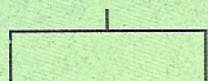
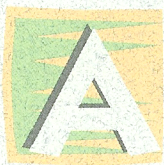


Scale

1 inch = ____ feet



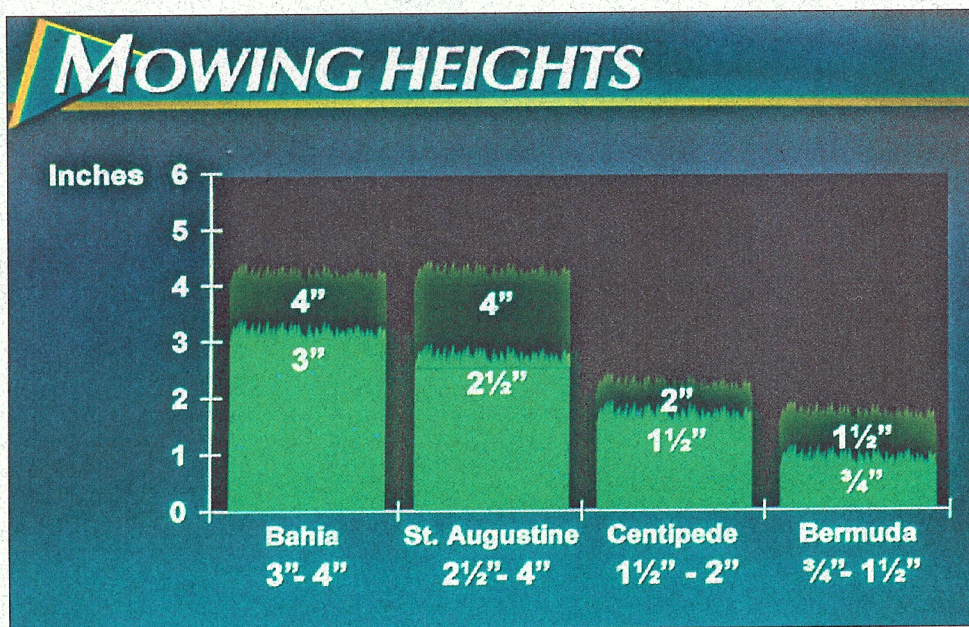
Water Efficiently



truly efficient way to use water in a yard is to design the yard so that it thrives predominantly on rainfall. Even if your yard has a lawn and specialty gardens, it is possible to design it as a Florida Yard in which you can water the plants as needed.

However, even an ideal landscape design can be over-watered.

That's why many of the actions in this section deal with sprinkler systems. It's extremely important that each irrigation zone is set to meet the needs of the plants in that area. For example, a lawn in full sun will demand more frequent irrigation than an established plant bed of shrubs and groundcovers. Remember to follow all local and state watering restrictions.



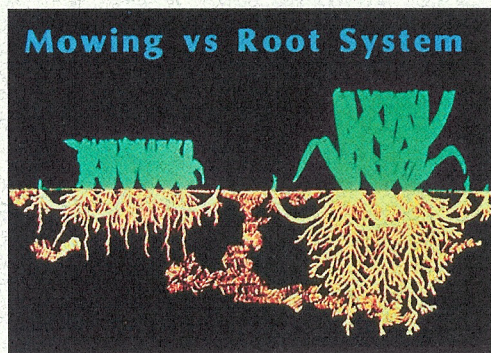
Mow lawns at the recommended mowing heights to encourage healthy growth of the root system.

Give your lawn a break during the Winter!

Avoid the temptation to keep your lawn green and growing year-round. Lawns go semi-dormant in central and northern Florida from November through March. During this time, the lawn will only need water every ten days.

Let your plants tell you when they need water and then water them correctly.

See the *FY&N Handbook* for ways to tell when your lawn and plants need water. The *Handbook* also shows you how to calibrate your sprinkler system so your plants get the water they need. Also go to <http://edis.ifas.ufl.edu/EP110> for the latest UF recommendations.



The higher the grass, the more extensive the root system, and the healthier the lawn.

