



# Lawn & Palm BMPs

Amanda Marek





# Lawn Best Management Practices





# Common FL Turfgrasses

- St. Augustine - #1 most common
- Zoysia
- Bahia
  - Oh, and centipede too



 Sod Solutions



 PENNINGTON

# Why We Love St. Augustine Grass

- The #1 most popular lawn grass in FL
- Dense, carpet-like look
- Dark green blades
- Relatively good shade tolerance (dwarf cultivars do best)
- Does well in a wide range of soil types
- Establishes quickly by sod or plugs
- Usually maintains some green color in winter dormancy





# Why We Love Zoysia

- Dense, carpet-like look
- Finer blades than St. Augustine
- Few weeds (when healthy)
- Tolerant of multiple herbicides
- Does well in a wide variety of soil types
- Needs less nitrogen fertilizer than St. Augustine



# Why We Love Bahia

- The lowest maintenance grass
- Not prone to thatch build up
- Few major pest and disease issues
- Extremely drought tolerant – no irrigation
- Requires little fertilization
- Soft leaf blades
- Readily available by seed – less expensive, self-seeding





# Why We Hate St. Augustine Grass

- Does require irrigation in drought (new cultivars more drought-tolerant Ex. Cobalt or CitraBlue)
- Prone to thatch
- Has aggressive runners and coarse blades
- Herbicides should be used with caution
  - \*Floratam
- Susceptible to serious pests and fungal diseases
  - Chinch bugs (Captiva is resistant)
  - Large patch (aka Brown Patch)
  - Root rots
  - Dollar Spot
  - Gray Leaf Spot
  - Nematodes



# Why We Hate Zoysia

- Needs more mowing to stay short
- Prone to thatch
- Does poorly in shade
- Needs just as much water as St. Augustine to stay green
- Quick to brown in winter and slow to green up in spring
- Slow growth – sod or plugs only
- Susceptible to serious pests and fungal diseases
  - Large patch (aka Brown Patch)
  - Root rots
  - Dollar spot
  - Hunting billbug, chinch bugs, nematodes, etc.





# Why We Hate Bahia

- The “pasture grass”
- Tall, scratchy seed heads – difficult to mow
  - ‘Argentine’ has fewer, smaller seed heads
- Patchy growth = more weeds
- Turns brown in winter and during drought (greens up quickly after rain)
- Does poorly in shade and alkaline soils



# Centipede Grass

- Low-maintenance, attractive turfgrass
- Slowly grows by runners and seed (\$\$)
- Blanket-like, soft, lime-green color; will go dormant in drought and winter
- Mowed short 1.5" – 2.5"
- Full sun to partial shade
- Fertilize with very low to no N
- Needs acidic soil





# What Your Lawn Wants From You

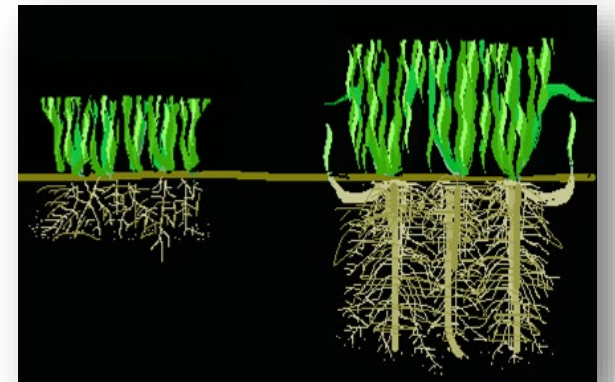
- Don't overfeed it
- Don't overwater it
- Proper mowing, thatching and soil amendments
- Patience & understanding



