



Christi

ARCHBOLD OCTOBER 2022 NEWS for curious minds



In This Issue:

1. Bruised but Fortunate
2. The Deyrup Legacy
3. Congratulations Senior Research Biologist
4. 2022 Visiting Scholars
5. The Black Bear Who Inspired a Movement

Bruised but Fortunate



Cleaning up the Archbold campus after Hurricane Ian. Photo by Zach Forsburg.

Hurricane Ian crossed State Road 70 west of the Station around 8PM on September 28 as a Category 3 hurricane. Thanks to lessons learned from previous hurricanes, like Hurricane Irma in 2017,



[Donate Now](#)

[Archbold Biological Station Website](#)

we were ready. Dr. Hilary Swain, Archbold Executive Director, said, "Thanks so much to all those who helped Archbold prepare for Hurricane Ian by battening down the hatches, removing sensitive equipment from the field, and making arrangements for folks to stay over at the Station. Your hard work and support is so appreciated." **Our main weather station recorded maximum gusts of up to 96.3 mph.** Maximum wind gusts at Archbold during Hurricane Irma were similar at 97.4 mph. The Station recorded 8.85 inches of rain during Irma and 4.28 inches during Ian. After the storm, we discovered limited structural damage. Our main building, listed on the National Historic Register, lost some roof tiles. The whole campus was cluttered with tree limbs, leaves, and debris. Over at the Ranch, there were areas of flooding. We lost power along with over 80% of Highlands County residents. Our 1960 Station generator, Old Faithful, which has seen us through many hurricanes, including Charley, Jeanne and Frances in 2004, faltered five days after Ian. Fortunately, Glades Electric Cooperative, which Richard Archbold helped found, returned us to power within a couple of hours, just in time to save samples in freezers. Swain said, "Archbold is grateful to survive Hurricane Ian relatively unscathed. **We are thankful to our dedicated staff who helped us throughout the storm, during the cleanup, and have since returned equipment to the field and operations back to normal.** We extend our thoughts to all our neighbors and the communities in southwest and central Florida who went through this storm and suffered more severe damage."

The Deyrup Legacy

[Subscribe to our Monthly News](#)

[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

Job Announcements



Dr. Mark Deyrup and Nancy Deyrup. Photo by Dustin Angell.

Dr. Mark Deyrup, Emeritus Research Biologist, and Nancy Deyrup, retired Archbold Environmental Education Director, celebrated their 40th anniversary at Archbold on August 30.

The Deyrups arrived at Archbold in 1982. Nancy Deyrup, a budding Zoologist, began her work with Dr. Jim Layne on his long-term research studies. Dr. Deyrup devoted his professional life to studying the insect ecology in the Florida scrub. But, his expertise spans many fields, including entomology, ecology, botany, art, and writing. Over the years, he discovered many new species, like the Archbold Pygmy Mole Cricket (*Neotridactylus archboldi*), and published numerous scientific journal articles. In 2017, he published his wonderful book, [Ants of Florida: Identification and Natural History](#), revealing the natural history of the 239 ant species known to inhabit Florida with 90 plates of his exquisite ant illustrations. Under the leadership of Dr. Deyrup, Archbold's natural history collection grew to a quarter million pinned insect specimens. **Dr. Deyrup's life work in the scrub allowed him to see nature as a multidimensional world of nodes and networks connecting creatures and habitats.** He said, "Flowers are like gas stations

Grants-In-Aid of
Research for Visiting
Scholars

Grassland Bird Field
Assistants

Administrative
Assistant at the Ranch

where a parade of insects passes through to tank up on nectar before going off to their various jobs in the surrounding community." Nancy Deyrup has done it all, from data collection for Archbold's Plant Ecology, Entomology, and Limnology programs to weather collection, education, photography, and digitizing. **She pioneered Archbold's Florida Scrub Education Program by implementing a curriculum including a slide show and field trip to the Station.** Nancy initiated the popular Scrub Camp back in 1992, which continues to this day. She said, "It was so inspiring to introduce local children to the natural history of the Florida scrub they had been traversing their entire lives." The Deyrups dedicated their lives to Archbold's Science, Conservation, and Education mission. Even though Mark and Nancy are now retired, they continue their enduring work at the Station.

Congratulations Senior Research Biologist



Dr. Betsey Boughton with a group of steers used for experimental grazing at Buck Island Ranch. Photo by Emily Anderson.

Dr. Betsey Boughton was recently promoted to Senior Research Biologist. Since 2011, Betsey has held a leadership role as Program Director of Archbold's Agroecology program at Buck Island Ranch. Our promotion process for research biologists involves an external review. All six reviewers were effusive in their praise of her achievements since promotion to Associate Research Biologist in 2017, saying, "**Under her research**

Online Events

Oct 20: 3:30 PM-4:30 PM

'The Effects of Precipitation, Land Management, and Grazing Intensity on Soil Microbe Communities and Soil Characteristics'

Kyle Kirejevas,
Archbold Ranch Intern

[Register here](#)

Oct 27: 3:30 PM-4:30 PM

'Ranchland Conservation in Gunnison, Colorado'

and direction, Archbold's Buck Island Ranch has become increasingly well-known as a center for agroecology in the Southeast and an important partner in the USDA Long Term Agroecosystem Research (LTAR) program. The \$5,160,568 in external grants and contracts she has been awarded over the past 5 years, and the list of 79 projects she is leading or co-PI on, are remarkable. Her work is expanding our understanding of agroecology and the interaction of grazing and range management on water, biodiversity, nutrient fluxes, invasion, and more. She has contributed to 65 peer-reviewed publications (2017-2021), including direct involvement as first author or coauthor on 39 publications. This speaks to the creativity and novelty of her research efforts, the breadth of her science, and her highly collaborative approach. Her research partners are often from multiple organizations and disciplines (e.g., fire, climate science, hydrology, ranching, biogeochemistry). Her work supports and utilizes long-term datasets to resolve complex questions across these disciplines." Dr. Hilary Swain, Archbold's Executive Director, added, "Betsey's presence enriches us in many dimensions, and she has been a major contributor to the increasing stature of Archbold. Her promotion is richly deserved."

