

# Natives in Your Neighborhood

A photograph of a garden path leading to a white door, surrounded by lush greenery and signs. The path is made of concrete slabs and is flanked by wooden edging. On the left, there are several signs, including one that says "WILDLIFE FRIENDLY" and another that says "LOCAL FRIENDLY". The garden is filled with various plants, including ferns, grasses, and large-leafed plants. The overall scene is a well-maintained and diverse garden.

**Habitat Restoration at Home**

# Terms

**Habitat** – the place where a plant or animal species naturally lives

**Vegetation type**- defined as a suite of characteristics that include soil, water, physiognomy, phenology and biotic communities that can be used to identify natural areas.

**Ecosystem** - a community of organisms interacting with one another and with the chemical and physical factors in the environment.

**Ecosystem Management** - land management that attempts to maintain or simulate natural processes and conditions that support native plant and animal communities and promote continued interactions among organisms and their environment as an integrated system across the landscape.

**Biodiversity** – the variety of life on Earth at all its levels, from genes to ecosystems, and the ecological and evolutionary processes that sustain it.

**Restoration** – The act of returning something to its original state thus providing the ecological benefits to ecosystem and its inhabitants and visitors.

SEE: <http://crocdoc.ifas.ufl.edu/msrpmapp/>

# What is the difference between habitat restoration and native landscaping?



Troy Residence, Miami, FL  
Photo by George Gann



Community in Osprey, FL  
Photo © Russell Sparkman/ Fusionspark Media Inc.

Environmental Benefits  
and  
Conservation Benefits

# Habitat Components



Overstory

Canopy

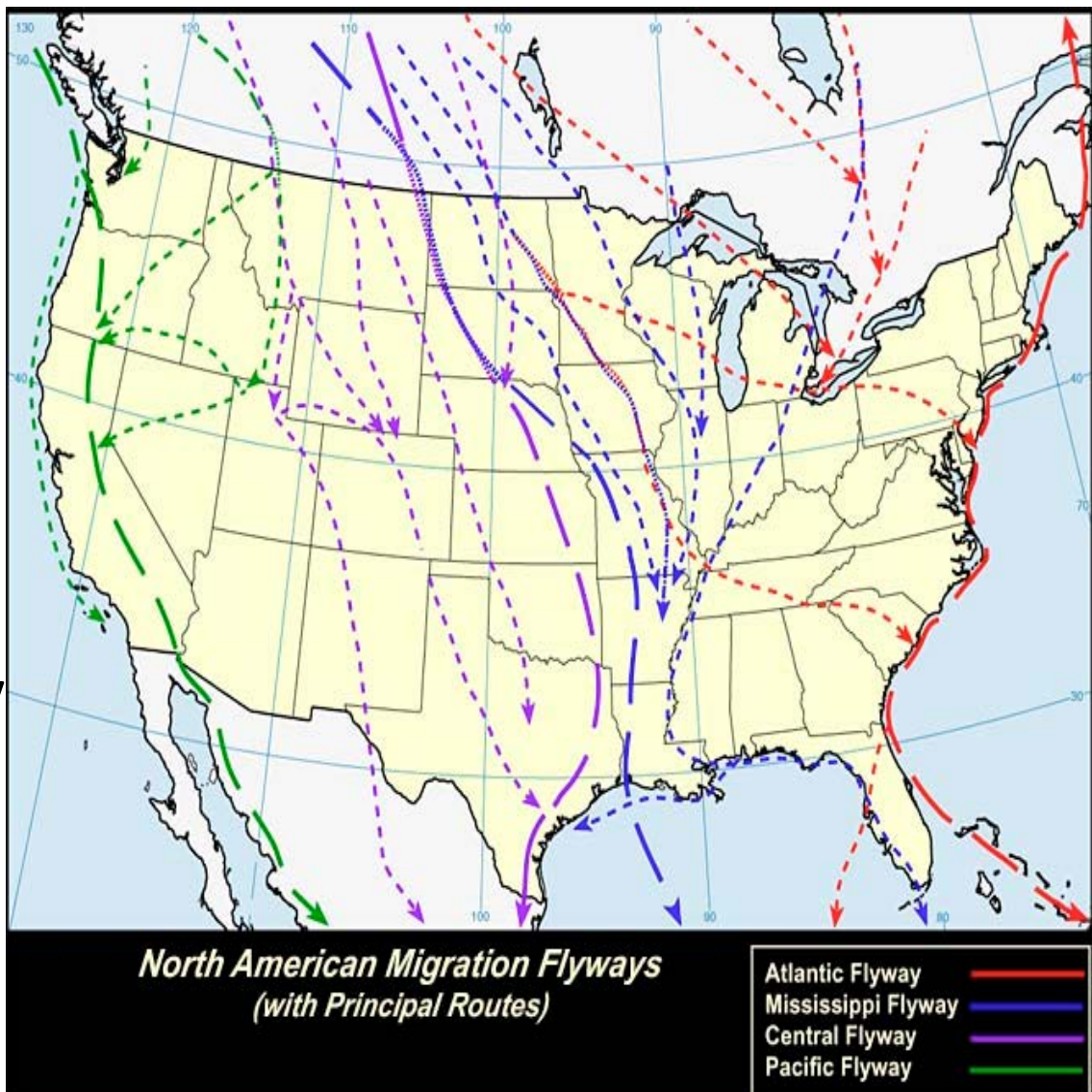
Understory

Shrub Layer

# Home to 3 Major flyways

- 1) Atlantic coast
- 2) Atlantic Tributaries West
- 3) Mississippi along the gulf coast

