

# **‘Phipps Ocean Park: Fusing History & Nature to Build a Sustainable Future’**

Preservation Foundation of Palm Beach  
Annual Trustees Meeting

February 07, 2022



International Policy Lead

George D. Gann  
[www.regionalconservation.org](http://www.regionalconservation.org)  
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Chief Conservation Strategist



# United Nations Decade on Ecosystem Restoration 2021-2030



**“There has never been a more urgent need to restore damaged ecosystems than now”**



UNITED NATIONS DECADE ON  
**ECOSYSTEM  
RESTORATION**  
2021-2030







# Global Uptake of International Principles and Standards for the Practice of Ecological Restoration



Launched in September 2019

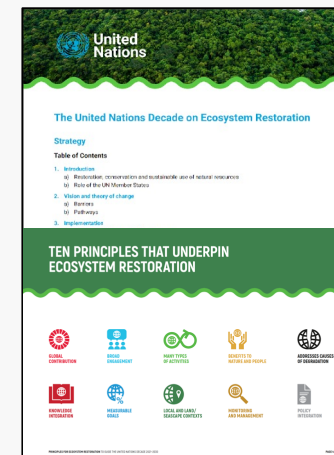
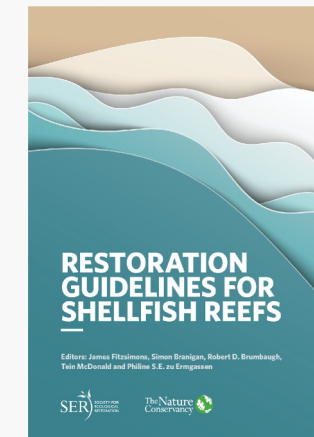
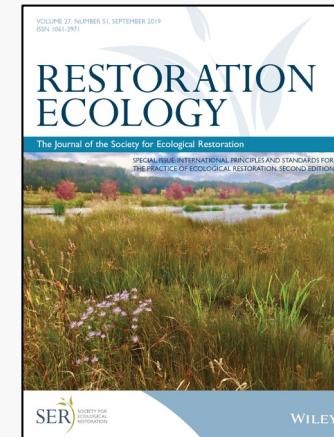
Incorporated into global restoration guidance

Cited as a key document in the official Strategy of the United Nations Decade on Ecosystem Restoration and the Decade Principles

Is the most downloaded manuscript in the history of journal Restoration Ecology (>37,000 downloads in 2+ years)

Cited >270 times (Dimensions)

[www.ser.org/standards](http://www.ser.org/standards), or <https://doi.org/10.1111/rec.13035>





Knowledge. Stewardship. Culture.

The Preservation Foundation of Palm Beach protects and celebrates the **architectural, botanical, and cultural heritage** of Palm Beach. Through advocacy initiatives, educational programs, architectural resources, and cultural events, the Foundation's goal is to inspire the community to learn about and protect the places that make Palm Beach special.

Viewing the Transformation of Phipps Ocean Park  
through the intertwined lenses of

History, Nature, and Sustainability



Understanding the past creates a sense of belonging in the present and guides our path to build a better future.

#### Interact, Learn, and Grow

- ▶ Access to our shared history at the Little Red Schoolhouse, one of the last vestiges of the Pioneer era in Palm Beach
- ▶ Expanded educational programming through the creation of a Coastal Restoration Center
- ▶ Interpretative historical and botanical signage

