

# TURFGRASS & GROUND COVERS FOR SOUTH FLORIDA

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**UF** | IFAS Extension  
UNIVERSITY of FLORIDA

Florida-Friendly  
Landscaping™ PROGRAM



Palm Beach County  
Cooperative Extension  
Service

# What is Extension?



Palm Beach County  
Cooperative Extension  
Service

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FAMILY AND  
CONSUMER SCIENCES

Florida-Friendly  
Landscaping™ PROGRAM

# Thinking outside the lawn

- Why is it important?
- Florida-Friendly Landscaping™
- Diversity!
- Reduce pest and disease pressure
- Attract wildlife
- Plant options

# 9 Principles

1. Right plant, right place
2. Water efficiently
3. Fertilize appropriately
4. Mulch
5. Attract wildlife
6. Manage yard pests
7. Recycle
8. Reduce stormwater runoff
9. Protect the waterfront



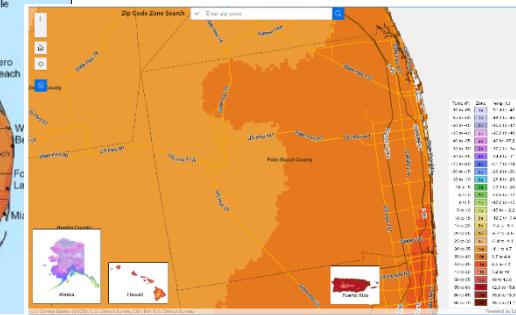
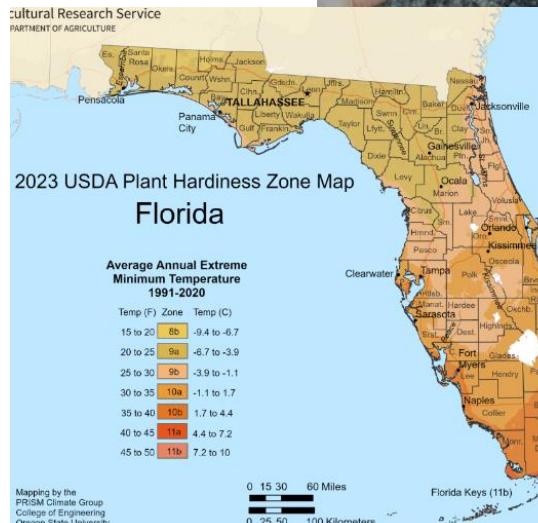
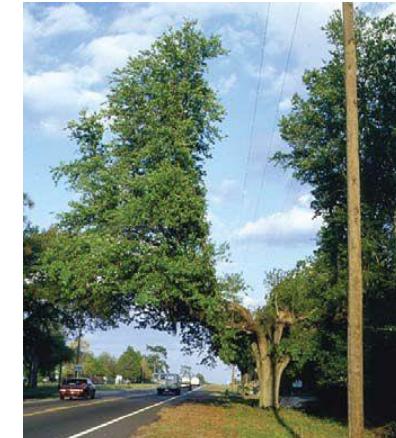
Florida-Friendly Landscaping is a collection of practices involving design, installation, operation, and maintenance which are intended to reduce irrigation water use, protect water quality from over-use of fertilizer and pesticides, and reduce stormwater runoff.

**Florida-Friendly**  
Landscaping™ PROGRAM



# Right Plant, Right Place

- Light
- Water
- Soil
- Drainage
- Structural limitations & obstructions – **Mature size!**
- Views
- Choose plants for your USDA Hardiness zone



