

Welcome

Florida-Friendly Landscaping™ FFL 101: Gardening With Purpose!



Florida-Friendly Landscaping™ FFL 101: Gardening With Purpose!



Session 1: Turfgrass BMPs & Establishment
Dr. Whitney Elmore, Director | Urban Horticulture Agent
UF/IFAS Extension Pasco County



Session 2: Gardening with Purpose
Julia Palaschak, Environmental Specialist
City of Tampa Water Department



Session 3: How to Reclaim Landscape Beds
Jacquelyn Rivas, Water Conservation Program Coordinator
UF/IFAS Extension Hillsborough County



Session 4: Right Plant, Right Place with Natives
Lynn Barber, Florida-Friendly Landscaping™ Agent
UF/IFAS Extension Hillsborough County

Session 1:

FFL 101: Turfgrass BMPs and Establishment

Dr. Whitney Elmore
UF/IFAS Extension Pasco County Director
Urban Horticulture Agent



Objectives

Turfgrass

- Right plant, right place
- Right care – best management practices
- Sod establishment
- Establishing healthy soil

Chemical applications

- Weed control & herbicides
- Insect and disease control & pesticides
- Fertilizers – dos and don'ts



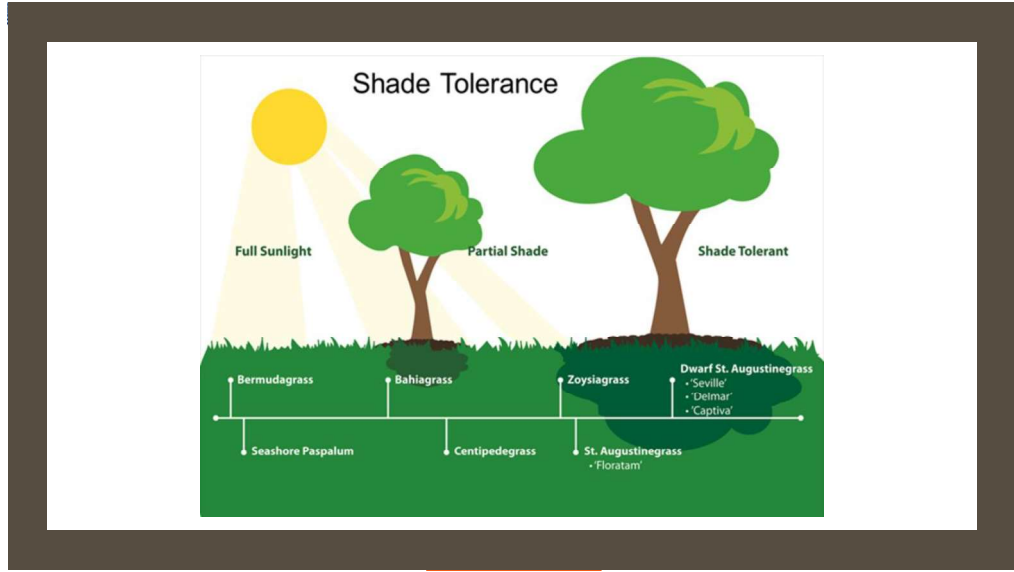
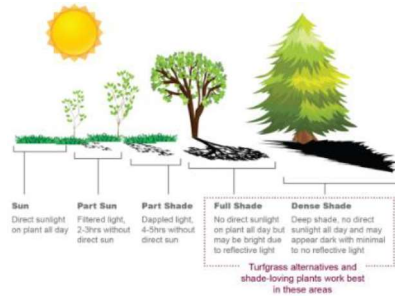
Right plant, right place

Shade tolerance

- Bahiagrass – 8-10 hours full sun
- St. Augustinegrass – 6-8 hours full sun
 - 30% dappled
 - Fewer inputs

Functional purpose of the turf

Irrigation



Right care

Mowing height
 Bahiagrass – 3-4"
 St. Augustinegrass – 3-4"
 No more than 1/3 of the blade

Irrigation
 ¾" per application
 Calibrate system
 Don't mix heads/zone
 Overlapping coverage
 Deep, infrequent

Thatch & clippings

Topdressing with compost



Can improve soil quality – more robust plant root structure



Nutrient and water-holding capacity – higher organic matter



Plant health – active soil microbes may improve quality and appearance



Potential for reduced irrigation and fertilizer



Aeration allows biologically active soil amendment into root zone



Application of ½ to ¾" of a fine screened fully composted product

Verticut in one direction
 Remove debris
 Late spring-mid summer
 Rake in compost
 Water in with ¼" following application
 Light N fertilization 1 week later

Amendment for healthy soil prior to planting

Sand-based w/low organic matter – residential is compacted

Amend soils prior to planting

Soil physical structure
Chemical structure
Biological structure

3-6 cubicyards/1,000 ft²

Tilled into top 6-8"
Well-decomposed & sterile
≤30% C:N or nutrients are tied up

Organic amendments

Compost
Increase water and nutrient holding capacity
Promotes healthy soil organisms
Decomposes over time/release nutrients slowly

Inorganic amendments

diatomaceous earth
calcined clay
perlite

Table 1. Comparison of selected organic soil amendments

| Soil Amendment | pH | Approximate C:N ratio | Water - Holding Capacity | Cation Exchange Capacity | Decomposition Rate |
|-------------------------|------------------|-----------------------|--------------------------|--------------------------|-------------------------------------|
| Biosolids | Acid to alkaline | 10-25 | Fair | Good | Rapid to moderate |
| Composted yard waste | Acid | ≤30 | Good | Good | Moderate |
| Manures | Neutral | ≤25 | Good | Good | Rapid (raw) to moderate (composted) |
| Peat moss | Acid | 15-30 | Good | Good | Rapid to moderate |
| Sawdust ² | Acid | 200-400 | Fair | Fair | Slow |
| Straw ² | Acid | 50-150 | Fair | Fair | Slow |
| Wood chips ² | Acid | 100-500 | Fair | Fair | Slow |