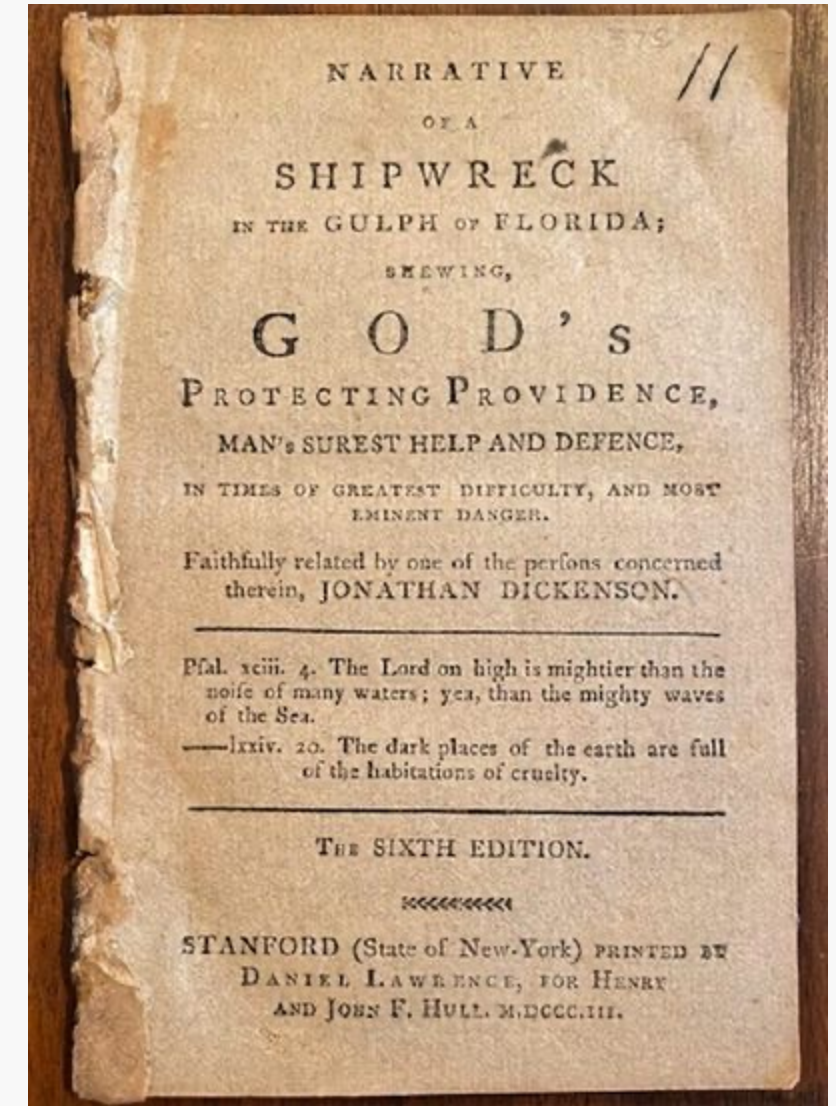






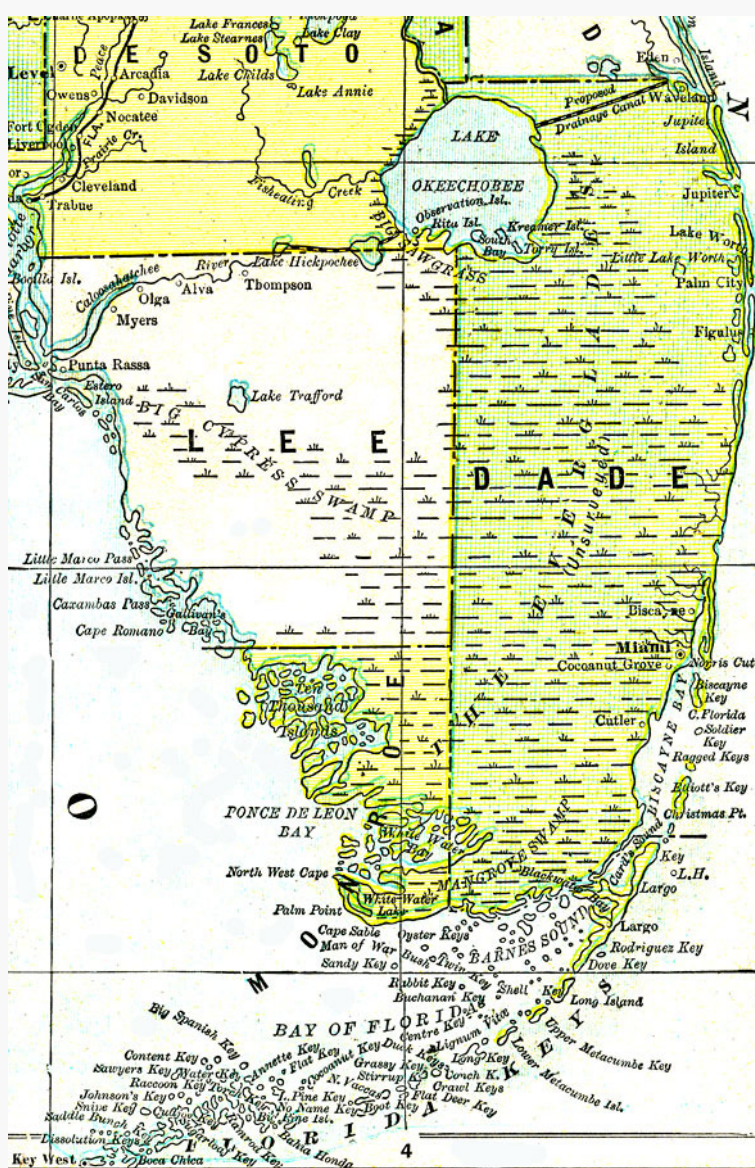
"The Florida Indians Capture the Shipwrecked Company," from Pieter van der Aa, *Naaukeurige Versameling der Gedenk-waardigste Zee en Landreysen na Oost en West-Indien* (1707). [Florida Memory](#) • [The Jupiter Inlet Hurricane of 1696](#)

- People were here before us
- People arrived in South Florida about 12,000 y ago
- Glades Indians (Jaega and others) extinct by 1770s
- Miccosukee and Seminole tribes permanently settled in southern Florida in the early 1800s
- **Indigenous fire** increased and maintained grassy and shrubby ecosystems that benefited wildlife and species diversity

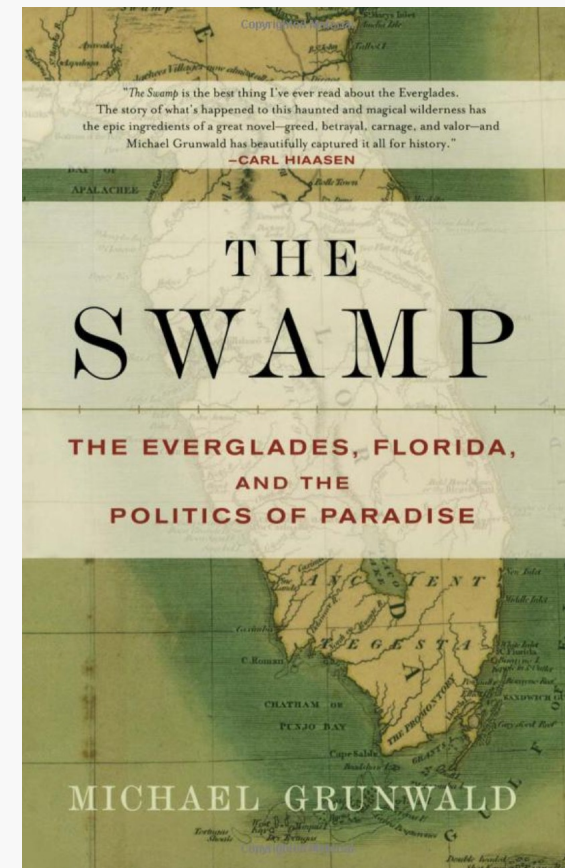
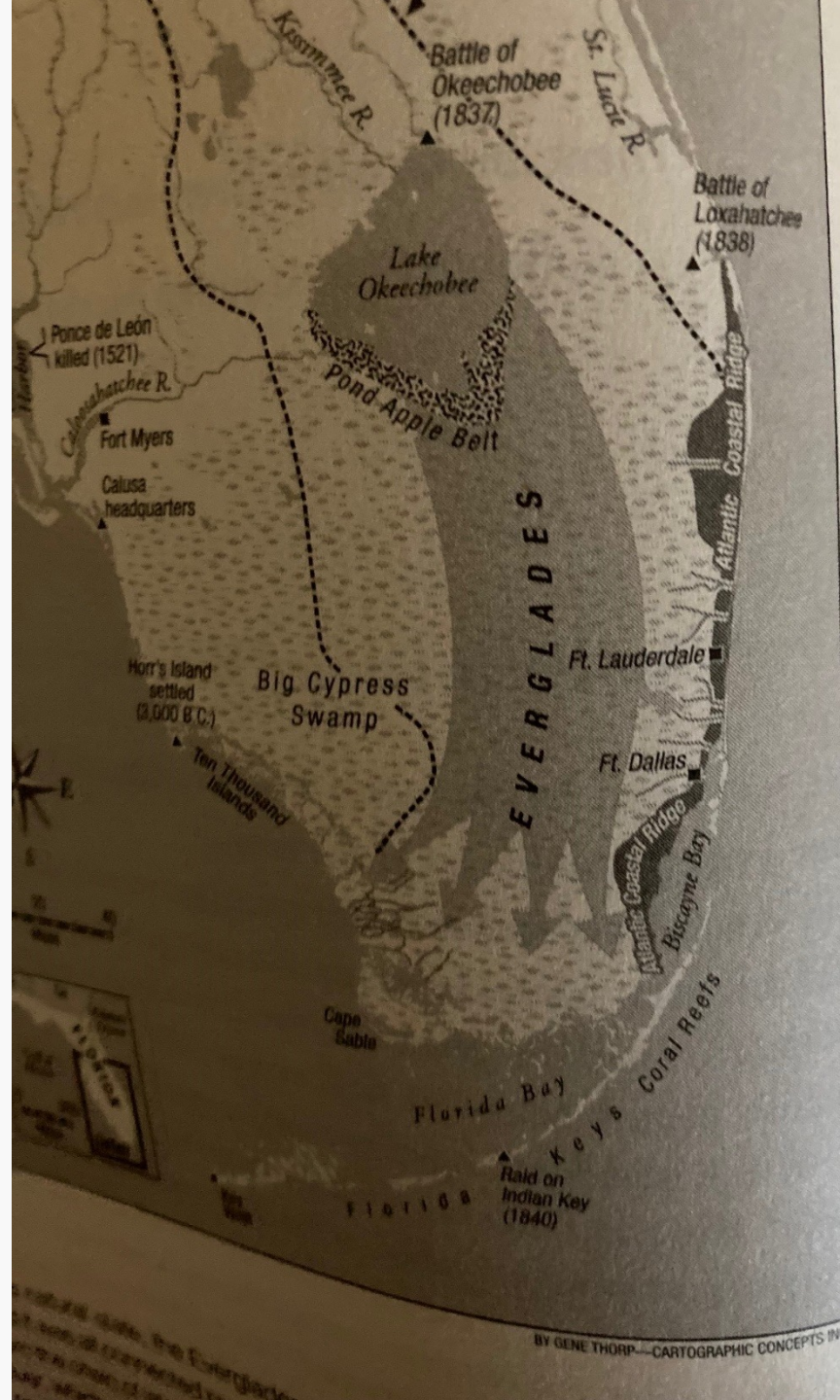