# Water Efficiently

Approximately 60% of a residential water bill attributed to irrigation

1000 ft<sup>2</sup> of Grass



Requires **12,000- 22,000** gallons of irrigation water per year

1000 ft<sup>2</sup> of Landscape Beds

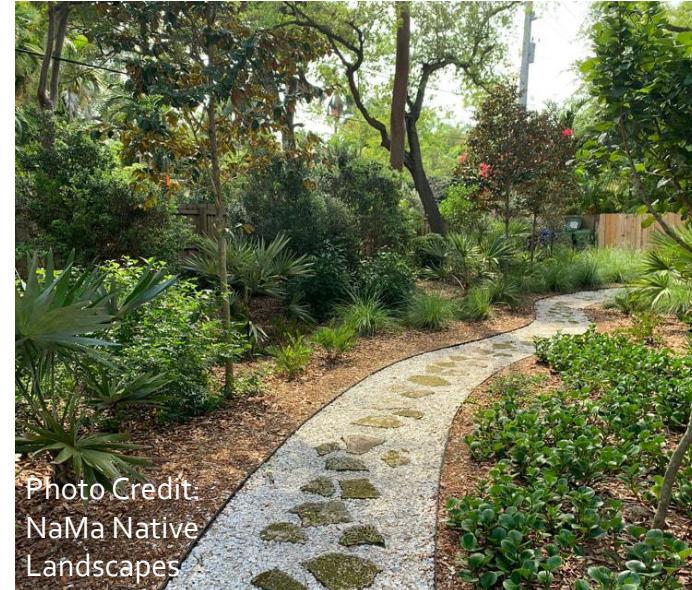


Photo Credit:  
NaMa Native  
Landscapes

Can conserve over **15,000** gallons of irrigation water per year

# Attracting Wildlife

- Urban areas rapidly increasing worldwide
- Local plant and animal communities particularly affected
- Habitats need
  - Food
  - Water
  - Shelter/Cover
  - Space
- Animals only reside/forage in areas with appropriate habitats
- Plant a diverse variety of natives
  - Heights
  - Densities
  - Flowers
  - Fruits/Seeds
  - Seasons

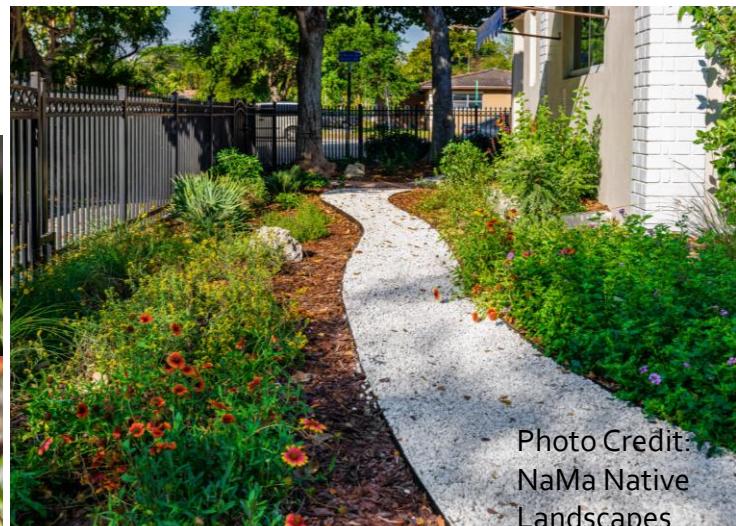


Photo Credit:  
NaMa Native  
Landscapes

# Manage Landscape Pest Responsibly

- **Set realistic expectations**

- Not practical to strive for insect-free, weed-free, or disease-free landscape

- Diversity = fewer pest and disease pressure

- Integrated Pest Management (IPM)

- Scout
- Start with the least toxic methods
- Spot treat! Avoid routine applications of pesticides
- Know beneficial insects in your yard

