



Jen Bro

ARCHBOLD OCTOBER 2020 NEWS for curious minds



In This Issue:

1. The Art & Science of Nut Hoarding
2. Sticky Steve
3. The Virtual Field
4. Archbold during COVID
5. The Art of Giving

The Art & Science of Nut Hoarding



A Florida Scrub-Jay takes a peanut in the shell to cache in a dry, sandy spot. This study was conducted in the summer and used whole peanuts as a surrogate for acorns.

Florida Scrub-Jays collect and store oak acorns in the Florida scrub to survive the lean winter months. Each jay will cache 6,000 to 7,000 acorns throughout their territory each year. This amazing survival strategy is known as scatter hoarding. With all this buried treasure, no surprise that jays pilfer nuts from the caches of



[Donate Now](#)

[Archbold Biological
Station Website](#)

[Subscribe to our
Monthly News](#)

other jays. Jays also visit their nut caches periodically to assess their viability and sometimes move them to better, often drier, sites. They appear to learn through trial and error which environmental variables favor optimal nut preservation. **Matthew Furst, from Paul Smith's College, and Jessica Greer, from Oregon State University, developed independent projects as Archbold Avian Ecology Interns to better understand how jay caching preferences changed over time within the family social group.** With Dr. Reed Bowman, Archbold Avian Ecology Director, they just published their [two-year study in the Journal of Field Ornithology](#). The team found experienced adults prefer to cache nuts in dry, open sites. Less experienced, but also socially subordinate birds, did the opposite. These birds prefer to cache in more vegetated sites with higher soil moisture, especially when other jays were watching. These less experienced jays may choose cache sites to avoid being seen since they are often the target of pilfering. By their second year, the younger birds preferred to cache in dry, open sites like the adults, even if they remained subordinate birds vulnerable to pilfering. The researchers concluded, "These patterns suggest that after gaining experience, jays learned which sites were more appropriate for caching and shifted their preference, regardless of their changing social status. We suggest that the risk of cache loss to food degradation might be greater than the risk of pilfering for Florida Scrub-Jays."

Sticky Steve



Archbold Press

"Archbold Biological Station is one of America's iconic centers of continuous research and education in field biology. It is a prototype of what we need all across America."
— Edward O. Wilson

Online Events

Oct 15: 3:30 PM

'Disease Ecology of Wild Pigs in Florida including Buck Island Ranch'

Dr. Samantha Wisely,
University of Florida

[Register here](#)

The 'Sticky Steve: A Home-Brewed Life' exhibit is on display at the Lake Wales Arts Center from September 11-November 7, 2020.

'Sticky' Steve Morrison chose a life surrounded by nature. Living in his cabin on the Lake Wales Ridge overlooking Tiger Creek, Sticky found his life's work. Upstream is [Tiger Creek Preserve](#), where Sticky worked for The Nature Conservancy as their Land Manager for over 30 years using fire to promote biodiversity in the Florida scrub. Sticky and his colleagues often assisted Archbold on our prescribed fires. Beyond his passion for ecosystem management, Sticky is an accomplished musician and philanthropist. He founded [Sandy's Music Girl Scholarship](#) to "Provide girls a chance to develop their creativity and self-esteem." When not playing fiddle, Sticky might be planning his annual Sticky Steve Tiger Creek Bass Tournament, woodworking, surfing, writing, creating art, or tending his family fruit orchard. Without the distraction of television, he has time to live a Sticky life. Friend **Paul O'Neill had the idea to celebrate this renaissance man of the Lake Wales Ridge. He asked local artists to create a portrait of Sticky.** The resulting exhibit, entitled [Sticky Steve: A Home-Brewed Life](#), is presented by the Lake Wales Arts Council featuring over 70 pieces of art by more than 60 artists. The beautiful collection represents Sticky through mosaic glass, sculpture, photography, basket weaving, painting, Spanish moss, and more. Jennifer Brown, Into Nature Films, created a short film '[A Sticky Life](#)' for the exhibit with shots of Sticky burning at Archbold. [View the video here](#) and discover how Sticky got his name. Experience the Sticky Steve exhibit in [virtual 3D here](#). Look out for the photograph of Sticky by Dustin Angell, Archbold Education Director. Archbold applauds Sticky's wonderful contribution to conservation and community on the Lake Wales Ridge.

Oct 29: 3:30 PM

'Does Patch-burn Grazing Enhance the Delivery of Ecosystem Services from Subtropical Humid Grasslands?'

Dr. Betsey Boughton,
Archbold Agro-ecology
Director

Dr. Nuria Gomez-
Casanovas, University of
Illinois

[Register here](#)

Oct 23: 10:00 AM

'East and West:
Comparing Species at the
East Foundation in Texas
and Archbold Biological
Station in Florida'

Joint Virtual Tour Live
from Texas and Florida

[Register here](#)

**Watch all past virtual
events [here](#).**

The Virtual Field



A screenshot from [The Virtual Field](#) website.