Story of Jonathan Dickinson, 1696





- Monroe County: settlement of Key West after 1820
- Dade County: established in 1836 with its seat at Indian Key, which was destroyed in 1840.



“Soon settlers were launching farming communities all the way down the Atlantic Ridge, the so-called **“Gold Coast.”**”



## Historical Ecosystems of Palm Beach – Coastal Strand



US Lifesaving Service House of Refuge  
Delray Beach 1876



Palmetto Park Road and A1A, Boca Raton  
c. 1925

To the Newcomer, the Barrier Islands  
Were Stark Prickly Landscapes



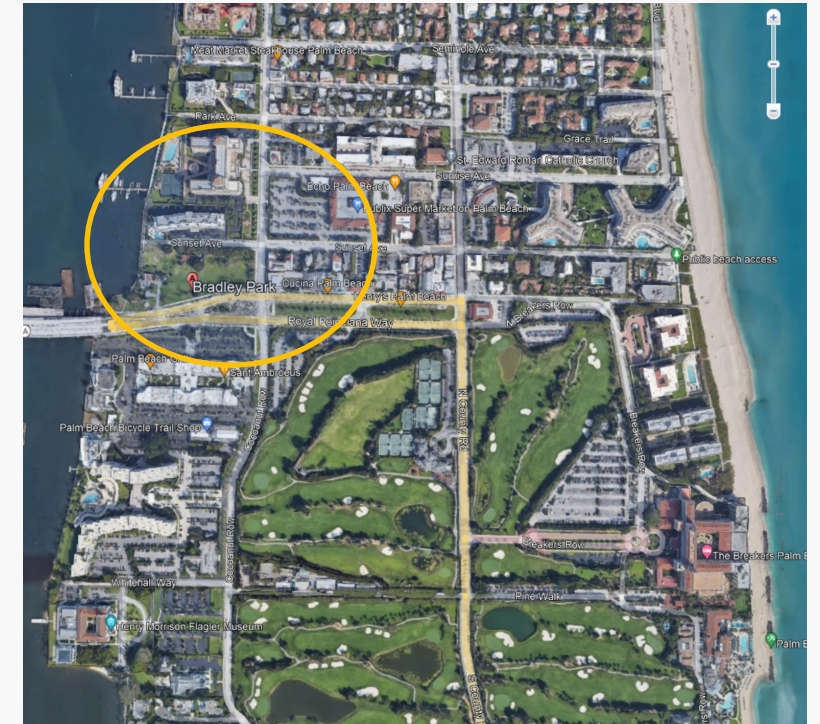
Freshwater Lakes, Interdunal Swales, and Swamps were also present, but we know almost nothing about them













Hogarcito, first Palm Beach home of Marjorie Merriweather Post & E.F. Hutton



Patches of Hammock Trees Frame House



Strangler Fig (*Ficus aurea*)



