



ARCHBOLD FEBRUARY 2018 NEWS for curious minds



In This Issue:

1. Charismatic New Wasp Species
2. Buck Island Soils
3. Devotion is Catchy
4. The Queen is Coming
5. Volunteer Valentines

Charismatic New Wasp Species



Microgaster archboldensis collected at Archbold by Dr. Mark Deyrup, Archbold Entomologist.

Way back in 1987 when Ronald Reagan was president and Michael Jackson released his album 'Bad', some wasps were collected at Archbold by Dr. David Wahl of the [American Entomological Institute](#). On January 18, 2018, over three decades later, **Dr. José L. Fernández-Triana**, a [Canadian National Collection of Insects](#) Entomologist, describes four new species of parasitoid wasps from Wahl's Archbold collection in a paper entitled '[Ten unique and charismatic new species of Microgastrinae wasps \(Hymenoptera, Braconidae\) from North America](#)'.



[Donate Now](#)

[Archbold Biological
Station Website](#)

[Subscribe to our
Monthly News](#)

Science takes time to sort out the elegant variations in body forms, DNA, and taxonomy. This is especially true with Microgastrine wasps which 'are the second largest subfamily of Braconidae with 2,700+ described species and an estimated 17,000-46,000+ worldwide.' Meet the four new beauties described from Archbold: 1) *Diolcogaster ichiroi* is all yellow and named for the author's favorite baseball player, Ichiro Suzuki; 2) *Diolcogaster miamensis* is known only from one Miami site and Archbold; 3) *Microgaster archboldensis* is distinguished with a large body size, unique color patterns and only known from Archbold. Fernández-Triana writes, 'Named after the Archbold Biological Station in Florida, US, to recognize the extraordinary fauna of Microgastrinae (and certainly of many other taxa) that it harbors and protects.'; and finally, 4) *Microgaster syntopic* which is very similar, or syntopic (occurrence of two species in the same habitat at the same time), to *M. archboldensis*. See the full ZooKeys publication [here](#).

Buck Island Soils



University of Central Florida students collecting soil samples with Dr. Betsey Boughton in a seasonal wetland at Buck Island Ranch.

Soils make up the foundation for life on the ranchlands of Florida. **A long-term study at Archbold's Buck Island Ranch coauthored by Dr. Betsey Boughton, Archbold Agro-ecology Program Director, Dr. Patrick Bohlen, former director at the Ranch and now faculty at University of Central Florida and others looks beneath the subtropical surface to better understand the soil ecology of ranch**

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

Public Events

Feb 24: 9am-11am

Walk Around a Recent Prescribed Fire

Walking Tour

Eric Menges & Kevin Main, Archbold

Mar 10: 3:30pm-4:30pm

30 Years on the Trail of Ants

Book Signing & Talk
Mark Deyrup, Archbold

All events meet in/at the Frances Archbold Hufty Learning Center.

wetlands. Boughton and her colleagues collected soil samples (0-15cm) three times over 9 years from 40 wetland study sites with varying land management practices (e.g., improved or semi-native pasture management, and with/without prescribed fire and livestock grazing). Soil samples were analyzed for bulk density, organic matter, nitrogen, phosphorus, and carbon. The big takeaway: 'Wetlands in highly managed, grazed, and/or burned pastures can sequester soil P (phosphorus) and N (nitrogen), playing an important role in nutrient processing for agricultural landscapes and watersheds.' Further, 'Functional wetlands within agrarian landscapes are essential to sustainable rangeland practices by serving as on-site water treatment systems and nutrient storage reservoirs, in addition to serving as biodiversity hotspots and livestock watering and forage sites'. Read the full study [here](#).

Devotion is Catchy



Annika Rose-Person collecting data for her Archbold Plant Ecology Research Internship on Feay's Palafox (*Palafoxia feayi*) insect pollinators in recently burned scrub.

'I've grown fond of the afternoon summertime clouds, the sandhill cranes, and the waxy green of palmetto leaves. **It's the only place in the world with plants like these. I'm convinced it's the only place in the world with people and researchers like these, too', says Annika Rose-Person.** Annika came to Archbold in 2016 as a [Plant Ecology](#) Intern. For her independent research project, she learned not only plant identification, but bug identification while

Executive Assistant Vacancy Announcement

Archbold Biological Station is seeking a detail oriented individual to provide administrative support to the Executive Director.

Incumbent must enjoy multi-tasking, have strong creative writing skills with experience working with social media, and be able to work independently under pressure in a fast-pace environment. Click [here](#) for more information.

studying the pollinators visiting Feay's Palafox (*Palafoxia feayi*). She discovered more bugs visit Feay's Palafox in recently burned scrub than in long unburned scrub. She said, 'I made countless mistakes in the beginning. But, I learned more than if I was shown how to do everything.' On one of Annika's first trips to a far-off field site, Stacy Smith (Archbold Plant Ecology Research Assistant since 2006) responded to a question whether she was optimistic about the survival of endangered scrub plants. Stacy said, 'I am optimistic. They have to survive. I couldn't do any of this if I didn't believe we were doing something meaningful.' 'Stacy's response stuck with me', said Annika. 'The people here believe deeply in what we're doing. Rare plant ecology can be disheartening. You have to really love the work and trust in your research to go back to it every day.' Now an Archbold Plant Ecology Research Assistant herself, **Annika added, 'What made me stay at Archbold was the dedication of the researchers to preserving scrub biodiversity and habitat.'**

The Queen is Coming



The Queen of Red Hill, a female Gopher Tortoise more than 60 years old, eating grasses in her fire-maintained home, a Southern Ridge Sandhill.

Archbold will soon release a new film about the Gopher Tortoises of Red Hill. The star of the show is a female tortoise first measured by Dr. Jim Layne in 1968. That was the year Layne, Archbold's first Research Director, began the long-term study of tortoises on Red Hill. Known as the 'Queen of Red Hill', this long-lived tortoise has presided over her sandhill kingdom for more than six decades. However, the



Check out our Youtube Videos!



Connect with us on Facebook!

Queen and other Red Hill residents came close to losing their unique home. With funding from [Disney Conservation Fund](#) and Archbold, Dr. Betsie Rothermel, [Archbold Herpetology Program](#) Director, partnered with [Into Nature Films](#) to tell this remarkable tale of tortoises and conservation in Florida. The Gopher Tortoise natural history will fascinate you while being inspired by the vision and dedication of some special people who made this story possible. This is a story about time, then and now. The deliberate pace of a tortoise. Measured against the speed of human activity and change. Right here in the heart of Florida. **Watch out for the 'Queen of Red Hill' coming this Spring.**

[Archbold Facebook Event Calendar](#)

Volunteer Valentines



Dave and Liz Schwab stand by their Valentine's Day themed bulletin board outside the Frances Archbold Hufty Learning Center.

Dave and Liz Schwab pose for a photo by fellow volunteer Linda Gette after updating and decorating the public bulletin board at the Frances Archbold Hufty Learning Center. Dave and Liz work as volunteers every Friday in the Learning Center during the winter and spring. Archbold is grateful for their contributions to create a welcoming atmosphere for our visitors. As well as greeting visitors, the Schwabs provide housekeeping in our public areas, and serve as guides for 4th grade classes who visit the Station during our Elementary School Program. Dustin Angell, Archbold Education Coordinator, shared **'Dave and Liz are part of a growing team of dedicated volunteers at Archbold. This team is changing our relationship with the community by helping**

Directions to Archbold Biological Station

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



visitors feel more welcome to explore our public areas and participate in our mission.'

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](#) | [MacArthur Agro-ecology Research Center](#) | [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