we even reached what are called Mamom ceramics. You know, Mamom are Middle Preclassic–Late Middle Preclassic ceramics, around the mid-first millennium BCE, but now, we encountered even earlier ceramics that appear to be from centuries before that time. And that is not very common in this area.”

This was the first time that these types of early ceramics have been found in the region, partly because it had been completely unexplored before, but sites in the broader neighborhood, and even in Becan, have also shown that early ceramics are very rare.

“We actually have one of the few sites with vestiges of the early colonizers, the first inhabitants perhaps who came to live in this interior. And this helps us complete the picture of the settlement dynamics that we have for the whole area. Now we know that Tamchén was at least partially settled in those early times.

“On the other extreme, we have Late Postclassic offerings at Chactún, and

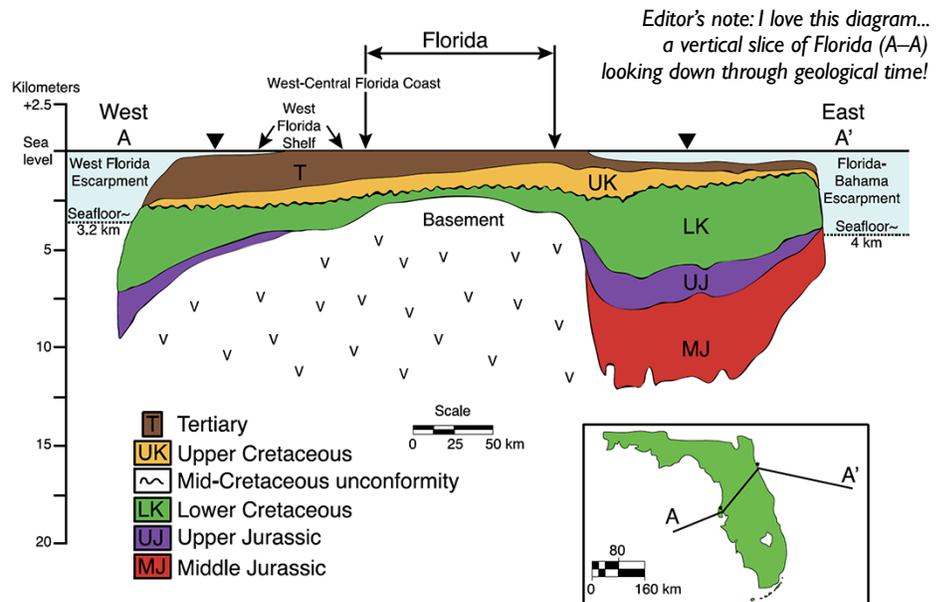
continued on page 5



Paleoclimate of Florida with Mark Brenner *continued from page 1*

the Florida Platform has been reconstructed.

- Over the past 50 Myr the climate of the Florida Platform followed the global climate change of declining atmospheric carbon dioxide (CO₂) and cooling, i.e., a transition from a greenhouse (warm) to an icehouse (cooler with cyclical glaciations and deglaciations) Earth. There were three major warming events that occurred during this prolonged cooling that impacted Florida's paleoclimate.
- Pleistocene data reveal a terrestrial climate comparable to the modern climate, with evidence of cool climate episodes that may have been influenced by regional upwelling of cold marine waters. As climate in Florida warmed after the Last Glacial Maximum and early Holocene (~18--~11.7 ka), there were profound consequences for Florida's terrestrial environment, as vast areas that had served as habitat for Pleistocene land plants and animals, some now extinct (e.g., mammoths, horses, giant sloths, tapirs), were inundated by rising seawater.
- Shortly after the onset of the Holocene Epoch (11.7 ka), rainfall increased contributing to rising groundwater tables and initial filling of Florida's more than 8,000 shallow lakes.



