Monthly Conservation Note

The Ecosystem of Conservation and Restoration - the Case of the Miami Tiger Beetle

People ask me what the difference is between nature conservation and ecological restoration. For me, conservation is the work we do to protect nature for ourselves and future generations. Ecological restoration is the work we do to assist the recovery of nature when preservation and conservation alone are no longer adequate. It is imperative in part because our conservation ambition has not kept up with humanity’s ever-expanding appetite for Earth’s physical and biological resources. Ecological restoration also places a high value on the intrinsic value of species and ecosystems. We don’t need to prove that the nature we restore provides for humanity – although clearly it does – facility at Richmond. Fire suppression, invasive species, and overabundant pines and saw palmettos had whittled away at the open patches of sandy habitat key to the MTB and other rare pine rockland species. Meanwhile, the National Geographic Photo Ark was about to launch the Photo Ark Species Impact Initiative, grant funding from which is now supporting our collaborative project at US Coast Guard Richmond and adjacent Zoo Miami (see story below). This project is underpinned by the International principles and standards for the practice of ecological restoration, which I helped write on behalf of the Society for Ecological Restoration and IRC. The project builds on the work of
species and ecosystems have a right to exist just like we do.

In practice, when things go well these ideas flow together like a complex and healthy ecosystem. The more integrated they are the more we accomplish. As an example, the Richmond Pine Rocklands in Miami-Dade County is home to the Miami tiger beetle (MTB), one of the rarest insects in the world. While the MTB may not be as charismatic as the Florida panther, it still serves as a “flagship species” for pine rocklands. The MTB was listed as endangered in 2016 but the US Fish and Wildlife Service (FWS) did not concurrently designate critical habitat as required by the Endangered Species Act. Designation of critical habitat is key to the protection, conservation, and recovery of listed species, and the Center for Biological Diversity, Miami Blue Chapter of the North American Butterfly Association, and Tropical Audubon Society sued the FWS to finalize the critical habitat designation proposed in 2021. Earlier this month an agreement was reached, and finalization is expected on May 8. In parallel to this effort, the FWS, US Coast Guard, Fairchild Tropical Botanic Garden, and IRC had been working to gear up the restoration of pine rocklands at the US Coast Guard

Many readers will know about the long battle at Richmond to protect pine rocklands, which is not yet over. As a community, we need to ensure that continuing threats, including the proposed Miami Wilds theme park, are set aside by decision makers and the restoration of this unique habitat is fully supported financially and politically. A robust conservation and restoration ecosystem would demand it.

George Gann
Founder and Executive Director

Pine rocklands with overly dense saw palmetto to undergo restoration. Image by George Gann.

Upcoming Events

Emerging Invasive Species Webinar

Nonnative invasive species continue to wreak havoc on Florida's native ecosystems. At IRC, we know firsthand the extensive amount of time and resources that are needed to combat these species.

WHAT IF we could identify species that have the potential to become the next Brazilian-pepper or Australian-pine and collectively target them in Palm Beach County (and beyond) before they take hold? WHAT IF we told you this was possible?
IRC is excited to host a free webinar on Thursday, May 4 at 6:30PM that will focus on the identification of several "emerging invasive" plant species (including at least one you will know!) that we at IRC have identified. We will discuss how to report your observations of these species to best influence the change that is needed. Although we are highlighting emerging invasive species for Palm Beach County, we encourage people from all throughout Florida to join the webinar and learn with us!

To register, click here.

Thank you to all who have supported IRC's programs with a $20 or larger donation in the last month: Janice Duquesnel, Steve Green, Thomas Herfort, James Johnson, Jimmy Lange, Donna Shore, Sarah Martin Kittredge, Ana Fernandez, Katharine Murray, David Sacks, and Steve Sewell.

While we get funding for some great projects, those funds rarely cover all of our costs, so we really do need your support to continue our important work.

Donations allow us to provide important conservation services such as improving our free online resources, increasing protection of rare plants and animals, restoring...
George Gann Named a National Geographic Explorer and Awarded Major Grant

IRC is excited to announce that George Gann, founder and Executive Director of the Institute for Regional Conservation (IRC) in Delray Beach, Florida, has been designated a National Geographic Explorer and was awarded the inaugural National Geographic Photo Ark Species Impact Initiative grant.