- Management

- Cultural
- Biological
- Physical
- Chemical



Green lynx spider



Green lacewing



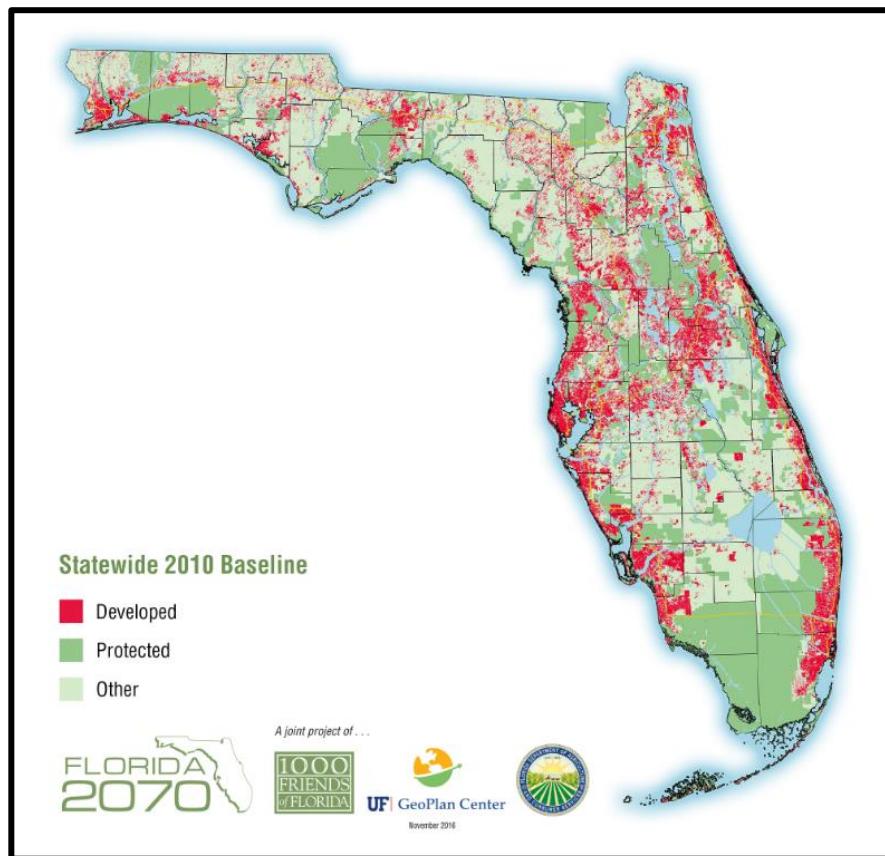
Ladybug



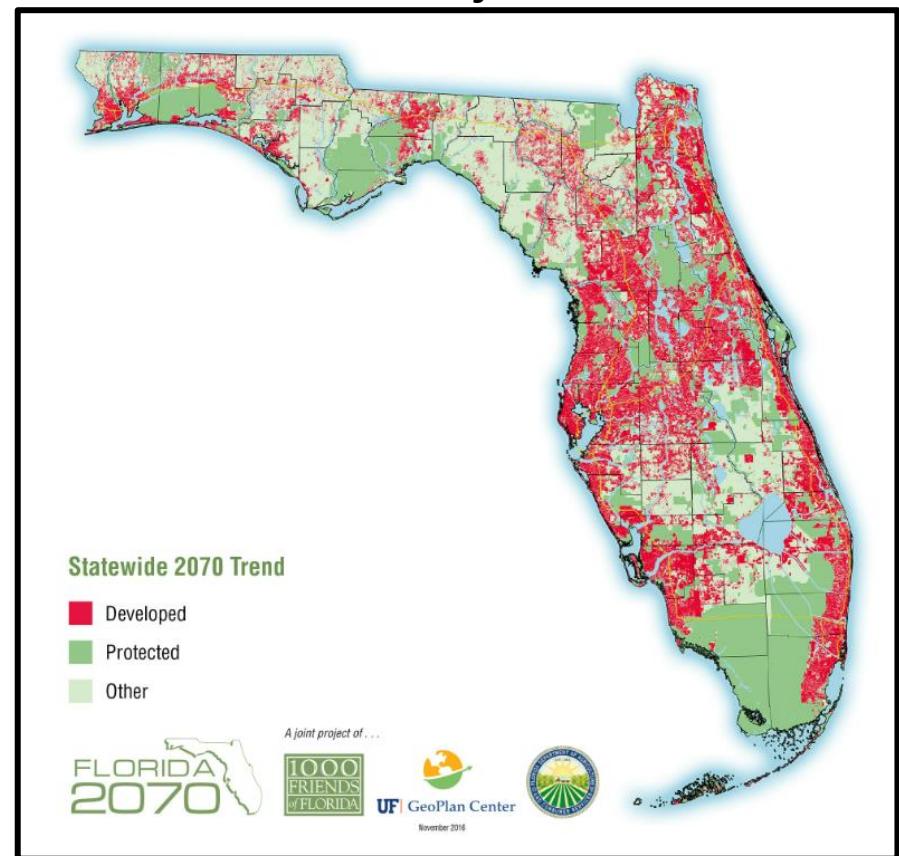
Scouting

# Environmental Concerns

2010 Baseline



2070 Projection



A wide-angle photograph of a modern, two-story house with large glass windows and a stone facade. In the foreground is a well-maintained, vibrant green lawn. A blue rectangular swimming pool is visible behind the lawn. To the right of the pool, there is a patio area with a dining table and chairs. A small palm tree stands on the lawn to the right of the pool. The sky is clear and blue.

# TURF SPECIES

For South Florida

# South Florida Lawn Grasses





# St. Augustine

## Advantages

- Dense, green turf
- Adapted to South Florida soils (high pH)
- Good shade and salt tolerance
- Quick to establish
- Readily available



St. Augustinegrass



## Disadvantages

- High irrigation needs
- Pests and diseases
- Poor cold and drought tolerance
- High fertilizer needs
- Weekly mowing in the summer
- Excessive thatch potential
- Sod only (no seed)



# St. Augustine - Cultivars

## Standard

- 'Floratam'
- 'Palmetto'
- 'BitterBlue'
- 'Classic'
- 'Raleigh'
- 'ProVista'
- 'CitraBlue'



## Dwarf

- 'Seville'
- 'Delmar'
- 'Sapphire'
- 'Captiva'
- 'Palmetto'
- 'Sola'



# St. Augustine - Maintenance

- Mowing height
  - Standard = **3.5" – 4"**
  - Dwarf = **2" – 2.5"**
- Fertilization recommendations S.FL.
  - Do not exceed **4-6 lbs N/1000 sq ft/year**
  - Split into 2 to 6 applications
- Irrigation of established turf should be based on an as-needed basis
  - **½" – ¾" of water per application**
- Thatch management (if over 1")
  - Proper mowing, fertilization & irrigation
  - Verticut or power rake
- Pests and diseases
  - Scout, properly identify, and select for resistance
    - Chinch bugs, large patch, LVN, gray leaf spot, webworms, armyworms, take all, etc.