² Due to a high C:N ratio, these materials are best suited for use as mulches on the soil surface. If incorporated in the soil, additions of N fertilizer will be needed to prevent immobilization of N

SOD ESTABLISHMENT

- HOA restrictions
- St. Augustinegrass sod
 - Supplemental irrigation
 - Less weed issues
- Bahiagrass seed or sod
 - 'Argentine'
 - Irrigation
 - Acreage
- Time of year
- 30-day irrigation establishment schedule



30-Day Lawn Establishment Schedule

| Day | # of Cycles | Run Time (fixed spray) | Run Time (rotors) | Time of Day |
|-----------------------|-------------|--|-------------------|--------------------------------|
| Day 1 | 3 times/day | 6 minutes | 18 minutes | Upon Installation |
| <i>My start date:</i> | | Water 3 times on the first day at 6 hour intervals. 1st application occurs immediately following sod installation. | | |
| Days 2 - 10 | 2 times/day | 8 minutes | 24 minutes | Before 8 a.m. and after 6 p.m. |
| <i>My day 10:</i> | | Increase run time as indicated. Water 2 times per day in the morning and the evening at 12 hour intervals. | | |
| Days 11 - 15 | 1 time/day | 16 minutes | 48 minutes | Before 8 a.m. or after 6 p.m. |
| <i>My day 15:</i> | | Increase run time as indicated. Water 1 time per day, in morning or evening. | | |
| Days 16 - 30 | 1 time/day | 20 minutes | 60 minutes | Before 8 a.m. or after 6 p.m. |
| <i>My day 30:</i> | | Increase run time as indicated. Water 1 time per day, in morning or evening. | | |

WEEDS & WEED CONTROL

Grassy, broadleaf, sedges – mostly annuals

Timing is critical

- Pre vs. post-emergence control (not eradication)
- **Pre-emergence** for Central Florida is Feb. 15 (4-5 days of 65-70°)
- 2nd app at 6-9 weeks
- Don't use pre-emergence herbicides 2-4 months before sod/seed
- Post-emergence – spray when young, don't mow prior

Read the fine print – cultivar dependent

- Bahiagrass – 2, 4-D
- St. Augustinegrass – atrazine; no good selective herbicides

Spot treatments

DISEASES

- **Take-all root rot**
 - Preventative fungicides
 - No suppression
- **Large patch disease**
 - Preventative
 - Suppressive
- **Seasonality**
- **Cultural controls are the key**
 - SRN fertilizers
 - Proper fertilization & irrigation
 - Proper cultural methods



INSECT PESTS

- **Bahiagrass**
 - Mole crickets
 - Spring adults
 - Summer nymphs – key to control
- **St. Augustinegrass**
 - Chinch bugs
 - Preventative and suppressive
- **Key – control the weeds = control the pests/disease**
- **Monitoring procedures**
- **Insecticides at damage threshold**
- **Label is the law!**



Fertilizer bmps

SRN fertilizers

- Equal parts N to K
- Low to no P required
- Soil test – soil pH

Not before rain event

- Irrigate with ½”

Only during active growing season

- March/April – October

Sample Fertilizer Label 16-0-8

| GUARANTEED ANALYSIS | |
|------------------------------------|--------|
| Total Nitrogen (N) | 16.00% |
| 4.0% Ammoniacal Nitrogen | |
| 12.0% Urea Nitrogen* | |
| Soluble Potash (K ₂ O) | 8.00% |
| Sulfur (S) | 4.00% |
| 4.0% Combined Sulfur (S) | |
| Iron (Fe) | 2.00% |
| 0.2% Water Soluble Iron (Fe) | |
| Manganese (Mn) | 1.00% |
| 0.11% Water Soluble Manganese (Mn) | |

Derived from: Polymer-coated urea, urea, ammonium sulfate, potassium chloride, iron sucrate, manganese sucrate.

*8.0% slowly available nitrogen from polymer coated urea.

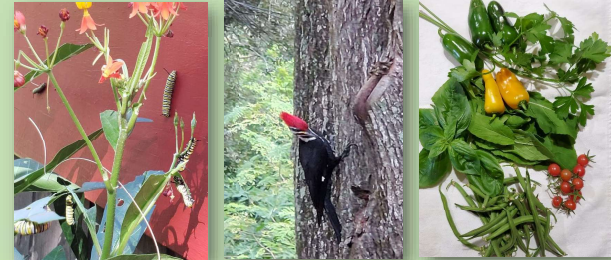
$$8/16 = 0.5 \times 100 = 50\% \text{ SRN}$$

FERTILIZER DETAILS

- Bahiagrass – 2-4 lbs N/1,000 ft² annually
- St. Augustinegrass – 2-5 lbs N/1,000 ft² annually
- 0.5-1.0 lb N/1,000 ft² max per application
 - 30% SRN up to 1 lb
 - Below 30% SRN up to 0.5 lb
- Calibrate spreader



Session 2: Gardening with Purpose



Julia Palaschak

Environmental Specialist, City of Tampa Water Department



Hillsborough County Florida



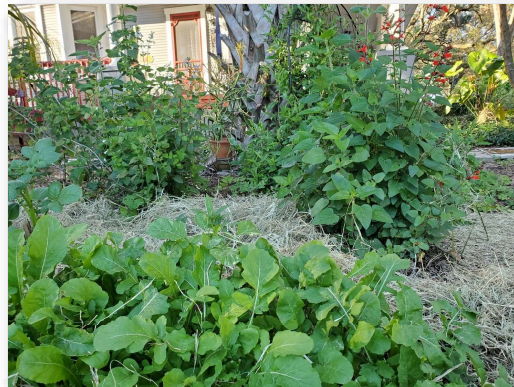
UF IFAS Extension UNIVERSITY OF FLORIDA

Florida-Friendly Landscaping PROGRAM

What can a garden do?