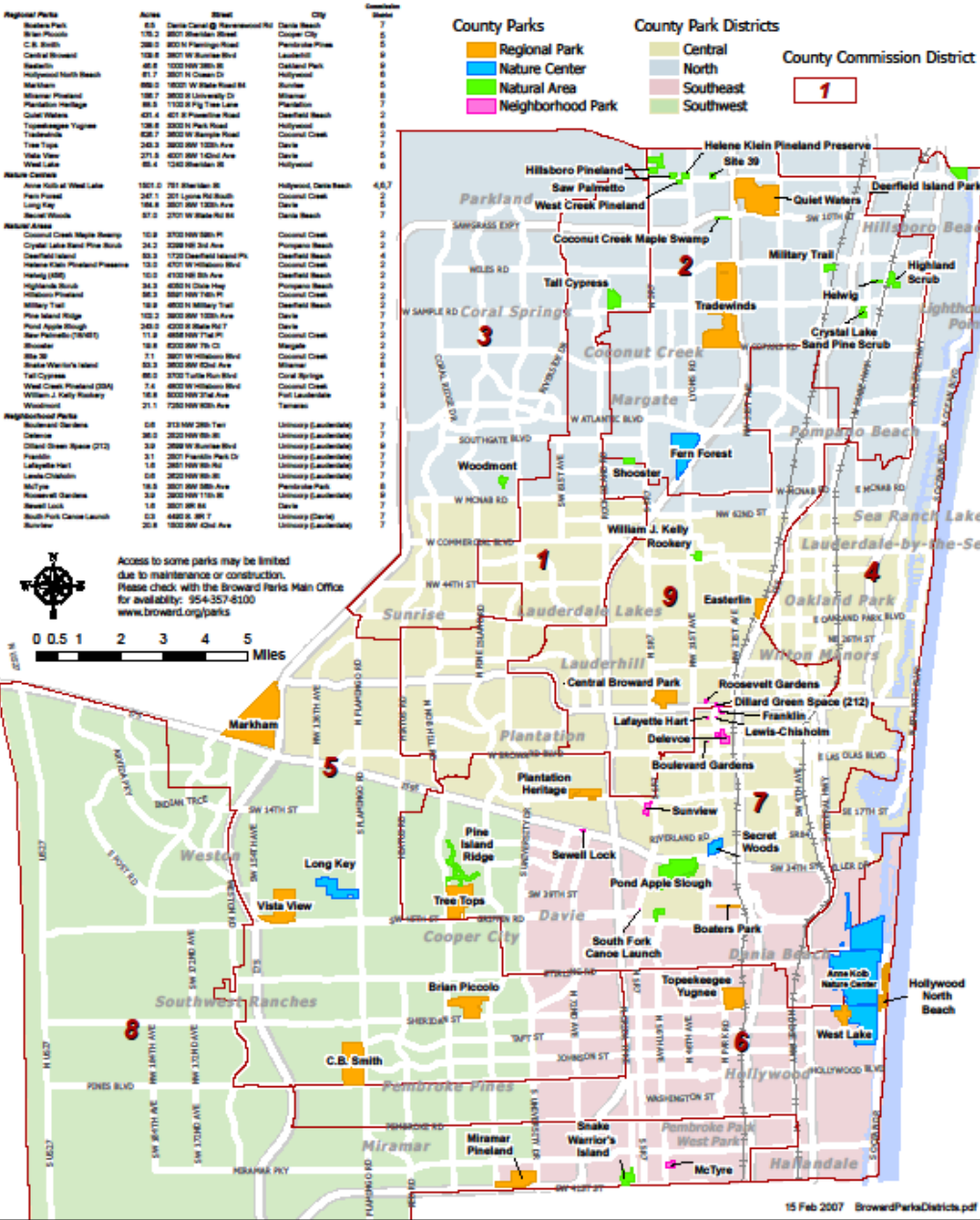
The Atlantic Flyway encompasses some of the hemisphere's most productive ecosystems, including forests, beaches, and coastal wetlands. This avian superhighway is utilized by 500-plus bird species and millions of individual birds.



Forty percent of the Atlantic Flyway's bird species are species of conservation need, 32 of which are priority bird species. [www.audubon.org](http://www.audubon.org)

**Broward County Parks & Recreation  
County Parks and Natural Areas**

Broward County Board of County Commissioners  
Parks and Recreation Division  
Environmental Section



Despite what we know, we have broken Florida and much of the world into fragments or completely destroyed habitat all together....

Note the small areas for Broward County Nature Centers and Natural Area Conservation

More importantly, note how much space belongs to someone with a yard!

Think about the difference we can make.....

# Good news though.....

Roughly 60% of land area in the United States (1.43 billion acres) is privately owned by millions of individuals, families, organizations, and corporations, including 2 million ranchers and farmers and about 10 million woodland owners. More than 100 species have 50% or more of their U.S. breeding distribution on private lands.

That means, your yard counts!

# Selecting habitat type

1. What is the history of your yard?
  1. What ecosystem was there historically?
  2. How has it been altered since development?
2. Current yard characteristics?
  1. High and dry?
  2. Low and wet?
  3. A little of both?
3. What is your soil like?
4. How much sun do you get?

## General Considerations:

- You may not be able to recreate original habitat type
- Something is better than nothing
- A high nutrient/low interior light habitat (e.g. hammocks) will be easiest.
- Low nutrient/high light habitats will be the most difficult. (Pines)