Photo credit: UF/IFAS



# Zoysia



## Advantages

- Very dense, resists weed invasion
- Adapted to wide range of soils
- Good shade, salt and wear tolerance



## Disadvantages

- Irrigation needs, drought dormancy
- Winter dormancy (cooler temperatures)
- Pests and diseases
- Spoon feed fertilizer
- Weekly+ mowing in the summer
- Excessive thatch potential
- Sod only (no seed)

# Zoysia - Cultivars

## *Z. japonica* (coarse)

- El Toro
- Empire
- JaMur
- Meyer
- Palisades



## *Z. matrella* (fine)

- Cashmere
- Diamond
- Taccoa Green
- Trinity
- Zeon
- Zorro



## Hybrid Cultivars

- CitraZoy™
- Emerald
- Icon™
- Innovation™



# Zoysia - Maintenance

- Mowing height
  - Medium- to Coarse-texture = **1.75" – 2.5"**
  - Fine-texture = **.25" – 1"**
- Fertilization recommendations S.FL.
  - Do not exceed **2.5-4.5 lbs N/1000 sq ft/year**
  - Split into 3 to 6 applications
- Irrigation of established turf should be based on an as-needed basis
  - **½" – ¾" of water per application**
- Thatch management
  - Proper mowing, fertilization & irrigation
  - Verticut or power rake
- Pests and diseases
  - Scout, properly identify, and select for resistance
    - Large patch, hunting billbug, tuttle mealybug, dollar spot, etc.



Photo credit: UF/IFAS



Photo credit: UF/IFAS



Photo credit: Roi Levin



Photo credit:  
Lyle Buss,  
UF/IFAS

# Bahia

## Advantages

- Drought tolerant
- Low fertilizer needs
- Tolerant of sandy, infertile soils
- Low maintenance
- Seed or sod



## Disadvantages

- Prolific seed heads (summer)
- Open growth = weed competition
- Poor wear and salt tolerance
- Mole crickets
- Course stems are difficult on the mower



# Bahia - Maintenance

- Mowing height = 3" – 4"
- Fertilization recommendations S.FL.
  - Do not exceed 1-2 lbs N/1000 sq ft/year
  - Split into 1 to 3 applications
- Irrigation of established turf should be based on an as-needed basis
  - 1/2" – 3/4" of water per application
- Pests and diseases
  - Weeds and mole crickets



Photo credit: UF/IFAS



Photo credit: UF/IFAS

# Bermuda

## Advantages

- Vigorous, dense turf
- Fine texture
- Adapted to a wide range of soils and climates
- Wear, drought, and salt tolerant
- Rapid establishment

## Disadvantages

- High maintenance
- Poor shade tolerance
- Used mostly as a sports turf
- Poor pest tolerance
- Invades plant beds
- Thatch



# Bermuda - Cultivars

## Vegetative (sod/sprigs)

- 'Tifway'
- 'TifGrand'
- 'TifSport'
- 'Latitude 36'
- 'TifTuf'
- 'Celebration'
- 'Bimini'
- 'NorthBridge'
- 'PremierPRO'
- 'TifEagle'



Photo credit: Tyler Jones,  
UF/IFAS

## Seed

- Princess77
- Sultan
- 'Arizona Common'
- 'Riviera'
- 'Cheyenne'
- 'Sahara'
- 'Sundevil'
- 'Jackpot'