A garden can...

- Feed us
- Save money on groceries
- Provide food and shelter for wildlife
- Improve and sustain our health
- Bring neighbors together
- Teach us about the natural world
- Teach us patience
- Tell us what season it is
- Fill us with gratification
- Provide retreat for contemplation
- Increase property value



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

| CROP | CENTRAL FLORIDA PLANTING DATES | | | | | | | | | | | | Days to Harvest |
|----------------------|--------------------------------|------|------|------|-----|------|------|------|-------|------|------|------|-------------------|
| | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | |
| Bears, bush | | | | | | | | | | | | | 50-60 |
| Bears, pole | | | | | | | | | | | | | 50-70 |
| Bears, lima | | | | | | | | | | | | | 65-75 |
| Bells | | | | | | | | | | | | | 50-65 |
| Broccoli | | | | | | | | | | | | | 75-90 |
| Cabbage | | | | | | | | | | | | | 80-110 (70-80) |
| Centaloupe | | | | | | | | | | | | | 75-90 (60-70) |
| Carrots | | | | | | | | | | | | | 80-90 |
| Cauliflower | | | | | | | | | | | | | 75-90 (50-70) |
| Celery | | | | | | | | | | | | | 115-135 (80-105) |
| Chinese cabbage | | | | | | | | | | | | | 70-90 (60-70) |
| Collards | | | | | | | | | | | | | 70-90 |
| Corn, sweet | | | | | | | | | | | | | 60-95 |
| Cucumbers | | | | | | | | | | | | | 50-65 (40-50) |
| Eggplant | | | | | | | | | | | | | 80-110 (70-80) |
| Endive/scalope | | | | | | | | | | | | | 80-95 |
| Kale | | | | | | | | | | | | | 80-95 |
| Kohlrabi | | | | | | | | | | | | | 70-80 (50-55) |
| Lettuce - Crisp | | | | | | | | | | | | | 50-60 |
| Lettuce - Butterhead | | | | | | | | | | | | | 50-60 |
| Leaf | | | | | | | | | | | | | 50-60 |
| Romaine | | | | | | | | | | | | | 50-60 |
| Mustard | | | | | | | | | | | | | 40-60 |
| Onion | | | | | | | | | | | | | 60-75 |
| Onion - Bulbing | | | | | | | | | | | | | 130-160 (110-130) |
| Peas - Green | | | | | | | | | | | | | 50-75 (30-40) |
| Peas - English | | | | | | | | | | | | | 50-70 |
| Peas - Southern | | | | | | | | | | | | | 60-90 |
| Peppers | | | | | | | | | | | | | 80-110 (60-80) |
| Potatoes | | | | | | | | | | | | | 85-110 |
| Pumpkin | | | | | | | | | | | | | 80-110 (60-100) |
| Radish | | | | | | | | | | | | | 20-30 |
| Squash | | | | | | | | | | | | | 80-110 (70-80) |
| Squash, summer | | | | | | | | | | | | | 60-75 (50-60) |
| Squash, winter | | | | | | | | | | | | | 80-110 (70-80) |
| Strawberry | | | | | | | | | | | | | 60-110 |
| Sweet Potato | | | | | | | | | | | | | 120-140 |
| Tomatoes - Slab | | | | | | | | | | | | | 80-110 (70-80) |
| Tomatoes - Ground | | | | | | | | | | | | | 80-110 (70-80) |
| Turnips | | | | | | | | | | | | | 40-60 |
| Watermelon S. M. L. | | | | | | | | | | | | | 85-95 (60-80) |

Planting period: Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec.

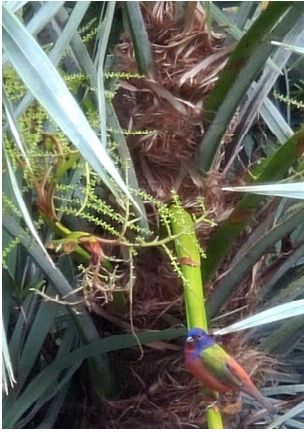
Harvest dates: [diagonal lines] Harvest dates assume transplants were used. If using seeds, the harvest dates will be later.

* Transplantability: 1 Easily survives transplanting, 2 Survives with care, 3 Use seeds or containerized transplants only.

** Days to Harvest: Days from seeding to harvest. Values in parentheses are from transplanting to harvest.

Food in the garden

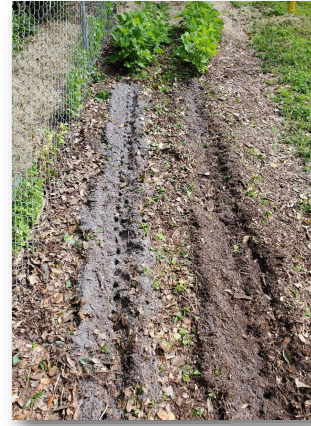
- Snow peas
- Green beans
- Peppers
- Arugula
- Kale
- Collards
- Everglades tomatoes
- Parsley
- Basil
- Blueberries
- Butternut squash
- Roselle
- Okra
- Citrus



