



ARCHBOLD SEPTEMBER 2018 NEWS for curious minds



In This Issue:

1. New Squiggles in the Sand
2. Sparrow Good News
3. The Science of Life
4. Jazzy Meeting
5. Deyrup Challenge Underway

New Squiggles in the Sand



Brandon Woo
New species of Pygmy Mole Cricket collected in Ocala National Forest by Brandon Woo.

New discoveries can happen right under our feet. In the Florida scrub, you might notice small piles of sand right after a rain. If you gently scrape away the sand, a tiny subterranean cricket is revealed. Just 1/4 inch in length, this is the Pygmy Mole Cricket. **The Archbold Pygmy Mole Cricket (*Neotridactylus archboldi*) was first described by Dr. Mark Deyrup and Dr. Thomas Eisner in 1996.** This fascinating little cricket lives in open sandy patches feeding on blue-green algae just below the surface of the sand. Archbold Entomology Intern Brandon Woo became enamored with these crickets, and realized there was much to learn. Woo shared, 'Nobody has carefully explored other sand



[Donate Now](#)

[Archbold Biological Station Website](#)

[Subscribe to our Monthly News](#)

[Archbold Press](#)

"Archbold Biological Station is one of America's iconic centers of continuous research and education in

ridges in Florida for Pygmy Mole Crickets. Since the scrub-adapted Pygmy Mole Crickets are flightless, there is high potential for new species around the state.' Encouraged by Mark Deyrup, Woo began his quest to find more of these crickets. **He discovered the Archbold Pygmy Mole Cricket also lives at the Avon Park Air Force Range. And, he found what appears to be a new species of Pygmy Mole Cricket in the Ocala National Forest.** Woo is also describing another new species collected by Deyrup from the northern Lake Wales Ridge in Polk County. Woo added, 'I think these crickets really show that anyone can go out into the field and make important discoveries. Archbold is a great place to jump-start such an adventure.'

Sparrow Good News



Becky Windsor removes the predator-deflection fence from a just fledged Florida Grasshopper Sparrow nest. One fledgling perches on the grass ready to fly into the surrounding prairie.

Archbold Avian Ecology biologists began monitoring the endangered Florida Grasshopper Sparrow at Avon Park Air Force Range (APAFR) in 2003. For the last two years, Archbold has also monitored sparrows on a private ranch in Osceola County. While research on Florida Grasshopper Sparrows is a team effort, the ranch work is led by Becky Windsor, a former Archbold Avian Ecology Intern and graduate student. **Without the intervention of biologists like Windsor, the success of Florida Grasshopper Sparrow nests is very low.** The top predator at the Osceola private ranch is the Red Imported Fire Ant. **To increase the population of this sweet sparrow, biologists surround each nest with a predator-deflection**

field biology. It is a prototype of what we need all across America."
— Edward O. Wilson

Public Events

Sept 7: 3:30 pm-4:30 pm

Two Avian Ecology Intern Seminars: Florida Scrub-Jay Research

Alfredo Gonzalez & Logan Clark, Archbold

Sept 18: 3:30 pm-4:30 pm

Seminar: Incidental Gardeners: The Role of Food-hoarding Corvids as Seed Dispersers for Trees

Mario Pesendorfer, Cornell Lab of Ornithology

fence and treat nearby fire ant nests with ultra-hot water. Because of these protections, not a single sparrow nest was lost to fire ants this year! Becky Windsor was supported by biologists at nearby Three Lakes Wildlife Management Area, Greg Thompson, an Archbold research assistant working at APAFR, and Dr. Josh King (University of Central Florida), who developed the hot water fire ant treatments. Led by Dr. Reed Bowman, Archbold's Avian Ecology Program Director, this is one crack team of experienced field biologists working hard to save the Florida Grasshopper Sparrow from extinction. After a typical morning on the ranch mist-netting Florida Grasshopper Sparrow fledglings and killing fire ants outside a newly hatched sparrow nest, Windsor shared, 'They are just a great species. People always wonder why we are focusing on this tiny sparrow with so few left. The conservationist in me says this is our moral responsibility to preserve what is left...which can be said for all species. They may not be as charismatic as a tiger, but they have the right to exist. I love them.'