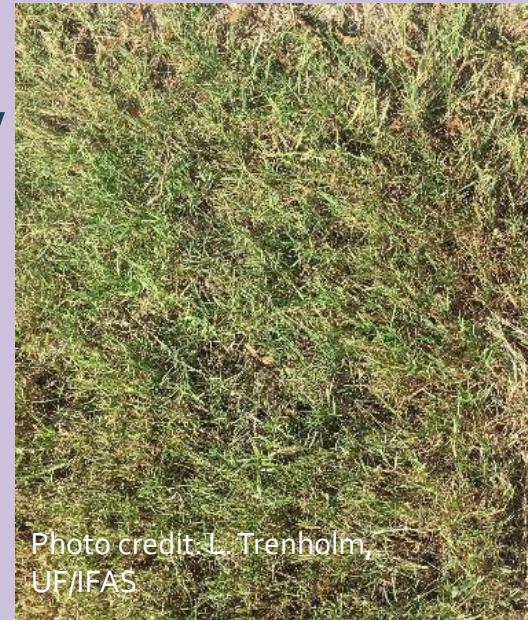


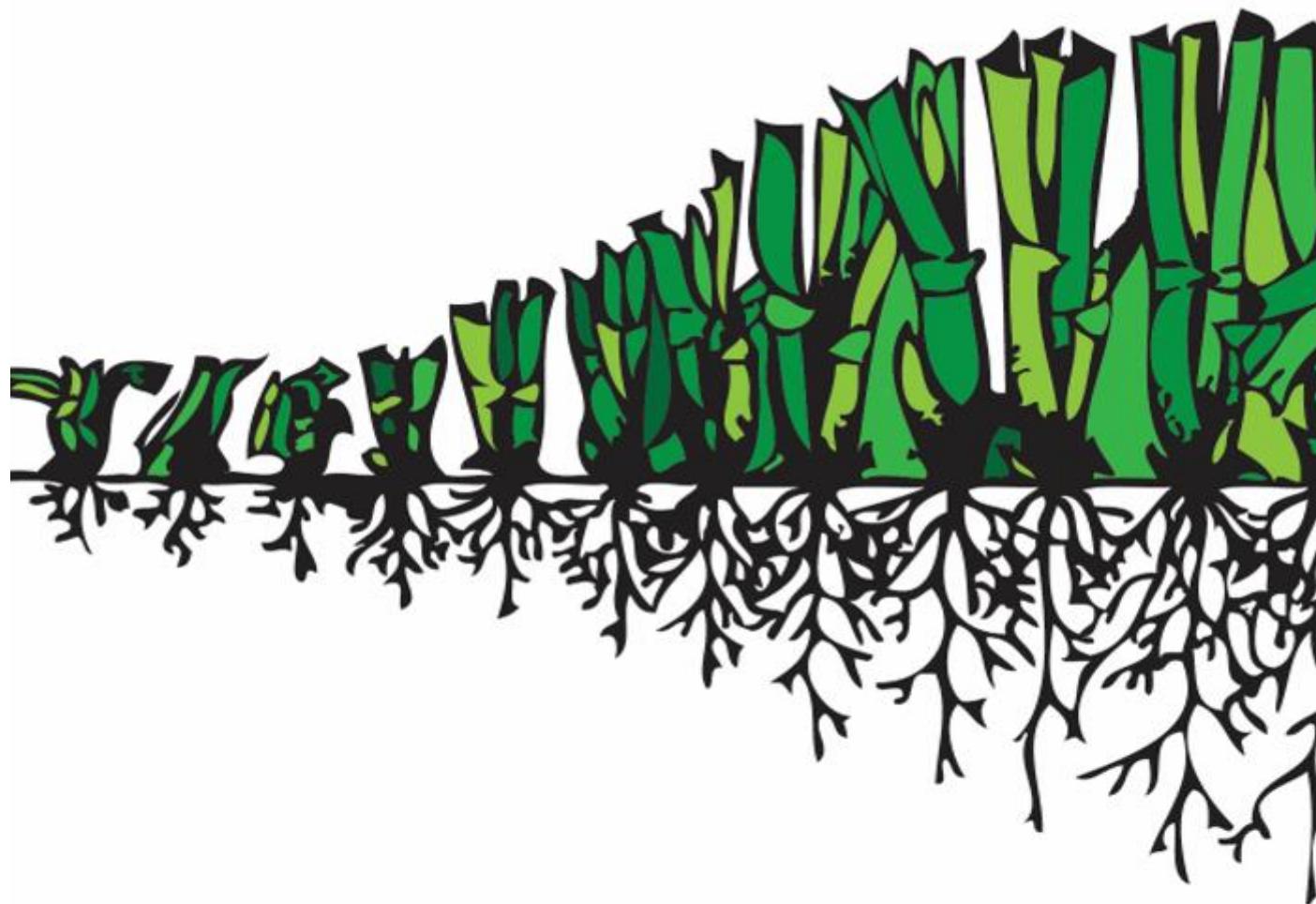
Photo credit: L. Trenholm,  
UF/IFAS

# Bermuda - Maintenance

- Mowing height = **1" – 2" (.5")**
- Fertilization recommendations S.FL.
  - Do not exceed **5-7 lbs N/1000 sq ft/year**
  - Split into multiple applications
  - $\frac{1}{2}$  - 1 lb N/1000 sq ft per applications=
- Irrigation of established turf should be based on an as-needed basis
  - $\frac{1}{2}"$  –  $\frac{3}{4}"$  of water per application
- Thatch management
  - Proper mowing, fertilization & irrigation
  - Verticut or power rake
- Pests and diseases
  - Scout, properly identify, and select for resistance
    - Nematodes, mole crickets, webworms, armyworms, mites, dollar spot, large patch, etc.