Stacy McPhail and
Susan Lohr, Gunnison
Ranchland Conservation
Legacy

[Register here](#)

**Nov 3: 3:30 PM-4:30
PM**

Emily Jones, Archbold
Intern

[Register here](#)

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

2022 Visiting Scholars



Visiting Scholars from Left to Right: Karma Thomas, Dr. Charles van Rees, and Dan Petticord.

In 2018, Dr. Mark Deyrup and Nancy Deyrup helped endow Archbold's Visiting Scholar program to award early

career scientists with financial support for field research at Archbold. Because of Covid restrictions in 2021, we selected three emerging scientists as Visiting Scholars in 2022: **1) Dr. Charles van Rees is a post-doctoral fellow at the University of Georgia working in aquatic ecology and conservation biology.** Charles was an intern in our Avian Ecology program in 2011. He is returning to study whether insects from aquatic food chains, known to be nutritionally superior to terrestrial insects, provide a nutritional subsidy to Florida Scrub-Jays. Charles is constructing hydrological models and using stable isotopes to detect the different isotopic signatures of aquatic and terrestrial foods in scrub-jay nestlings. **2) Dan Petticord is a Ph.D. student at Cornell University studying biogeochemistry in agricultural systems.** He is working on a collaborative project with scientists to reduce Phosphorus (P) loads from the soil and watershed by growing productive forage crops. Dan said, "Fungal associates, called mycorrhizae, affect how a plant uses soil P. Some mycorrhizae can increase or decrease P loss, affecting downstream water quality. We are trying to find the best plant for the job based on its surrounding soil environment." **3) Karma Thomas is a Master's student at Syracuse University studying the ecology and evolution of insects and their interactions with plants.** Karma said, "I am investigating the influence of time-since-fire on the community structure and floral visitation of nocturnal moths in Florida rosemary scrub. And, I will evaluate the role of these moths as pollinators in this threatened plant community." If you are interested in applying for the 2023 Visiting Scholars award, [click here](#). Applications are due November 14, 2022.

Connect with us on Instagram!



Connect with us on Twitter!



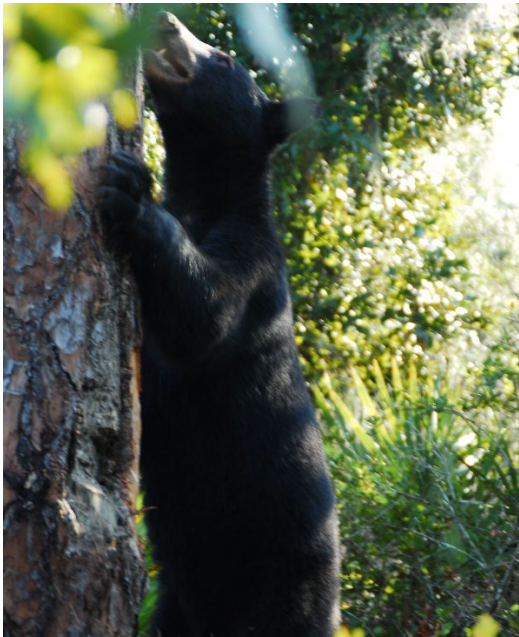
Check out our YouTube Videos!



Connect with us on Facebook!



The Black Bear Who Inspired a Movement



Florida Black Bear M34. Photo by Roberta Pickert.

When the bear known as M34 was radio-collared in 2009, the biologists studying his movements got a surprise. M34 embarked on an epic 500-mile journey in search of a new home. Florida

The Scrub Blog

Nature and Science from Florida's Heartland

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

[Archbold Facebook Event Calendar](#)



Directions to Archbold Biological Station

Black Bear M34 used his instincts to navigate challenging landscapes, and his journey showed the fragile connectedness of Florida and its potential to support wide-ranging wildlife. His migration would eventually change the future of conservation in Florida. M34's trek was crucial evidence supporting the Florida Wildlife Corridor, a network of conservation and private working lands designed to balance rapid growth with a green infrastructure that supports all Floridians—including our beloved bears! You Play a Role in M34's Legacy - helping to connect Florida's wild places and protecting Florida's wildlife. With your help, Archbold plays a vital role in protecting the Florida Wildlife Corridor. We provide essential research on water, plants, and animals, steward 20,000 acres of land within the Corridor, and continue monitoring these natural systems. **Keep an eye on your mailbox in the coming weeks for a beautiful map of M34's journey. Please support Archbold's important work [here](#).**

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

If you enjoy these stories from Archbold, please consider a gift to support our research and education programs. [Donate now](#). Your gift really makes a difference.

[Archbold Biological Station](#) | [Buck Island Ranch](#) | [Archbold Reserve](#)
[Contact Us](#) | [Directions](#) | [Newsroom](#) | [Donate](#)

We are a publicly supported organization exempt from income taxes under the Internal Revenue Code Section 501(c)(3).

[Privacy Policy](#) | [Unsubscribe](#)

[Archbold](#)
123 Main Drive, Venus, FL 33960