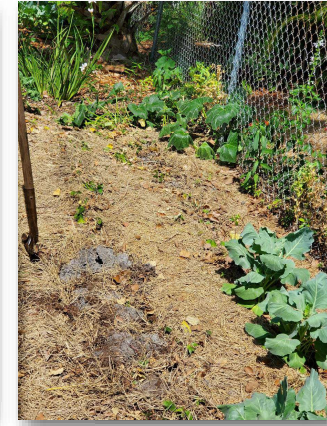
April

- Beauty berry
- Milkweed
- Simpson stopper
- Cherry laurel
- Pokeweed
- Porterweed
- Pentas
- Corky stem passion vine
- Salvia
- Wild coffee
- Gaillardia
- Fire bush
- Cassia

Plant, harvest, prepare for the next crop



February



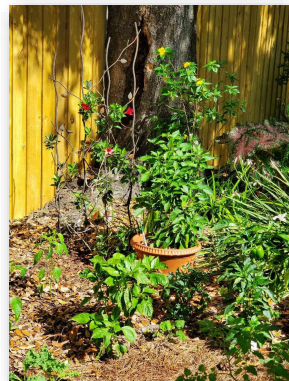
May

The pepper project



February

- Anaheim
- bell
- jalapeno
- yellow sparkle
- banana
- poblano

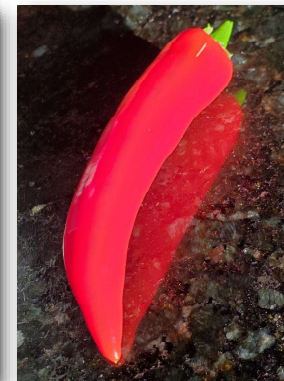


May

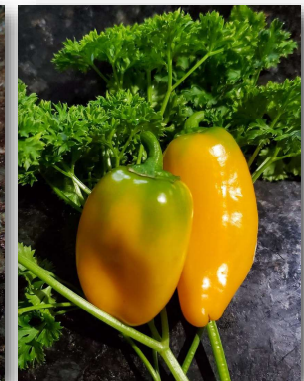
The pepper project



November



February



April

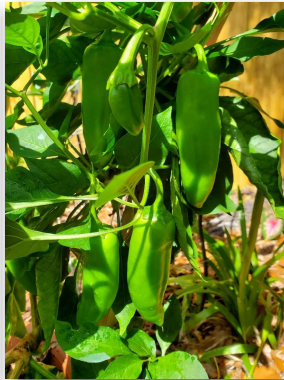
The pepper project



Bell



Banana
May

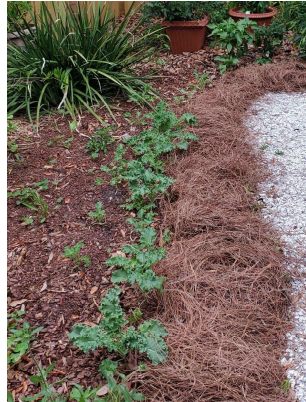


Annaheim

Arugula, kale, collards



February



April



May

Molybdenum, vitamin A, vitamin B complex, vitamin C, vitamin E, vitamin K, boron, calcium, iron, silicon, sodium, sulfur, enzymes

Everglades tomatoes



April



February



April

Blueberries, butternut squash, roselle



March



May



May

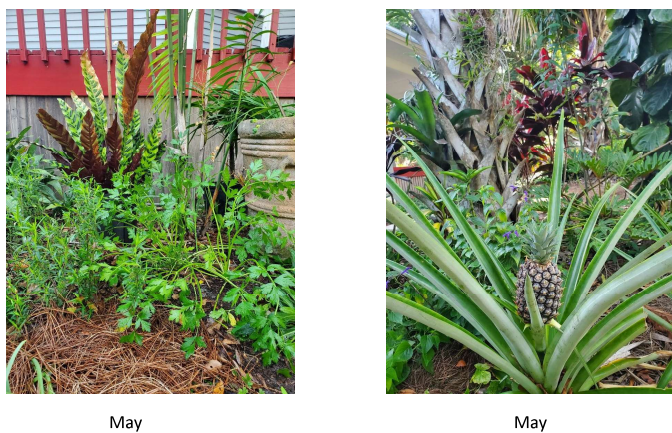
Okra, citrus, amaranth (callaloo)



Potatoes



Parsley and pineapple



American beauty berry, milkweed, Simpson stopper



Pentas, pokeweed, porterweed

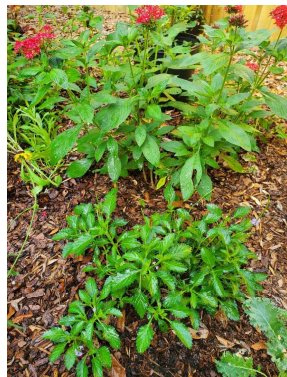


May



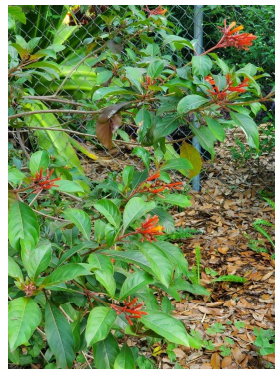
July

Portions of pokeweed are poisonous

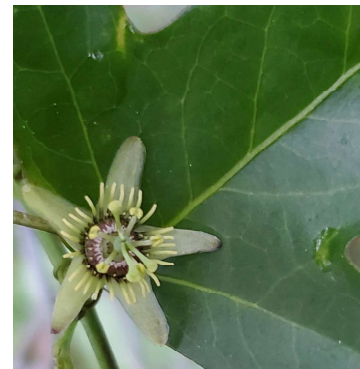


May

Firebush, corky stem passion vine, salvia



May



May



April

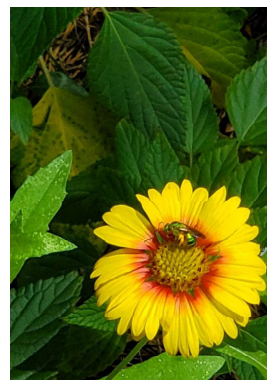
Cassia, wild coffee, gaillardia



October



October



April



Challenges

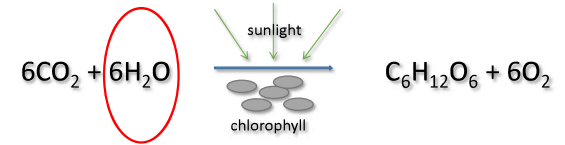
- Lubber grasshopper
- Cuban brown snail
- Root knot nematodes
- Windy spring days
- Effective watering during the dry growing season



