

Pinellas County Fertilizer Ordinance
Landscape and Fertilizer BMPs
and
Education Campaigns

Pinellas County Water Quality and Ordinance # 10-06

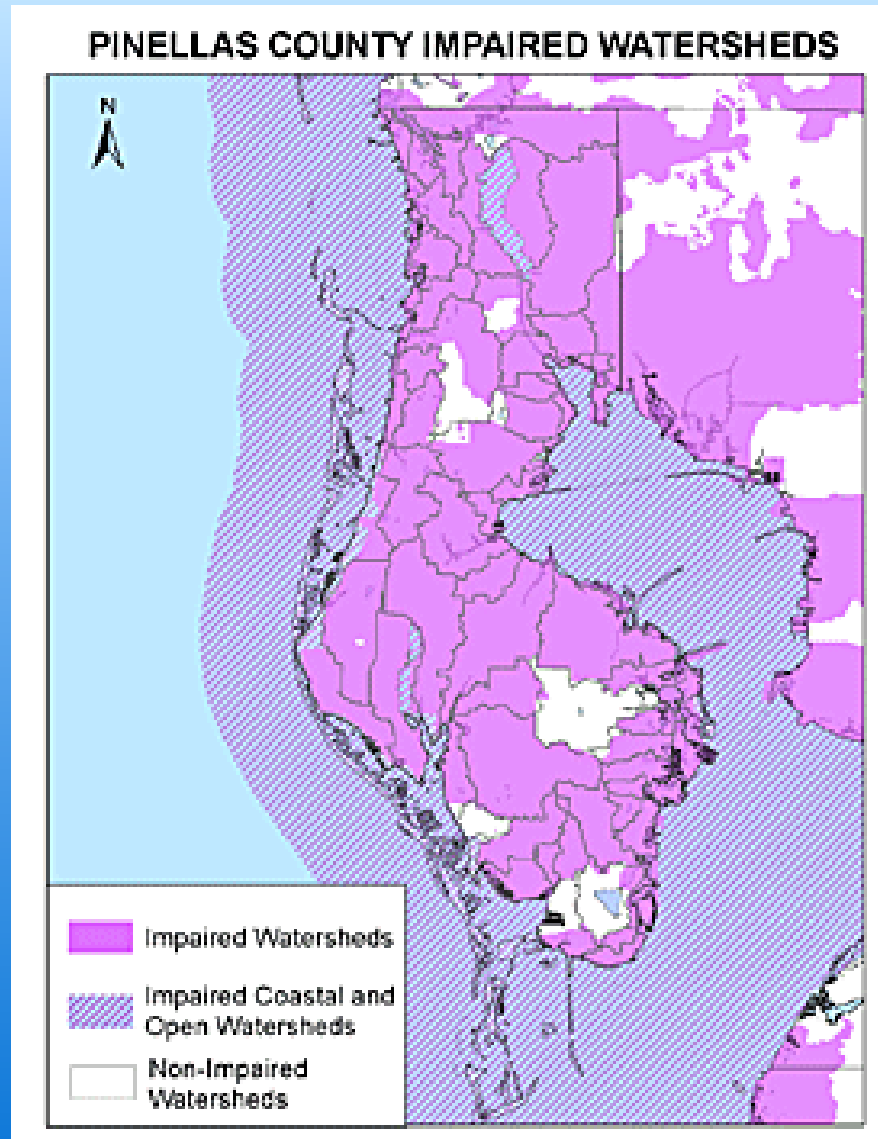
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Pinellas County Watershed Management



Impaired Waters in Pinellas County

#1 cause is Nutrients
#2 is Dissolved Oxygen
#3 is Bacteria

86% of our waters are
impaired for one more of
these.



Focus on Fertilizers

- Fertilizers are nutrients for your landscape; many products contain nitrogen and phosphorous
- Fertilizers are carried by runoff and leaching through the soil to our waterways
- In our waters, nitrogen & phosphorous cause algae blooms and other problems
- Education and application restrictions are important parts of a solution
- **Homeowners use 6 times more fertilizer than farmers**
- **You can still have a nice lawn without overfertilizing!**





Restoration Technology Costs

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Public Costs for Nitrogen Removal Projects are **SUBSTANTIAL**:

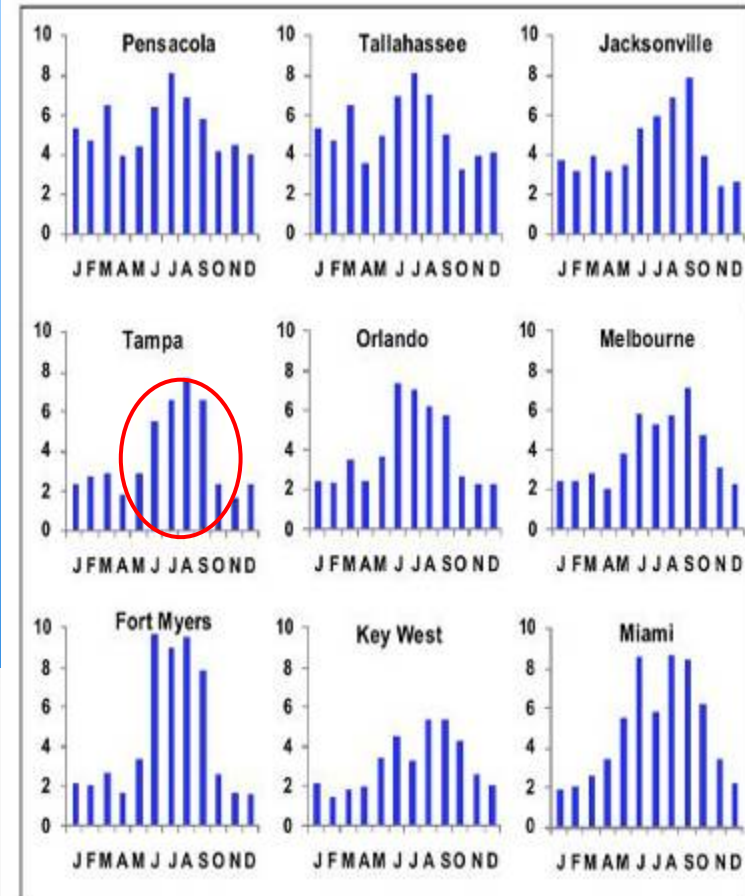
- Stormwater treatment: average cost to remove 1 pound of Nitrogen is over \$9,000
- If only **50%** of people follow the ordinance we can:
 - › Remove an estimated 27tons of nitrogen from Tampa Bay waters receiving from Pinellas County
 - › Save Pinellas County taxpayers \$490 million in water quality improvements



Key Points of Countywide Ordinance #10-06

Application Restrictions

- Summer restrictions for retail sales and application- NO nitrogen or phosphorous from June 1 – Sept 30
- Zero P application without a soil test
- Keep 10ft away from top of bank of waterbodies (seawalls too)



Key Points of Countywide Ordinance #10-06

Landscape Maintenance BMPs

- Best Management Practices education requirement for all professional landscapers
- Education & license requirement for all professional fertilizer applicators
- Information available for all municipal offices (business license, building department, city hall, etc)



Landscape Maintenance Best Management Practices

- Keep pavement clean (grass clippings, dirt, fertilizer, mulch, etc)
- Use Florida-Friendly Landscaping Practices
- Recycle grass clippings and leaves, get free fertilizer!



Landscape Maintenance Best Management Practices

Pinellas County
recommends a
6' no-mow, low
maintenance zone next to
water.



This includes Seawalls
and Wetlands!



Choose The Right Plant for the Site Conditions

Plants suited to the specific site conditions

- › sun, shade,
- › soil pH, drainage,
- › salt tolerance

reduces the need for water, fertilizer, pesticides and pruning



Muhlenbergia capillaris
Photo by Betty Wargo



Wire grass restoration project
Oscar Scheer State Park
Photo by Ann Murray
Copyright 2008 Univ. Florida



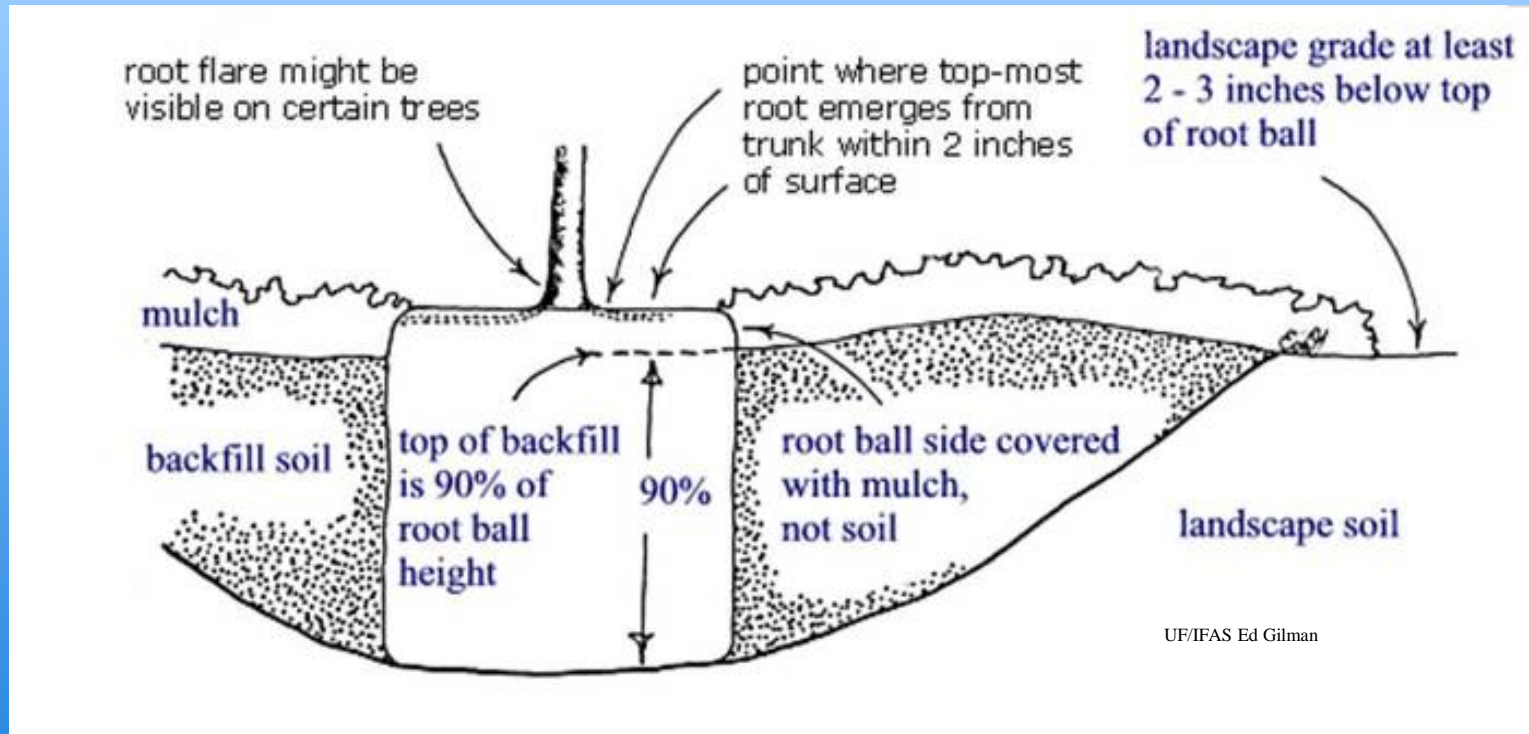
Right Plant, Right Place...