Photo credit: Tyler Jones,  
UF/IFAS



Athletic Field

Lawn

Utility Turf

# Shade Tolerance

Full Sunlight

Partial Shade

Shade Tolerant

Bermudagrass

Bahiagrass

Zoysiagrass

Dwarf St. Augustinegrass

- 'Seville'
- 'Delmar'

Seashore Paspalum

Centipedegrass

St. Augustinegrass

- 'CitraBlue'
- 'Provista'

# Managing Turf in the Shade

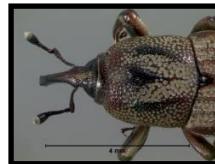
- Reduce shade (trim trees)
- Reduce traffic
- Reduce irrigation
- Reduce fertilization; promoting growth will stress the turf
- Increase mowing height
- Select a more shade-tolerant groundcover or mulch



# Pests & Diseases

## Insects

- Turf caterpillars
- Scarab beetles
- Chinch bugs
- Hunting billbug
- Mole crickets
- Scale insects & mealybugs



## Diseases

- Gray Leaf Spot
- Large Patch
- Take-all Root Rot
- SCMV/LVN



## Nematodes



## Weeds



UGA1391326

	Bahia	Bermuda	St. Aug.	Zoysia	Centipede
Region	Statewide	Statewide	Statewide	Statewide	Statewide (acidic soils)
Maintenance	Low	Medium-High	Medium	Medium	Low
Establishment Method	Seed, sod	Seed, sod, sprigs, plugs	Sod, plugs	Sod, plugs, seed	Seed, sod, plugs
Wear	Poor	Excellent	Fair	Excellent	Fair
Drought	Excellent	Excellent	Good	Excellent	Good
Soil	Acid	Wide range	Wide range	Wide range	Acid
Shade	Fair	Poor	Good-excellent	Good-excellent	Fair
Nematode tolerance	Excellent	Poor	Good	Good	Poor



Photo credit: Tyler Jones,  
UF/IFAS



Photo credit: Cat Wofford,  
UF/IFAS



Photo credit: Cat Wofford,  
UF/IFAS

Photo credit: UF/IFAS



## Dwarf Fakahatchee Grass

*Tripsacum floridanum*

Zone: 8A – 10B

Size: Mature height of 2 – 3 feet with a spread of 2 – 3 feet

Drought Tolerant  
Wildlife Plant



Photo by S. P. Turnipseed

## Muhly Grass

*Muhlenbergia capillaris*

Zone: 8A – 11

Size: Mature height of 2 – 4 feet with a spread of 1 – 4 feet

Drought Tolerant  
Wildlife Plant



Photo Credit:  
Marjorie Shropshire

## Frogfruit, Turkey Tangle

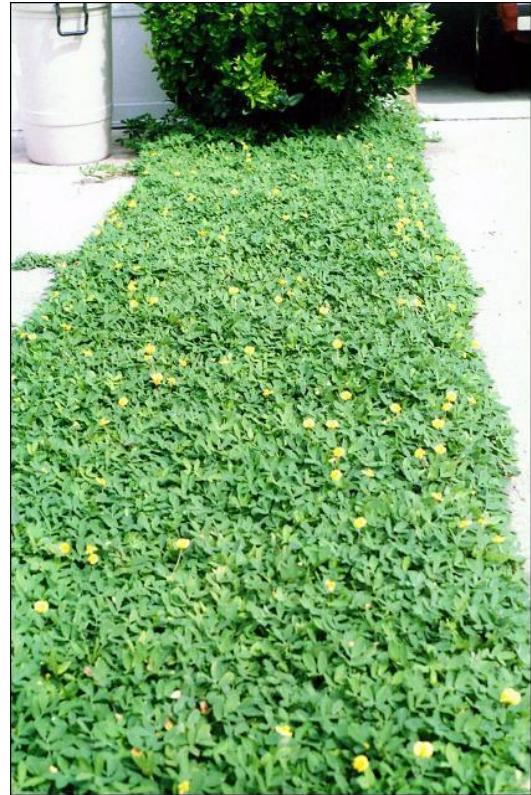
*Phyla nodiflora*

Zone: 8A – 11

Size: Mature height of 6 inches

Blooms all year

- Full sun to part shade
- Moderate moisture (not drought or flood tolerant)
- Several butterflies use it as a host and nectar plant.
- In low traffic areas, it can be a great replacement for lawn.