*The best defense against pests and diseases is a healthy lawn!*

# Watering Your Lawn

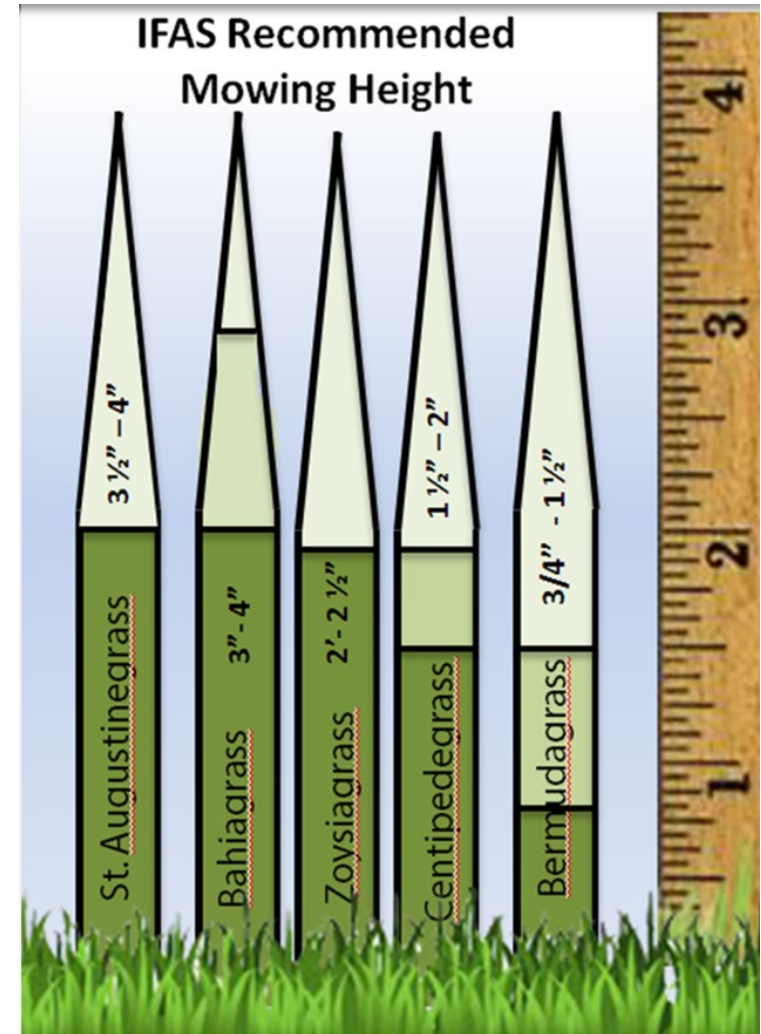
- #1 issue with lawn care is overwatering
- Water  $\frac{1}{2}$ " –  $\frac{3}{4}$ " each time you irrigate
- Irrigate between 4am – 8am is best
- Never water more than 2x a week
- Water less in winter – once every 10-14 days
- Turn system off during rainy season – summer!
- Only water as needed
  - Leaf blades fold in half
  - Grass sounds dry and crunchy
  - Looks off color
  - Footprints remain





# Mowing

- St. Augustine and Bahia performs best when mowed high 3.5"-4" (unless dwarf cultivar)
- Zoysia needs it short: 2" – 2.5"
- Keep grass clippings on lawn
  - Light layers do not contribute to thatch
  - Do not remove more than 1/3 of the blade at a time



# Dethatching St. Augustine & Zoysia

- Dethatch about every 2 years or when thatch is  $\frac{1}{2}$ " - 1" thick
- Avoid overwatering and over fertilizing
- Avoid routine spraying of broadspectrum pesticides that kill beneficial organisms
- Aerate every 1-2 years





# Amending the Soil

- Topdress 2x a year with ¼" layer of compost
- During growing season (April – September)
- Best results when combined with aeration
- Adds organic matter and breaks up compacted clay soils
- Do not add lime (unless a soil test recommends)! No beer, no baking soda, no laundry detergent, no Epsom salts!