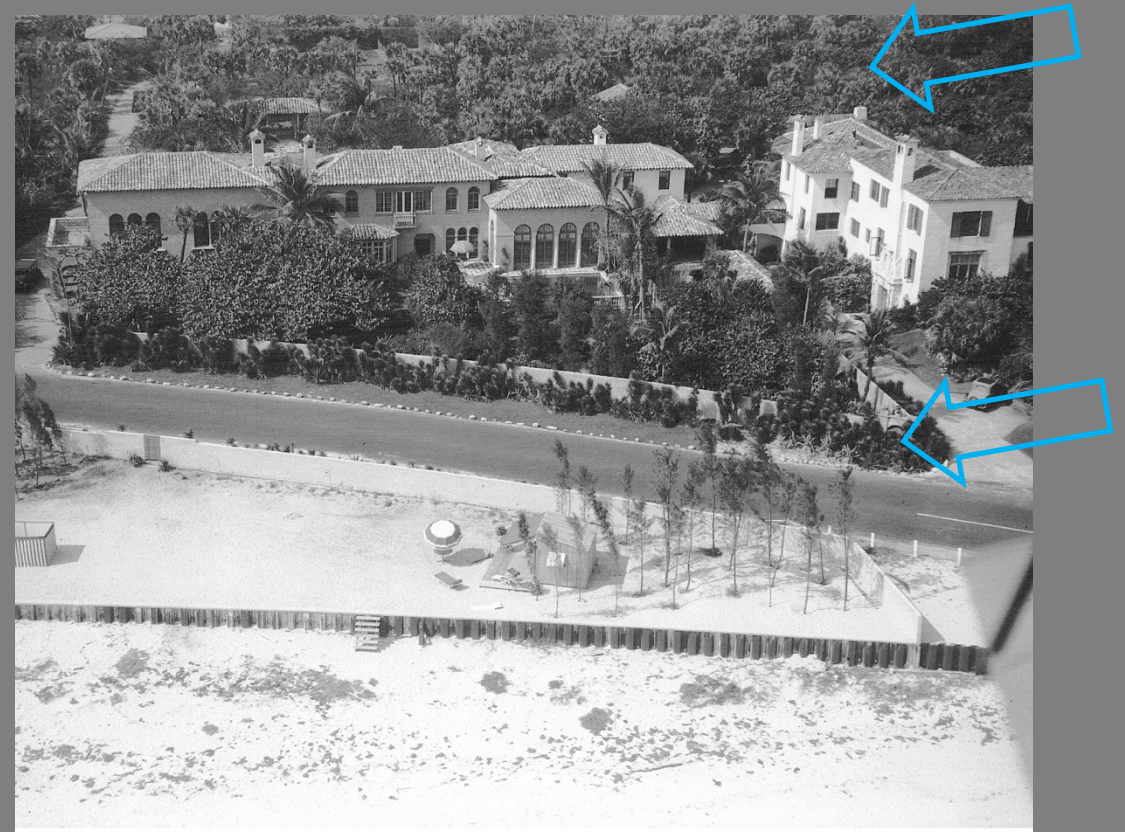
Grove of Trees on Edge of Golf Course



Naturalistic Gardens, Including Native Plants,  
Comprised Some of the Earliest Landscapes in Palm Beach



07 Banyan Road



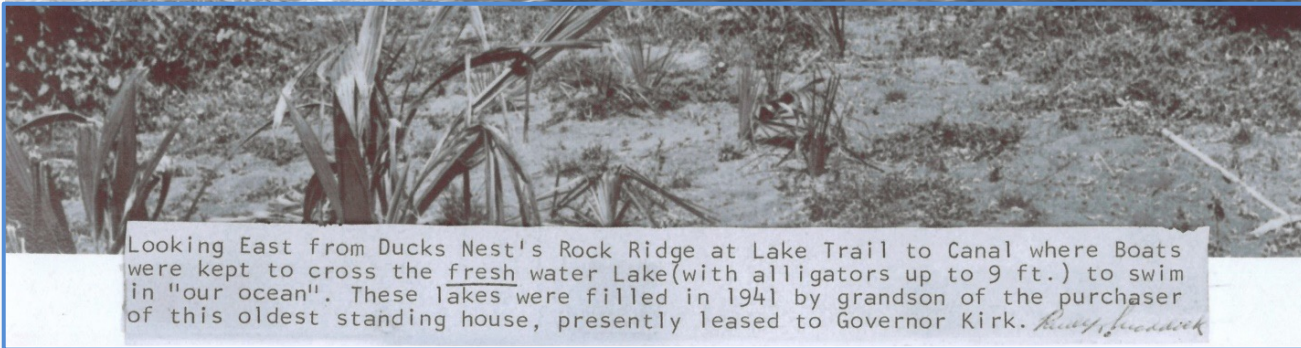


By mid-20<sup>th</sup>  
century the  
transformation  
of the island  
was complete.