FLORIDA YARD ACTIONS

- ☐ Design and maintain a yard that thrives predominantly on rainfall once plants are established.
Credit: 6 inches.
- ☐ Water your lawn and other plants only when they show signs of stress. (Comply with any existing watering restrictions in your community.)
Credit: 3 inches.
- ☐ Calibrate your sprinkler(s) to apply 1/2 to 3/4 inch of water per application.
Credit: 3 inches.
- ☐ Mow lawns high to encourage a deeper, more drought and pest tolerant root system. A higher cut also helps shade out weeds. Cut no more than 1/3 the height of grass blades with each mowing. Credit: 2 inches.
- ☐ Put a rain gauge in your yard to track rainfall to avoid unnecessary watering.
Credit: 2 inches.
- ☐ Connect an automatic rain shut-off device to your sprinkler system's timer. Set the device to 1/2 inch so it will override your system's timer when enough rain has fallen. Replace back-up batteries in your system's timer each year before the rainy season. Check to see if the shut-off device is working properly.
Credit: 2 inches.
- ☐ Design or modify your sprinkler system to water lawn areas separately from plant beds requiring less water. Credit: 2 inches.
- ☐ Use a drip or micro-spray irrigation system to more efficiently water plant and flower beds.
Credit: 2 inches.

____ Total Inches

Mulch



Mulch helps retain moisture in the soil and moderates soil temperature. Mulch also helps to reduce erosion and weeds.

Mulch is often sold in bags, by the yard or by the truckload. So, how much mulch do you need for your yard?

MULCH: How much do you need to have the recommended depth of 3 inches?

By the bag:

1 bag containing 2 cubic feet covers 8 square feet (2 ft. X 4 ft.)

By the bale:

1 bale of pine straw covers 18 to 20 square feet.

By the yard:

1 cubic yard covers 108 square feet (9 ft. x 12 ft.)

By the truckload:

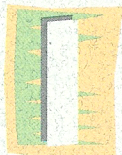
1 mini pickup holds 11½ yards and covers 162 square feet (9 ft. x 18 ft.)

1 full-sized pickup holds 21½ yards and covers 270 square feet (9 ft. x 30 ft.)

If you are buying bags containing 2 cubic feet of mulch, you can use the following chart:

Your plant bed in square feet	The depth of mulch	
	2 inches	3 inches
25 sq. ft.	2 bags	3 bags
50 sq. ft.	4 bags	6 bags
100 sq. ft.	9 bags	13 bags

Recycle



In a Florida Yard, grass clippings, leaves and yard trimmings are recycled rather than thrown away.

By recycling yard debris, we gain free mulch and return valuable nutrients to the soil.

Turn plant and kitchen scraps into rich compost for your indoor and outdoor plants.

FLORIDA YARD ACTIONS

- ☐ Keep a 2-3 inch layer of organic mulch over the roots of trees, shrubs, and in plant beds. Remember to leave at least 2 inches of space between the mulch and the plant's trunk or stem. (Don't mulch citrus trees.) Credit: 2 inches.
- ☐ Replenish mulch once or twice a year, as needed to maintain a 2-3 inch depth. Credit: 1 inch.
- ☐ Create self-mulching areas under trees where leaves can stay where they fall. Credit: 1 inch.
- ☐ Use by-product or alternative mulches such as pine bark, Eucalyptus and Melaleuca, or use recycled municipal mulch from your community. Credit: 1 inch.

___ Total Inches

FLORIDA YARD ACTIONS

- ☐ Recycle grass clippings by leaving them on the lawn. Credit: 2 inches.
- ☐ Use fallen leaves and pine needles as mulch under trees and shrubs. They make an attractive, natural mulch and are free. (If you have more leaves than you can use, share them with a friend or neighbor.) Credit: 2 inches.
- ☐ Create and maintain a compost pile with kitchen scraps and yard waste (no animal products, please). Credit: 3 inches.

___ Total Inches



Pull mulch away from stems and trunks to avoid stem rot.

Fertilize Appropriately



any trees and landscape plants demand little or no fertilizer once they are established and mature. Fertilizers can be hazardous to the health of your yard and the environment if they are misused.

When over-applied, fertilizers aggravate insect and disease problems and force excessive growth which must then be mowed or pruned. Excess or improperly applied fertilizers can also run off from yards into waterways or leach into aquifers, polluting drinking water.

How much fertilizer should you buy?

It's Spring, and Bob and Jane want to fertilize their lawn. Here are the steps they take to determine how much fertilizer to buy:

- They measure their lawn area and calculate square feet:
Backyard: 60×50 feet
($60 \times 50 = 3,000$ square feet)
Frontyard: 50×40 feet
($50 \times 40 = 2,000$ square feet)
Total square footage =
5,000 square feet.
- They shop for fertilizers which contain slow-release nitrogen and find two products priced the same, a 10-2-10 and a 16-4-8. The 16-4-8 contains 16% nitrogen, 4% phosphorus, 8% potassium. The 10-2-10 contains 10% nitrogen, 2% phosphorous, 10% potassium.
- They use this simple formula to determine the application rate of each fertilizer:
$$100 \div \text{the \% N} = \text{the amount of fertilizer to spread over 1,000 square feet.}$$
- Therefore, $100 \div 10 = 10$ pounds per 1,000 square feet (for the 10-2-10) and $100 \div 16 = 6$ pounds per 1,000 square feet (for the 16-4-8).
- Their 5,000 square foot lawn would require 50 pounds of 10-2-10 (5×10) but only 30 pounds of the 16-4-8 (5×6).
- Both products contain 40 pounds of fertilizer. Bob and Jane save money by purchasing one bag of 16-4-8 instead of two bags of 10-2-10.
- Before spreading the fertilizer, they calibrate the fertilizer spreader to apply 6 pounds per 1,000 square feet. (Hint: This information is available from the spreader's manufacturer or UF Extension Service.)

For specific UF recommendations based upon particular grasses, go to <http://edis.ifas.ufl.edu/EP110>

The Fertilizer Tag:

Florida law requires that fertilizer manufacturers supply a tag with every bag of fertilizer. There's a wealth of information on the tag once you understand how to interpret it. *The FY&N Handbook* helps to demystify much of the information you will find.

Use fertilizers in which 30% or more of the nitrogen is in a slow- or controlled-release form.

Fertilizer Facts:

- 1. Fertilizer is not plant food.**
Food to a plant is the sugars it makes through photosynthesis. Fertilizer nutrients are used in this process and can aid in the plant's growth process. But it is important to remember that a lawn or plant growing poorly in too much shade will not grow better if fertilized.
- 2. The truth about 100% Organic.**
The 100% Organic claim often refers only to the nitrogen in the bag. Furthermore, the nitrogen can be derived from natural products such as manure or it can be from synthetic chemicals such as urea. Read the label to determine where the organic nitrogen is coming from.
- 3. Buy nutrients, not fertilizer.**
Many fertilizers contain a number of plant nutrients even though only one or two may be needed. What plant response do you want: greener growth? more flowers or fruits? Does the plant exhibit specific nutrient deficiencies? Know which nutrients will provide these responses and buy only those.

FLORIDA YARD ACTIONS

- ☐ Fertilize only as needed to maintain the health of lawns and landscape plants. If plants show signs of stress, such as yellow leaves or stunted growth, identify the problem before applying fertilizer. Do not exceed the rate of 1 pound of nitrogen per 1,000 square feet per application. Credit: 2 inches.
- ☐ Use slow-release fertilizers. Buy fertilizers that contain 30% or more of the nitrogen in slow-release forms. Credit: 2 inches.
- ☐ Use iron (ferrous sulfate or chelated iron) instead of nitrogen to make your lawn green during the summer. Credit: 1 inch.

____ Total Inches

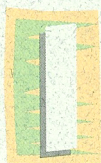
Slow-release Fertilizers

When fertilizer nutrients are in slow release forms, they are available to plants over a longer period of time and less nutrients are wasted or lost as pollutants. Look for these terms on the product or fertilizer tag:

Timed-release, slow-release or controlled-release.

Water insoluble nitrogen, Activated sludge, Sulfur-coated urea (SCU), IBDU, Ureaform (UF), Nitroform, or Polymer-/Plastic-/Resin-coated urea.

Managing Yard Pests



It is unrealistic, and even unwise, to strive for an insect-, disease- and weed-free yard. Many insects are beneficial, helping to keep pests under natural control. Many other insects simply coexist with humans causing us no harm. In fact, only about 1% of all insects are harmful.

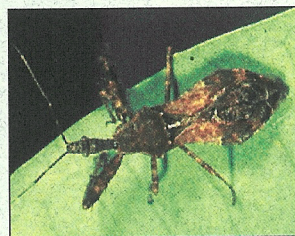
Meet some of the Good Guys. Help protect these beneficial insects so they can naturally keep pests under control.



Lady Beetle (larva)



Lady Beetle



Assassin Bug



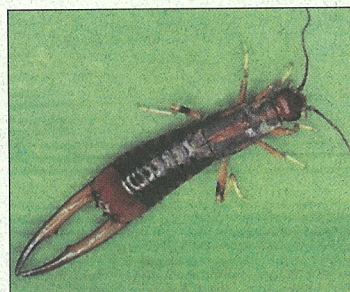
Green Lacewing (larva)



Green Lacewing



Big-eyed Bug



Earwig



Syrphid Fly



Syrphid Fly (larva)

IPM-Integrated Pest Management

Communities and individuals are successfully managing pests by protecting beneficial insects and reducing the use of pesticides. By definition, pests include insects, diseases and weeds. With a little bit of knowledge and the right tools, it is easy to practice IPM in your yard.