Not harmful



Photosynthesis requires water



Let's Talk About Water

TO ENSURE PROMPT CREDIT PLEASE RETURN THE ABOVE PORTION OF BILL WITH YOUR PAYMENT

JULIE PRASCHAK
TAMPA, FL 33604-3222

Bill Date: 03/05/2021

Service For: JULIE PRASCHAK Service To: 03/03/2021

| Meter Number | Current | Previous | Days of Service | CCF (100 cu ft) | Gallons (1000's) |
|----------------|---------|----------|-----------------|-----------------|------------------|
| 16076817 WATER | 126 | 126 | 26 | 3 | 2 |

| | | |
|--------------------------------|----------------|-------|
| LAST BILLING | 53.50 | |
| LESS PAYMENTS | 53.50 CR | |
| WATER BASE CHARGE 5/8" | 1 Meter @ 3.00 | 3.00 |
| WATER TIER 0 CHARGE | 3.0 @ 2.21 | 6.63 |
| TBW PASS-THROUGH | 3.0 @ 0.00 | 0.00 |
| WATER SUBTOTAL | 9.63 | |
| UTILITY TAX 10% | | 0.96 |
| WASTEWATER BASE CHARGE 5/8" | 1 Meter @ 3.00 | 3.00 |
| WASTEWATER CHARGE | 1.0 @ 5.00 | 5.00 |
| SOLID WASTE RESIDENTIAL CHARGE | | 34.91 |

Amount Now Due \$53.50

Your Account Number 16076817

Water Customer Class RESIDENTIAL

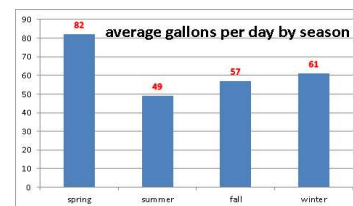
Water Usage History

| Months | Gallons (1000's) |
|--------|------------------|
| MAR | 2 |
| FEB | 2 |
| JAN | 2 |
| DEC | 2 |
| NOV | 3 |
| OCT | 1 |
| SEP | 1 |
| AUG | 2 |
| JUL | 2 |
| JUN | 3 |
| MAY | 4 |
| APR | 3 |
| MAR | 2 |

Sewer Maximum/Lawn Credit: 1 CCF/MO

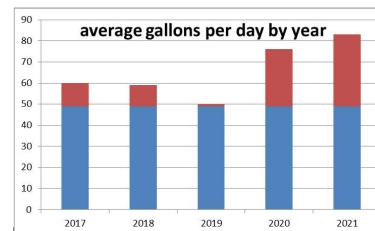
Pay This Amount

Watering with purpose



By the numbers:

- Summer use = indoor use = 49 gallons per day
- Outdoor use 2017-2018 = 11 gallons per day
- Outdoor use 2020-2021 = 30 gallons per day



Vegetable gardening increased average water use by 19 gallons per day = \$20 per year

April & October are highest months of use

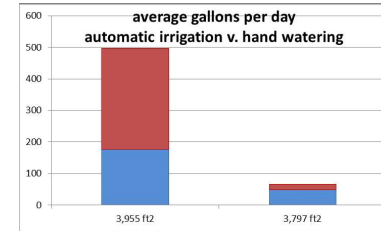
How big is the garden?



By the numbers:

- Lot = 10,000 ft²
- House, apron, porch & decking = 5,000 ft²
- Interior gardens = 5,000 ft²
- Exterior street garden = 1,000 ft²
- Exterior mowed area = 1,000 ft²
- 30 gallons per day for 6,000 ft² of gardens

How much water can a garden use?



- | | |
|---|--|
| Automatic irrigation | Hand watering as needed |
| • 320 gallons / day | • 30 gallons / day |
| • 12 gallons / minute | • 1 ½ gallons / minute |
| • 29.5 gallons / ft ² / year | • 1.6 gallons / ft ² / year |

UF/IFAS seasonal watering for lawn including rainfall: 16.6 gallons / ft² / year

Would you like help understanding your outdoor water use?

City of Tampa customers:

savewater@tampa.gov

Julia, Justin, Ileana, Ryan, Tonia
City of Tampa Water Department

Hillsborough County customers:

(813)744-5519

Paula, Jackie and Sonya
UF/IFAS Hillsborough Extension

Goal for Tampa Bay: Save 11 million gallons of water per day by 2030

Get Rebates for Saving Water

Rebates for homes and businesses to help save water indoors and outside.

- ✓ High-efficiency toilets
- ✓ Smart irrigation controllers
- ✓ Restaurant spray valves
- ✓ Commercial dishwashers

...and more!

Learn more at TampaBayWaterWise.org





Hillsborough
County Florida



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Florida-Friendly
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Save 5 starting today

1. Tampabaywaterwise.org for rebates
2. Water landscape by hand, only when needed
3. Check for leaks regularly
4. Use 1 gallon per minute aerators on bathroom faucets
5. Use 1.5 gallon per minute showerheads
6. Take 5-minute showers
7. Collect rainwater
8. Turn the water off!