Archbold Director Hilary Swain is collaborating with the Organization of Biological Field Stations (OBFS), specifically Claudia Luke, Kari O’Connell, and Sarah Oktay, on a National Science Foundation award to support [The Virtual Field](#), a coalition of 50+ field stations and marine laboratories around the globe creating a suite of virtual teaching materials. In September, they presented a virtual workshop for field station directors at the annual OBFS meeting. Participants learned how to introduce faculty and students to virtual ecosystems and field research by exploring online materials to experience the field in new ways. They assessed student assignments and instructor guides for nine new five-minute '[Ecosystem Exploration](#)' videos designed to teach students to observe evidence of ecological concepts (e.g., species, habitats, processes, and human-environment interaction). Archbold’s contribution to the Ecosystem Exploration series will be posted soon! Participants viewed excerpts of the 50-minute 'Live from the Field' events which give opportunities for students to talk with researchers in a particular discipline across multiple field sites. Register for upcoming 'Live From the Field' events '[Intertidal Climate Change](#)' [here](#) and '[Nutrient Cycling in Grasslands](#)' [here](#). The value of this new approach is apparent with COVID restrictions to field work but will also be useful after the pandemic. Hilary

Grant-In-Aid of Research

\$2,000 award to be given to two visiting scholars for work involving field research at Archbold.

Learn more [here](#).

Swain noted, "The pivot to virtual field experiences might seem counterintuitive for field stations that are dedicated to get people 'in the field'. The challenges of COVID brought home the unique strengths of field stations in producing virtual materials to mitigate and expand actual field experiences. These may be introductory materials enticing students to 'give field research a try', serving thought-provoking comparisons of scientific approaches among multiple sites, view individual field sites across all the seasons, and importantly, broaden access to students who, for many reasons, might never be able to get into the field." Visit TheVirtualField.org to view the full suite of virtual teaching materials.

Archbold during COVID



The 2020 Archbold Avian Ecology staff and interns.

The COVID pandemic continues to have profound impacts on so many lives around the world. **Our deep appreciation to all those on the front lines and in essential jobs who have worked hard to keep us safe.** At Archbold, we have been fortunate so far that no Florida-based staff, interns, or visitors are known to have contracted COVID. Our special challenge is that Archbold is not only a place of work, but also home for many staff and interns. By designing and implementing detailed guidelines and safety protocols, we allow staff to conduct fieldwork or vital operations work. Key visiting researchers and VIP visitors have been invited to join us under the same strict provisions. **We**



Connect with us on
Instagram!



Connect with us on
Twitter!



Check out our Youtube
Videos!

launched a major effort to communicate and hold events online. To our surprise and delight, we greatly expanded our audience and participation. Staff successfully pivoted to office duties remotely from home. All staff deserve special thanks for making this happen, especially Sharon Hawkins, Kevin Patram, and our communications team. We are sad to turn away our public visitors and shut down our volunteer program temporarily. Our summer camp had to 'go virtual' while the Highlands County Elementary School program was cancelled this fall. Numerous college classes, researchers, and graduate students were unable to visit. The great joys of working at Archbold are the camaraderie outside, chance encounters and conversations, the pleasures of meeting visitors from different places and interests, and sharing notes over a drink or meal. **We have been less without each other. We look forward to reestablishing our connection with you.** Our community is essential to our sense of place.



Connect with us on Facebook!

[Archbold Facebook Event Calendar](#)

The Art of Giving



Zach Forsburg with young American Alligator and curious school children at Archbold before COVID.

There are many ways we can make a difference like volunteering our time and making financial donations to our favorite organizations and causes. Giving makes us feel good and is impactful. **Archbold Alumnus, Zach Forsburg, has mastered the art of giving.** He inspires friends and colleagues to give

The Scrub Blog

Nature and Science from Florida's Heartland

Explore [The Scrub Blog](#) by Archbold creative staff.



thousands of dollars to Archbold's Education Program each year in honor of his birthday. Zach shared, "I was lucky to have invaluable experiences during my formative years thanks to science outreach programs that fostered my interest in science and the natural world. **Archbold provides valuable outreach and education programs to the community, which inspires me to give back in any way that I can.**"

This year, Zach takes his support one step further. After defending his PhD dissertation in 'Effects of artificial light at night (ALAN) on the physiology, growth, and behavior of two common Texas anurans' at Texas State University, he returned to Archbold to assist our Philanthropy Program for the next few months. Watch his Archbold seminar describing his PhD research [here](#). Zach epitomizes the philanthropic mantra: Time, Talent, and Treasure. Archbold deeply appreciates his many contributions. This fall, he will help us examine and strategize ways to further inspire others to support Archbold. Zach's expertise and research background will make a significant difference in understanding how best to move forward, how we can inspire readers like you to give, and how we can work directly with donors to make sure they are engaged in helping us have a greater and broader impact. Please [reach out to Zach](#) to share your ideas! Archbold is so grateful for the monetary and other gifts and volunteer hours that many of you donate to fund and run our essential programs. Your generosity helps us understand our natural world and impacts others through education and outreach. We are greatly appreciative of all our current and past donors and volunteers. **If you would like to support Archbold, click [here](#) or [contact Deborah Pollard](#).**

Directions to Archbold Biological Station

Eight miles south of Lake Placid. Entrance is 1.8 miles south of SR 70 on Old SR 8.