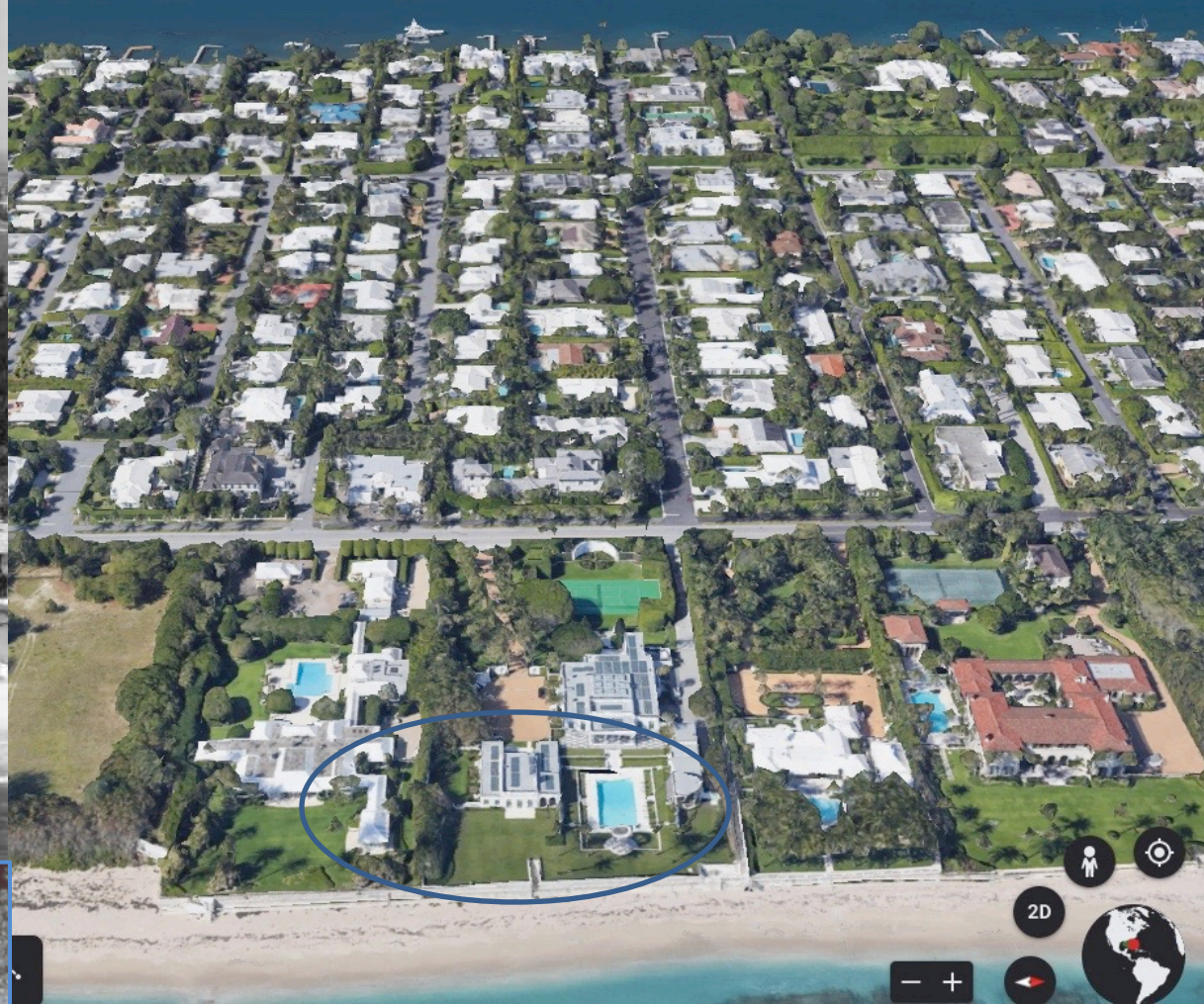




## Villa Artemis with Freshwater Lake in Background



Looking East from Ducks Nest's Rock Ridge at Lake Trail to Canal where Boats were kept to cross the fresh water Lake (with alligators up to 9 ft.) to swim in "our ocean". These lakes were filled in 1941 by grandson of the purchaser of this oldest standing house, presently leased to Governor Kirk. *Henry J. Goodrich*



Google Earth 2021





PLATE 14

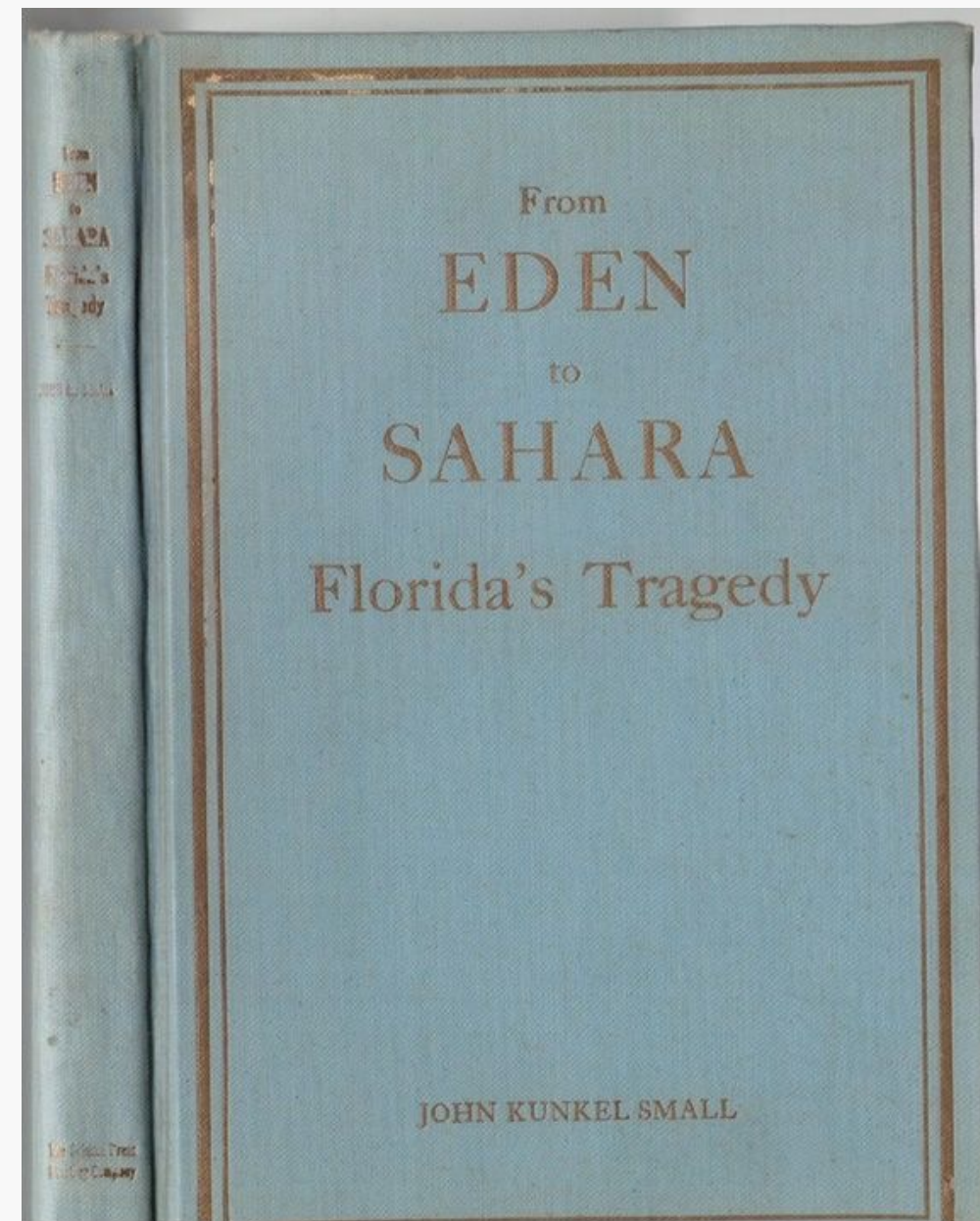
The same spot as shown in the accompanying plate. The last vestige of the plant life here was destroyed in changing this place from a reptilian to a mammalian place of abode. On the sandy dunes adjacent to the mangroves now buried under a layer of marl and sand, formerly grew rare and showy plants, among which rose-purple flowers were a conspicuous feature; for example a candy-root each of whose flowers showed a central speck of gold and a four-o'clock relative with large infertile flowers and small inconspicuous flowers which burrowed and produced fruits under the ground.