West-to-east depth section across the central Florida Platform – part of the even larger Florida-Bahamas Platform. This diagram shows two distinct rock types that underlie the Florida Platform: (1) >500-Ma-old basement rocks (white component marked with “v”) overlain by (2) much younger, mostly limestone (marked with colors; MJ, UJ, LK, UK, T). There is a third geologic unit, mostly quartz-rich sand, which overlies the limestone. The sand covers most of the exposed Florida Platform and forms most of our beaches. Source: “T” (Tertiary and Quaternary) modified from Hine et al 2003; Hine 2013; *Geologic History of Florida: Major Events That Formed the Sunshine State* by Albert C. Hine. Gainesville: University Press of Florida, 2013.

Seven hundred million years ago, the basement rocks that underlie the Florida Platform were located near the South Pole and were part of a larger continental landmass called Gondwana, which eventually collided over millions of years with another large land mass called Laurasia, forming the megacontinent Pangea in the Paleozoic, from ~350 Ma to ~250 Ma (Hine 2013). Thus, the

> 500-Ma-old basement rocks that underlie the present Florida Platform once formed part of the African and South American continents.

▶ The source PDF is 28 pages in length and downloadable at both: https://www.researchgate.net/publication/322414541_Paleoclimate_of_Florida and <https://fsu.digital.flvc.org/islandora/object/fsu%3A539192>

June 19 • 730 pm • Don't miss Mark Brenner:

Dense Human Populations, Overexploitation of Resources, and Protracted Severe Droughts: A Recipe for Classic Maya “Collapse”

Recently, archaeologists have begun to reconsider the utility of the term “collapse” to describe cultural changes in the Maya Lowlands during the late 8th and early 9th centuries CE. Ethnographers have chimed in, pointing out that the term is “loaded” and even implies disappearance of the ancient Maya, when in fact Mayan language and Maya culture remain vibrant today.

Furthermore, archaeologists argue that there was a substantial Postclassic occupation, particularly in the northern sector of the Yucatan Peninsula. Nevertheless, there is ample evidence for widespread

cultural and demographic changes by the 9th century CE. For example, large temples were no longer built, stela were not erected, fine polychrome ceramics were not fabricated, and many large urban centers were abandoned.

Numerous hypotheses have been postulated to explain the cultural/political changes of the Terminal Classic, among them internecine warfare, foreign invasions, earthquakes, overexploitation of resources (e.g. soil degradation), disease, insect outbreaks, climate change, etc. Although there may be evidence

to support each of these causal factors for “collapse,” it is far more likely that multiple stressors brought about the political disintegration.

Scientists are incorporating new techniques to better understand the climate and environmental conditions under which the ancient Maya lived. New LiDAR data from the Peten region of Guatemala suggest a Late Classic population of 7–11 million in the entire Central Maya Lowlands region. To put such numbers in perspective, the population of Peten (Guatemala) in the mid-1960s was about 25,000, <1% of the Late Classic value in the region and less than half the number of inhabitants in a single site like Tikal, ca. 800 CE.

See page 7 for more...

Survey Reveals New Discoveries in the Northern Sector of Calakmul Biosphere

Interview with Ivan Šprajc by Teena Clipston

continued from page 3

some modifications of monuments in Chactún, Lagunita, and probably also at Tamchén, which is not very common.

You know most of this area was practically abandoned after the Classic Maya collapse. Now we have evidence that there were some small random groups around that were leaving offerings in front of monuments.

“What is surprising, is the numerous modified monuments that we found. Many of these broken stelae were reset, and some of those fragments were reset as corner stones of ballcourts. Something similar was found in Calakmul.

For example, Stela 66 was set in the corner of a ballcourt, at some later date. We don’t know exactly why.”

Calakmul was one of the largest and most powerful ancient cities in the Maya lowlands, located deep in the Campeche jungle, 22 km from the Guatemalan border. The city, bearing many symbols of a snake head glyph that reads *Kaan*, is known as the Snake Kingdom. It reigned during the Classic period.

There seems to have been an unknown group of settlers that changed the dynamics in the cities of Chactún, Lagunita, and Tamchén. They remain a mystery. Because of the broken stelae and modified monuments, we do know that they didn’t have the same respect for the monuments as their predecessors in the area. However, they didn’t completely destroy them, so that relationship remains ambiguous: whether it was warfare, a new king, a new group of people moving into an already deserted city, or a hostile takeover from within, the answers are still not clear.

