

ARCHBOLD MARCH **2024 NEWS**

for curious minds



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Road to Sustainability



Left to right: Gene Lollis, Jacqueline Phares, and Lacey Leitner at Buck Island

A recent synthesis of Archbold's Buck Island Ranch research highlights a sustainability balancing act. Published in Nature Communications, the study synthesizes 17 years of data collected by Archbold scientists to understand how ranch landscapes benefit society. Led by a group of University of Florida researchers, collaborating with Archbold scientists, ranchers, and scientists from multiple other universities and institutions, the study investigated the effect of land use intensification on grasslands and wetlands. Land use intensification refers to the activities that enhance the productivity or profitability of an area of land. Buck Island Ranch's improved bahiagrass pastures are the most intensively managed agricultural landscape. while our semi-native pastures are less intensely managed. The team found that the two pasture types produce complementary ecosystem services needed for a multifunctioning ecosystem. The improved pastures provided more beef production and economic value but fewer ecosystem services. In contrast, the seminative pastures provided less beef production but more ecosystem services, including improved water quality, methane mitigation, non-native species resistance, and biodiversity. Dr. Betsey Boughton says, "This study highlights the importance of maintaining both improved and semi-native pastures on the landscape. The two together are essential for economic and environmental sustainability." Their work highlights the importance of including a larger landscape framework to consider the agricultural impacts outside the managed grasslands, like in embedded wetlands. Dr. Yuxi Guo, the study's lead author, says, "By considering the broader ecological context and interconnections between different land uses, we can achieve sustainability while minimizing negative environmental impacts." Read the full article here.



"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

Edward O. Wilson

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Your donation to Archbold today supports our mission to build and share the scientific knowledge necessary to protect the life, lands, and waters of Florida and beyond.

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Wild Kingdom at Archbold



Mutual of Omaha Wild Kingdom filming in the Florida scrub at Archbold. Photo by Zach Forsburg.

Archbold's work studying and protecting Florida Scrub-Jays, grasslands such as Buck Island Ranch, and the Florida Wildlife Corridor reached a new audience in Mutual of Omaha's Wild Kingdom rotecting the Wild TV show on NBC. The latest episode Pathway to Protection begins with hosts Peter Gros and Dr. Rae Wynn-Grant following their GPS to a camera trap location where conservation photographer Carlton Ward awaits them. Ward says, "This is a studio set up in the Florida Wildlife Corridor trying to get video of the elusive Florida Panther." The endangered panther requires large, connected habitats for their population to grow, including safe passage under Florida highways. After a sequence with Gros in the Florida Panther Refuge highlighting a unique female panther called Broketail, the story heads to Archbold's Florida scrub. Wynn-Grant joins Archbold's Dr. Sahas Barve, Tori Bakley, and Sarah Beres. Barve introduces the scrub-jay as living in a close-knit family group who defend their patch of scrub from neighbors. **The** viewer appreciates the scrub-jay's reliance on the Florida Wildlife Corridor to connect remnants of **imperiled scrub.** The show wraps up at Archbold's Buck Island Ranch with Archbold Ranch Manager Gene Lollis, Ward, Gros, and Wynn-Grant riding horses and discussing the value of ranches in the Corridor. Lollis says, "We have Black Bears, alligators, and panthers here. Those animals need a large space. I've seen entire ranches like this one turned into housing developments. It is very sad to see a way of life disappearing." Ward says, "The rancher is saving the panther. But, in an interesting way, the panther can also help save the ranch." Watch the full episode here.

The Journey of Paul Gray



Portrait of Dr. Paul Gray by Dustin Angell Photography.

Dr. Paul Grav's dedication to Florida science and conservation began as a University of Florida graduate student in 1988. That same year, he first visited Archbold on a class tour where he met the Florida Scrub-Jay and legendary ornithologist Glen Woolfenden. After completing his Ph.D on the Florida Mottled Duck, Gray worked for the Florida Game and Fresh Water Fish Commission, leading him to Buck Island Ranch to discuss grassland management for ducks and other wildlife with Dan Childs, the previous Ranch Manager. Based up the road from Archbold in Lorida, Gray began working for the National Audubon Society in 1995. As the Science Coordinator for Audubon Florida's Everglades Restoration Program, Gray provides technical support to policy teams on water, land, and bird management issues primarily related to Lake Okeechobee, and for state-wide issues as needed. He says, "Science and policy are very different disciplines and need each other to be successful. Policy people need to know the factual background. And scientists need trained advocates to promote their ideas. The work on Buck Island Ranch is especially important for Audubon because we need to understand the trade-offs of working lands on resources such as water supply and quality, biodiversity, green space, carbon, and so on. I use Archbold's science daily to inform our policy team and decision makers." Gray recently presented a seminar at Archbold about his work. Watch here Archbold is grateful to have a wonderful colleague, neighbor, and powerful advocate for our science in Dr. Paul Gray. He says, "Some of my most rewarding conversations about Florida have been with Archbold people. When there, I feel like I am at a shrine to human learning and betterment." Thank you, Dr. Gray.

