



Lawn & Palm BMPs

Amanda Marek



Lawn Best Management Practices



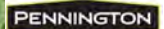
Common FL Turfgrasses

- St. Augustine - #1 most common
- Zoysia
- Bahia



 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. 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



What Your Lawn Wants From You

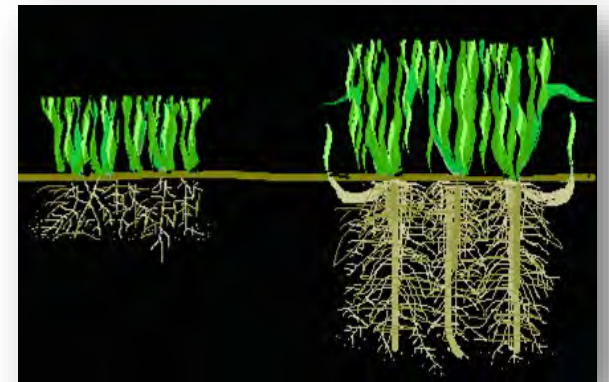
- Don't overfeed it
- Don't overwater it
- Proper mowing, thatching and soil amendments
- Patience & understanding



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

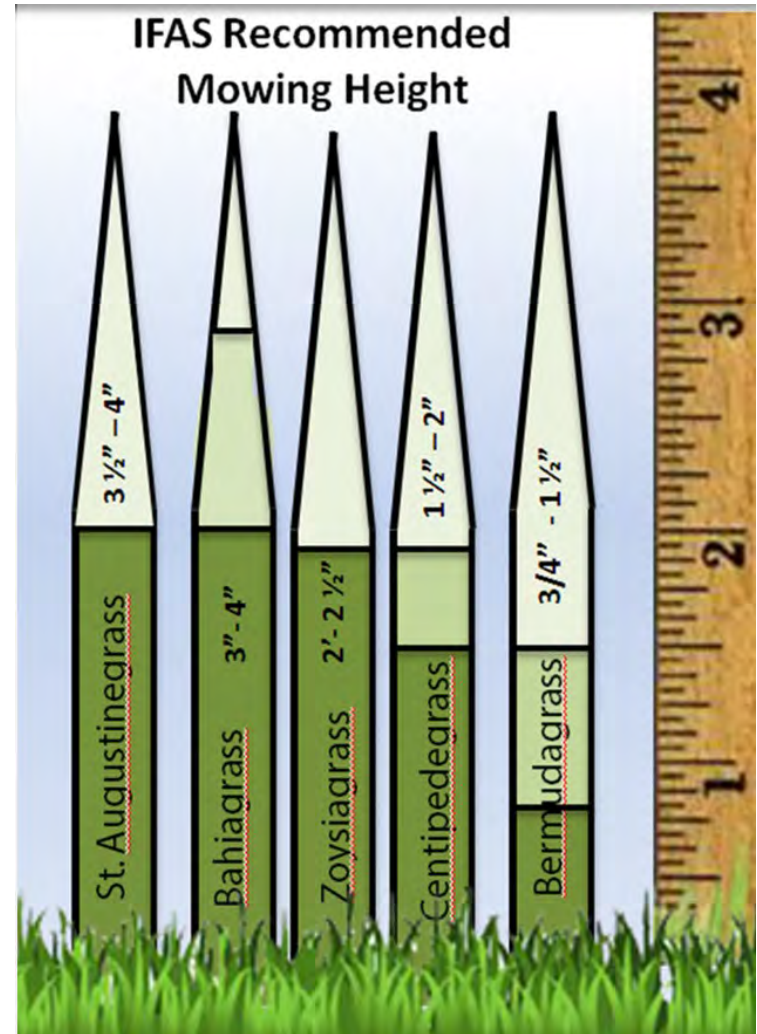
Watering Your Lawn

- #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



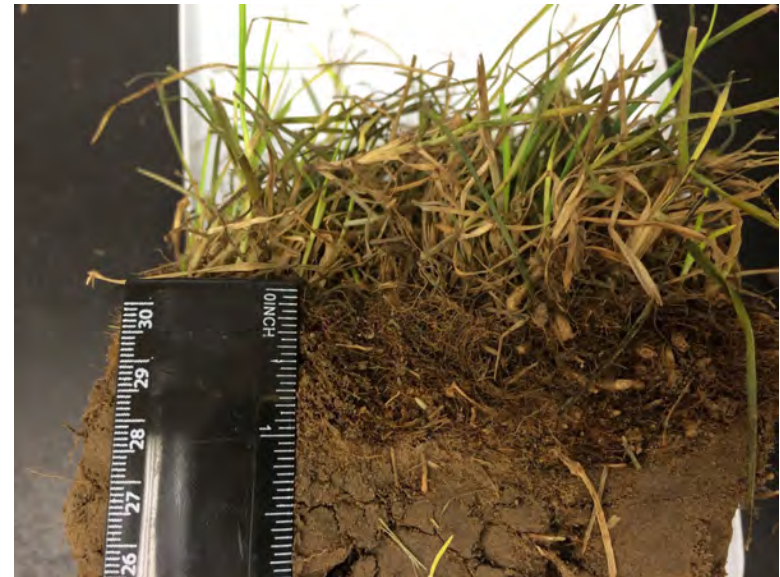
Mowing

- 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!

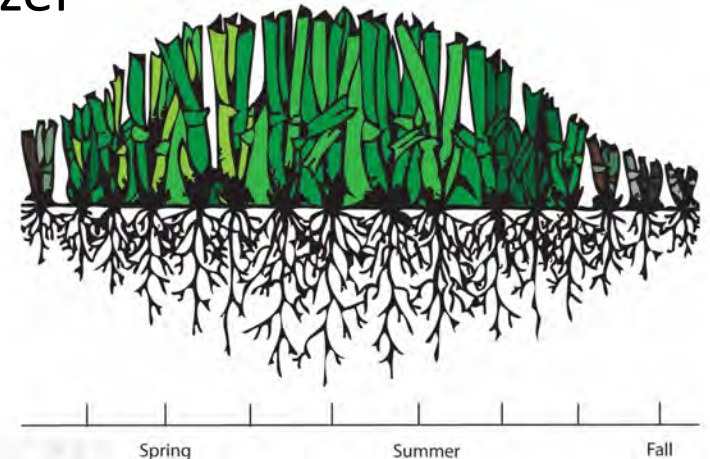


US Composting
Council



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!)

