Greetings from your ACUA Graduate Student Liaisons! We hope that you all are having a great summer doing field work, research and internships! As well as getting some vacay time in there, too. We love hearing what students from all over the world are up to. In this edition we have some fascinating articles on research being conducted in the USA, Israel and the Dominican Republic. We also have a great blurb to share with you on the benefits of being an ACUA graduate student representative. Thank you to everyone that continues to share their stories and reading our Student Newsletter!

Remember, we are always looking to highlight student research and projects! Simply email grad-rep@acuaonline.org. We will be more than happy to share your photos and stories on the ACUA Facebook and Instagram. Hope to hear from you soon!
North Central Florida has long been known to be a hotspot of prehistoric underwater archaeology. The Suwannee River, in particular, has a dense concentration of Paleoindian artifacts, although the majority of these artifacts are recovered ex-situ. This summer, through May and June, a team of archaeologists working with the Center for the Study of the First Americans at Texas A&M University excavated a site that may be a rare exception to this rule: the Lewis-McQuinn site. The Lewis-McQuinn site was found by avocational divers in the 1980s and reported to the state of Florida. What makes Lewis-McQuinn unique is that in the river adjacent to the site, diagnostic artifacts spanning from the Early Paleoindian to Late Archaic periods have been recovered. This is significant because intact, stratified cultural deposits are very rare in the Southeast United States. Radiocarbon ages on these types are also rare or absent, as organic material rarely survives in Pleistocene aged sediments on land. The exception to this is underwater, where organic material is more likely to survive. Thus, Lewis-McQuinn is one of few sites in the state of Florida that could produce stratified cultural deposits from the Late Pleistocene and Early Holocene in association with radiocarbon datable material. However, the Lewis-McQuinn site is badly eroding from both constant boat wakes and natural riverine processes. In the past decade, over 30m² of site area has been stripped from the site by these human and natural factors. Because of this, an archaeological team led by Morgan Smith, a PhD candidate at Texas A&M University, excavated an intact portion of the site to determine the true significance of the Lewis-McQuinn site before it is lost forever. Preliminary results indicate that at least three intact components still exist at the site, including a Middle Paleoindian Suwannee component, Middle Archaic Newnan component, and a Woodland component, likely Deptford. The project, directed by Dr. Michael Waters and Morgan Smith, included graduate and undergraduate students from Florida State University, the University of West Florida, and Texas A&M University. This work was supported by the North Star Archaeological Research Program and was completed in coordination with the Florida Division of Historical Resources. The Lewis-McQuinn excavation was completed as a part of the larger Florida Submerged Prehistoric Landscapes Archaeological Survey and Heritage project (F-SPLASH). F-SPLASH will also be conducting testing at a possible new underwater archaeological site on the Silver River in late July and early August of 2019.

Being an ACUA graduate student representative is a great way to get involved in underwater archaeology. As a student representative, I am encouraged to learn more about current issues and topics that impact our field. I can also help other graduate students grow as underwater archaeologists, whether that means posting field school or job opportunities for them on social media, encouraging them to publish research in our quarterly newsletter, or sharing recent archaeological findings through Facebook. Another main advantage of being a student representative is that you are a part of a large network of professionals who are at the forefront of our field. This means you meet and interact with others who shape our field, so you can gain valuable knowledge from them. These people are also the ones who may hire you in the future, so getting to know them through ACUA will help make you stand out when you apply for jobs.

Being a part of ACUA has been a gratifying experience and has helped me grow as a student in underwater archaeology. ACUA will be selecting a new graduate student representative for the next year, and I would highly encourage graduate students to apply. If you have any questions, please feel free to reach out.

-Aleck Tan, Graduate Student Rep
In the southeastern portion of the Dominican Republic, in the province of La Altagracia, lies El Parque Nacional del Este, or East National Park, roughly 3.4km east of the fishing town of Bayahibe. This park and the surrounding areas contain some of the richest cultural and natural resources of the entire island of Hispaniola. A system of caves, caverns, and sinkholes known as the Padre Nuestro complex is interlaced throughout the park, often travelling under its boundaries. The entire area is composed of karst topography, similar to that of southern Indiana but having formed much more recently. The limestone of the island was laid down by coral reefs in a shallow sea during the Pleistocene. These systems of caverns and caves are created through the dissolution of the surrounding rock into the water that permeates the porous limestone. Sometimes the ceilings of these systems collapse under their own weight, opening up the watery underworld of the island to the terrestrial world.