Save Water Save Cash

Julia Palaschak
savewater@tampa.gov



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Landscaping PROGRAM

Session 3:

How to Reclaim Landscape Beds

Jacqlyn Rivas, Water Conservation Program Coordinator
UF/IFAS Extension Hillsborough County

Preview

- How to reclaim landscape beds
- Water efficient plant establishment



Hillsborough
County Florida



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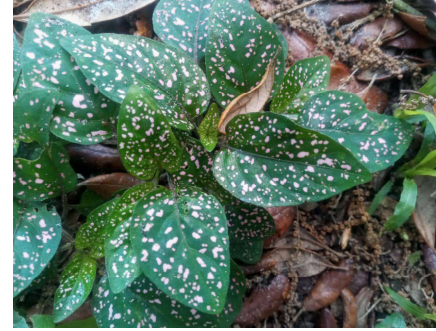
Florida-Friendly
Landscaping PROGRAM



Reclaiming Landscape Beds

A THOUGHTFUL APPROACH

Site Inventory and Analysis



(Photo Credit: Janet Rivas)

- Evaluate site conditions
- Identify plants to keep/discard
- Divide perennials if needed
- Find a certified arborist for
 - Tree removal
 - Tree care

Manage Weeds

- Hand picking
- Solarization
 - Can also kill good soil bacteria
 - Must have enough sun
- Chemical control
 - Follow product label



(Photo Credit: Jacqulyn Rivas)

PREPARE LANDSCAPE BED



(Photo Credit: Jacqulyn Rivas)

- Test soil/compost pH
- Amend soil with compost
- Fix grade (level)

PLANT SELECTION & DESIGN



(Photo Credit: Jacquyn Rivas)

- **Choose the right plant by considering**
 - Sun
 - Soil
 - Water
 - Mature height/spread

PLANT PLACEMENT

- **Avoid overcrowding**
 - Decreases air circulation
 - Increases susceptibility to disease
 - Requires excessive pruning



(Photo Credit: Jacquyn Rivas)

PLANT PLACEMENT

- **Avoid overcrowding**
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(Photo Credit: Jacquyn Rivas)

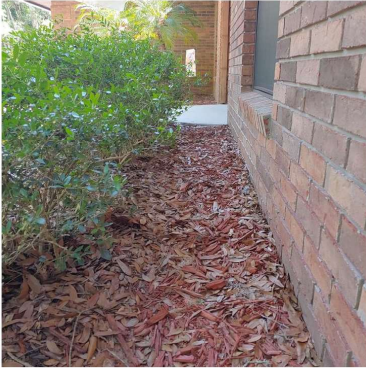
PLANT PLACEMENT

- **Avoid planting under eaves**
 - Plants might not receive adequate rain
 - Prevents plant damage
- **Plant shade trees at least 10 feet away from foundation**



(Photo Credit: Jacquyn Rivas)

PLANT PLACEMENT

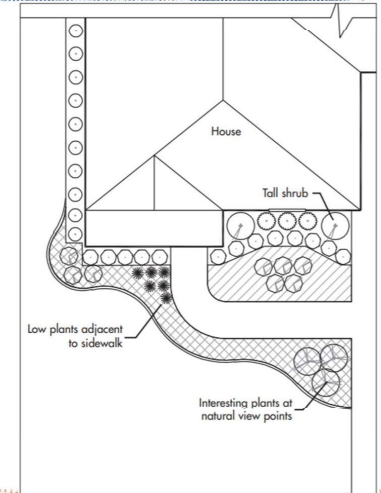


(Photo Credit: Jacqlyn Rivas)

- **Avoid planting under eaves**
 - Plants might not receive adequate rain
 - Prevents plant damage
- **Plant shade trees at least 10 feet away from foundation**
- **shrubs 3 feet away from foundation**

FLORIDA-FRIENDLY LANDSCAPING GUIDE TO PLANT SELECTION & LANDSCAPE DESIGN

- **Plant identification tables**
 - Key on page 31
- **Landscape design**
 - Challenges
 - Plant characteristics
 - Design solutions



(Front entry, solution 2, page 7)

PURCHASING PLANTS



(Photo Credit: Jacqlyn Rivas)

- **Avoid purchasing plants that are**
 - Diseased/pest-infested
 - Unhealthy
 - Leggy
 - Rootbound
- **Check**
 - Stems
 - Under leaves
 - Roots



How to Establish Landscape Plants

A WATER-EFFICIENT APPROACH

Factors that Effect Establishment Periods

| encourages growth | limits growth | little or no effect |
|--|--------------------------------|---|
| loose soil | compacted soil | peat or organic matter added to backfill soil |
| proper irrigation management | little or no irrigation | root stimulant products |
| mulch 8' or more around planting hole | grass and weeds close to trunk | fertilizing at planting |
| root flare slightly above soil surface | planting too deep | adding spores of mycorrhizae* |
| leaving top of tree intact | pruning at planting | water absorbing gels |

*can enhance growth on seedlings under certain circumstances

(Source: <https://hort.ifas.ufl.edu>)

Establishing Trees: Watering Frequency

| Type of Plant | Establishment Period | Watering Schedule ^A | Recommended Amount of Water ^B |
|--|----------------------|---|---|
| Trees with less than 2" trunk diameter | 3 to 6 months | 1. Daily for 2 weeks 2. Every other day for 2 months 3. Then weekly until established | 2 to 3 gallons per inch of trunk diameter |
| Trees with 2" to 4" trunk diameter | 6 to 12 months | 1. Daily for 1 month 2. Every other day for 3 months 3. Then weekly until established | 2 to 3 gallons per inch of trunk diameter |
| Trees with over 4" trunk diameter | 12 or more months | 1. Daily for 6 weeks 2. Every other day for 2 months 3. Then weekly until established | 2 to 3 gallons per inch of trunk diameter |