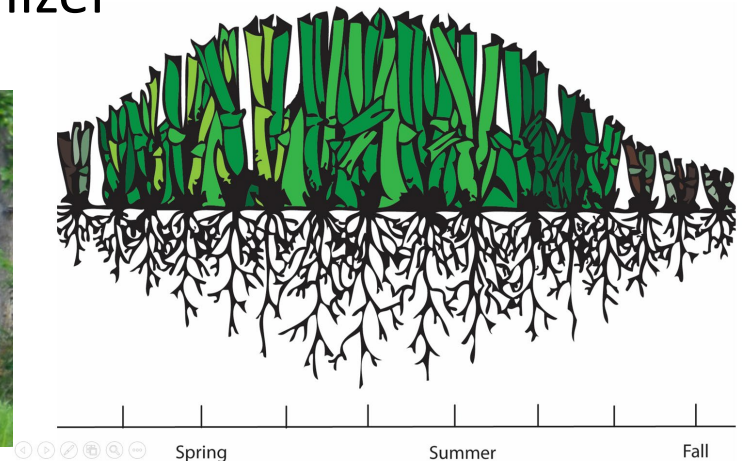


**US** Composting  
Council



# Feeding Your Grass

- Fertilize only when grass is actively growing
  - April 15 – October 1
- Extra potassium in the fall feeding
- Do not fertilize with nitrogen (N) or phosphorous (P) past Oct. 1
- Do not use Weed and Feed products (0-0-7 exception)
- Do not guess. Get a soil test!
- Do use slow-release granular fertilizer



# Patience & Understanding

- Fungal diseases take time and repeated treatment – always follow the label!
- Apply preventative fungicides the following year if disease occurred
- Insecticides may also require repeated treatment
  - Spray only if a pest problem exists!
  - Scout regularly to catch reoccurrence early
- Allow it time to rest in winter and green up in the spring
  - Have tolerance for brown grass in winter
  - Don't apply fertilizers too early or late
  - Never overwater
  - Be cautious with chemicals during green-up and high temperatures