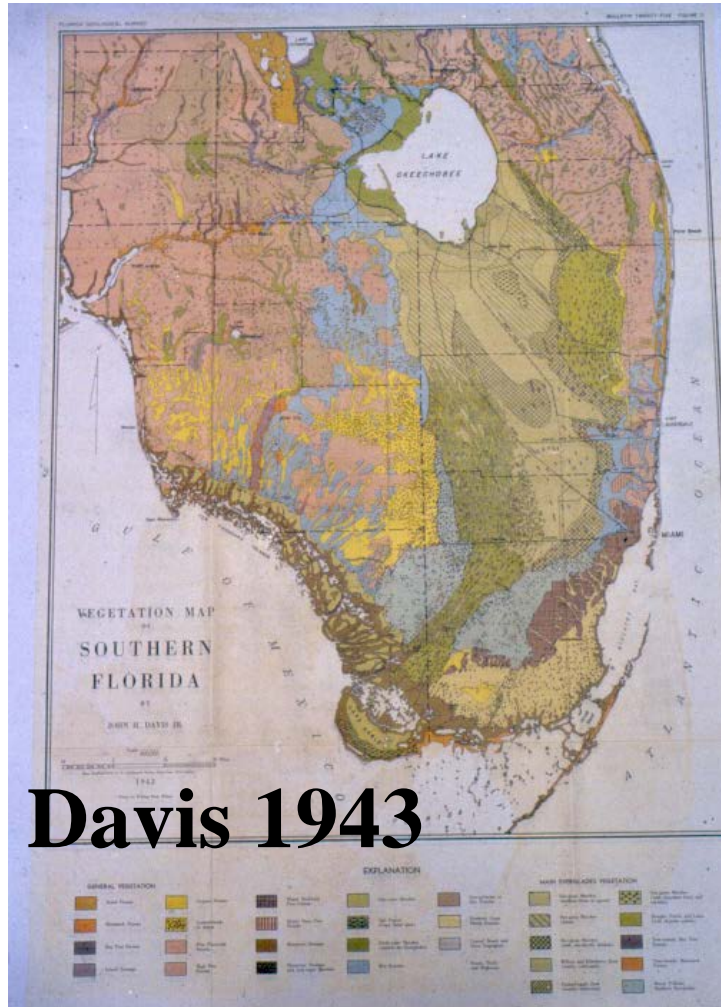
# South Florida Ecosystems

- Hammocks
- Pine
- Wetland

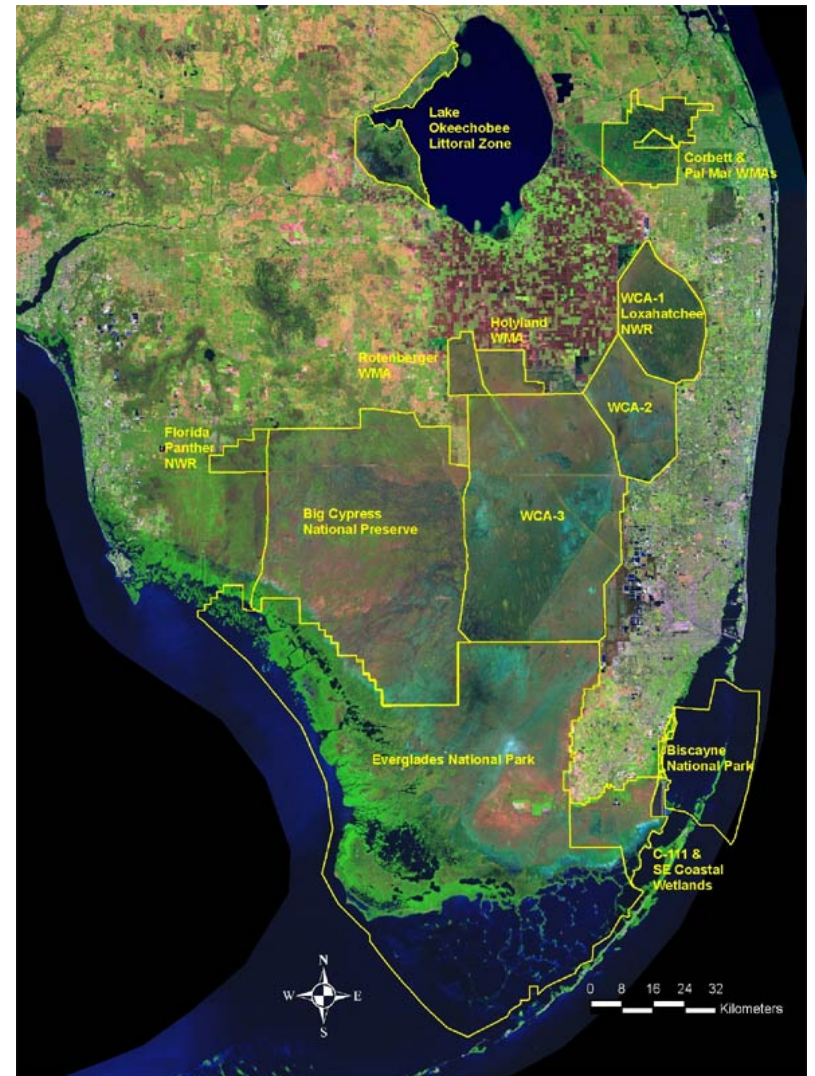


# **USING NATIVES FOR YOUR NEIGHBORHOOD**

# South Florida: Then and Now

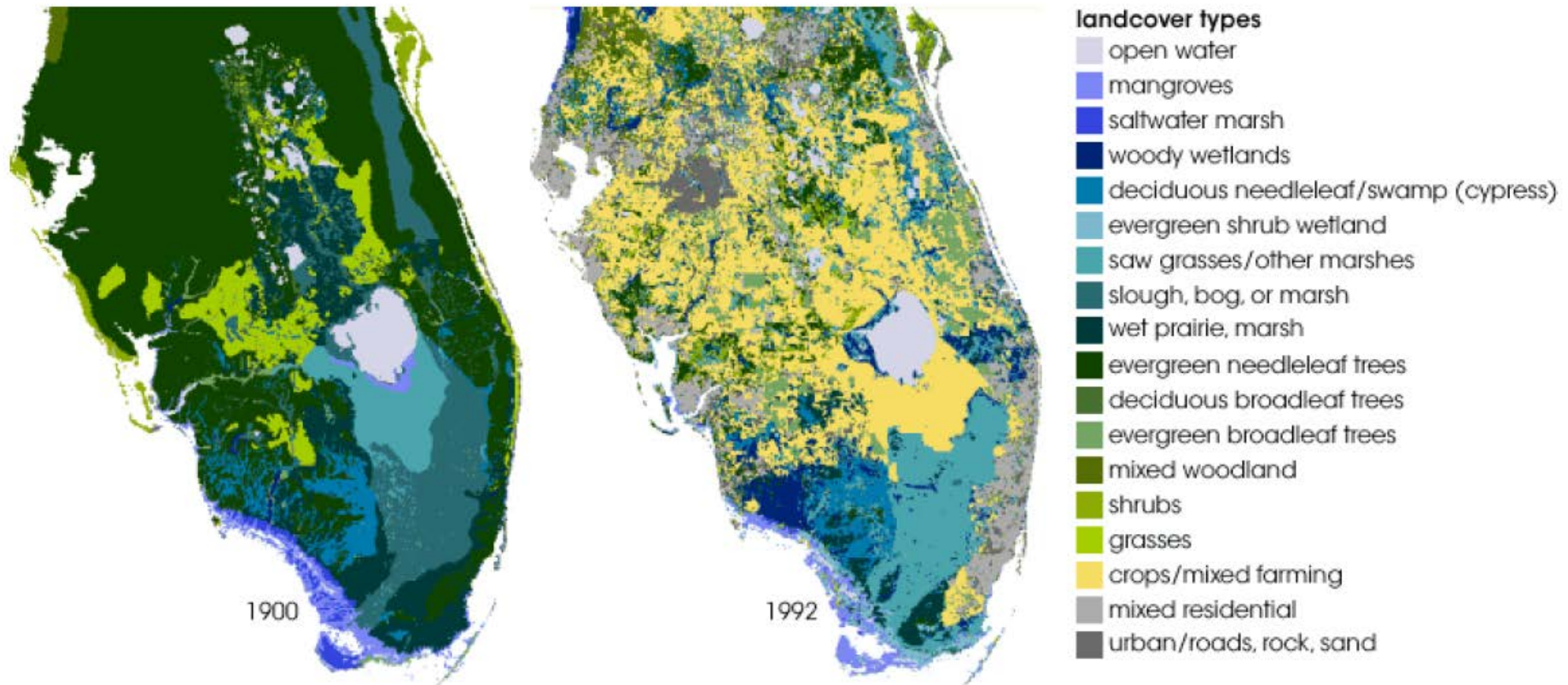


Davis 1943



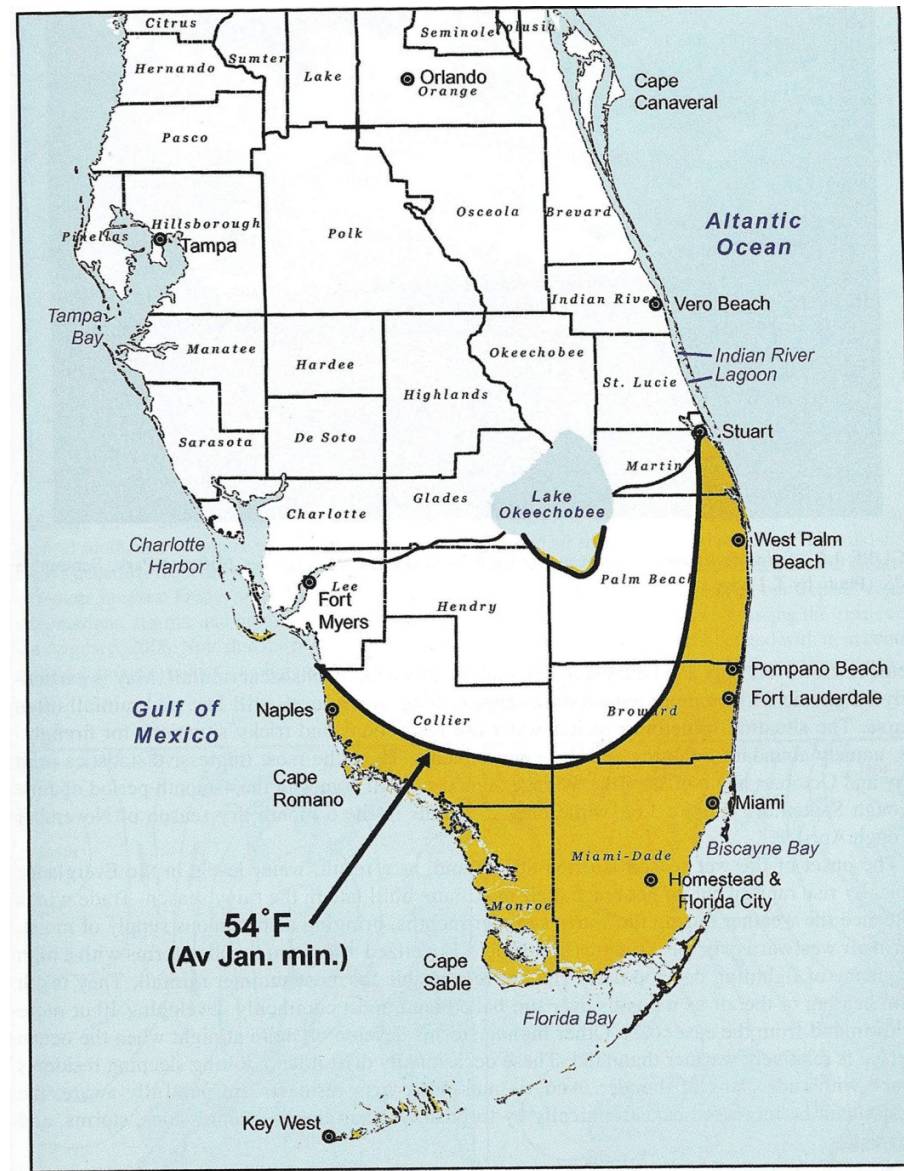
# Reconstructed original landscape (Pielke et al) for Florida

land cover conversion to agriculture and urban development



# We live in a botanically unique region

- Mixture of tropical and temperate species
- Isotherm – average minimum temperature in January of 54°F or warmer



**FIGURE 1.5** A map of Florida showing where the average daily minimum temperature in January is 54°F or warmer (for the period of record 1971–2000). This 54° isotherm approximates the natural distribution of many native tropical plants. Only less sensitive species occur near the northern or inland boundary. Note that the isotherm reaches significantly farther north on the Atlantic coast (to Stuart) than on the Gulf coast (to Sanibel Island, or just above Naples on the mainland) and that Lake Okeechobee provides protection for a narrow band hugging its south shore. (Redrawn from mapping provided courtesy of David Zierden, state climatologist, The Florida Climate Center and The Center for Ocean-Atmospheric Prediction Studies, Florida State University. With permission.)