The Science of Life



Miranda Bunnell and Ashley Engle sit down for a [film interview](#) about their High School Research Assistant job at Archbold this summer.

Remember your introduction to science—asking a question or doing an experiment? How about your first immersion into the delights and dips of nature? For Ashley Engle and Miranda Bunnell, they need only look back a couple weeks. They are 17-year olds now entering their senior year at Lake Placid High School (10 minutes north of Archbold). But for this summer, they were part of Archbold's special community of scientists and educators thanks to a [National Science](#)

Job Opportunities

[Post-Doctoral Research Associate – Remote Sensing/Carbon Flux in Subtropical Grasslands](#)

[Post-Doctoral Research Associate – Livestock Tracking and Behavior](#)

The Scrub Blog

Nature and Science from Florida's Heartland

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

Queen of Red Hill

[Foundation](#) award to Dr. Eric Menges, Director of [Archbold's Plant Ecology Program](#). **The 'Research Assistantship for High School Students' was a summer job unlike any other.** Engle and Bunnell spent 2.5 months collecting data alongside Archbold Plant Ecology research interns (recent college grads) and research assistants like Stephanie Koontz while conducting their own independent research culminating in a formal presentation. **A day in the Florida scrub with the engaging duo is filled with comedy, drama, blunders, and pure joy. See for yourself in our new film 'The Science of Life' capturing the unique perspectives of two capable and curious teenagers.** On camera, they confide that negotiating Prickly Pear cactus, wading through wetlands, and enduring 'unfriendly bugs' in the scrub was 'totally worth it'. Thanks to the National Science Foundation and Archbold's community of inspiring mentors, they will carry this science experience forward in all they do. Watch their sweet film [here](#). Share on [Facebook here](#).



Watch 'Queen of Red Hill' about the Gopher Tortoises of Red Hill and the special people whose vision and dedication made this story possible. Watch on Archbold [Facebook](#) or [Vimeo](#).

Jazzy Meeting



Dr. Elizabeth Boughton with University of Central Florida biologists Dr. Pedro Quintana-Ascencio, Leo Ohyama, Federico Borghesi, and Haoyu Li at the ESA meeting in New Orleans, Louisiana.

Like a herd of cows to a water hole on a hot day, our nation's largest community of ecologists gathered in early August at the **103rd Annual Meeting of the Ecological Society of America (ESA) in New Orleans**, Louisiana. Dr. Elizabeth Boughton, [Archbold's Agro-ecology Program](#) Director, was one of scores of Archbold researchers and past interns in attendance. By day, everyone participated in forums exploring the meeting theme 'Extreme events, ecosystem resilience,



Check out our Youtube Videos!



Connect with us on Instagram!



Connect with us on Facebook!

and human wellbeing'. Boughton presented a poster examining how patch burning affects forage production and plant diversity at Buck Island Ranch. **Within the patch burns, she found that burned areas had higher productivity and plant diversity compared with unburned areas.** By night, these hard working ecologists took in some local Cajun/Creole food, New Orleans history, and of course, some great jazz. Boughton shared, 'The conference, as always, is a great place to get reinvigorated with the science of ecology – new ideas were brought home. One of my favorite parts was seeing previous interns and research assistants and hearing what they are doing now. **It is quite inspiring to see how their careers are developing and know that Archbold played an important role in helping them on their way.'**

Deyrup Challenge Underway



Reed Bowman
Balduina angustifolia flowering in the Florida scrub.

We are so pleased to see your generous responses to [Mark and Nancy Deyrup's Matching Gift Challenge](#). Thank you to all who have already given. Your gifts will help Archbold pursue daring lines of scientific inquiry and engage more people in learning about, and protecting, the natural world around us. And there's still time to support the Station and help us meet the Challenge! **Thanks to the Deyrups, any gift you make to Archbold between now and September 30, 2018 will be matched dollar-for-dollar, up to a total of \$20,000.** It is humbling that after brilliant careers at Archbold, the Deyrups chose to leave such a personal legacy to the Station. And, it is fitting that so many have already stepped up to meet their Challenge—ensuring that Archbold will continue to

[Archbold Facebook Event Calendar](#)

Directions to Archbold Biological Station

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



answer pressing scientific questions, publicize our findings, and engage more people in protecting nature. Thank you for any [gift](#), and as always, your support means a great deal to all of us.

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