**(Always read the label!)**



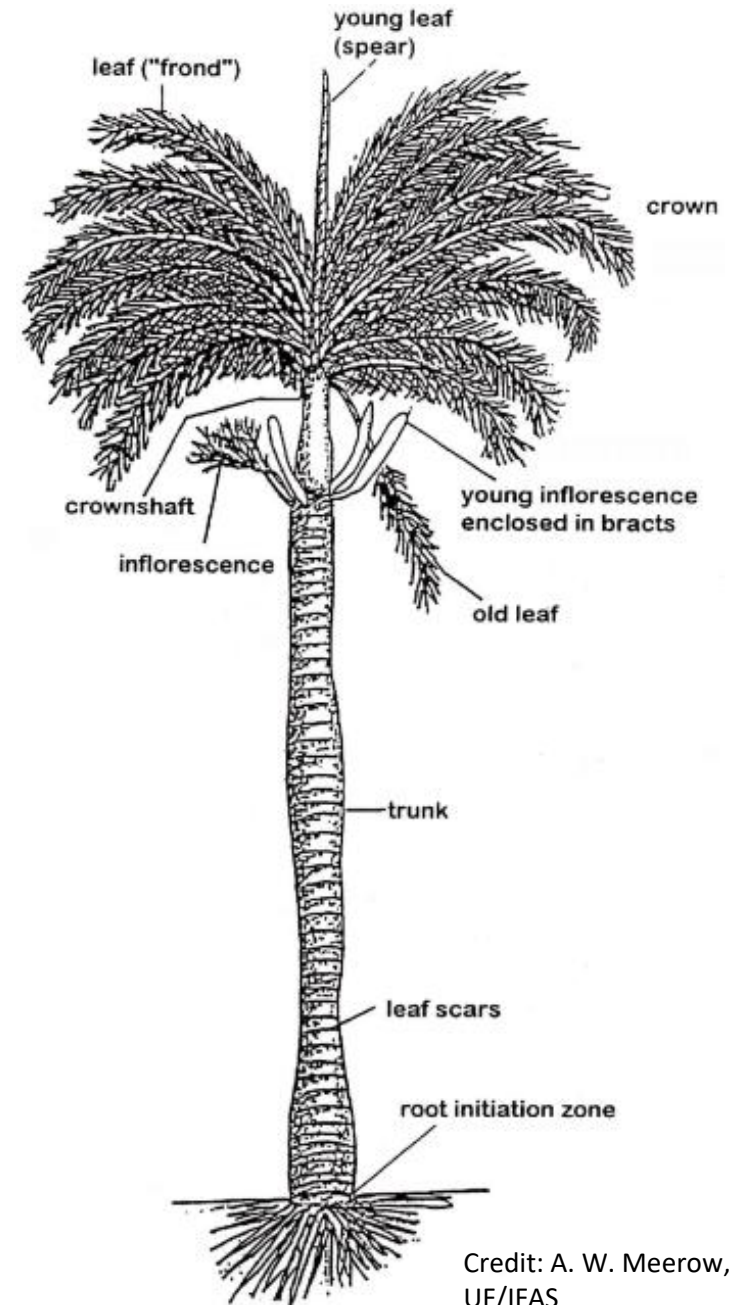


A close-up photograph of a palm frond, showing the long, slender, green leaflets radiating from a central rachis. The frond is positioned diagonally across the frame, with the rachis running from the top left towards the bottom right. The background is a soft, out-of-focus white and light grey gradient.

# **Palm Best Management Practices**

# Palm Tree Basics

- Palms grow from one bud – the “heart” of the palm
- Generally grow one frond at a time – the “spear” leaf
- Do not have true bark – can’t heal wounds
- Produce many roots that do not grow wider with age – good for tight spaces
- Roots may grow 50ft out from trunk and above the surface



Credit: A. W. Meerow,  
UF/IFAS

# Weird But Totally Normal

- Roots sometimes grow above ground – “adventitious roots”
- Old fronds and “boots” can fall off – sometimes a lot at once, sometimes none at all
  - Ex. Mexican fan palms
- Trunks may erode with age
- Fronds may get “scurf”
- Old fronds at bottom turn brown





# Weird But NOT Normal



Amanda Marek, UF/IFAS  
Lethal Bronzing (lethal decline) positive





# Weird But NOT Normal

- Majority of fronds are brown / dead
- Dead or absent spear leaf
- Soft or collapsed trunk
- Severe yellowing of fronds
  - Nutrient deficiency usually starts in old fronds
- Nutrient deficiencies manifest in different ways





# Palm Problems

- Pests
  - Not usually major issue
  - Cycad scale on sago is an exception - Dinotefuran
- Diseases – the biggest concern
  - Lethal bronzing / Lethal Yellowing (aka Lethal decline)
  - Bud rot
  - Fusarium wilt
  - Ganoderma butt rot
  - Leaf spots and blights
  - Trunk rot













# A Fed Palm is a Happy Palm

- Nutrient deficiencies are very common – esp. potassium and magnesium
- Show up in different ways depending on the palm and the nutrient
- Not usually fatal unless severe and prolonged
- May take 2-3 years for a palm to fully recover
- Sagos (cycads not palms) are very similar

Magnesium



Boron



Potassium



Potassium



# Palm Care 101

- Avoid over pruning
  - Maintain a 360° full canopy
  - Only remove dead fronds
  - Disinfect pruning tools
  - Do not prune in winter
- Feed Me, Seymore!
  - Use a complete palm fertilizer (8-2-12 + micronutrients, slow-release)
  - Feed every 3 months between March - September
- Right Plant, Right Place
  - Select palms hardy in your climate zone





# Proper Pruning

- Only prune fronds that are completely brown
  - Reduce nutrient deficiencies
  - Skirts provide habitat for wildlife
- Avoid cutting into trunk or pulling off fronds
  - Wounds can welcome fungal trunk rot
  - Disinfect tools with alcohol or bleach between trees
- Over pruning increases risk of wind or freeze damage to the heart



Before pruning



Acceptable pruning



Overpruning





# Feeding Your Palm

## 8-2-12

- Complete palm fertilizer
  - Micronutrients
  - Slow-release N P K (“polymer coated” or “sulfur coated”)
  - Slow-release Mg (Kieserite)
- Avoid “oxides” or “sucrates”
- Fertilize every 3 months during growing season
  - ex. March, June, September
- Spread evenly under canopy, including grass
- Do not use Epsom salts
- Always follow label instructions