“We can only guess that some new people came. We do know that at some point ceramic types changed quite drastically. They changed in Becan which has been explored and excavated far better than the neighboring regions. We know that ceramic changes happened after 750 CE or so. There is a break, kind of a rupture, and then some new groups arrived, so we suspect something

The bird is a ceramic seal from the test pit at Tamchén; it was found in the second earliest layer, together with Mamom and pre-Mamom ceramics. Photo credit: Atasta Flores Esquivel.

similar happened at Chactún, and probably in Lagunita and Tamchén also. “They did have some respect for those monuments, they did break many of them, but their fragments were again put as corner stones in ballcourts or in some plazas.”

Although the locations of Chactún, Lagunita, Tamchén remain relatively close to Calakmul, no evidence has yet been found linking the cities to the Snake Kingdom.

“We wish we had found something like that (linking Chactún, Lagunita, and Tamchén to Calakmul), but we didn’t. We have discovered some inscriptions on stela monuments. We even have the name of a ruler in the 8th century and some dates, but so far, we have no mention of the *Kaan* dynasty. We actually don’t know if there was any relationship with the *Kaan* dynasty of Calakmul. Perhaps the florescence of Chactún and Lagunita is actually a consequence of the collapse of the *Kaan* dynasty.”

Another mystery, found in a separate test pit in a small architectural group several kilometers away from Tamchén, is the discovery of stone spheres (see photo on page 3). Although similar spheres have been found in Ceibal and in Nakum, Guatemala, archaeologists are still baffled by the findings.

“But no one knows exactly what the whole thing is about. It is frustrating. We just don’t know. There were several spheres. But some of them were placed in two rows, on purpose. It looks like some kind of offering from before the plaza was commissioned. Something like that, but we are guessing again.”

The mysterious Maya continue to leave us intrigued. Perhaps we will have more answers once all of the LiDAR data has been analyzed. The next field season will possibly see excavations in Chactún begin. Are the answers to our questions below



Head artifact: This small ceramic head is from another test pit at Tamchén; it also seems early. As yet, the exact date is unknown (it was found on bedrock, without clear associations of datable ceramics).

Photo credit: Atasta Flores Esquivel.

the surface of the ground, or inside these ancient structures? The area, still pristine to excavations, may yet reveal the tombs of kings, unspoiled ceramics, hieroglyphs with a story to tell, or perhaps, only more questions... the process will continue. 📌

About the author: Teena Clipston graduated with a diploma in Journalism and Short Story writing in 1996. She has since published 100s of articles and two short stories. She is currently writing her first fictional novel, *Gypsy Saint James and the Treasure of Ix Chel*. **Editor’s note:** I lovingly refer to Teena as our “IMS Reporter in the Field” as her home base is Playa del Carmen!

Unique Maya Jadeite Gouge with Wooden Handle Discovered Underwater in Belize

continued from page 2

communities – including the salt workers at Ek Way Nal. Jadeite beads, for example, were interred in graves at the nearby trading port on Wild Cane Cay.

Mineral identification

The jadeite gouge was analyzed at the American Museum of Natural History to determine the object's chemical composition and mineral phases. These analyses reveal that the tool is of exceptionally high quality and is compositionally consistent with jadeite samples from the Motagua River valley in Guatemala.

This is consistent with a Guatemalan source, and resembles some of the very fine Olmec-like jadeite artifacts. As an example of jadeite, the gouge approaches the quality of so-called “gem grade” material, in that it has a translucent blue-green color often associated with objects from Formative (Olmec) sites. Translucency is conferred by a tight microstructure of intersecting jadeite grains; this structure also confers mechanical durability.

Wooden handle

Thin slices of the wooden handle were taken using a backed razor. Analysis of the wood's structure shows that the handle is made from Honduras rosewood, as indicated by the presence of characteristic storied rays. Honduras rosewood is locally available in the deciduous forest on the south side of the Deep River, and more generally in southern Belize. The rosewood handle was conserved using the polymer method at Texas A&M University. As with previous waterlogged finds from the Paynes Creek Salt Works, printed replicas were made from the 3D scans for use in exhibitions and for public outreach.