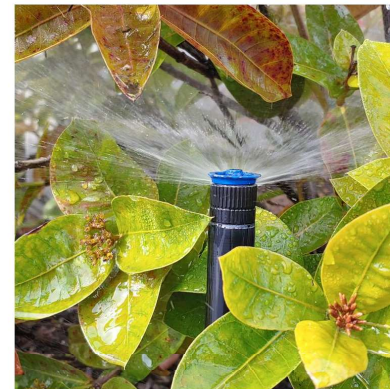
(Source: tampabaywater.org)

Establishing Shrubs: Watering Frequency

| Type of Plant | Establishment Period | Watering Schedule ^A | Recommended Amount of Water ^B |
|---|----------------------|---|--|
| Shrubs in 1-gallon containers | 3 to 6 months | 1. Every day for first few weeks after planting 2. Gradually decrease to every other day, to every third day until established | 1 quart |
| Shrubs in 3-gallon containers | 6 to 12 months | 1. Every day for first few weeks after planting 2. Gradually decrease to every other day, to every third day until established | 2 quarts |
| Shrubs in 7-gallon containers or larger | 1 to 2 years | 1. Every day for first few weeks after planting 2. Gradually decrease to every other day, to every third day until established | 1 gallon |

(Source: tampabaywater.org)

Establishing Plants: Watering Methods



(Photo Credit: Jacqulyn Rivas)

High-volume inground irrigation not recommend

- Turf requires different amounts of water
- Stream can damage plants
- Plant interference causes uneven water distribution
- System can apply too much water
- Water ordinances limit inground irrigation use

Establishing Plants: Watering Methods

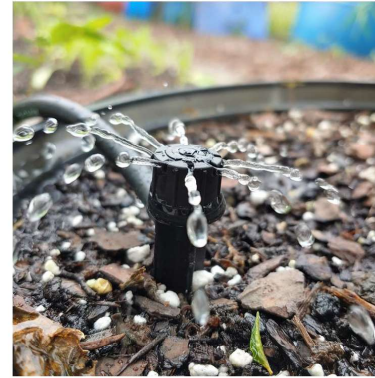


(Photo Credit: Gilmour)

Recommended watering methods

- Hand watering
- Watering pale
- Use nozzle with water hose
 - Swivel
 - Control flow range
 - Locking mechanism
 - 8 Patterns: mist, shower, fill, rinse, softwash, clean sweep, and jet

Establishing Plants: Watering Methods



(Photo Credit: Jacqlyn Rivas)

Recommended watering methods

- Microirrigation (low flow)
 - Not restricted
 - Conserves water
 - Reduces erosion
 - Reduce pest pressure

ESTABLISHING PLANTS

- Establishment period increases if underwatered
- Ensure proper moisture during summer/drought
- Do not water
 - Between 10 am and 4 pm
 - If root ball is saturated
 - 24 hours after receiving ¼-inch of rain
- Use a rain gauge



(Photo Credit: Jacqlyn Rivas)

ESTABLISHING PLANTS

- Plants are established when
 - They survive/grow without irrigation
 - Roots have grown to edge of foliage canopy
- Watering after establishment might be required
 - For drought-sensitive plants
 - When plants wilt



(Photo Credit: UF/IFAS)



Session 4:
Right Plant, Right Place with Natives

Lynn Barber, Florida-Friendly Landscaping™ Agent
UF/IFAS Extension Hillsborough County

UF | IFAS Extension UNIVERSITY of FLORIDA
Florida-Friendly Landscaping™ PROGRAM
UNIVERSITY of FLORIDA

Florida-Friendly™ Landscaping

- What is it?
 - Integrated approach
 - Less time/\$
 - Wildlife friendly
- Goals
 - Conserve
 - Protect



Right Plant, Right Place

- 1st and foremost of 9 Florida-Friendly Landscaping™ principles
- Focus on water and environmental conservation
- Why?
 - Negative environmental impacts
 - FL current population 20 million residents
 - By 2060, 35 million residents projected
 - Water - not a renewable resource at the rate being used

Florida-Friendly™ Landscaping

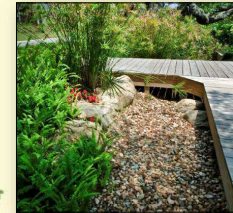
Nine Principles

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



Right Plant, Right Place

- Plants selected for a specific site will require minimal amounts of water, fertilizer, pesticides and maintenance
- Thorough planning will help you place plants where their needs and yours are met



Are These Good Choices?



Right Plant, Right Place?



Tips and Examples

Narrow strips of grass - difficult to maintain



Tips and Examples



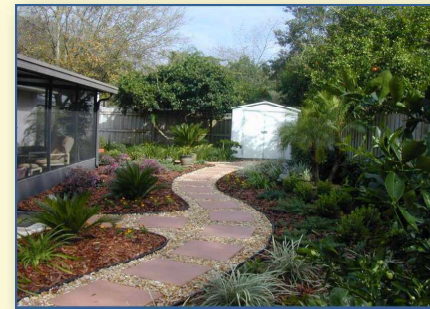
Tips and Examples

Before:



Tips and Examples

After:



Tips and Examples

Before:



After:



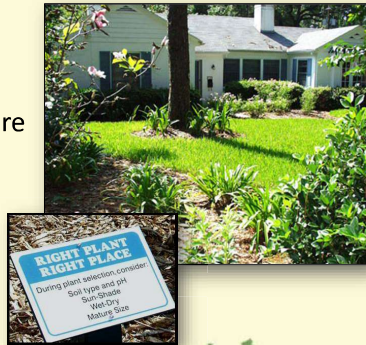
Planning Your Landscape: Keys to Success

- Plan first
 - Analyze your site
 - Determine needs
 - Design considerations
 - Site preparation
- Purchase
- Plant Last
- Florida-Friendly Principles in Practice

Key to Success

Proper planning and plant selection

- Avoids problems later
- Saves energy, money, water, effort, etc.
- Makes the landscape more enjoyable
- Ensures needs are met



Key to Success

Plan First, Plant Once

- This is a process, not a one-time event!
- Know the plants and the conditions required to thrive
- Consult with your UF/IFAS County Extension Office
- View edis.ifas.ufl.edu or UF 'topic'
- Utilize regional gardening books and magazines



Site Analysis

What do you have and how can you use it?