Development of Miami Beach at Indian Creek

## John Kunkel Small, New York Botanical Garden

- Author of Flora of the Southeastern States and many more
- Supported by patronage of industrialist Charles Deering
- Wrote From Eden to Sahara based on expedition of 1922

“The **wholesale destruction** of the plant covering, through carelessness, thoughtfulness, and vandalism in the Peninsular State, prehistoric and historic , **was everywhere apparent.**”



Published 1929





## FLORIDA: A LANDSCAPE OF DREAMS

Atlantic Center for the Arts

**Closing Reception: Friday, February 4, 2022 5 PM – 7 PM**

*Florida: A Landscape of Dreams* takes audiences on a visual journey across our state while addressing issues such as land conservation, water quality, and wildlife diversity. Over the years, Florida has been marketed as a ‘Paradise’—and selling the dream to tourists and residents alike—has come at a steep price. However, with a renewed interest in discovering “Old Florida” and the trend of “heritage tourism” on the rise, the public is poised to pay attention to what has been in our backyard all along. Thanks to the tireless efforts of certain conservation photographers—Jennifer Adler, Eric Clay, Paul Marcellini, Tessa Skiles, Mac Stone and Carlton Ward Jr.—we have truly come to understand what’s at stake. Florida’s landscape—from cypress strands to sawgrass prairies, coastal lowlands and estuaries to freshwater springs—is an environmental gem, and the aptly named “Treasure Coast” is a gift we cannot afford to squander. Through stunning imagery and educational initiatives, these photographers continue to make a difference. By showcasing Florida’s unique landscape and examining the role it plays in supporting our state’s lifestyle and economy, these photographers remind us that our future does not exist on a parallel track. Rather, it is intertwined with that of Florida’s conservation efforts, and the steps we take today will determine the final outcome. The photographs in this exhibition allow viewers to appreciate the many facets of Florida’s biodiversity, and the critical need to preserve it.

[Learn More](#)

“Over the years, Florida has been marketed as a ‘Paradise’—and **selling the dream to tourists and residents alike—has come at a steep price.** However, with a renewed interest in discovering “Old Florida” and the trend of “heritage tourism” on the rise, the public is poised to pay attention to what has been in our backyard all along.”



Expanding appreciation of coastal ecosystems and native plants inspires people to integrate environmental stewardship into everyday life.

Envision, Renew, and Conserve

- ▶ Showcase the distinctive beauty, diversity, and benefits of native plants
- ▶ Protect the coastline by returning historic ecosystems to the park and thus creating a model of sustainability
- ▶ Foster a habitat for coastal wildlife





## Showcasing Beauty, Diversity, and Benefits



More than 200 native species were historically on the Island



# Protecting and Restoring Native Ecosystems



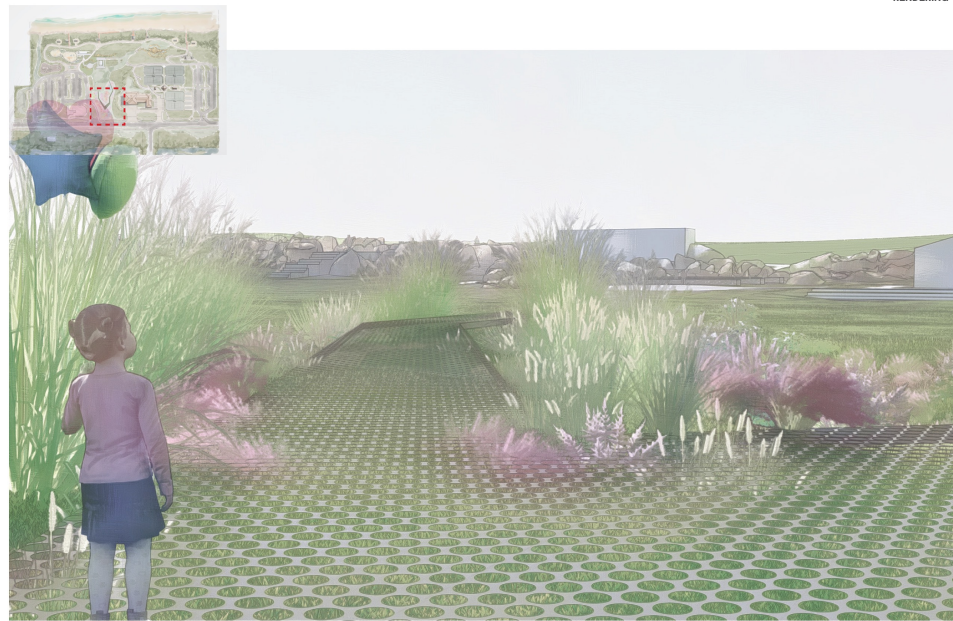
Beach Dune (pioneer zone)



Sea lavender, c. 1915



Coastal Stand (shrub zone)



jungles Wildflower Meadow (interdunal swale) Phipps Ocean Park  
September 2021



Coastal Forest (maritime hammock)



## Build on Sustainable Landscapes Work at Pan's Garden





# Fostering Habitats for Birds and Butterflies

## Four Larval Host Plants – 10 Coastal Butterflies



**Cassius Blue**



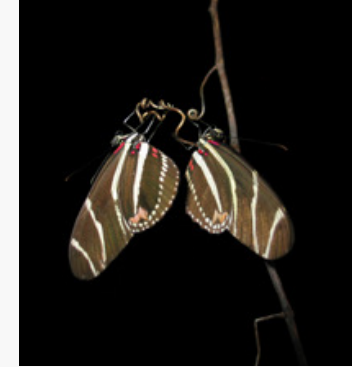
**Large Orange Sulphur**



**Martial Scrub-Hairstreak**



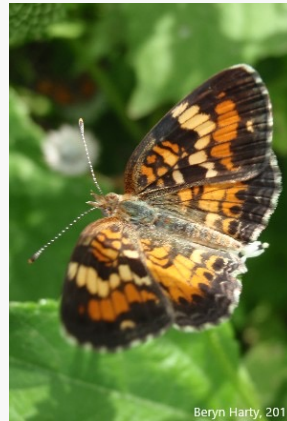
**Common Buckeye**



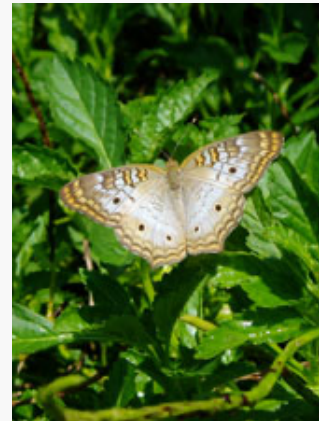
**Zebra Heliconian**



**Gray Hairstreak**



**Phaon Crescent**



**White Peacock**



**Gulf Fritillary**



**Julia Heliconian**



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# Why is this Work Important? - Environmental and Human Crises



1,000,000 species threatened with extinction (IPBES, 2019).