### GUARANTEED ANALYSIS

|                                                       |        |
|-------------------------------------------------------|--------|
| TOTAL NITROGEN (N)*                                   | 8.00%  |
| 0.79% Ammoniacal Nitrogen                             |        |
| 7.21% Urea Nitrogen                                   |        |
| AVAILABLE PHOSPHATE (P <sub>2</sub> O <sub>5</sub> ** | 2.00%  |
| SOLUBLE POTASH (K <sub>2</sub> O)***                  | 12.00% |
| MAGNESIUM (Mg) TOTAL                                  | 4.00%  |
| 4.00% Water Soluble Magnesium (Mg)                    |        |
| SULFUR (S) Total                                      | 6.28%  |
| 6.28% Combined Sulfur (S)                             |        |
| BORON (B)                                             | 0.15%  |
| 0.15% Water Soluble Boron                             |        |
| COPPER (Cu) Total                                     | 0.05%  |
| 0.05% Water Soluble Copper (Cu)                       |        |
| IRON (Fe)                                             | 0.15%  |
| 0.15% Chelated Iron (Fe)                              |        |
| MANGANESE (Mn)                                        | 2.00%  |
| 2.00% Water Soluble Manganese (Mn)                    |        |
| ZINC (Zn) Total                                       | 0.15%  |
| 0.15% Water Soluble Zinc (Zn)                         |        |

DERIVED FROM: Polymer Coated Urea, Polymer Coated Sulfate of Potash, Magnesium Sulfate (Kieserite), Copper Sulfate, Manganese Sulfate, Zinc Sulfate, Polymer Coated Ammonium Phosphate, Iron EDTA, Sodium Borate.

I \*7.20% Slowly Available Urea Nitrogen from Polymer Coated Urea.