**Happens when you closely match
the site conditions to
the needs of the plant**

As a result, the plant will be healthier and happier. And **you will have FAR fewer problems and FAR less maintenance and use FAR less pesticides.**

Proper Planting Hole

The planting hole is at least 1.5 times the diameter of the root ball.



This provides loose soil for the expansion of new roots.

Water in Backfill



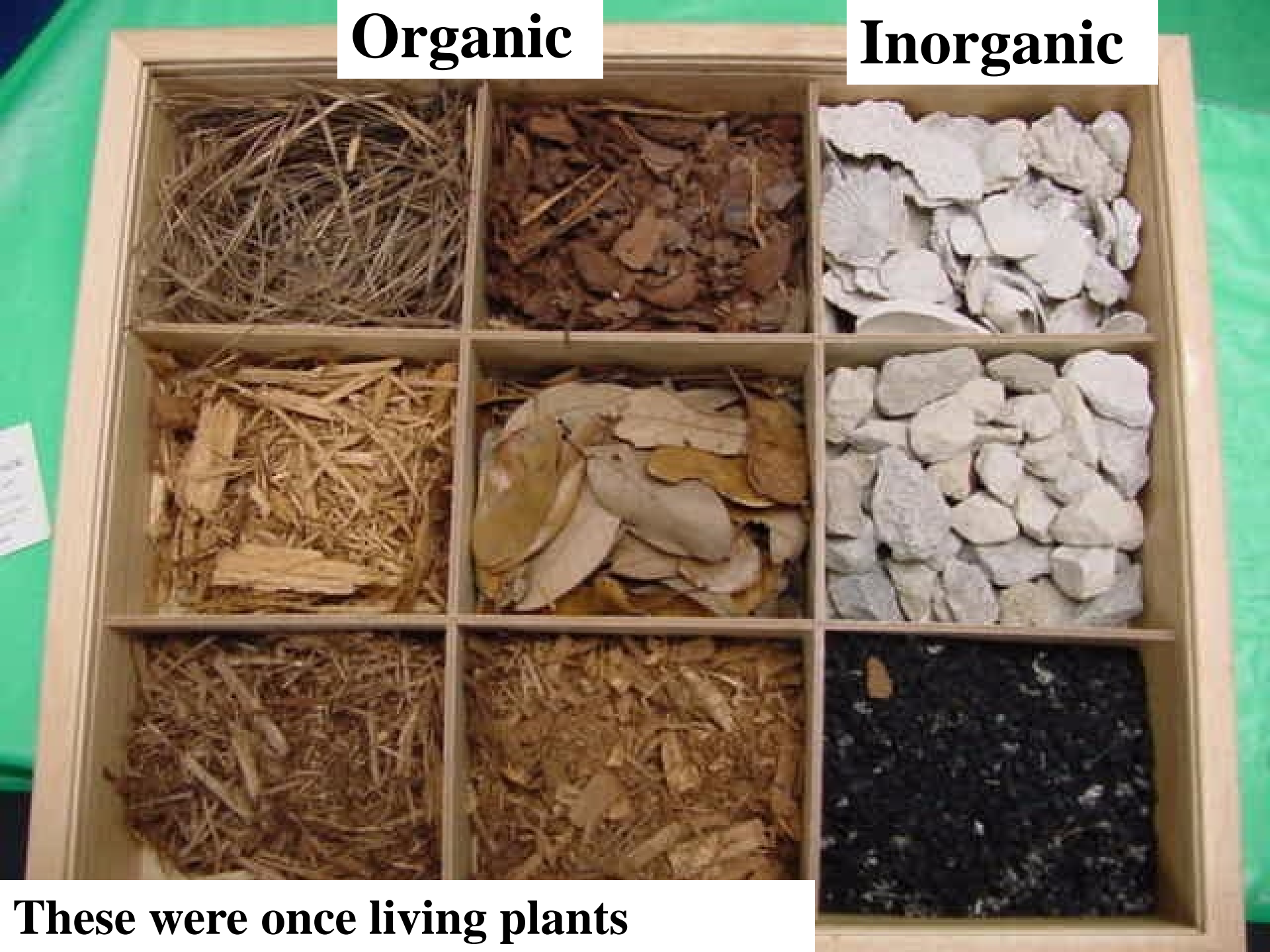
Landscape Mulch



Any material applied
to the soil surface to
protect or improve the
area covered

Organic

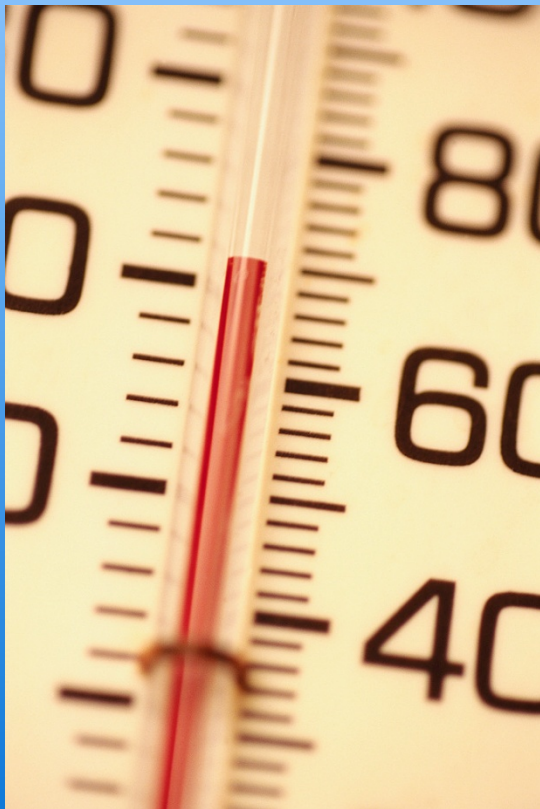
Inorganic



These were once living plants

Benefits of Mulching

1. Reduces weeds



2. Slows water loss

3. Moderates soil temperature

Benefits of Mulching



4. Organic mulch can improve soil structure



5. Provide protection from mechanical damage.

Keep mulch away from base of plant



Improper Mulching

Mulching in a volcano-like manner can:

- › Rot the trunk
- › Cut off oxygen to roots
- › Keep vital irrigation and rain water out
