

WATER EFFICIENTLY



LANDSCAPING PRINCIPLES FOR FLORIDA-FRIENDLY YARDS

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Even though watering restrictions are commonplace throughout Florida, many homeowners still overwater. Overwatering does more than deplete the water supply, it also makes plants prone to pests and adds to stormwater runoff, which pollutes our water systems. By choosing and operating a watering system correctly, you can reduce water bills, insect and disease problems, and maintenance requirements. For example, the more you water your lawn, the faster it grows and the more it needs to be mowed.

Photo by: Jim Phillips



Micro-spray jets directly delivery small volumes of water.

Most watering restrictions limit irrigation to certain days and times.

But realize that even if it is your assigned day to irrigate, that does not mean you *must* irrigate. Scheduled watering can waste time, money and resources. Don't let the calendar tell you when to water — look to your plants for telltale signs of water needs. Water lawns when 50 percent of the lawn shows signs of wilt: leaf blades folded in half, blue-gray color and footprints remain on the lawn. Water established bedding plants and shrubs when you see early signs of **wilting**.

FYN Glossary Box



Wilting: the drooping of plant parts, especially leaves, generally because of a lack of water



Florida Irrigation Society:



Watering Tips

- n Reduce the need for watering by choosing water-efficient and drought-tolerant plants, including those native to your site, and plant them in the right place. If you group plants according to their water (and light) needs, you can simplify watering methods and systems. For example, separate turf irrigation zones from tree and shrub zones.
- n If you have an automatic sprinkler system, install a rain shutoff device or sensor that will override the system when it rains. Set this device to shut off your system when half an inch of rain has fallen. Florida law requires rain shutoff devices on all automatic sprinkler systems installed since 1991. Your county's UF/IFAS Extension office, the USDA Natural Resources Conservation Service (NRCS) or a certified irrigation professional can provide technical assistance.
- n Water in the early morning (4–7 a.m.). This is the most efficient time because temperature and wind speeds are at their lowest, which reduces evaporation. Also, grasses are less susceptible to fungus if water is applied at the time that dew normally forms.
- n Avoid watering between 10 a.m. and 4 p.m. Temperature and wind speeds are at their highest during this time — so evaporative losses are more likely.
- n Follow this simple watering schedule for grass: Apply $\frac{1}{2}$ " to $\frac{3}{4}$ " of water when grass shows signs of distress (bluish-gray color/folded leaf blades). Do not water again until symptoms reappear.
- n If rain is predicted within the next 24 hours, don't irrigate.
- n Use a rain gauge to measure rainfall volume.



Photo by: Jim Phillips

Do not water when it is raining — use a working rain sensor on your irrigation system to shut it off automatically.



- n Experiment with gradual reductions in irrigation to see if plants can tolerate less water. Some people use no irrigation, but have healthy plants.
- n Water less in cooler months (November–March). Turn off automatic watering systems in summer if rainfall is consistent and in winter months when little water evaporates.
- n Make sure your sprinkler system is applying uniform coverage and operating properly. This single action proves to be one of the best ways to conserve water.
- n Check your system periodically for broken heads or leaks.

To Sprinkle or Not to Sprinkle

You are probably familiar with sprinklers that are part of an automated system. In some landscapes, such as a lawn or annual flower bed, those kinds of sprinklers can be the best watering method. For other landscape areas, learn about water-conserving micro-irrigation systems.

- n Micro-irrigation systems deliver small volumes of water directly to the root zone through low-flow-rate emitters, such as micro-spray jets, bubblers or drip tubes.

Florida Yard Tip:

Soil Moisture

If the soil in your yard appears dry, that does not mean the root zone is dry. A soil-coring tool like the one shown pulls up a soil sample that allows you to see and feel the moisture in a plant's root zone. A soil core also reveals whether you are watering so much that water is wasted below the root zone. Using a soil corer can help you judge when to turn off an automatic watering system. Look for coring tools at most irrigation and some garden supply stores.



Photo by: Dan Culbert, Okeechobee Ext.



SJRWMD WaterWise Florida Landscapes:



- n Although micro-irrigation equipment releases small amounts of water, it does not prevent overwatering. Nutrient **leaching** can occur if the system runs for excessively long time periods and waterlogs soil. Sandy soils permit water to distribute laterally to a limited degree only; this can also cause overwatering by micro-irrigation systems.
- n Drip or micro-spray fittings can clog and may require that you filter the water source. Inspect fittings regularly and possibly clean them. Insects and rodents can damage drip tape or tubing.
- n If you already have an irrigation system, your options for retrofitting to micro-irrigation may be limited. Sometimes low-pressure emitters, such as bubblers, can be adapted to existing sprinkler heads. This may require an attachment at the source to reduce water pressure.



Photo by: UF/IFAS

Sprinkler water misdirected toward the pavement is more likely to run off the impervious surface and be wasted.

FYN Glossary Box



Leaching: the downward movement of water (and any particles dissolved in it, such as nutrients or pollutants) through soil



Water-Wise Advice

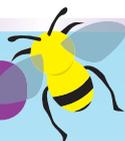
Get practical advice on state-of-the-art irrigation systems from several sources:

- n The water management districts (<http://www.dep.state.fl.us/secretary/watman/>) and Florida Irrigation Society (<http://www.fisstate.org/>) provide information on irrigation system selection, maintenance and appropriate watering practices.
- n If you are changing areas of your landscape from turf to trees or planted beds, consult with your county's UF/IFAS Extension office or with the Natural Resources Conservation Service regarding watering options.
- n If you are in the market for a new irrigation system, find a reputable certified irrigation contractor who has experience with these systems.
- n A free inspection of irrigation system efficiency is available in some areas through the Natural Resources Conservation Service and water management districts' Mobile Irrigation Labs. For contact information in the south Florida area, please visit:
http://www.sfwmd.gov/images/pdfs/splash/spl_mobile_irrig.pdf



Tampa Bay Water Outdoor Conservation:

Florida Yard Tip:



Calibrating Irrigation Systems

Follow these steps to determine how much water your irrigation system is applying:

- n Set several similar, flat-bottomed, straight-sided cans (all must be of equal size) in various places within one watering zone. Tuna cans work well for this.
- n Turn on sprinklers for 15 minutes.
- n Pour the water from all containers into one container. Measure the depth of the water to the nearest 1/8".
- n Divide the measurement by the number of containers to determine the average amount of water applied in that zone in 15 minutes.
- n In the future, water the area only as long as it takes to apply 1/2" to 3/4" of water.