\*\*1.80% Slowly Available Phosphate from Polymer Coated Ammonium Phosphate

\*\*\*10.80% Slowly Available Potassium from Polymer Coated Sulfate of Potash

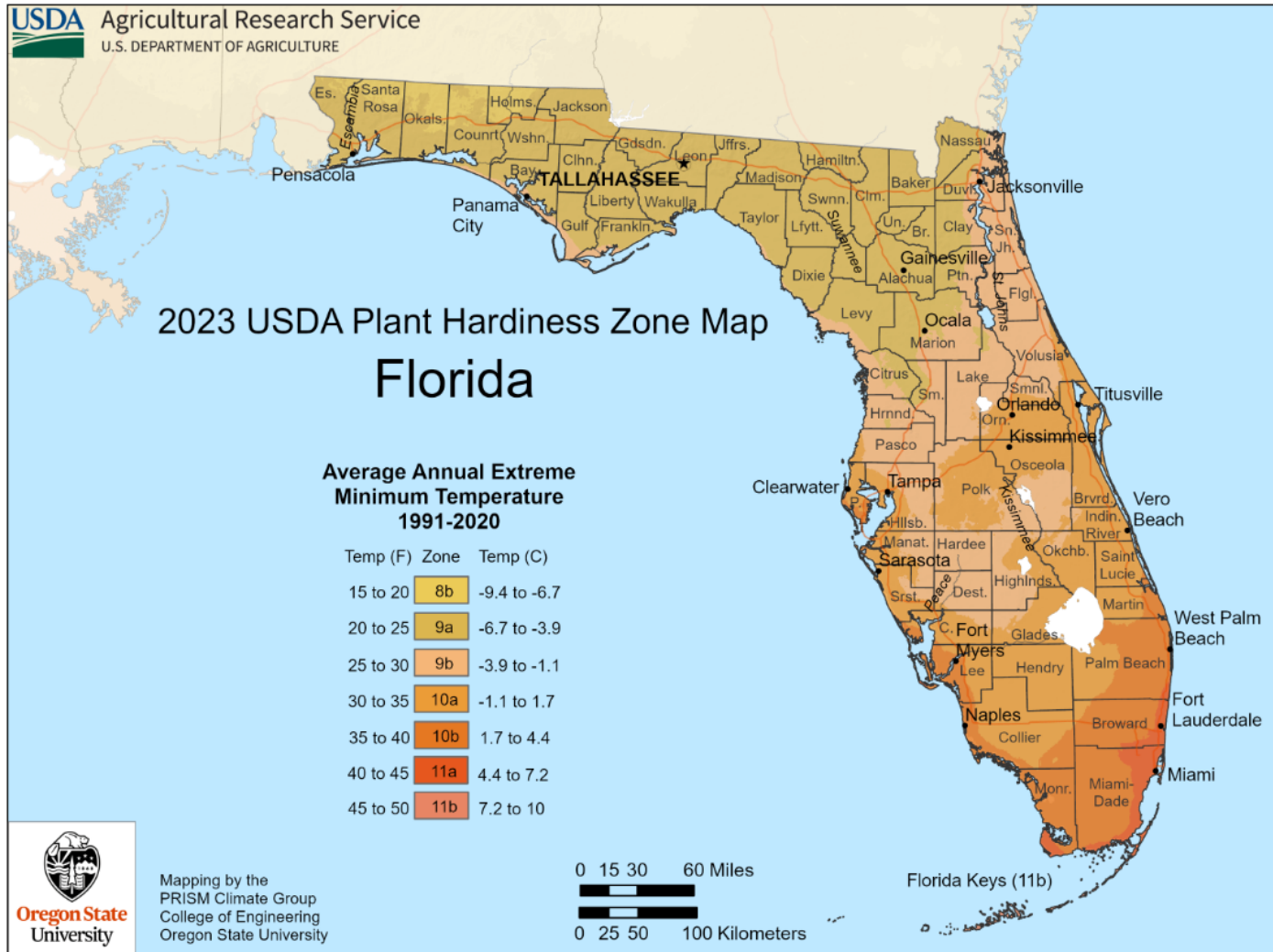




# Dos and Don'ts to Winterize Your Florida Landscape

Amanda Marek, Florida-Friendly Landscaping Agent  
UF/IFAS Marion County Extension Service

# First things first...







# Preparing for Winter ... What NOT to do

- Don't prune
  - There are exceptions (ex. Crepe myrtles)
- **Don't water as often**
  - Water lawn once every 10 - 14 days
- **Do not fertilize**
  - After Oct. 1 or before April 15
  - Exception: roses and citrus fertilize in Feb.
- Do not scalp your lawn

# Let your Lawn Sleep!



A. Marek. UF/IFAS

***Brown in  
Winter is  
Good!***



# Preparing for Winter ... What to do

- Add or refresh mulch
- Check and repair irrigation
- Know what you can plant
- Know how to protect cold sensitive plants



# Mulch

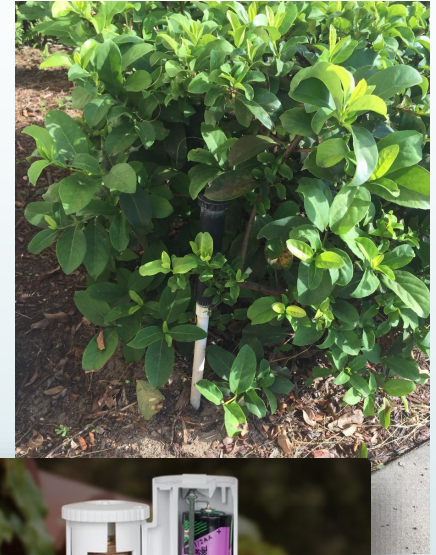
- Organic mulches are preferred
  - Add organic material to soil
  - Refresh annually
- Mulch buffers soil temperature
- Mulch 2-3 inches deep after settling
- Keep mulch away from plant bases
  - Do not “volcano” mulch except during hard freezes