- › Keep roots too wet in poorly drained soils
- › Cause stem girdling roots on some trees



3-cut method to prevent bark ripping





Branch bark ridge

Collar

Handout

Collar: swollen area at the base of the branch where it joins the trunk. This tissue is rich in energy reserves and chemicals that hinder the spread of decay. Good pruning cuts avoid cutting into the collar.

Do not hurricane cut palms!



The fronds protect the core of the tree. If the core is damaged the tree dies.



Hurricane cutting is illegal in Broward County because it is so harmful to palm trees.

Over grooming can kill palm trees

Pencil necking, caused by over pruning, will increase the chance that it will break in a storm, and will eventually lead to death of the palm.



The “hurricane cut” may actually reduce the protection for the palm.



Pruning Palms

Handout

Yellow fronds on palms are a symptom of a nutrient deficiency. Removing them usually makes the problem worse and limits diagnosis.

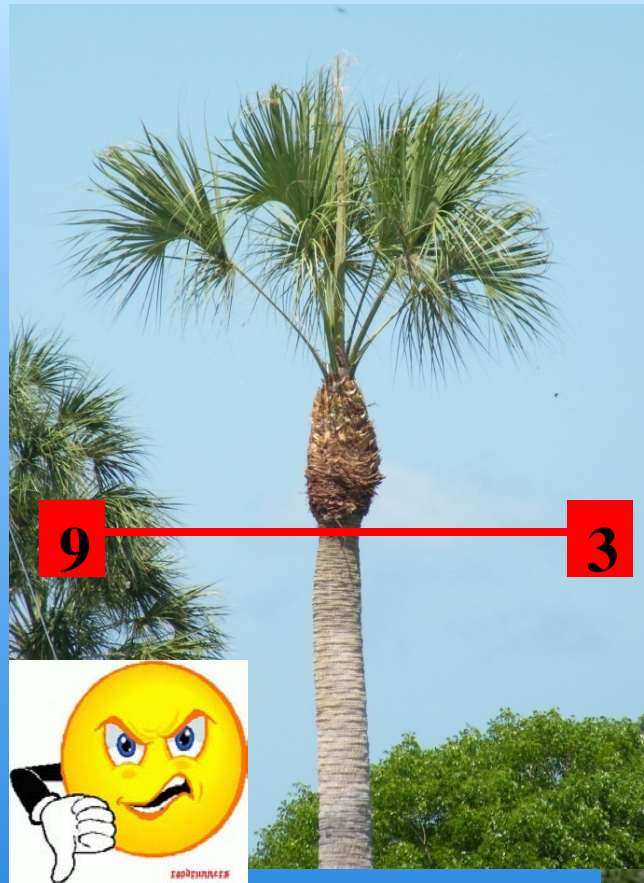


Over pruned!

