For: July, 2009
By: Ken Rudisill
Extension Horticulture Faculty
UF/IFAS-Bay County

Drought and the Landscape

The hot weather is definitely upon us. I saw a dog chasing a cat and they were both walking. During periods of drought or just a few days without rain or irrigation, plants can get drought stressed. To help plants get through the drought times, the following guidelines are given as suggestions for management practices during a drought.

General Practices

Irrigation Priorities. Irrigate highly visible and intensively managed areas first. Drought sensitive plants should have high priority, but turf should have lower priority. Although turf is drought sensitive, it is cheaper to replace turf than to replace trees and shrubs.

Time of Day. Water early in the morning. Less water loss occurs from evaporation and wind drift in the morning because of cooler temperatures and less wind.

Irrigation Frequency. Irrigate deeply at long intervals rather than frequent, shallow waterings. Deep watering improves drought resistance by promoting deeper, more extensive root systems. Depth of watering should be six to twelve inches for turf and bedding plants, and twelve inches for perennials, shrubs, and trees. One inch of irrigation wets a sandy soil to a depth of about 12 inches.

Maintenance. Examine the irrigation system and repair leaks promptly.

Weed Control. Keep weeds under control; weeds steal water from plants.

Fertilization. Don't fertilize or, if you do, do so with a low nitrogen fertilizer. Fertilization stimulates growth and increases water needs.

Pesticide Application. Avoid unnecessary applications of pesticides that require "watering in."

Management Practices for Turf

Irrigation. Irrigate turf only after about 30% of your lawn starts to wilt. Signs of wilting include footprints that remain in the grass long after being made, a bluish-grey appearance to the lawn, and a large proportion of leaf blades that are folded in half length-wise.

Cutting Height. Raise the cutting height of turf. Although taller grass uses slightly more water than shorter grass, a higher cutting height promotes deeper rooting and maintains turf quality longer.

Mowing Frequency. Mow less frequently. Mowing stresses the grass plant by increasing respiration and reducing root growth. In addition, never remove more than one-third the length of the blade to prevent too much stress on grass.

Mower Blade. Use a sharp blade when mowing. A sharp mower blade produces a cleaner cut that heals more quickly and loses less water than a cut made by a dull blade.
Management Practices for Bedding Plants, Shrubs and Trees

**Mulch.** Add mulch to beds to reduce evaporation from soil and to moderate soil temperature, reducing stress on roots. Don’t apply the mulch to deep since water may have a hard time penetrating the mulch.

**Irrigation Methods.** If possible, don’t use overhead sprinklers for shrub and flower beds; hand water, flood irrigate, or use trickle irrigation. Greater water loss can occur with overhead irrigation because of evaporation and wind drift.

**Irrigation Frequency.** Irrigate trees and shrubs after they start to wilt. Drooping leaves and a change in leaf color are signs of wilting. Many trees and shrubs can survive drought without irrigation, providing they are well-established and were irrigated prior to the drought.

**Shade.** Move container plants to shaded areas so their water needs will be reduced.

Further information on proper water management practices can be found in [ENH-9](#), *Watering Your Florida Lawn*; [ENH-57](#), *Improving Drought Tolerance in Your Florida Lawn*; and [ENH-72](#), *Landscape Design for Water Conservation*. These are available online and at the Extension office.