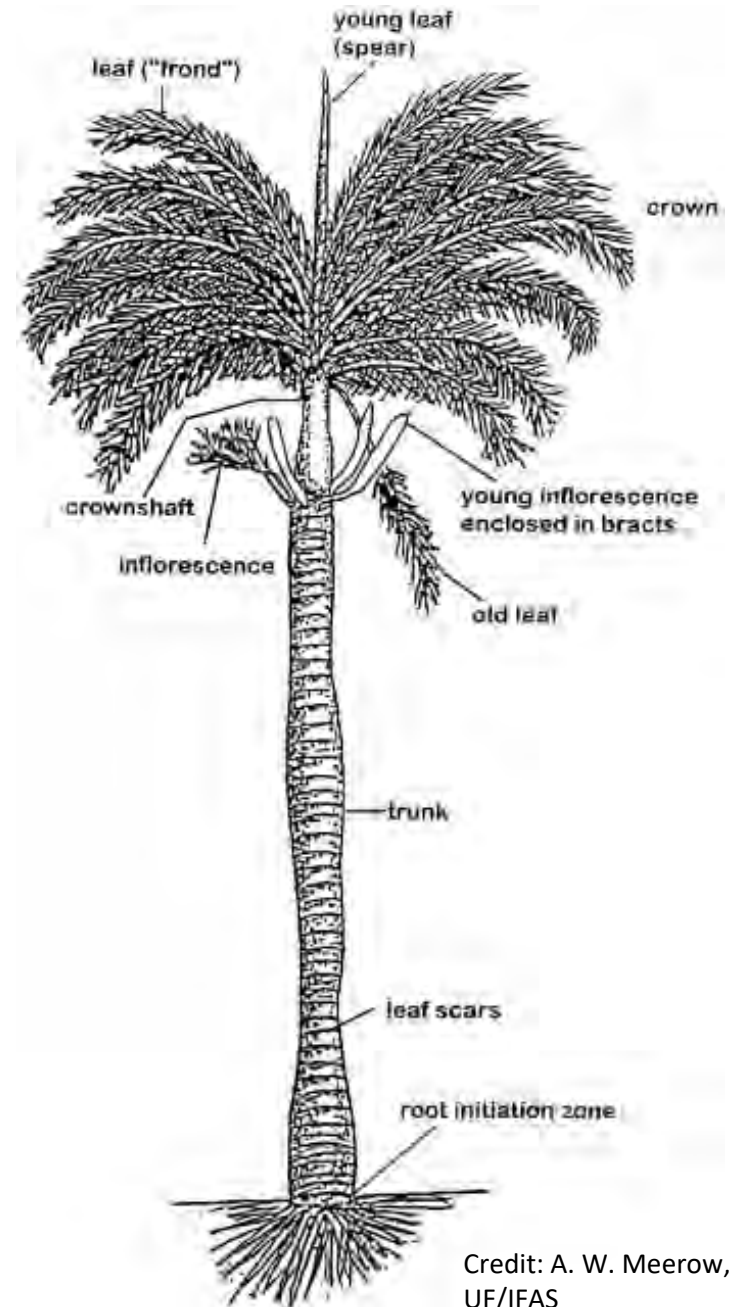




Palm Best Management Practices

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



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



Manganese



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 ₂ O ₅ **.....	2.00%
SOLUBLE POTASH (K ₂ 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.

*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



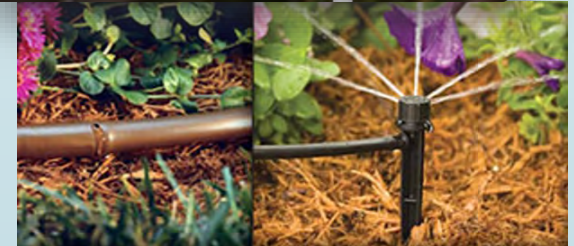
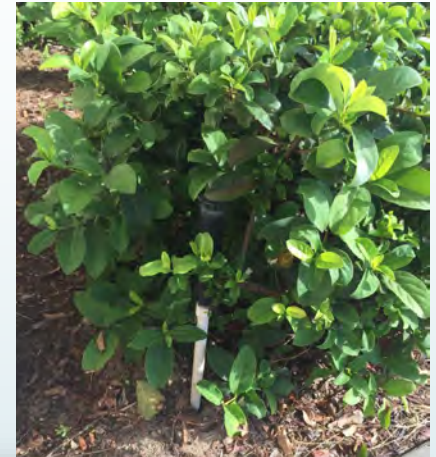
Mulch

- ▶ 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



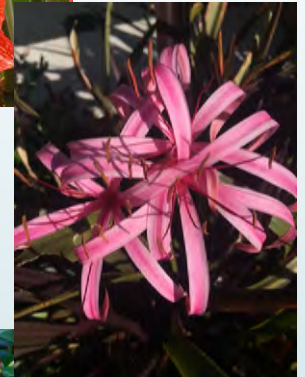
Check Irrigation System

- ▶ 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



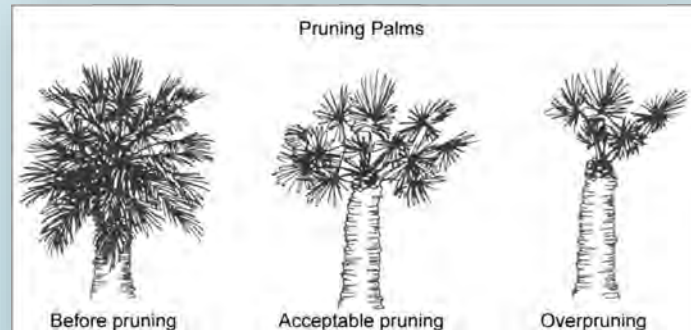
Protection from Freezes

- ▶ 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 Landscaping™ PROGRAM



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