# Natives for Your Neighborhood

The screenshot shows the homepage of the 'Natives For Your Neighborhood' website. The header features the logo and title, along with a navigation menu including 'home', 'plant list', 'habitats', 'wildlife', 'map', and 'IRC home'. A central banner reads 'an innovative conservation resource for South Florida'. Below this, there are sections for 'Support this project' with a 'Donate' button, 'Join our email list!', and 'Acknowledgements and past sponsors'. The main content area is titled 'A resource to help change what is now a backyard hobby for a few into a powerful conservation tool of many.' and includes a search form for plants and animals by zip code or county. A 'Map of South Florida' is displayed, showing county boundaries and names: CHARLOTTE, GLADES, MARTIN, LEE, HENDRY, PALM BEACH, COLLIER, BROWARD, MIAMI-DADE, and MONROE (Keys). The right sidebar contains links for 'About natives for your neighborhood', 'What are native plants?', 'Frequently asked questions', and 'Resources Links'.

## Why Natives for Your Neighborhood?

- Protected areas cannot support all species.
- Empowers individual action and engages community members in conservation.
- Creates urban habitat, connectivity, and resilience to change

# Urban Habitat

Backyard Habitat



Bioswales  
Rain Gardens



- Biophilia = humans need nature (Biophilic cities)
- Sustainability – cities are not going away
- Utilizing every opportunity to incorporate nature into urban settings

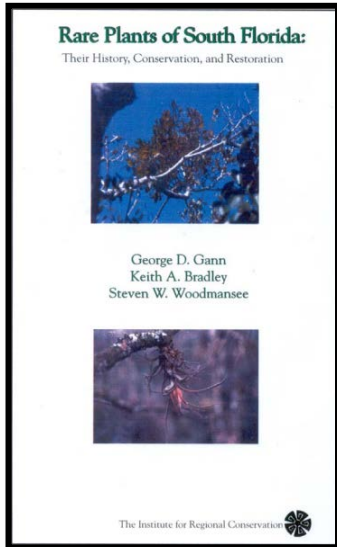
Vertical gardens



Parklets



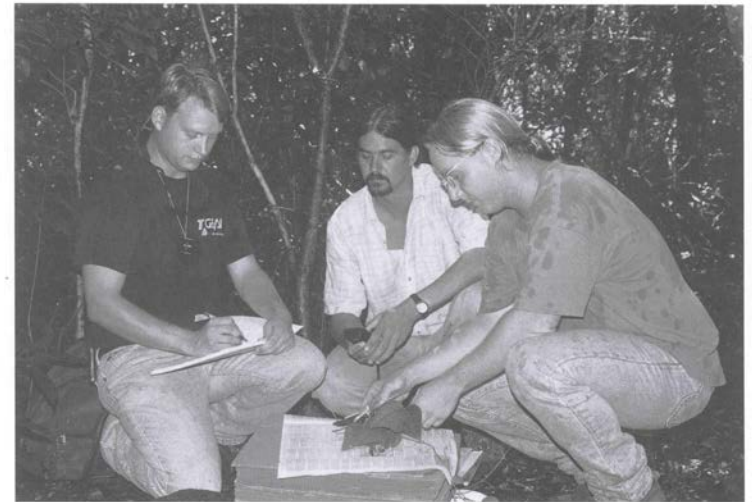
# Natives for your Neighborhood: The Data



