



ARCHBOLD MAY 2018 NEWS for curious minds



In This Issue:

1. Belowground Botany
2. Surviving Fire Film
3. 1/4 Century on the Ranch
4. Cornell Returns...Again
5. Heartland to Headwaters Corridor Expedition

Belowground Botany



Scrub Blazing Star (*Liatris ohlingerae*) is an endangered plant in the family Asteraceae that is endemic to the fire-maintained Florida scrub and the Bahamas.

A widespread but little understood ecological phenomenon is dormancy, when adult plants 'sit out' a year or longer belowground before resprouting. **A recent paper published in the #1 ecological journal [Ecology Letters](#) presented an analysis of long-term datasets collected from 112 plant species to draw some general conclusions on the ecological and evolutionary basis for prolonged dormancy.** One of the 34 international authors and scientists participating is Dr. Eric Menges, Archbold



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Plant Ecologist, and his work on the Scrub Blazing Star (*Liatris ohlingerae*). **They found prolonged dormancy is more common than anyone thought** with many plants around the world staying dormant between 1-25 years, surviving from partnerships with soil fungi. Foliage loss is one type of plant stress the study revealed can lead to dormancy caused by factors like drought, disease, or wildlife eating plant buds in the previous growing season. Some plants remain dormant because under mild winter conditions, they do not perceive the arrival of spring. Plants that go dormant and then resprout show an ecological cost, most commonly decreased subsequent survival. Costs of dormancy increased with latitude which means dormancy is more common closer to the equator. Menges shared, 'Long-term datasets were critical to showing plant dormancy patterns. Archbold's dataset on Scrub Blazing Star spans 15 years, 20 populations, and 2345 plants.' Read the [EurekAlert here](#).

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

Surviving Fire Film



Watch 'Surviving Fire: In the Florida Scrub' full film [here](#).

Fire is one of the earth's dominant forces. Fire shapes the ecology of earth. **Archbold's new film 'Surviving Fire: In the Florida Scrub' features three decades of fire ecology research by Dr. Eric Menges, Archbold Plant Ecology Director, examining the fire-adapted Florida scrub on the Lake Wales Ridge of central Florida.** The scrub is so fire-adapted that most species survive the heat and flames. But how? Join Eric Menges for a 16 minute exploration into the elegant and unexpected ways plants survive fire. You will never look at Florida plants the same away again. The film pays

Spotted Skunk

Burrow Foray



Watch an Eastern Spotted Skunk foraging around a Gopher Tortoise burrow in this 30 second video clip shared on Archbold Facebook [here](#). This video was recorded by Nicole White, an Archbold visiting researcher studying Gopher Tortoises under the direction of Dr. Betsie Rothermel, Archbold

tribute to the special people who work hard to put fire on the ground and monitor the effects of fire to improve fire management. [Watch the full film here](#) produced by [Into Nature Films](#) and funded by a [Long-term Research in Environmental Biology \(LTREB\)](#) award from the National Science Foundation to Eric Menges.

1/4 Century on the Ranch



Gene Lollis (photo right) and son Laurent Lollis (photo left) on the job at [Buck Island Ranch](#).

Gene Lollis needed a job 25 years ago. And, Archbold's newly created [MacArthur Agro-ecology Research Center](#) at Buck Island Ranch needed an Assistant Ranch Operations Manager. Lollis recalls feeling that this was a 'unique opportunity to investigate the inner workings of a large cattle operation and make discoveries on how it must coexist with the natural environment.' Growing up working as a cowboy for ranching families in central Florida, he hoped to give something back to the ranching community he knew and loved. Maybe Archbold's science could help save Florida ranching from the threat of land development. **Today, Lollis has a diverse job as Ranch Operations Manger. But, what he likes most is the 'cowboying'. He said, 'I like to ride my horse and be with the cows and be outside enjoying all the openness and wild that comes with it.'** Lollis believes his time at Buck Island Ranch has made him who he is today: 'A cowboy with an open mind'. He raised his family with his wife Terrie living on the ranch including two daughters and son, Laurent Lollis, who now also works at the ranch. Reflecting on 1/4 of a century, Lollis is grateful. Grateful for his personal family. Grateful for his Archbold family.

And, grateful for this beautiful ranch. Clearly, this is more than a job.

Cornell Returns...Again



Cornell graduate students on an orientation walk during their first full day at Archbold.

Fifty years ago, Dr. Dick Root from the [Cornell University Department of Ecology and Evolutionary Biology](#) first visited Archbold to explore the possibility of bringing graduate students for a field ecology class. Encouraged by Archbold's Research Director at the time, Dr. Jim Layne, the first class visited in 1968. This April, Dr. Harry Greene, Dr. Kelly Zamudio, and Dr. Jed Sparks continued the tradition of bringing Cornell graduate students into the Florida scrub for a two-week immersive field experience, including an independent research project. 17 students attended, one of the biggest classes in years. Zamudio said, 'There were some great projects this year including one that revisited all the seasonal ponds on the Station to measure their change in shape since they were first mapped in 1984, and another one measuring animal tracks on the sandy firebreaks.' **Greene shared, 'Among the many wonderful things about the Florida course are watching students, despite sometimes stumbling, gain confidence in their individual abilities to ask and answer a question about nature; and to see them gel as a group of supportive, collaborative fellow naturalists.'** That is at the heart of this course. Amongst the Sand Pines, roaming cattle, and Florida Scrub-Jays, curious minds have been cultivated here spanning fifty years. Watch an earlier video about the Cornell class [here](#), and click



Check out our Youtube Videos!



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[here](#) to learn more about supporting future Cornell University graduate student expeditions to Archbold.

Heartland to Headwaters Corridor Expedition



Archbold board members (Mary Hufty, Lela Love, Vevie Dimmitt and husband Lawrence), staff (Deborah Pollard, Hilary Swain, Dustin and Emily Angell, and former staff Tricia Martin) were excited to join Expeditioners (Mallory Dimmitt, Carlton Ward and son, and Joe Guthrie) for the corridor kick off.

The [Florida Wildlife Corridor](#) team has just completed its third expedition. The 2018 Heartland to Headwaters adventure was a 8-day mini-trek, April 15-22, considerably shorter than the team's earlier 1,000-mile expeditions—Everglades to Okefenokee in 2012 and Glades to Gulf in 2015—which took 100 days and 70 days respectively. Their 2018 expedition goal was very targeted: 'To navigate and document a critical chokepoint of the Corridor that can possibly still be saved'. The focus was on lands west of Orlando and the need for more wildlife crossings under Interstate-4. Cheering the team on at the kick-off event, which was launched from The Nature Conservancy's Disney Wilderness Preserve in Kissimmee, were Archbold board members and staff. A week later, board member Vevie Dimmitt and Director Hilary Swain were also present at Little Everglades Ranch near Dade City, to greet them at the end of their adventure. Mallory Dimmitt, expeditioner, described their first few days as, 'Very heavy-going, through lands that had not been managed for decades, presenting some of the most difficult, impenetrable hiking we have experienced on any expedition'. **Saving the**

Directions to Archbold Biological Station

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



'chokepoint' of corridor lands they crossed and highlighted will allow large animals, such as bear and panther, to move north from places like Archbold and cross I-4 on their way to the Green Swamp and back again. [Archbold is proud to have been an important science and conservation partner for the Corridor since its inception.](#)

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