## Perennial Peanut

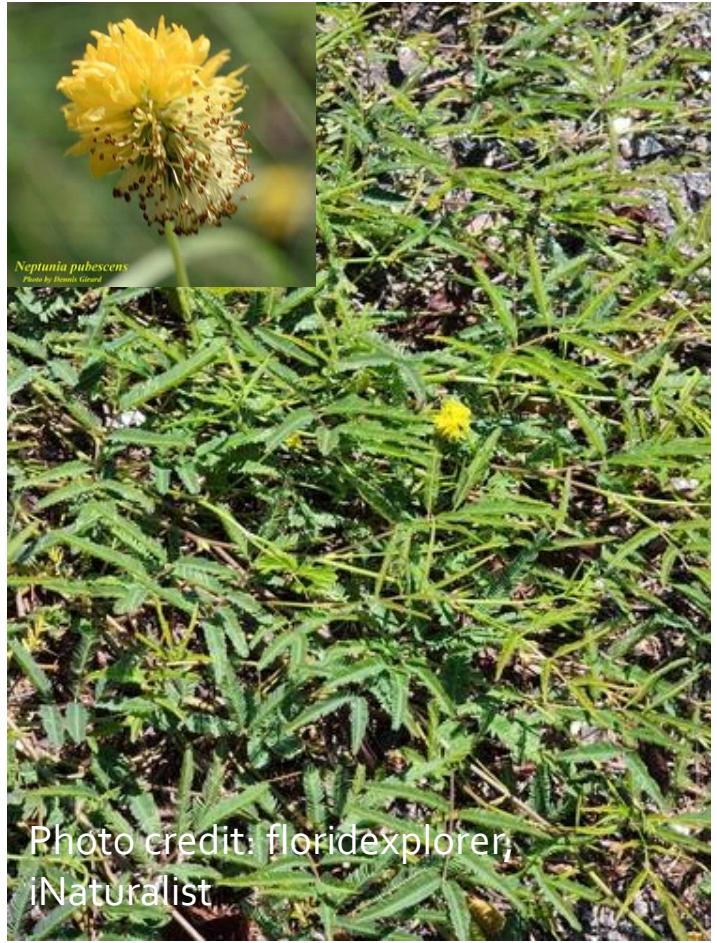
*Arachis glabrata*

'Ecoturf' or 'Arblick'

Size: Mature height of 6 inches

Grows by rhizomes

- Full sun to part shade
- Drought tolerant – heat and humidity
- Blooms great for pollinators
- Low traffic areas
- Low fertilizer needs
- Mow 3"-4" every 3-4 weeks



## Tropical Puff

*Neptunia pubescens*

Zone: 8B – 11

Size: Mature height of 3-6 inches

Drought Tolerant

Host and Nectar Plant



## Sunshine Mimosa

*Mimosa strigillosa*

Zone: 8B – 11

Size: Mature height of 3-6+ inches

Very Drought Tolerant

Host and Nectar Plant

Photo credit:  
NaMa Native  
Landscapes



Photo credit: Ed Gilman, UF/IFAS

## Peperomia

*Peperomia obtusifolia*

Zone: 10A – 11

Size: Mature height of 6-8 inches

Shade Tolerant



Photo Credit: Keri  
Rüder, FNPS

## Browne's Savory

*Clinopodium brownei*

Zone: 8A – 10B

Size: Mature height of up to 6 inches

Wet areas (ditch, swale, rain garden)

Nectar Plant

Fragrant when break the leaves

Photo credit:  
George Gann,  
IRC



Photo credit: Susan Lerner,  
Pan's Garden, IRC



Photo credit:  
Shirley Denton,  
IRC



Photo credit:  
George Gann,  
IRC

## Oblongleaf Twinflower

*Dyschoriste oblongifolia*

Zone: 8A – 10B

Size: Mature height of up to 1 foot

Drought Tolerant

Host and Nectar Plant

## Swamp Twinflower

*Dyschoriste humistrata*

Zone: 8B – 10A

Size: Mature height of 6 inches

Wet areas (ditch, swale, rain garden)

Host and Nectar Plant



## Blanket Flower

*Gaillardia pulchella*

Zone: 3 – 11

Size: Mature height of .5-2 ft

Drought Tolerant

Summer-Fall peak flowering

Pollinator and Wildlife Plant

## East Coast Dune Sunflower

*Helianthus debilis* subsp. *debilis*

Zone: 8A – 11

Size: Mature height of 1-3 ft

Very Drought Tolerant

Blooms all year

Pollinator and Wildlife Plant



*Bacopa caroliniana*  
Photo by Guy Anglin



*Bacopa monnieri*  
Photo by J. & J. Balaban  
USF Herbarium Slide Collection

## Lemon Bacopa & Waterhyssop

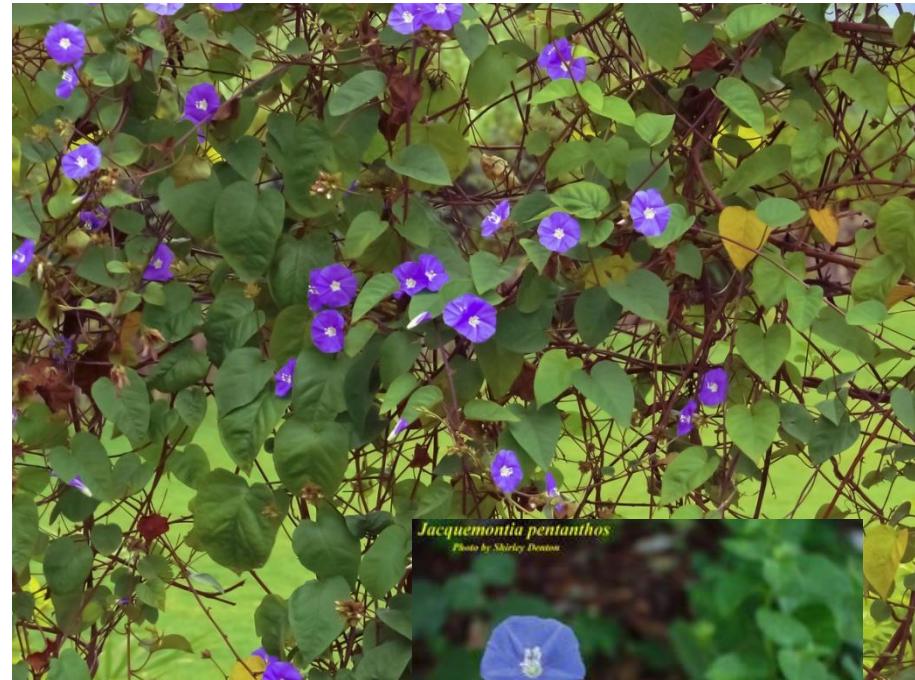
*Bacopa caroliniana* & *Bacopa monnieri*