- Floristic Inventory of South Florida
  - Seven years, three plant nerds, one complete database

- Assessed status of native species, identified rare species
- Determined effectiveness of existing conservation areas, including small conservation areas, to conserve native plant species
- Identified opportunities to restore rare plants and their habitat.

Afield celebrates...  
ORION



80 Species To Be Added to Florida's  
Endangered Species List

Premier Issue of *Orion Afield* (1997)



# Natives for Your Neighborhood

The screenshot shows the website's header with the logo and navigation menu. The main content area features a search section with a text input for a zip code, a county dropdown, and search buttons for plants and animals. Below the search is a map of South Florida with county labels: CHARLOTTE, GLADES, MARTIN, LEE, HENDRY, PALM BEACH, COLLIER, BROWARD, MIAMI-DADE, and MONROE (Keys). The left sidebar contains a 'Donate' button and an email list sign-up. The right sidebar has links for 'About natives for your neighborhood', 'Frequently asked questions', and 'Resources Links' including 'Water Wise Landscaping', 'Florida Friendly Landscaping', 'Wildlife Habitat Certification', and 'Find your Native Plant Society Chapter'.

## Different levels to search?

- County Lists
  - Most generalized species
  - Highest ease of success
- Zip Code Lists
  - Inland zip codes - lists include more specialists
  - Coastal zip codes – generalist species (use habitat)
- Habitat Lists
  - Most specialized

# Search by zip code

## Zip Code 33483

### search for Native Plants, Habitats and Wildlife

This is a long narrow zip code area in eastern Delray Beach and the town of Gulfstream on the island of Palm Beach in Palm Beach County. Information on strictly coastal or inland plants can be found by viewing habitat data for this zip code area.

#### Native Plants

• Click below to obtain a list of native plants that are recommended for 33483, and to see photos and learn more about them.

Whether you are just beginning a new native plant project, or will be introducing native plants into an existing garden, this is the place to find out which native plants are right for your specific area.

[Get your plant list for 33483 !](#)

[Advance search for plants](#)

#### Habitats

• You can try your hand at ecological restoration in your yard or project site by recreating a native habitat.

• Click below to view a list of some native habitats for 33483.

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 33483 !](#)

#### Wildlife

• Click the button below to learn about the wildlife that may be expected in your area and what native plants can be planted and habitats created to attract them.

[Get your wildlife list for 33483 !](#)

## Habitats in Zip Code 33134

To take gardening with natives a step further, you can learn about the native plant habitats that are appropriate for your area. You can then choose a habitat, and view a list of plants for that specific habitat. This way, you can try your hand at restoring a native plant habitat in your yard or project site. Habitat lists also include some hard to grow natives and natives with narrow habitat requirements, such as strictly coastal species, that may not be included on your main zip code list.

### Bayhead

[Learn More](#)

[Plant List](#)

### Marl Prairie

[Learn More](#)

[Plant List](#)

### Pine Rockland



[Learn More](#)

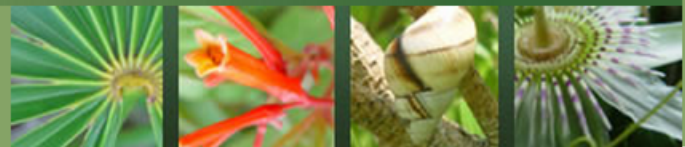
[Plant List](#)

### Rockland Hammock

[Learn More](#)

[Plant List](#)

- Retrieve lists of plants, habitats, and wildlife native to your area.
- Why by zip code?
  - Conservation and wildlife considerations

[home](#)[plant list](#)[habitats](#)[wildlife](#)**BETA**[map](#)[IRC home](#)

Support this project

[Donate](#)[Join our email list!](#)

Acknowledgements and past sponsors

Contributing Native Plant Nurseries

## Habitats

### Mesic Hammock

[Learn more about this habitat](#)

### Plants found in the Mesic Hammock habitat, in zip code 33432

Sort By:

[Scientific Name](#)[Common Name](#)

Group By Habit:

[PRINTER FRIENDLY VERSION](#)

- Widely cultivated
- Cultivated at native plant nurseries

#### Common Name

- [American beautyberry](#)
- [Ball-moss](#)
- [Bloodleaf, Juba's bush](#)
- [Blue-maidencane](#)
- [Button-hemp, False nettle, Bog hemp](#)
- [Cabbage palm](#)
- [Calusa grape](#)
- [Canada toadflax](#)
- [Coastal bedstraw](#)
- [Coastalplain staggerbush](#)
- [Coco-plum](#)

#### Scientific Name

- [Callicarpa americana](#)
- [Tillandsia recurvata](#)
- [Iresine diffusa](#)
- [Amphicarpum muhlenbergianum](#)
- [Boehmeria cylindrica](#)
- [Sabal palmetto](#)
- [Vitis shuttleworthii](#)
- [Linaria canadensis](#)
- [Galium hispidulum](#)
- [Lyonia fruticosa](#)
- [Chrysobalanus icaco](#)

Enter a zip code:

OR

Choose a county:

OR

Search for a plant in the Natives For Your Neighborhood database:

Common Names

OR

Search for an animal in the Natives For Your Neighborhood database:

Common Names

[Find](#)[Clear](#)

About natives for your neighborhood

What are native plants?

Frequently asked questions

Resources Links

- [Water Wise Landscaping](#)
- [Florida Friendly Landscaping](#)
- [Wildlife Habitat Certification](#)
- [Find your Native Plant Society Chapter](#)

## Natives for Your Neighborhood plant list

### Plants in Zip Code 33483

Below is a list of the cultivated native plants for this zip code. These plants, all within their natural ranges in this geographic area, are appropriate for use in landscaping here. By planting these native species, you will not only create a low-maintenance landscape to enjoy, but you will also contribute to the conservation and restoration of South Florida's environment. (For more on this, [click here.](#))

To take gardening with natives a step further, you can learn about the native plant habitats that are appropriate for your area (click the back button to view a list of those habitats). You can then choose a habitat, and view a list of plants for that specific habitat. This way, you can try your hand at restoring a native plant habitat in your yard or project site. Habitat lists also include some hard to grow natives and natives with narrow habitat requirements, such as strictly coastal species, that may not be included on your main zip code list.