Job Announcements

Assistant/Associate Research Biologist in Avian Ecology

Conservation Partnerships Coordinator

Environmental Education Internship

Scientific Illustration Internship

Plant Ecology Internship

Public Events

Mar 7: 5:00 PM-6:30 PM
Grant Livingston Concert

Mar 10: 1:30 PM-3:00 PM
Amphibious Adventure
Learn more here

Mar 16: 10:00 AM-11:00 AM
Preserving Plants
Learn more here

Mar 17: 1:30 PM-2:30 PM

Florida Scrub-Jays & Bird Science

Learn more here

Mar 28: 5:00 PM-6:30 PM

Archbold Book Club

Mar 30: 10:00 AM-11:30 AM

Nature Journaling
Learn more here

April 6: 9:00 AM-12:00 PM

Plants & People

Learn more here

Timeless: Art, Science, & Nature



Photography artwork by Reed Bowman and Dustin Angell at the Wild Space Gallery. Photo by Linda Gette.

See the work of selected Archbold artists at the Wild Space Gallery founded by the Florida Wildlife Corridor Foundation in St Petersburg from now until March 29. The exhibit Timeless: Science, and Nature at Archbold Biological Station shows the public that art is multidisciplinary, weaving together science, natural history, philosophy, and more. Gallery curator Noel Marie Smith writes, "In the living laboratory/studio that is Archbold, they are building a picture of Florida's ancient lands and its inhabitants over time." Featured artists include the stunning nature photography of Reed Bowman alongside Dustin Angell's beautiful portraits. Renowned artist Michele Oka Doner is represented with her piece 'Owl Menu', which she recently donated to Archbold. A wall devoted to Mollie Doctrow's intricate woodcuts highlights quintessential forms and textures of the scrub, from cacti to palmettos and burned oaks. Peer into the one-of-a-kind world of Mark Deyrup with a recreation of his science laboratory and insect illustration studio. Other artists featured included Tom Eisner and Maria Eisner's photography, Evelyn Gaiser's music, and Deborah Mitchell's wild observations. Learn more and plan your visit here. Join Hilary Swain on March 9 from 3:00-4:30PM for her talk about the art of Archbold and the Florida Wildlife Corridor titled 'Part 1: The Big Picture'. Join Mark Deyrup on March 16th from 2:00-3:30PM for his talk 'Part 2: From an Ant's Eye View'. RSVP for their upcoming talks here.



Hilary Swain and Fin Ouweleen visit the Boca Grande Community. Photo by Zach Forsburg. $\,$

Several years ago, the Friends of Boca Grande Community Center launched a fundraising effort to support a research internship at Archbold Biological Station named 'Boca Grande 6-R Initiative'. The 6-R stands for Ridge, Ranch, River, to Reef, Research, and Restoration. Based out of Gasparilla Island in southwest Florida, the Friends care about understanding the breadth of environmental issues in Florida. They aim to make a difference within their community and Florida by supporting research and restoration at Archbold. Fin Ouweleen, the first Boca Grande Research Intern supported by the Boca Grande Community, completed his internship last year. Fin worked in the Archbold Predator-Prey Program studying mammal movements in natural and suburban areas within the Florida Wildlife Corridor. Fin was promoted to Research Assistant after his internship and recently visited the Boca Grande Community to update them on his work and thank them for supporting his internship. Fin stated, "The internship was a great opportunity that gave me valuable experience in my field and jump-started my career. I'm very thankful to the Boca Grande Community for giving me this opportunity." **The** Boca Grande Community is investing in students, early career researchers, and aspiring leaders passionate about the ecological challenges facing Florida who want to be part of the solution. Funding for this internship comes from charitable contributions to the Boca Grande 6-R Initiative, managed by the Gulf Coast Community Foundation. Archbold is excited and grateful for Boca Grande's partnership in supporting a sustainable future in



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The Scrub Blog

Nature and Science from Florida's Heartland

Explore The Scrub Blog by Archbold creative staff.



Directions to Archbold Biological Station

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