Conclusions

The depositional context of the Ek Way Nal gouge in a salt kitchen demonstrates that high-quality jadeite was not reserved for, or limited to, elite usage. If not obtained through local market-place trade, jadeite may have been transported by merchants travelling along the coastal canoe route from the Motagua River valley quarries, or have been directly procured by the salt producers or their delegates.

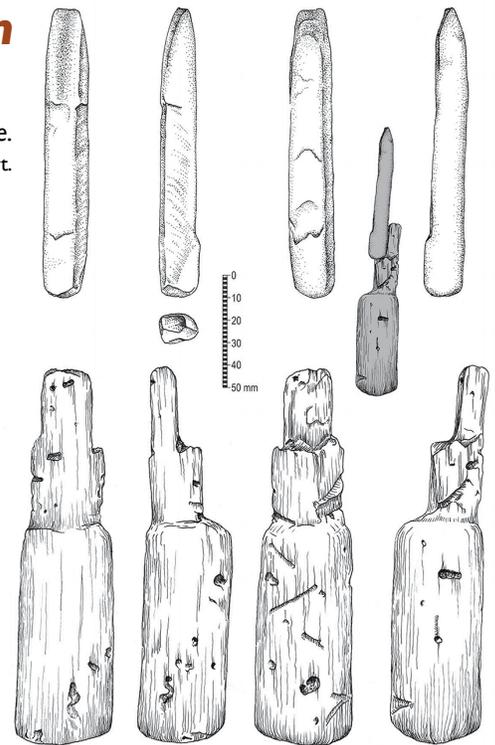
The salt workers were successful entrepreneurs who were able to obtain high-quality tools for

Drawings of the gouge and handle.
Illustrations by Mary Lee Eggart.

their craft through the production and distribution of salt. A basic biological necessity that was in demand for the Maya diet, salt was also a storable form of wealth and an important preservative for fish and meat. The choice of high-quality materials, such as jadeite and rosewood, for use in utilitarian tools, demonstrates that the salt workers played an important role in the Classic Maya marketplace economy.

Citation: McKillop, H., Harlow, G., Sievert, A., Smith, C., & Wiemann, M. (2019).

Demystifying jadeite: An underwater Maya discovery at Ek Way Nal, Belize. *Antiquity*, 93(368), 502-518. doi:10.15184/aqy.2019.35. The full report is downloadable at: <http://dx.doi.org/10.15184/aqy.2019.35> and is also available on the Cambridge University Press website by searching the report by name. 🏠



Paynes Creek, Belize

The only known Classic Maya wooden structures are located in Paynes Creek National Park in Belize. The project, led by LSU Professor, Heather McKillop, will help protect the underwater wooden structures and make information available to area residents and tourists. With the three-year grant from the AIA, McKillop will construct an observational platform and host a series of workshops and talks in the region to raise awareness of the site. Check out the project's website and view videos that feature Heather explaining the importance of their work at: <http://www.archaeological.org/projects/paynescreekbelize>



Grad student Mark Robinson and Project Director Heather McKillop hold an ancient wood post at Paynes Creek.

Consider donating to help Heather McKillop's projects

“I would love to have anyone donate to our underwater salt works project. Louisiana State University (LSU) does not allow me to have GoFundMe account, etc. However, I do have a tax-deductible account with the LSU Foundation called “Maya Support Fund” for which all funds go to support Maya archaeology in the field and in the lab. Nice that they let me control the distribution. I have used it in the past for student airfare to Belize, for C14 dating of artifacts, for 3D printer supplies, and directly to support the field work. Donations can be made by mailing a check to: LSU Foundation, Dept. of Geography and Anthropology, LSU, Baton Rouge, LA 70803. Please make sure to write on the check that it is for the “Maya Support Fund.” We're in the field now, and we'll be back in Belize during April-June in 2020, and in 2021. It would be wonderful to have visitors from the IMS!” Heather 🏠