Driving down the trail towards the cavern, one will notice the thickness of the surrounding foliage. The park is one of the most untouched regions of the entire island, and its remoteness is evident in the approach to the site. Parking by the opening of the cavern, next to a fenced-off pump house used by surrounding resorts, the mosquitoes become a bit of a nuisance. Unloading and setting up the SCUBA gear becomes the first priority. The divers are preparing for a dive in an enclosed environment. Safety is paramount and the planning and set up can have no faults. Once gear is set up and buddies are ready, the approach to the cavern begins.

As one approaches the entrance to the cavern, they are greeted by a small sinkhole which opens to a pool of water that is 35 m east to west by 4.5 m north to south and is roughly 1m deep. The slope is slippery, dotted with exposed limestone. Divers are to be extremely careful when approaching the cavern. In order to descend into this watery underworld, one must pass under a rocky shelf jutting over the surface of the pool. After donning their SCUBA gear and descending, one will see the small mouth of the cavern open up into a large room. The first thing the diver will notice is the clarity of the water. When undisturbed, the waters of Padre Nuestro offer some of the most amazing visibility. When all is clear, I liken the experience to floating through the cave, unhindered by gravity. A large pile of rock from and debris from the collapsed ceiling slopes down steeply into the room.

Within the pile of rubble are Taíno artifacts, modern trash, and various faunal remains. This rubble pile descends 17m into the main chamber of the cavern. A large rock, a piece of the ceiling that has collapsed, is at the center of the room roughly 10m below the surface. This formation is known as the Whale Rock because of its shape and color, seeming to resemble the fictional whale of Melville’s creation. This main room measures roughly 25 x 25 m. The presence of speleothems such as stalactites, stalagmites, and merged columns are instant indicators that the cavern was once dry. The current hypothesis is that the cavern was flooded roughly 6,500 years ago, concurrent with a global sea level rise to within 3 meters of modern water levels.

The deepest depths of the cavern hold invaluable cultural resources; a variety of extinct Antillean ground-sloths and an extinct species of monkey. Work has been done in the quantifying of all faunal remains from the site and creating a catalog of remains collected. The sloping rubble pile contains some of the oldest stone tools yet uncovered on the island as well as Taíno water-gathering vessels. The importance of caves such as Padre Nuestro is highlighted by the above material that has been collected. These caves still serve as sources of freshwater to locals; however, much of the water is now contaminated with coliform bacteria. It is for this reason that the protection of submerged cultural resources such as Padre Nuestro Cavern is paramount, not only to document and preserve the cultural history of the island but also to protect a natural resource and geological feature that is so central to the topography of Hispaniola.

Thomas Brimm, Indiana University, tbrimm@iu.edu.
The Ma‘agan Mikhael B shipwreck was discovered off the Mediterranean coast of Israel in 2005. Five seasons of underwater excavations have been conducted to date (2016–2018), headed by Dr. Deborah Cvikel of the Leon Recanati Institute for Maritime Studies at the University of Haifa. A significant portion, 19.6 m long, and 4.9 m wide, of the wooden hull of the ship, survived (Fig. 1). The shipwreck dates to the 7th–8th centuries AD, based on 14C analysis and typological study of the ceramics.

The finds include metal and wooden artefacts, rigging elements, organic material such as food remains and ropes, and bricks. However, the most significant finds are the ceramic sherds and complete amphorae. Over 100 amphorae have been documented so far; these include the Late Roman (LR) I, LR 4, LR 5 and LR 13 type amphorae. Some still contained remnants of their original contents – olives, grapes or raisins, walnuts, pine nuts and figs, which were common in the Mediterranean diet at this time. Many also bear inscriptions in Arabic or depict Christian symbols in dipinto. Additional ceramics include a number of fine wares, such as bowls, plates, jars and juglets and cooking wares.

The ship was apparently a merchantman plying the Levant coast with a heterogeneous cargo of amphorae with trade contacts in Egypt, Cyprus and the southern Levant. The sequence of construction, construction tradition, and the circumstances of the wrecking event are yet to be determined. The Ma‘agan Mikhael B shipwreck is an exceptional source of information regarding various aspects of ship construction, seamanship and seafaring in the Mediterranean, as well as trade routes, production centers and commodities during Late Antiquity.

Ma‘agan Mikhael is an excellent location for study and training for underwater archaeology. Diving is easy, in warm water with good visibility. The water is shallow, allowing experienced divers to spend long periods on site. Several MA and PhD theses have resulted from the excavation and research of the Ma‘agan Mikhael B shipwreck presented in this paper.

References
Steffy, J. R. 1994: Wooden Ship Building and the Interpretation of Shipwrecks (College Station).

- Maayan Cohen and Michelle Creisher, University of Haifa, maayancohen8@gmail.com
UPCOMING Conferences


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For any comments, questions, or suggestions, please contact: Morgan Smith, Aleck Tan or Tara Van Niekerk at grad-rep@acuaonline.org

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