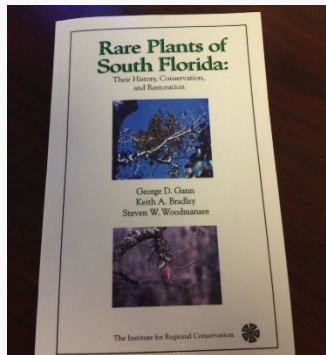


Climate change and sea level rise

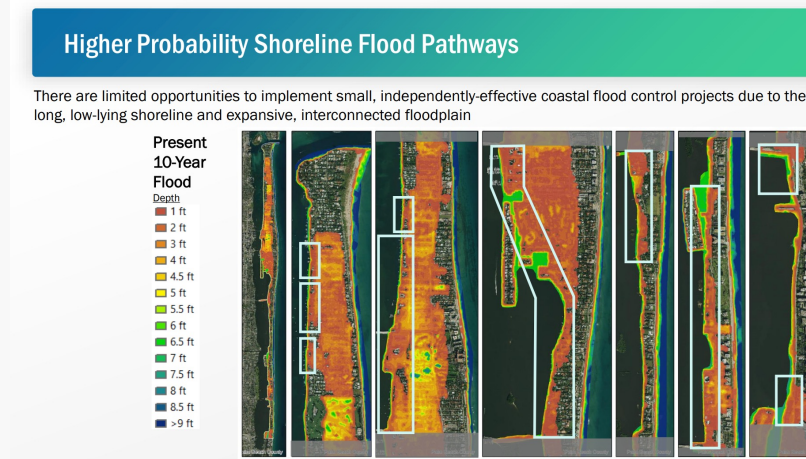


*Schinus terebinthifolia*  
Photo by Shirley Denton

Diseases and Invasive Species



1 in 4 native plant species in South Florida gone or nearly gone (Gann et al. 2002 to present)



There are limited opportunities to implement small, independently-effective coastal flood control projects due to the long, low-lying shoreline and expansive, interconnected floodplain

Woods Hole Group 2021



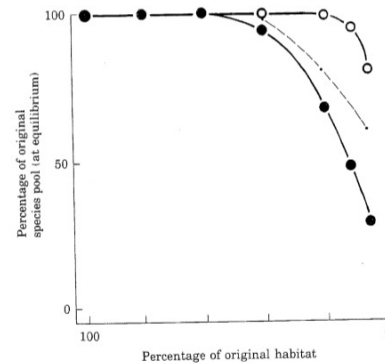




## Fragmentation leads to inexorable loss

no species are lost from either pool. As fragmentation proceeds we eventually reach some critical level of reduction and fragmentation where species begin to die out. The susceptible pool loses species earlier and loses more species in total than does the resistant pool. When the resistant pool begins to lose species, it loses them very rapidly, because by this time the fragments are small and there is little habitat left.

Insularization causes extinctions over and above those expected through reduction in the total area of habitat. More species persist at equilibrium if the remaining habitat is concentrated into a single large patch rather than distributed over many small fragments (Figure 4). We stress that the results in Figure 4 are equilibrium patterns; depending on the relative time scales of habitat destruction and species'



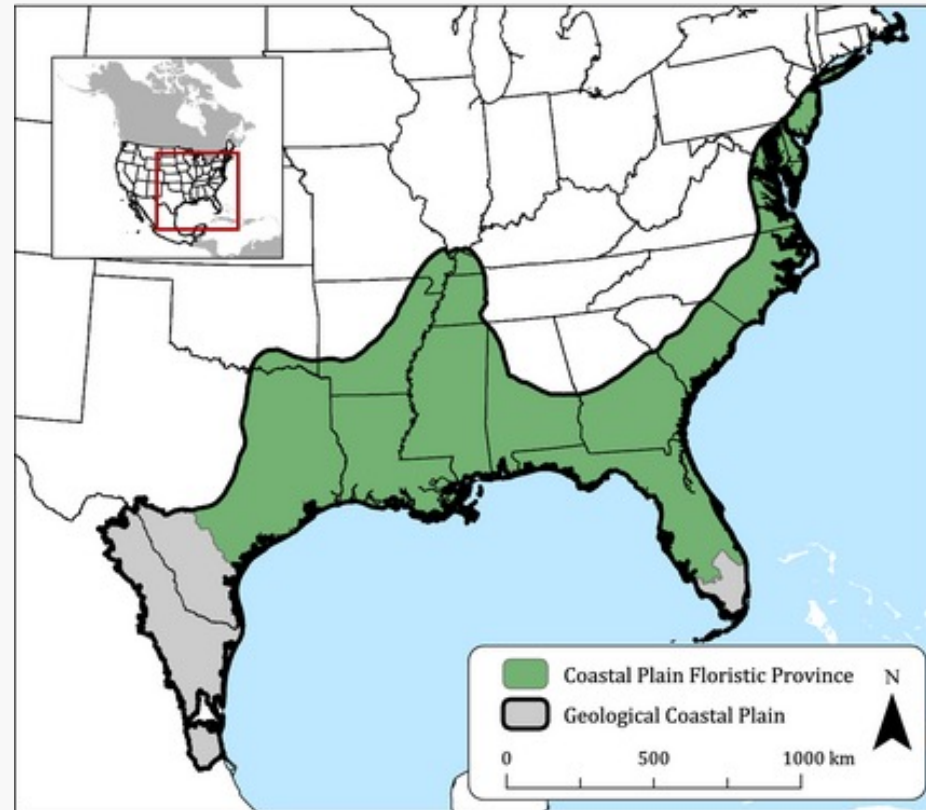
**FIGURE 4.** The number of species remaining in each species pool as fragmentation proceeds. Closed circles show the pool of species with large area requirements and low vagility. Open circles show the species with less stringent area requirements. The small dots connected by the dashed line depict the proportion of the first pool that would be present when the habitat is minimally fragmented. (From McLellan et al., 1986.)