Dense Human Populations, Overexploitation of Resources, and Protracted Severe Droughts: A Recipe for Classic Maya "Collapse"

with Mark Brenner

Department of Geological Sciences & Land Use and Environmental Change Institute, of the University of Florida
Cenote Miguel Colorado (Carmiche)

Since the 1960s, Earth scientists working in the Maya Lowlands have generated data that provide insights into the paleoclimate and paleoecology of the region. Lake sediment cores from the hilly terrain of Peten contain evidence of profound, human-mediated landscape transformation (deforestation and soil erosion). Evidence for periodic, severe and persistent droughts, first emerged from study of a sediment core collected in Lake Chichancanab, and such climate drying has now been documented from lake cores taken elsewhere. Such qualitative paleoclimate findings suggested that drought played a role in Maya cultural transformation ("collapse"), given the temporal correlation between past dry periods and changes in the archaeological record.

I will present some recent data that shed light on past climate, environment and demographics in the Maya Lowlands, and discuss how multiple stressors may have affected ancient Maya culture.



A) The hammock weavers of Ek' Balam – one can find a wonderful assortment of fine hamacas in the town. B) Sr. Serapio Canul Tep (Punta Laguna) describes the Ch'a Châak ceremony, an ancient ritual requesting rain. C) The Maya hat weavers of Cuch Holoch who weave hats in a small shallow cave. D) Cenote Xlacáh at Dzibilchaltún. Such dissolution features are openings to the local aquifer. E) Doña Asaria prepares tortillas in Santa Elena.



Mark Brenner is a limnologist/paleolimnologist with special interests in tropical and subtropical lakes and watersheds. He received his undergraduate degree in Biology from Grinnell College and his MS and PhD degrees in Zoology at the University of Florida (UF). Mark is a Professor in UF's Department of Geological Sciences and Director of the Land Use and Environmental Change Institute (LUECI).

He teaches courses in Limnology, Paleolimnology, Florida Lake Management, Tropical Field Ecology, and Humans and the Environment of the Yucatan Peninsula, the latter two in Yucatan, Mexico.

Mark is Co-Editor-in-Chief of the *Journal of Paleolimnology*. Mark's research addresses interactions among climate, environment, and humans. He has conducted fieldwork in Mexico, Guatemala, Panama, Colombia, Venezuela, Bolivia, Ecuador and the Galapagos Islands, Haiti, the Dominican Republic, China, Cambodia, Madagascar, and Florida. In addition to his interests in ecology and paleoecology, Mark is an avid fan of alternative music and a collector of folk art.

June 19 • 7:30 pm • K-413 • IMS Public Presentation • with Mark Brenner

The IMS is a Community Partner with Miami Dade College – Kendall Campus, Miami, FL

This program will take place at 7:30 pm in K-413 (in Building K-4, Room 13)

Go to the college website at: www.mdc.edu for directions and campus map.

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Unbundling the Past: Events in Ancient and Contemporary Maya History for June by Zach Lindsey

2 June 608 CE and **29 May 746 CE:** On 9.8.15.0.0 and 9.15.15.0.0, the people of Piedras Negras celebrated an event typically translated as “5 tuns lacking.” These events fell on the 15th tun of every k’atun cycle, and were probably like bigger new years celebrations. Most cities didn’t make a big deal of them, but Piedras Negras memorialized them prominently. Why? Well, do you need another excuse to party? By the way, the next one is 0.0.15.0.0 (October 4, 2027) in case you’d like to call off work in advance!

15 June 742 CE: On 9.15.10.17.14 6 Ix 12 Yaxk’in G3, Itzamnaaj B’ahlam II of Yaxchilan died after more than sixty years in office. But though responsible for an incredible buildup of the city’s architecture and the commissioning of some of the most famous lintels in Maya history, Itzamnaaj B’ahlam could not prevent political instability after his death; this date also marks the beginning of a period of uncertainty that lasted ten years.