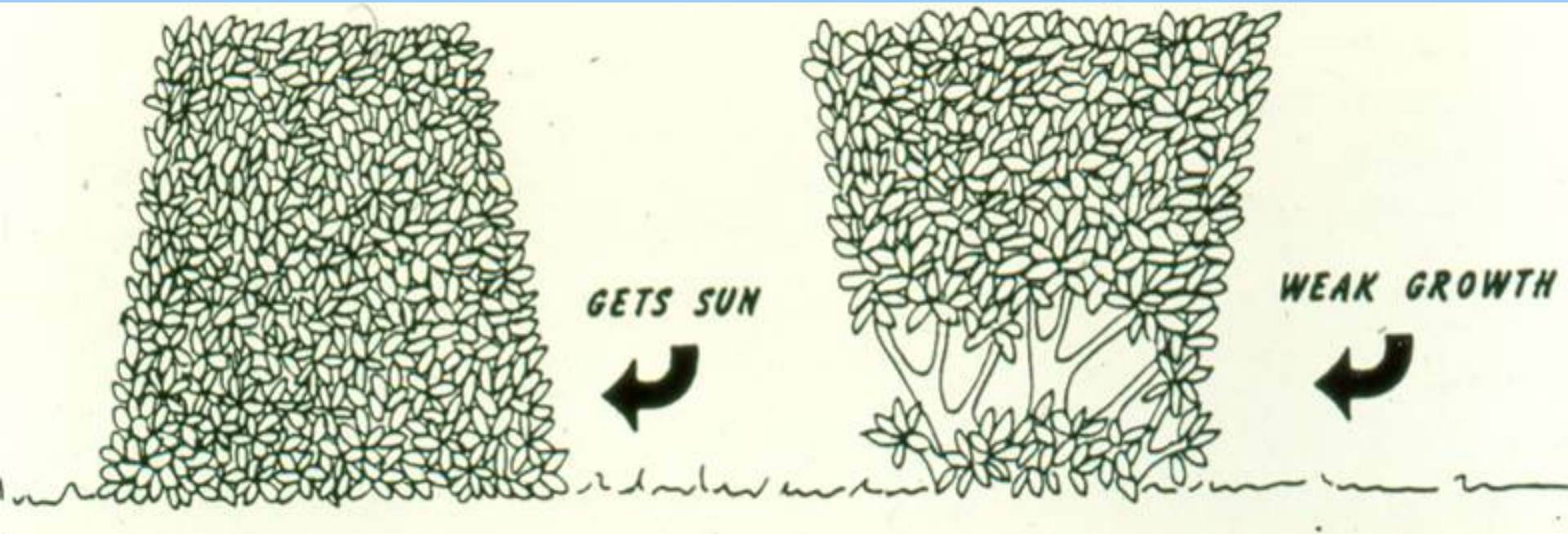


Pruning Palms

- Don't prune palms needlessly
- *Never cut off green fronds.*
- *Never trim palms above 9 to 3.*
- Pruning reduces the palms ability to produce food for itself.

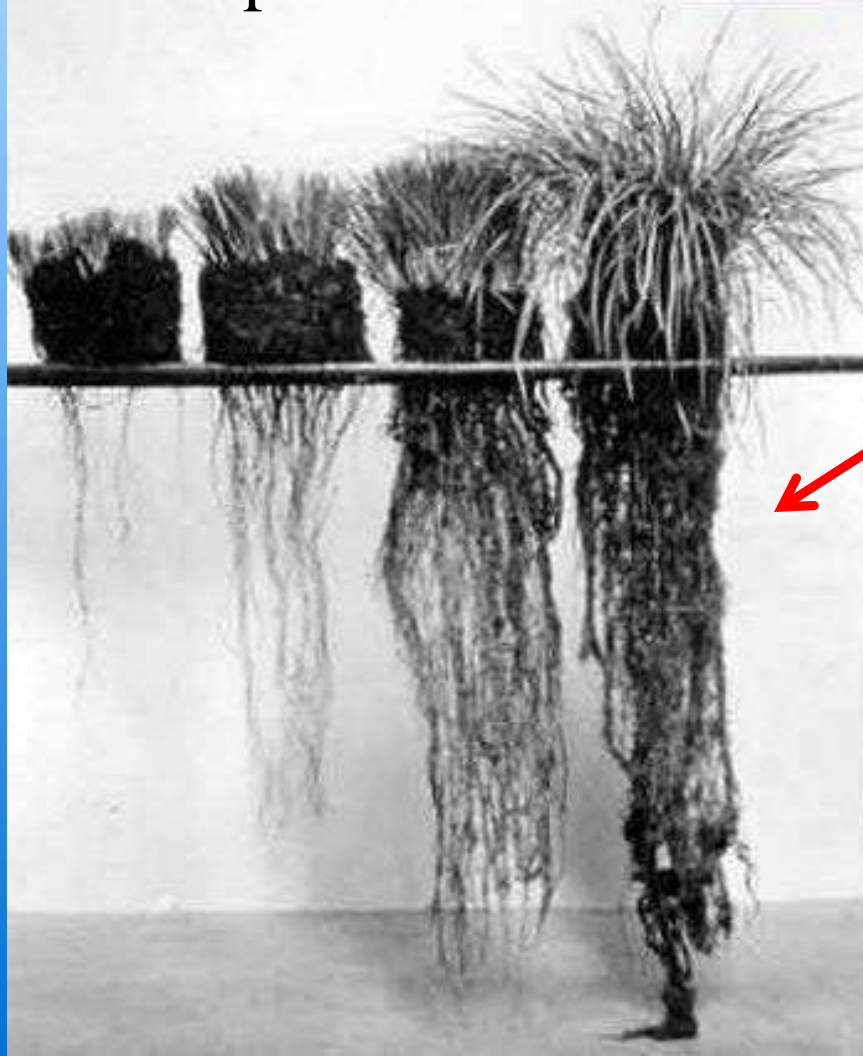


Always prune wider at the base!