This $350,000 grant will be used to fund the ecological restoration of habitat for two federally endangered insects in the Richmond Pine Rocklands of Miami-Dade County, Florida. The focal species, Miami tiger beetle (*Cicindelidia floridana*) and Bartram’s scrub-hairstreak butterfly (*Strymon acis bartramii*), are endemic to the pine rocklands ecosystem of southern Florida.

IRC will lead the two-year project in collaboration with the US Fish and Wildlife Service, US Coast Guard, Zoo Miami, Fairchild Tropical Botanic Garden, and other partners.

The Photo Ark is a multi-year effort that aims to document every species living in the world’s zoos, aquariums, and wildlife sanctuaries – while raising awareness of and seeking solutions to some of the most pressing issues affecting wildlife and their habitats.

"Meet Our Team" Spotlight

Welcome, Katherine Hardial!
Katherine Hardial joined IRC as our new Office Administrator earlier this month. Katherine is a Miami native, who has always enjoyed the beauty of not only our beaches but also the biodiversity of the Florida Everglades. She is excited to join the team at IRC and help do her part in keeping South Florida beautiful for not only humans but also for our native species.

Welcome to the team, Katherine!

IRC Contributes to Summary Report

IRC is proud to contribute to this newly published summary report for the Standards of Practice to Guide Ecosystem Restoration: A contribution to the UN - Decade on Ecosystem Restoration, 2021-2030. The Society For Ecological Restoration (SER) and many other collaborators also contributed to this report.

To access the summary report, click here.

Recent Events

Florida City Pineland Volunteer Day

Together with Miami-Dade Environmentally Endangered Lands program, Miami-Dade County's Department of Regulatory and Economic Resources, Fairchild Tropical Botanic Garden's Connect to Protect Network, NAACP Miami-Dade Branch and Citizens for a Better South Florida, IRC held an ecological restoration volunteer day at Florida City Pineland on Saturday, April 8.

Thanks to the help of over 75 wonderful volunteers, we were able to transform areas
of the preserve that were previously infested with the invasive Brazilian-pepper plant into thriving habitats for over 700 native pine rockland plants such as coontie (*Zamia integrefolia*), quailberry (*Crossopetalum ilicifolium*), and Mexican alvaradoa (*Alvaradoa amorphoides*).

For more photos from the event, [click here](#).

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**Earth Day at Homestead Air Reserve Base**

On Friday, April 21, IRC Crew Leader Alex Crow and IRC Field Technician Celeste Boncompte participated in an Earth Day event at the Homestead Air Reserve Base. While there, they promoted IRC's Pine Rockland Initiative and free online resources.

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**Presentation to Town of Jupiter Beach Committee**

On Monday, April 24, IRC Assistant Director of Programs, Cara Abbott, was invited to speak at the quarterly Town of Jupiter Beach Committee meeting.

Her presentation gave background into IRC's Restoring the Gold Coast Program and discussed the importance of dune restoration. We are thankful for this opportunity and hope to collaborate with the Town of Jupiter soon!

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**IRC Presents Poster at Florida Rare Plant Conference**

IRC Program Associate, Michelle Smith,
participated in the poster presentation portion of the Florida Rare Plant Conference on Friday, April 28. The poster was titled, "Summary of the reintroduction of *Jacquemontia reclinata* (Beach clustervine) and the importance of Coastal Strands in Palm Beach and Miami-Dade Counties."

The presentation covered the collaborative restoration efforts made by IRC, Fairchild Tropical Botanic Gardens and others to conserve this federally endangered species.

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**Bioblitz at Spanish River Park**

IRC teamed up with the City of Boca Raton Office of Sustainability to participate in the global "City Nature Challenge" by holding a bioblitz at Spanish River Park on Saturday, April 29.

IRC staff members Cara Abbott, Kelly McLoughlin, and Michelle Smith took participants on a guided walk around the park, teaching them about coastal ecosystems and the diverse native plants that inhabit them. Participants learned to identify several rare species and report their findings in iNaturalist.

For more photos from the event, [click here](#).

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