To view detailed information on the horticultural requirements and landscaping uses of the plants as well as photos for most species, click on any plant name.

Sort By:

Group By Plant Form:

- Widely cultivated
- Cultivated at native plant nurseries

Common Name	Scientific Name
<a href="#">American beautyberry</a> <input checked="" type="checkbox"/>	<a href="#">Callicarpa americana</a>
<a href="#">American bluehearts</a>	<a href="#">Buchnera americana</a>
<a href="#">Arrowfeather threasure</a>	<a href="#">Aristida purpurascens</a>
<a href="#">Ball-moss</a>	<a href="#">Tillandsia recurvata</a>
<a href="#">Banded wild-pine, Twisted airplant</a>	<a href="#">Tillandsia flexuosa</a>
<a href="#">Button-hemp, False nettle, Bog hemp</a>	<a href="#">Boehmeria cylindrica</a>
<a href="#">Cabbage palm</a> <input checked="" type="checkbox"/>	<a href="#">Sabal palmetto</a>
<a href="#">Camphorweed</a>	<a href="#">Heterotheca subaxillaris</a>
<a href="#">Candyweed, Show milkwort</a>	<a href="#">Polygala violacea</a>
<a href="#">Climbing hempweed, Climbing hempvine</a>	<a href="#">Mikania scandens</a>
<a href="#">Coastal plain hawkweed</a>	<a href="#">Hieracium megacephalon</a>
<a href="#">Coastal Plain willow</a> <input checked="" type="checkbox"/>	<a href="#">Salix caroliniana</a>

# Wildlife and Plant Lists

### Wildlife in Zip Code 33483

Below is a list of animals that may be observed in this zip code. By planting native species, you will not only create a low-maintenance landscape to enjoy, but you will also create habitat for these wildlife species.

Sort By:

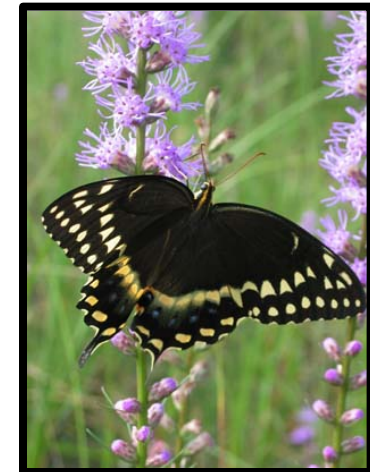
Common Name	Scientific Name
<b>Butterflies</b>	
<a href="#">Barred Yellow</a>	<a href="#">Eurema daira</a>
<a href="#">Black Swallowtail</a>	<a href="#">Papilio polyxenes</a>
<a href="#">Brazilian Skipper, Canna skipper</a>	<a href="#">Calpodis ethlius</a>
<a href="#">Carolina Satyr</a>	<a href="#">Hermeuptychia sosybius</a>
<a href="#">Cassius Blue</a>	<a href="#">Leptotes cassius</a>
<a href="#">Ceraunus Blue</a>	<a href="#">Hemiarqus ceraunus</a>
<a href="#">Clouded Skipper</a>	<a href="#">Lerema accius</a>
<a href="#">Cloudless Sulphur</a>	<a href="#">Phoebis sennae</a>
<a href="#">Common Buckeye</a>	<a href="#">Junonia coenia</a>
<a href="#">Giant Swallowtail</a>	<a href="#">Papilio cresphontes</a>
<a href="#">Gray Hairstreak</a>	<a href="#">Strymon melinus</a>



Ceraunus Blue on *Galactia smallii*



Screech owl in nest box in a restored Pine Rockland



Palamedes Swallowtail on *Liatris*



Restored Rockland Hammock in Miami-Dade County yard.

Enter a zip code: \_\_\_\_\_  
 OR  
 Choose a county: \_\_\_\_\_  
 OR  
 Search for a plant in the Natives For Your Neighborhood Database: \_\_\_\_\_  
 Common N: \_\_\_\_\_  
 OR  
 Search for an animal in the Natives For Your Neighborhood Database: \_\_\_\_\_  
 Common N: \_\_\_\_\_  
 Find Clear  
 Support this project  
 Donate  
 Join our email list  
 Acknowledgements and past sponsors

**AMERICAN BEAUTYBERRY**  
 Callicarpa americana  
 Verbenaceae

**General Landscape Uses:**  
 Accent flowering shrub in residential and commercial landscapes. Also useful in buffer plantings.

**Ecological Restoration Notes:**  
 A relatively common shrub of forest edges nearby throughout South Florida.

**Availability:**  
 Widely cultivated.

**Description:**  
 Medium bushy shrub with arching branches forming a large mound. Leaves coarse, 2-6 inches long, aromatic when crushed.

**Dimensions:**  
 Typically 5-9 feet in height. Usually as broad as tall and sometimes broader.

**Growth Rate:**  
 Fast.

**Range:**  
 Southeastern United States, Maryland and Missouri west to Texas and south to the Monroe County Keys; Bermuda, Bahamas and Cuba. Very rare in the Monroe County Keys and perhaps absent south of Key Largo.

**Habitats:**  
 A wide range of terrestrial ecosystems.

**Soils:**  
 Moist, well-drained sandy, limestone or organic soils, usually with a humusy top layer.

**Nutritional Requirements:**  
 Moderate; can grow in nutrient poor soils, but needs some organic content to thrive.

**Salt Water Tolerance:**  
 Low; does not tolerate long-term flooding by salt or brackish water.

**Salt Wind Tolerance:**  
 Moderate; grows near salt water, but is protected from direct salt spray by other vegetation.

**Drought Tolerance:**  
 High; does not require any supplemental water once established.

**Light Requirements:**  
 Full sun to light shade.

**Flower Color:**  
 Pink or rarely white.

**Flower Characteristics:**  
 Semi-showy in dense clusters.

**Flowering Season:**  
 All year; peak spring-summer.

**Fruit:**  
 Red-purple berry-like drupe, rarely white. Very showy clusters in the leaf axils. All year; peak summer-fall.

**Wildlife and Ecology:**  
 Provides significant food and moderate amounts of cover for wildlife. Nectar plant for butterflies. Birds eat the fruits.

**Horticultural Notes:**  
 Grown from seed. Clean pulp from seed by rubbing on a paper towel or by placing into a blender with water and then straining. Sprinkle seeds into a pot with 2" or more potting soil. Place in light shade or full sun and keep moist.