Mowing Heights

Grass mowed higher is more drought tolerant
and pest resistant



Mowing Height



Bahia

3 - 4"

Standard St. Augustine

3.5 - 4"

Dwarf St. Augustine

2 - 2.5"

Zoysia

1.5 - 2.5"

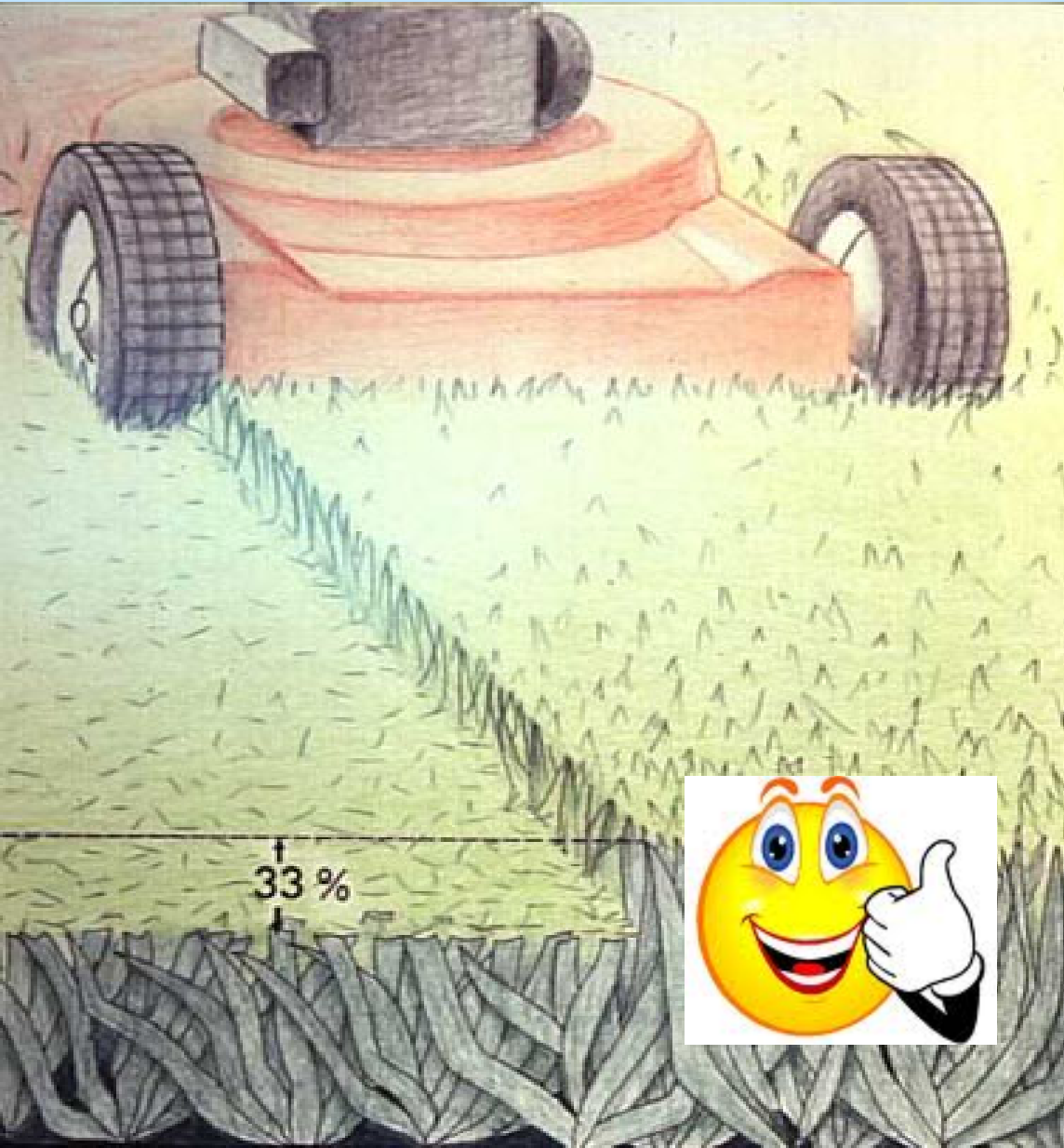
Bermuda

0.5 - 1.5"

**Mowing below recommended heights
is the main cause
of turf death!**



Mowing Height



Remove only 1/3 of the leaf blade at each mowing

EXAMPLE:

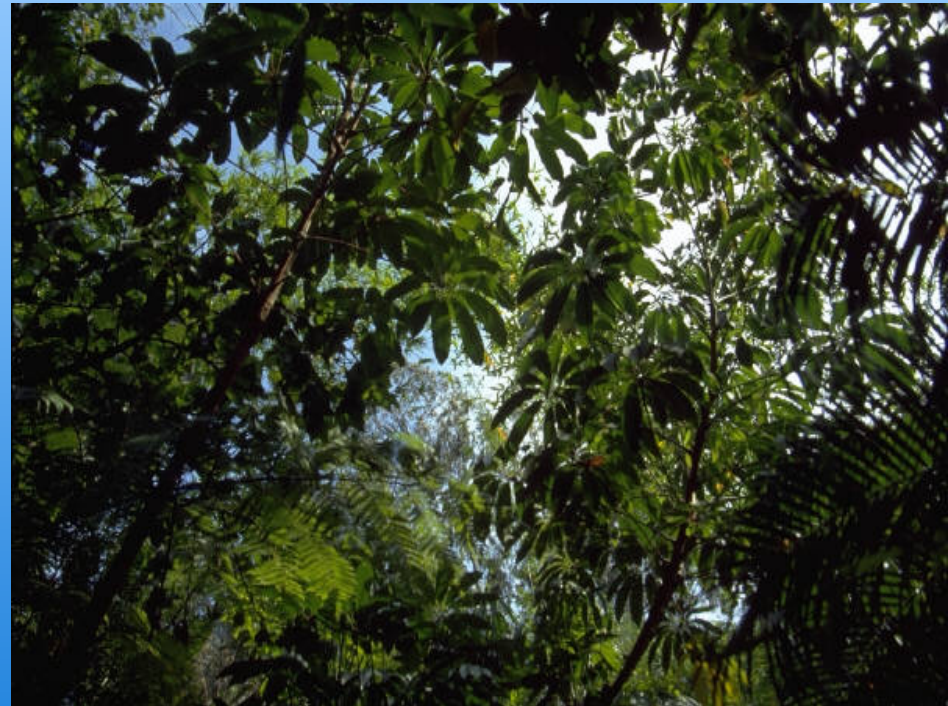
Let St. Augustine reach 6 inches before mowing, then cut 2 inches off top



Tip: Clippings don't cause thatch, over watering and over fertilization causes thatch

Turf vs Shade

- Trim branches to allow more light
- Increase mower height
- Reduce irrigation
- Reduce traffic and other stresses
- Use shade tolerant grass cultivars
- Replace with shade tolerant ground cover or mulched bed



Watering Your Lawn

The average Floridian uses about 124 gallons of water each day

Outdoor water use accounts for 50% of water used by households

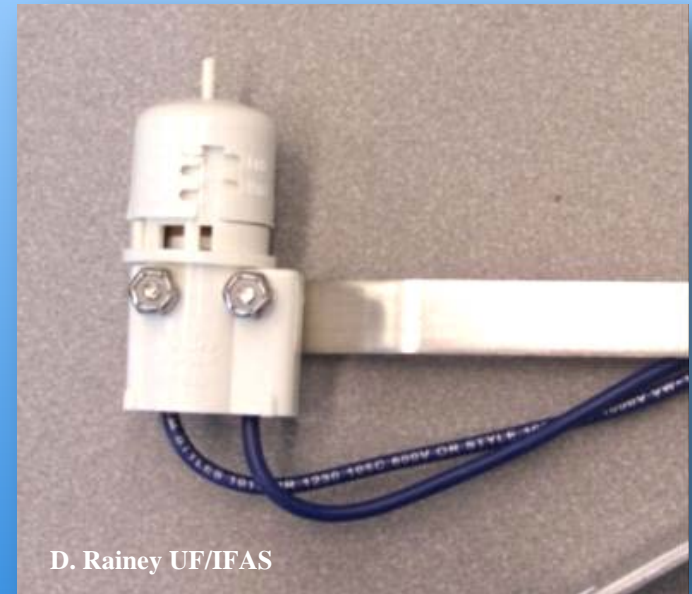
Florida consumes more fresh water than any other state east of the Mississippi River



Be A Water Saver

- Inspect your sprinkler system
- Repair any problems, adjust spray heads and nozzles so you're not watering hard surfaces
- Adjust your timer seasonally!
- Water just before, or just after sunrise
- Make sure you have a working rain sensor: Florida law requires it!

Clue: If it's raining and the sprinkler system is running, it's not working



D. Rainey UF/IFAS

Rain sensors(rain shut-offs)