Zone: 8A – 11

Size: Mature height of .25 – .5 ft

Likes high moisture areas

Pollinator and Host Plant



*Jacquemontia pentanthos*  
Photo by Shirley Denton



## Skyblue Clustervine

*Jacquemontia pentanthos*

Zone: 10A – 11

Size: Mature height of 12 – 15 feet

Blooms all year, primarily in fall

Pollinator and Wildlife Plant



Photo credit: Tyler Jones,  
UF/IFAS

# More Ground Covers

**Asiatic Jasmine Minima** – *Trachelospermum asiaticum*, Zone 8-10

**Basketgrass** – *Oplismenus burmannii* & *setarius*, Zone 8A-10B

**Blue Porterweed** – *Stachytarpheta jamaicensis*, Zone 9B-11

**Elliott's Love Grass** – *Eragrostis elliottii*, Zone 8A-10B

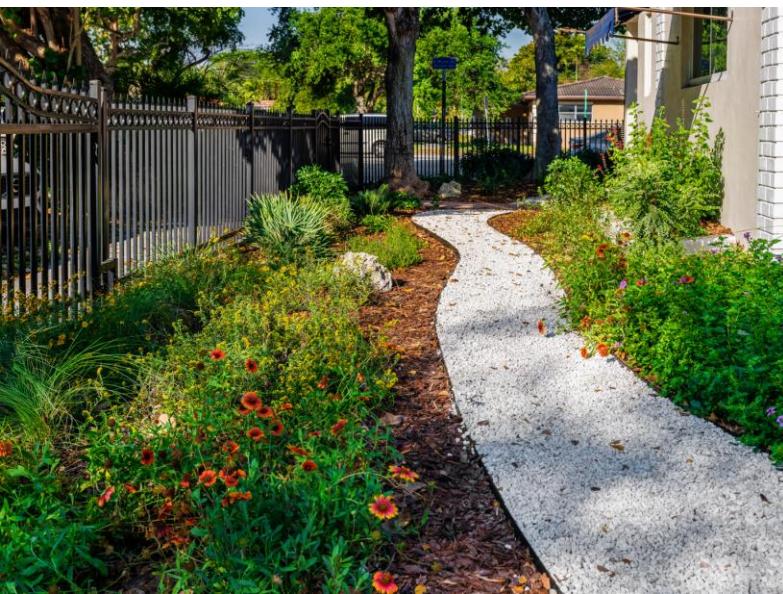
**\*Pineywoods Dropseed** – *Sporobolus junceus*, Zone 8A-10B

**\*Purple Love Grass** – *Eragrostis spectabilis*, Zone 8A-10B

**\*Railroadvine** – *Ipomoea pes-caprae* subsp. *brasiliensis*, Zone 8B-11

**\*Spartina** – *Spartina bakeri* & *patens*, Zone 8A-11 & 9A-11





# Resources

- UF/IFAS askifas
  - <https://edis.ifas.ufl.edu/>
- Florida-Friendly Landscaping™
  - <https://ffl.ifas.ufl.edu/>
- Florida Native Plant Society
  - <https://www.fnps.org/plants>
- Institute for Regional Conservation – Natives for Your Neighborhood
  - <https://www.regionalconservation.org/beta/nfyn/default.asp>
- Atlas of Florida Plants, USF Herbarium
  - <https://florida.plantatlas.usf.edu/>
- Florida Association of Native Nurseries
  - <https://www.fann.org/plants/>



**The Institute for Regional Conservation**

*Conservation of rare plants, animals, and ecosystems*

# Thank you!

## Questions?

**Phone # :** (561) 233-1750

**Email:** [mastergardener@pbcgov.org](mailto:mastergardener@pbcgov.org)

**Facebook page:** UF/IFAS Palm Beach County Master Gardener Volunteers

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