- Check your lawn and plant beds regularly for pest problems.
- Identify the problem. Know the good from the bad. Is it a chinch bug or a big-eyed bug? It makes a difference. Big-eyed bugs eat chinch bugs.
- When appropriate, first try non-chemical approaches (like cultural methods) and safest pesticides possible, such as insecticidal soaps, horticultural oils and *Bt* products.
- Spot treat. If chinch bugs or weeds are the problem, don't treat the entire lawn—only the affected area. If one out of ten shrubs have scale, treat only the infested plant.
- Be tolerant! Low levels of pests will do minimal damage to plants and many are a source of food for beneficials.
- The label is the law! Read pesticide labels carefully for information on using pesticides and disposing of leftover chemicals and containers.

FLORIDA YARD ACTIONS

- Check plants regularly. Walk around your yard every week and observe your plants and lawn for signs of problems. Credit: 2 inches.
- Avoid routine applications of pesticides. Treat only affected areas rather than spraying your entire lawn or yard. (Require that your maintenance company follow these strategies.) Credit: 3 inches.
- Know at least five beneficial insects that provide natural control of harmful pests. Credit: 2 inches.
- Use environmentally-friendly pesticides such as horticultural oils, *Bacillus thuringiensis* (*Bt*) and insecticidal soaps. These effective and safe materials can control most plant pests. Credit: 2 inches.
- Wherever possible use non-chemical approaches to pest control, such as pruning off affected areas, hand-removing insects, etc. Credit: 3 inches.

____ Total Inches

Friendly Fungus? *Aschersonia* is a fungus that attacks whitefly nymphs on citrus trees. The term beneficial applies to bacteria, birds, insects or any other organism that keeps pest populations under control.

Stormwater Runoff



Keeping rain and sprinkler water on our yards and out of stormdrains can help reduce pollution of Florida's bays, rivers and lakes. Because water washes off our yards, it is important to reduce the amount of pollutants on our property. *The FY&N Handbook* shows the benefits of having swales in your yard and using pervious surfaces for patios and walkways.

Making a Rain Barrel

Rain barrels are a great way to reduce stormwater runoff and to save water for a dry spell. If you have gutters on your house, you may be able to collect 55 gallons of water during a 1/2-inch rain by connecting a downspout to a rain barrel or cistern.

Tools:

Electric Drill
15/16" Drill Bit
Sabre Saw
(you can use a hand drill & hand saw)

Supplies:

Plastic Drum (55 gal. best)
3/4" Spigot (with male threads)
PVC Cement
Caulk

Directions: Use only barrels that have carried food products, not chemicals!

1. Drill 15/16" hole at the first even part of barrel, about 6" to 8" from bottom.
2. Screw 3/4" spigot into hole (should have a snug fit).
3. When spigot is about 3/4" of the way in, apply PVC cement to threads and finish tightening.
4. If using a downspout, use a sabre saw to cut a hole in lid to fit spout. After inserting down spout, caulk around the hole.
5. Other option: Take off the lid of a drum or trash can and cover the opening with a fine fiberglass screen. Place the container where water flows off your roof.
6. Elevate barrel on 2 to 3 cement blocks to allow easy access to the spigot. (If you want more pressure, raise the barrel higher above the ground.)
7. You may want to add a second spigot at the top of the barrel so you can direct the overflow through a hose into a specific part of your yard.

FLORIDA YARD ACTIONS

Let only rain down the drain! While stormwater often travels through pipes under our roads just like sewage, it is *not* treated at a waste treatment plant. Instead stormwater flows directly into ponds, lakes, rivers and bays.



Blue plastic drum painted to match the house.

Note: Barrels come in many sizes, shapes and colors.

- Barrels either have sealed lids or lids that can be removed. Barrels with sealed lids have two small round openings. They have flat bottoms and are more stable. Barrels with removable lids have larger openings making cleaning out debris easier.
- Drums made of white plastic seem to disintegrate more quickly in the sun.
- Food-grade drums are also available in 48 gallon and 42 gallon sizes.