Frequency vs Duration

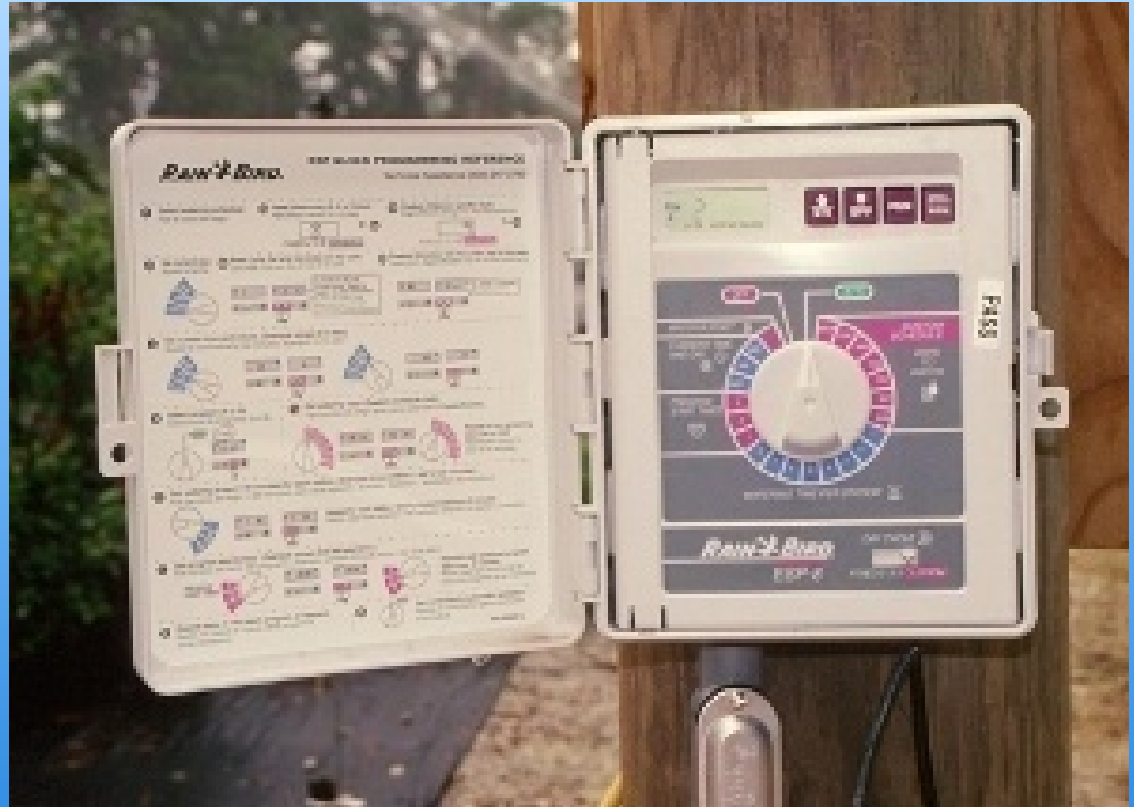
Frequency
is how often you irrigate a zone

Some zones may need water more or less frequently depending on site conditions.

Duration
is how long the zone runs

Calibrate Sprinklers to apply $\frac{1}{2}$ - $\frac{3}{4}$ inches per watering.

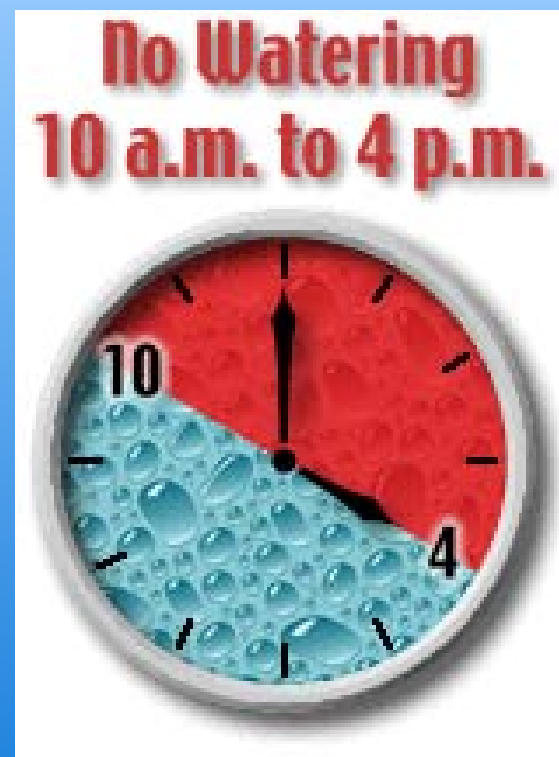
Zones with different sprinkler types or coverage may need different duration.



Duration determines how deep the water goes.

Check Watering Restrictions

- ✓ Statewide water restrictions prohibit watering
- ✓ Notify if watering is occurring during restricted times
- ✓ Website for restrictions
<http://www.swfwmd.state.fl.us/conservation/restrictions/>



How to Tell When A Lawn Is Thirsty



- The grass has a dull, bluish-gray color
- Footprints remain in the grass
- Leaf blades are folded in half

Apply water when about 50% of your grass shows wilt.



Water Less, Weed Less

These weeds love
lots of water:

- Sedges
- Dollar weed
- Bluegrass
- Alligatorweed
- Goosegrass



Handout



Maximizing Participation and Compliance Education Campaigns!



Watershed
where we **LiveWorkPlay**



Watershed
donde **VivimosTrabajamosJugamos**



**SKIP THE
FERTILIZER.**

The gulf will thank you.

Be Floridian.org

THANKS

Maximizing Participation and Compliance



- Internet ads
- Billboards
- Movie theater ads
- Articles in garden sections of newspapers and HOA publications
- Retail stores handouts and workshops
- On-line educational tools (videos, slides, etc.) for homeowners
- Visit www.BeFloridian.org



Protect our Fun!

- Our local economy relies on clean water
- Regulations are to protect and restore water
- One way we can meet State and Federal Regulations
- Supporters of clean water need to share information and spread the word



About Be Floridian

You could call us the Society for Preserving Florida for Boating, Fishing, and Drinks with Little Umbrellas.

Be Floridian

*Enjoy Florida.
It's where you live now.*



Questions?