26 June 729 CE: On 9.14.17.14.17 1 Kab’an 0 Mol G9, Ix Matawil Sotz’ got married, but thanks to sloppy handwriting, scholars like Mark Pitts and Kathryn Josserand disagree whether it was to Ruler 3 or Ruler 4 of Piedras Negras. That’s a pretty important disagreement!



Right-side view of a “Drum Altar” from Yaxchilan. Itzamnaaj B’ahlam II’s name glyphs are carved on the rim text.
Photo by Nikolai Grube.



Above right: Illustration of the glyphs incised on one of the Shell Plaques from Piedras Negras Burial 5. By the end of his long reign, Ruler 3 was without a male heir. He was old and in poor health. This was a crisis for Piedras Negras, and for the royal family. One possible reading of the shells tells an incredible story of how the family, and Lady K’atun in particular, made tremendous personal sacrifices to try to assure an orderly transition of power. The glyphs provide us the only record of this drama. “Then on 9.14.17.14.17, 1 Kab’an Seating of Mol, June 26, 729, Lady Matawil Sotz’ was revealed / adorned (in the enclosure?)”.

I’m partial to Josserand’s view: that Matawil Sotz’ was Ruler 3’s daughter, and she married Ruler 4 shortly before her father’s death, just as her father got married shortly before his own father’s death. 🏰

Upcoming Events at the IMS:

June 19 • 7:30 pm: *IMS Public Presentation*
Dense Human Populations, Overexploitation of Resources, and Protracted Severe Droughts: A Recipe for Classic Maya “Collapse” in K-413 – with **Mark Brenner**. Mark is a Professor in University of Florida’s Department of Geological Sciences and Director of the Land Use and Environmental Change Institute.

IMS Special Notice:

In alignment with MDC, we will take a summer break from public programs during the months of July and August.

IMS Program Note:

In alignment with MDC, we now offer nine IMS presentations during a calendar year: January – June and September – November. For more information, contact our Hotline at: 305-279-8110; or by email at: info@instituteofmayastudies.org

Upcoming Events and Announcements:

An excellent video series for Maya Studies **The Living Maya** – Producer Hubert Smith notes: “The Living Maya” is a 4-hour PBS series. It covered an entire year in a Yucatec Maya village – shot in 1976-77. It is the only visual record extant of traditional corn-zone Maya. Meso-Americanists and their students can study swidden agriculture, little-changed over the long span of Maya history. They can also get acquainted with people who, when they arrive at an appropriate moment, still speak to Jaguar spirits and Forest Lords while also being fully-versed in wage-labor in the cities of Merida and Cancun. The original series may be accessed here: https://search.alexanderstreet.com/preview/work/bibliographic_entity%7Cvideo_work%7C765402

Thru April 3, 2021: *MIHS Museum Exhibit*
Paradise Found: 6,000 Years of People on Marco Island: The Key Marco Artifacts – The Marco Island Historical Society (MIHS) celebrates its 25th Anniversary and the realization of

a 25-year quest to bring “home” on loan the world-famous Key Marco Cat and other rare Precolumbian Native American artifacts discovered on Marco Island, Florida. In collaboration with Collier County Museums, the Smithsonian Institution, and the University of Pennsylvania Museum. See: <https://themihis.info/keymarcoartifacts/>

Editor’s Tip: *Online all the time*
Ancient Americas Events – Get in the know with Mike Ruggeri’s “better-than-ever!” comprehensive list of upcoming Ancient Americas Lectures, Conferences and Exhibits: Go to: <https://mikeruggerisevents.tumblr.com/>

Check out and get in on the fun on our IMS Facebook page: Get in on all the action! IMS members post interesting links, as well as photos from their recent adventures. Join the **Explorer**-ation! at: <https://www.facebook.com/groups/MiamilMS/>



IMS EXPLORER

Join the **Explorer**-ation! Scholar or not, we welcome submissions from IMS members and other Maya enthusiasts. Share what interests you with others. All articles and news items for the **IMS Explorer** should be forwarded to the newsletter editor at: mayaman@bellsouth.net