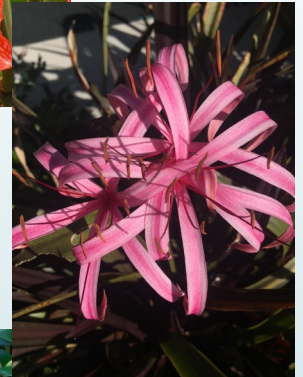
# Check Irrigation System

- Run system to check for
  - Leaks
  - Blockages
  - Broken sprinkler heads
- Set system to manual
- Check rain sensor
- Reduce water usage
  - Capping unneeded heads
  - Convert beds to micro irrigation
- During hard freeze, keep facet furthest from well or main trickling



# Yes, You Can Still Plant!

- Bulbs
  - Amaryllis
  - Crinum lilies
  - Lily of the Nile (Agapanthus)
- Trees, Shrubs and Perennials
  - Fall is an ideal time for cold-hardy trees, shrubs and perennials
  - Do not plant palms
- Sodding is best left for late March
- Cool-season annuals & vegetables
  - Snapdragons, petunias, pansies, violets
  - Greens – collards, kale, turnips, spinach, cabbage





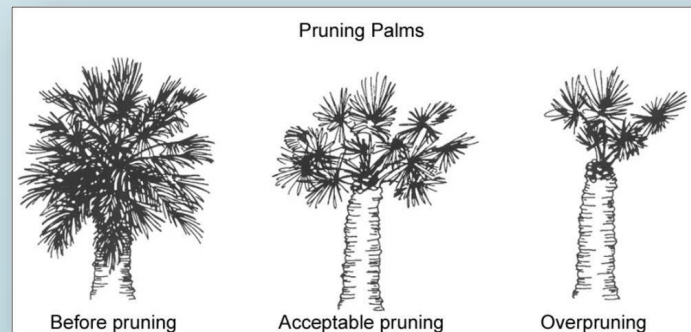
# Protection from Freezes

- Use freeze cloth or sheets to the ground
  - Don't use plastic
  - Don't lollipop
  - Don't use gas heaters
  - Wrap trunks with layers of cloth or newspaper



# Protection from Freezes

- Do not run water on woody plants for freeze protection
  - May suffer breakage from ice
- Do not prune burned vegetation!
- Bring in sensitive plants if possible
- Fertilize palms routinely throughout the growing season for better freeze tolerance
  - Avoid over pruning!





# Recovering from Freeze

- Water the soil after a freeze
- Prune dead branches in spring (mid-end March)
- Fertilize in spring (April 15 is the earliest)
- Remove dead plants in spring

***Be patient!***



# Florida-Friendly Plant Options

## RESOURCES

### APPS AND PUBLICATIONS

FFL Plant List & Apps



Publications





# FFL Resources

**Florida-Friendly  
Landscaping™ PROGRAM**



[https://www.facebook.com/  
MarionCountyMasterGarden  
ers](https://www.facebook.com/MarionCountyMasterGardeners)

Amanda Marek  
UF/IFAS Marion County Extension  
Service

[mandab@ufl.edu](mailto:mandab@ufl.edu)

352-671-8400

<https://sfyl.ifas.ufl.edu/marion/>

2232 NE Jacksonville Rd.  
Ocala, FL 34470

FFL Website:

<https://ffl.ifas.ufl.edu/>

Purchase Books:

<http://ifasbooks.ifas.ufl.edu/>

Gardening Solutions:

[https://gardeningsolutions.ifas.ufl  
.edu/](https://gardeningsolutions.ifas.ufl.edu/)

# Florida-Friendly Landscaping™ PROGRAM



Amanda Marek  
UF/IFAS Marion County Extension Service  
Florida-Friendly Landscaping Agent  
2232 NE Jacksonville Rd  
Ocala, FL 34470

Ph: 352-671-8400

E: [mandab@ufl.edu](mailto:mandab@ufl.edu)

Web: <http://sfyl.ifas.ufl.edu/marion/>



UF/IFAS Marion County Master  
Gardeners



<https://gardeningsolutions.ifas.ufl.edu/>