**Comments:**  
 This is an excellent and adaptable shrub for nearby throughout South Florida. The attractive purple fruits attract many birds. Periodic heavy pruning nearby to the ground encourages new growth.



George D. Gonn



Roger L. Hammer



George D. Gonn



# Species Pages

- How the plant can be used in landscapes and ecological restorations
- Where the plant can be found
- Description, height, growth rate, and range
- Habitats where it is typically found
- Requirements: soil, nutrients, salt tolerance, water, and light
- Flower and fruit descriptions
- Wildlife interactions
- Notes, comments, advice, and caveats

# Other ways to search

**Advanced Search for Plants**

Zip Code:

Name (common or scientific):

Light Preference:

Soil:

Form:

Drought Tolerance:

Fruit:

Wildlife Attractant:

Flowers Significant:

Sort By:

Widely cultivated  
 Cultivated at native plant nurseries

Common Name	Scientific Name
<a href="#">American beautyberry</a> <input type="checkbox"/>	<a href="#">Callicarpa americana</a>
<a href="#">Cabbage palm</a> <input type="checkbox"/>	<a href="#">Sabal palmetto</a>
<a href="#">Coastal Plain willow</a> <input type="checkbox"/>	<a href="#">Salix caroliniana</a>
<a href="#">Common snowberry, Milkberry</a> <input type="checkbox"/>	<a href="#">Chiococca alba</a>
<a href="#">Coralbean, Cherokee bean</a> <input type="checkbox"/>	<a href="#">Erythrina herbacea</a>
<a href="#">Elderberry, American elder</a> <input type="checkbox"/>	<a href="#">Sambucus canadensis</a>
<a href="#">Gopher-apple</a> <input type="checkbox"/>	<a href="#">Licania michauxii</a>
<a href="#">Marlberry</a> <input type="checkbox"/>	<a href="#">Ardisia escallonioides</a>
<a href="#">Saw palmetto</a> <input type="checkbox"/>	<a href="#">Serenoa repens</a>
<a href="#">Shiny-leaved wild coffee</a> <input type="checkbox"/>	<a href="#">Psychotria nervosa</a>
<a href="#">Shortleaf wild coffee</a> <input type="checkbox"/>	<a href="#">Psychotria sulzneri</a>
<a href="#">Twinberry, Simpson's stopper</a> <input type="checkbox"/>	<a href="#">Myrcianthes fragrans</a>
<a href="#">Wax myrtle, Southern Bayberry</a> <input type="checkbox"/>	<a href="#">Myrica cerifera</a>
<a href="#">White stopper</a> <input type="checkbox"/>	<a href="#">Eugenia axillaris</a>

- Advanced search forms let you find exactly what you are looking for.

- A wildlife attracting shrub that will grow in light shade and has conspicuous fruits?



American Beautyberry



Coralbean

# Where to get plants:

- Join your local chapter of the Florida Native Plant Society
- Native plant day and other native plant sales (Tropical Audubon Society)
- Local native nurseries
- Seeds and propagation
  - Don't collect in protected areas
- Beware fake natives

# Pinelands

- **Flatwoods** – term for Florida pinelands, occurring on flat, sandy soil. Originally the most widespread plant community in FL
- **Mesic pine flatwoods** – higher, dryer flatwoods
- **Hydric pine flatwoods** - lower flatwoods with some soil saturation and flooding
- **Pine rockland** – occur on southern Atlantic Coastal Ridge. Not flatwoods, grow on rough, exposed limestone
- **Scrub** - fewer or no pine trees, short woody shrub vegetation with bare patches of sand





# Pineland Restoration

## Not for the faint of heart! – Start small

- Soils: acidic, poorly drained, sandy, low nutrient.
- Open, low diversity tree canopy
- Diverse herbaceous layer
- Naturally maintained by fire

### Considerations

- Open area
- Buffer between habitat and structures
  - Hammock edges, lawn, gravel, etc
- Trees and shrubs first, grasses and flowers later

# Natives to Avoid



**Spanish-needles**  
*Bidens alba var. radiata*



**Hardwood seedlings**

# Hammock Restoration

Relatively simple, can be done even in small areas

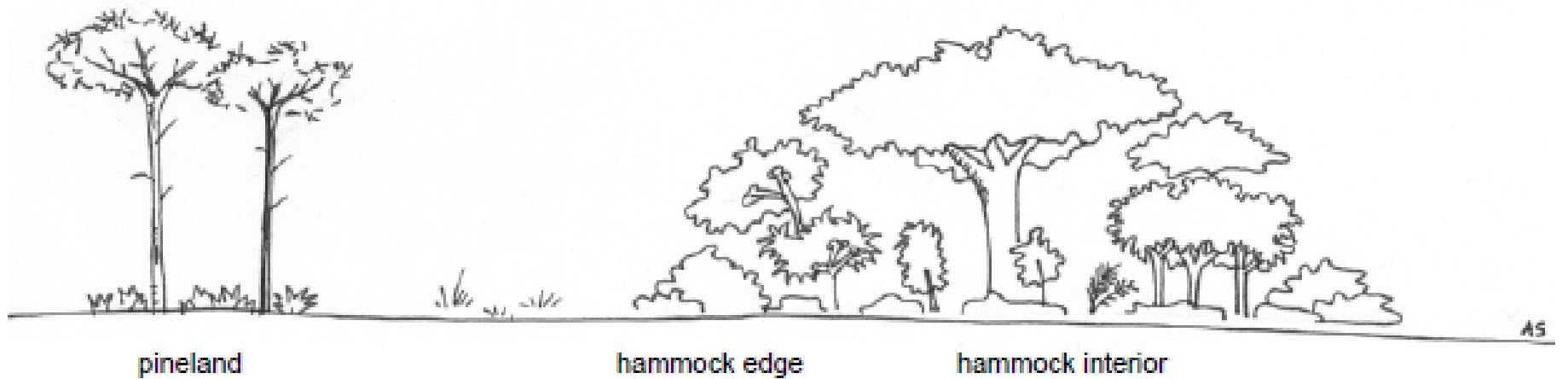
- Soils: well drained, organic.
- Diverse canopy and sub-canopy
- Open understory
- Dense edges

## Considerations

- Overhead and underground utilities
- Higher canopy diversity
  - More diverse in tropical hammocks
  - Less diverse in PBC – more temperate species