Wilcove 1986



Some species and groups go faster some slower





North American Coastal Plain Global Biodiversity Hotspot  
Noss et al. 2014





# Local Biodiversity Matters For Conservation and Sense of Place



Species of Management Concern in Everglades National Park, hardwood hammocks.



# Coastal Restoration Center



*Piriqueta cistoides* subsp. *caroliniana*



*Trichostema dichotomum*



The Institute for Regional Conservation

## BIODIVERSITY STARTER KITS

As part of our Restoring the Gold Coast Program, IRC is offering native biodiversity starter kits for gardens on barrier islands in southern Palm Beach County.

Each kit comes with hand-selected native plants perfect for enhancing your native beach dune system or coastal garden. This service helps make the restoration of native habitats on barrier islands cost effective and time efficient.

### What Each Starter Kit Contains

A single kit contains five native plants in 4" to 3-gal. containers, including at least one rare species not readily available on the open market. A double contains 10 native plants. Prices start at \$60 for DIY kits.

Kits Are Available For:

- Beach dunes and coastal grasslands
- Coastal strand and shrublands (back dune)
- Tropical hammock forests and coastal gardens
- Butterfly attracting kits for a wide variety of coastal habitats

### How You Can Get Your Kit

We will be offering a monthly pickup service of these kits. Delivery and planting can be arranged for an additional fee. If you're interested in purchasing an IRC Biodiversity Kit, please visit our website at: [regionalconservation.org/donationrgc.html](http://regionalconservation.org/donationrgc.html)

Focal Gold Coast Species

**Beach ragweed**  
*Ambrosia artemisiifolia*

- Florida Keys north to Brevard County, but usually extant along Florida east coast.
- Introduced at Atlantic Dunes Park (2010) and Delray Municipal Beach (1995), still present.

**Beach Clustervine**  
*Juncus roemerianus*

- Federally endangered. Miami-Dade to Martin County (endemic).
- Reintroduced to Atlantic Dunes Park (2010) and introduced to Delray Municipal Beach (2002-2006, still present).

**Beach-leuca**  
*Croton punctatus*

- Scattered and rare in southeastern Florida. Not common on re-southernized beaches.
- Present at Atlantic Dunes Park and Delray Municipal Beach. Plants added in 1995.

**Pine-land Croton**  
*Croton leucomeris*

- Florida Keys to St. Lucie County. Nearly extant north of Miami-Dade County. Sole larval host for two federally endangered and endemic butterflies.
- Planted at Delray Municipal Beach (1995) but introduction failed.

**Bartram's Scrub-hairstreak**  
*Stypania aux bartramii*

- Federally endangered. Monroe and Miami-Dade counties, extant in Brevard and Palm Beach counties.
- Larvae feed only on Pine-land croton.

**Florida prairie-clover**  
*Dalea carolinensis* var. *floridana*

- Federally endangered. Southern mainland north to Palm Beach and Collier counties. Extinct in Palm Beach County.
- Collected in the Palm Beach area only in 1895 and 1918.



**Natives For Your Neighborhood**  
Conservation of native plants, habitats, and wildlife

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Zip Code 33480  
search for Native Plants, Habitats and Wildlife

This is a long narrow zip code area in the Town of Palm Beach in Palm Beach County. [Link to map.](#)

Click below to obtain a list of native plants that are recommended for 33480, and to see photos and learn more about them.

Get your plant list for 33480!

Advance search for plants

**Habitats**

To take gardening with natives a step further, you can learn about the plant and animal habitats that are native to your area. Here you can also learn more about native habitats and ecosystems, and get a list of plants native to this habitat that are recommended for your zip code.

Read more about restoring native habitats in our [Frequently Asked Questions](#) section, and learn how you can attract wildlife such as birds and butterflies to your yard.

Get your list of habitats for 33480!

Find Native Plants!

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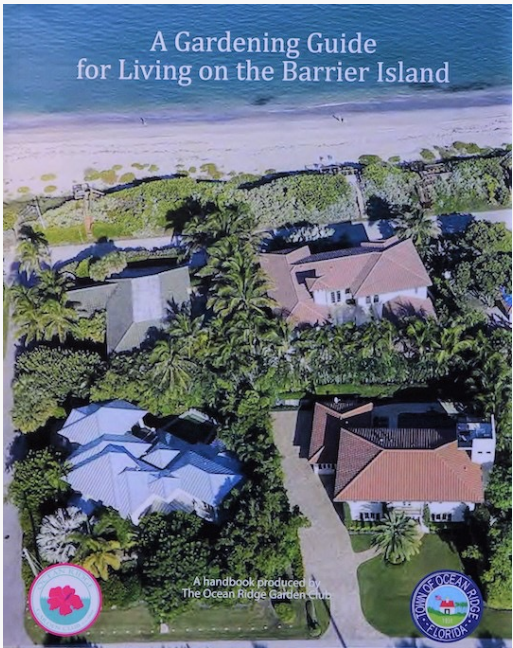
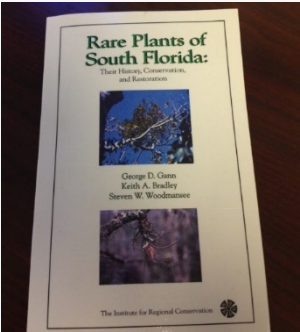
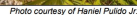
Facilitate Recovery of Biodiversity

Contribute to Science-based Restoration

Provide Tools for Residents and Region



The Institute for Regional Conservation  
Uniting Global Thinking with Local Expertise



▲ Native plant gardening and ecological restoration may be more closely linked than you think. A coastal garden at a dune in Ocean Ridge, Florida, uses local native plants to restore a coastal shrub land. It is both beautiful and restorative. Photo by George Gann.

▲ Photo by Kimberlee Duke Pompeo

emphasis of National Garden Clubs Inc. At the international level, there is tremendous work being done to address not one, but three global environmental challenges: countering climate change, preventing the extinction crisis and providing adequate ecosystem services to meet the needs of a sustainable world. Meeting these challenges requires transformational change; business as usual just won't work. We know that traditional conservation alone, what we think of as "protection" or "preservation," is insufficient to meet these challenges. Instead, we need





As our community grows and the environment becomes more fragile,  
*we will create extraordinary spaces at Phipps Ocean Park that  
will immerse everyone in the awe of nature, invite visitors  
to understand the past, and inspire all to commit to  
a sustainable future.*