- ☐ Where possible, direct downspouts and gutters to drain onto the lawn, plant beds or containment areas where rain will soak into the soil rather than run off the yard. Credit: 1 inch.
- ☐ Decrease soil erosion by planting groundcovers where lawn grass doesn't thrive, such as under trees or on steep slopes. Credit: 2 inches.
- ☐ Use mulch, bricks, flagstone, gravel, or other porous surfaces for walkways, patios and drives. Credit: 1 inch.
- ☐ Collect and store rain runoff from your roof in a rain barrel or cistern. Credit: 2 inches.
- ☐ Create swales (low areas) or terracing to catch, hold and filter stormwater. Credit: 3 inches.
- ☐ Pick up after pets. This will help reduce bacterial and nutrient pollution entering stormdrain systems. Credit: 1 inch.
- ☐ Clean up oil spills and leaks on the driveway. Instead of using soap and water, spread cat litter over oil, sweep it up and then throw away in the trash. Credit: 2 inches.
- ☐ Sweep grass clippings, fertilizer and soil from driveways and streets back onto the lawn. Remove trash from street gutters before it gets washed into stormdrains. Credit: 2 inches.

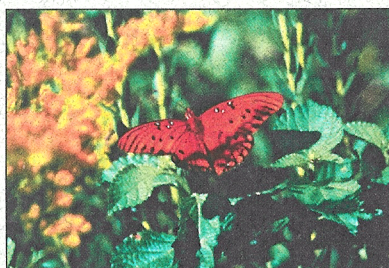
___ Total Inches

Attracting Wildlife



With more than 1,200 kinds of animals, Florida ranks third in the nation in wildlife diversity.

Providing adequate food, water and shelter can increase the number and variety of species that live in your yard.



Butterflies add beauty to our yards and pollinate plants.



Protect butterfly larvae and provide them with the plants they need for food and shelter.



Frogs help keep mosquitoes and other unwanted insects under control. They also serenade us at night, especially after a good rain.

FLORIDA YARD ACTIONS

- ☐ Plant vines, shrubs and trees that provide cover, nesting areas, or food for birds, butterflies and other wildlife. Credit: 3 inches.
- ☐ Provide a water source, such as a bird bath or a small pond, for wildlife. Credit: 1 inch.
- ☐ Provide wildlife shelters such as a bat house, bird house, brush pile or a dead tree. Credit: 1 inch.
- ☐ Identify five kinds of wildlife critters (insects, reptiles, animals, birds, etc.) that live in your yard. Credit: 2 inches.

____ Total Inches

Aquascaping for You and Wildlife

Small backyard ponds can be very beneficial to assorted wildlife. A balanced system including fish and plants won't necessarily need a pump or filter (as long as you don't feed the fish).

Flexible PVC or rubber liners allow you to create the pond shape you want. Create a 9-inch wide shelf, about 9 to 12 inches below the water line, for potted aquatic plants. Walls should have a 20 degree slope.

Preformed ponds are usually rugged, made of fiberglass or PVC. They can be placed above or below the ground.

Protecting the Waterfront



Waterfront property owners realize the special contribution our bays and waterways make to their quality of life. They also understand how fragile these natural treasures can be.



FLORIDA YARD ACTIONS

- ☐ Remove invasive exotic aquatic plants by cutting, pulling or raking. If using herbicides, remove dead plant material from the water to reduce pollution. Credit: 2 inches.
- ☐ Decrease wave action and increase habitat by placing clean native limestone rock in front of your seawall. Credit: 3 inches.
- ☐ Protect your native shoreline plants. (For example: mangroves in salt water; pickerelweed and duck potato in fresh water). Never prune mangroves or remove other vegetation without first seeking proper guidelines and permits. Credit: 2 inches.
- ☐ Establish a 10-20' no fertilizer, no pesticide zone along your shoreline. Credit: 2 inches.
- ☐ If possible, plant a border of low-maintenance plants between your maintained lawn and shoreline/seawall to absorb nutrients and provide necessary wildlife habitat. Credit: 2 inches.
- ☐ Where feasible, plant native aquatic vegetation in front of your seawall or along your shoreline. Credit: 4 inches.

____ Total Inches

Total Inches for All
Florida Yard Actions: ____

Florida Yards & Neighborhoods

is a program of the Florida Extension Service
of the University of Florida's Institute of Food and Agricultural Sciences.
Florida Yards and Neighborhoods Program Website:

<http://hort.ufl.edu/fyn>

For other lawn & gardening information on the internet visit the
University of Florida's EDIS (Electronic Data Information Source) Website:

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

University of Florida Cooperative Extension Service resources used in this publication: *Florida Guide to Environmental Landscapes, Florida Lawn Handbook, Helpful or Harmful? Flash Cards, A Guide to Environmentally Friendly Landscaping: Florida Yards & Neighborhoods Handbook, Your Florida Landscape: A Complete Guide to Planting and Maintenance, FAIRS* CD-ROM Multimedia Database.

All programs and related activities sponsored for, or assisted by, the Institute of Food and Agricultural Sciences are open to all persons regardless of race, color, age, sex, handicap or national origin.