# Hammock Structure

## Simplified hammock structure

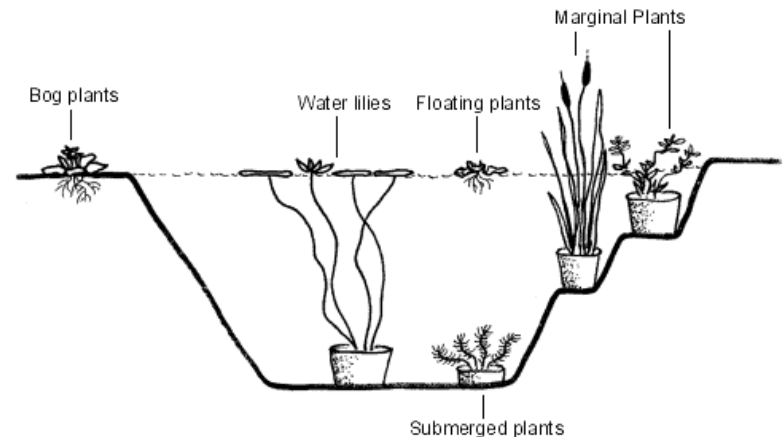


# Wetlands

- Hydroperiod – how often and how much water is in your wetland?
- Examples:
  - Canal edges
  - Ponds
  - Seasonally flooded areas
  - Swales

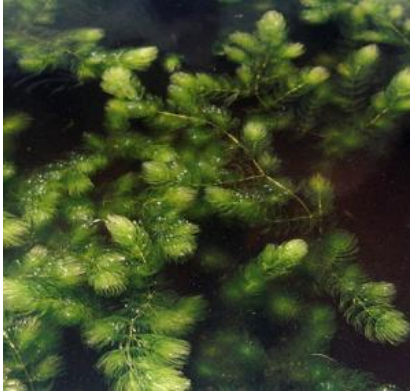
## Types of Aquatic Plants

- Plants which float in the water un-rooted
- Plants rooted at the bottom with leaves above the water
- Plants on the water edge. (Marginal and Emergent)
- Completely Submerged plants



## Submerged

*Ceratophyllum demersum*



## Bottom rooted, floating leaves

*Nymphaea odorata*



## Emergent and Marginal

*Pontederia cordata*

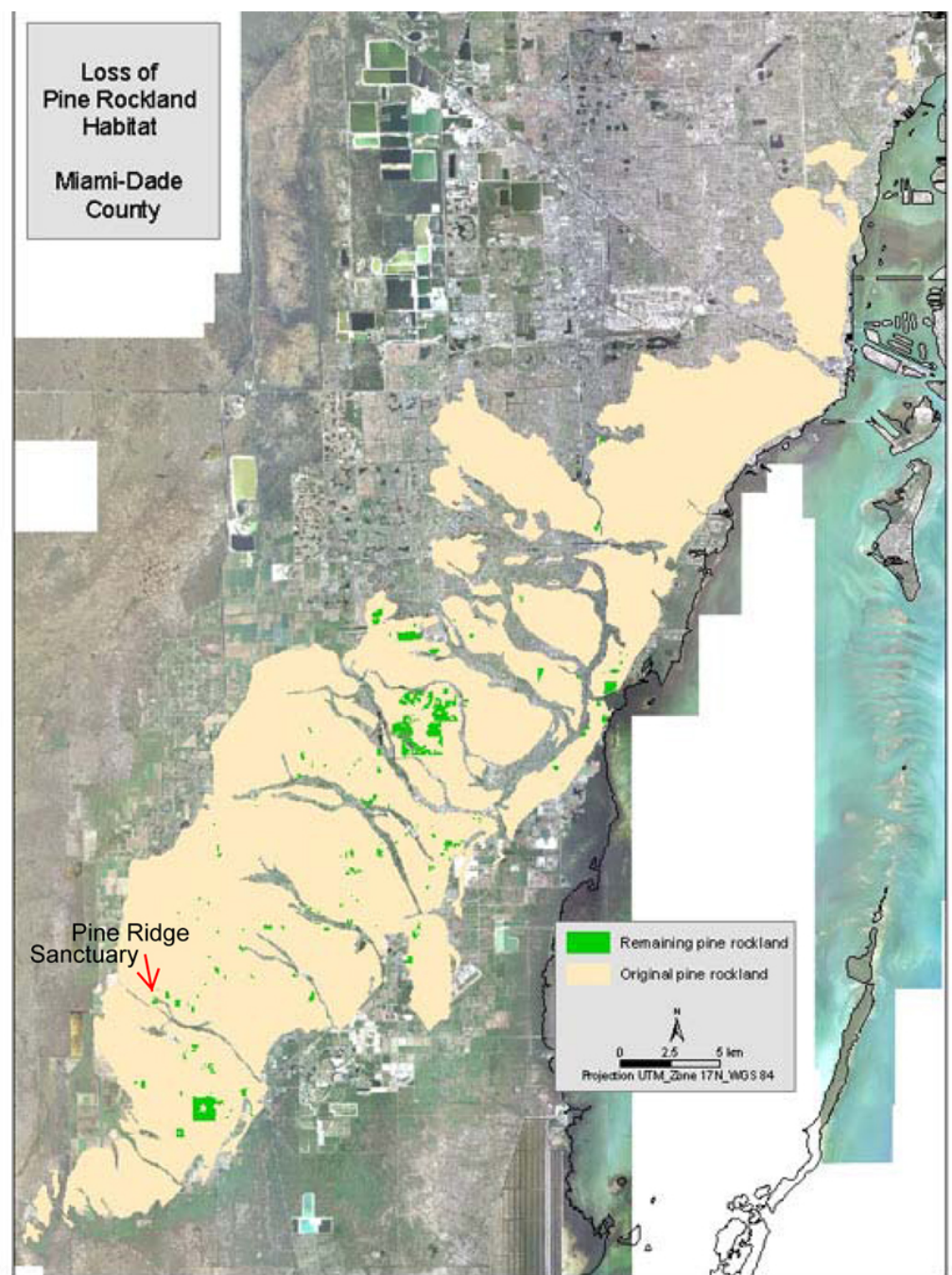


## Floating

*Spirodela polyrhiza*



# Example: Pine Rockland Restorations in Miami- Dade County



Map developed by Karen Minkowski (FTBG), Keith Bradley (IRC) and George Gann (IRC)

# Tropical Audubon Society phase one (c. 1990)





# Tropical Audubon Society phase two (Fall, 2002)





**Pinklet – *Stenandrium dulce***



**Walter's groundcherry –  
*Physalis walteri***



**Spurred Butterfly-pea –  
*Centrosema virginianum***



**Southern Florida sandmat –  
*Chamaesyce pergamena***

In 2007



# Important Considerations

- **Something is better than nothing!**
- Start simple and become more complex with time.
  - Choose more generalized plants at first for most success
- Conservation benefits:
  - Use FISF and other resources to select species that could benefit from connectivity in yards
  - Focus on rare species

# Sponsors and Contributors

- Nurseries
  - Native Choice Nursery
  - Jesse Durko's Nursery