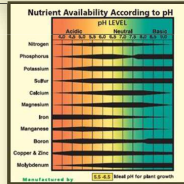
- Light
- Soil type
 - Sand, clay, silt
 - Soil pH
 - Soil moisture
- Soil pH
 - Minimal cost



Clay



Sand



Standing water

Site Analysis

What do you have and how can you use it?

- Views
- Hardscape
- Structural limitations and obstructions



thetreecenter.com



Sun or shade?

Site Analysis

Climatic Conditions

- Consider the orientation of your home
- Locate microclimates in your landscape
- Use The FFL Guide to Plant Selection & Landscape Design to guide plant choices
- Choose plants recommended for your zone, which is????



Determine Needs and Wants

How Do You Currently Use the Property?

- Family activities
- Pets
- Storage
- Vegetable garden
- Outdoor entertainment



Design Considerations

Level of Maintenance



Design Considerations

Level of Maintenance



Design Considerations

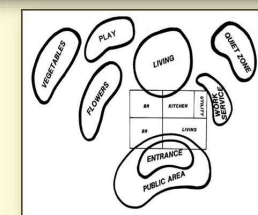
Mature Size and Other Factors

- Mature height and spread
- Growth rate
- Shape
- Salt tolerance
- Native or non-native adaptive
- Susceptibility to pests/disease



Landscape Plan

- Arrange activity areas
- Draw where you want trees, shrubs, ground covers, or flowering plants
- Group plants according to needs



Site Preparation

- Remove unwanted plants and debris
- Fix grade
- Amend the soil



Buying Healthy Plants

- Look for new growth
- Roots should be white and fibrous
- Avoid pot bound plants
- Avoid diseased or insect infested plants



Comparing Landscapes

Landscape 1

- Quarter acre
- Entire ¼ acre covered in lawn (10,890 sq. ft.)

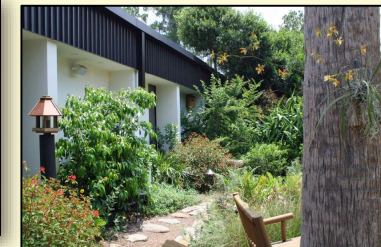


Landscape 2

- Quarter acre
- 1/16 covered in lawn (2723 sq. ft.)
- Rest of the area is lower-maintenance plants

Landscape 1 has four times the energy costs as Landscape 2! (Parker 1982)

Environmentally Friendly Landscaping



Your yard is an integral part of the protection and preservation of Florida's environment

Natives – Ornamental Grasses

Elliott's lovegrass *Eragrostis elliottii*, Muhly grass
Muhlenbergia capillaris

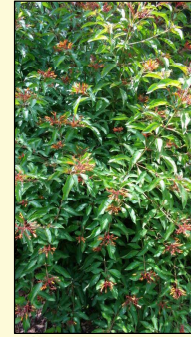


Photo credit: Lisa Sanderson, UF



Natives – Shrubs

Firebush/Scarlet bush *Hamelia patens*,
Wild coffee *Psychotria nervosa*



Natives – Perennials

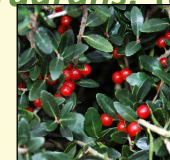
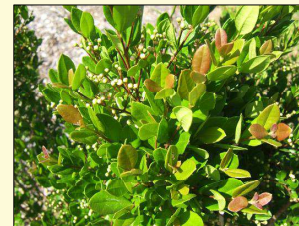
Beach sunflower *Helianthus debilis*, Salvia
Salvia spp.



Photo by Julia Palaschak

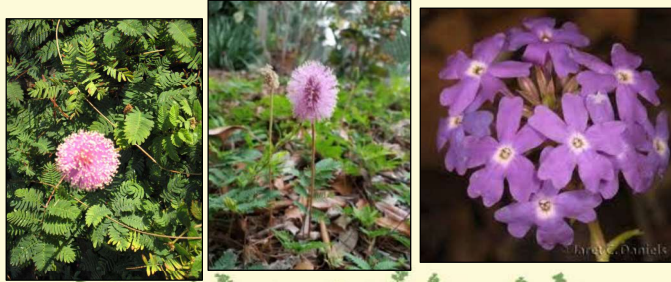
Natives – Trees

Simpson's stopper *Myrcianthes fraarans*, Yaupon
holly *Ilex vomitoria* and cvs.



Natives – Groundcovers

Sunshine mimosa Powderpuff *Mimosa strigillosa*, Tampa vervain, Tampa mock vervain *Glandularia tampensis*



Natives – Palms

Florida Zamia *Zamia floridana*, Needle palm *Rhapidophyllum*



Conclusions

The decisions we make about our landscapes have a profound impact on water quality.

With a little thought, our landscapes can combine beauty, function, and environmental protection.



Show Off Your Landscape!

Community Water Wise Award Program
Sponsored by Tampa Bay Water &
Florida-Friendly Landscaping™ Yard Recognition



Thank you!

Protect water quality, conserve water and save money

Reduce, reuse, recycle and repeat!



Hillsborough
County Florida

Presentation revised by Lynn Barber, FFL Agent

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