PLANT LIFE COLUMN

RAIN CHECK FOR SPRINKLERS

Recent rains quench our thirsty soil. Winter and Spring are our dry seasons. Rain now means that the irrigation system gets a break. Logic says shut sprinklers off when it is raining. So does the law.

Automatic sprinkler systems consist of controllers or timers and valves that schedule when and how long sprinklers run. If you have an automatic sprinkler system that was installed after May 1, 1991, you must have an automatic rain shut-off switch, also called a rain sensor. Hillsborough and Volusia County have enforcement codes in place requiring all systems to have rain shut-off devices. Having to mandate logic seems silly, doesn't it. Yet I know you have sprinklers while it is raining and wondered why someone didn't turn them off. Though sensors are required, compliance with the law is very poor. Many installers plead ignorance of the law. Some just refuse to install them. Sensors are often improperly installed, never wired to the controller, or installed in an unsuitable location.

Rain switches are not expensive, require no special permit or training, and are not difficult to install by the do-it-yourselfer. They are good for the environment, since they prevent unnecessary watering. Rainfall for irrigation reduces the need to use drinking-quality water. When used properly, rain switches save water by skipping irrigation cycles.

Rain switches also save the associated water and sewer charges or pumping costs. Rain shut-off devices may reduce lawn and landscape problems caused by overwatering, when we receive adequate rainfall. The devices also reduce wear and tear on your system because it runs only when needed.

Rain switches sense moisture from rainfall, and avoid watering during or just after the rainfall. Depending on the setting, the system will over-ride watering times and shut the sprinklers off after a set amount of rainfall. It only interrupts the cycle of the irrigation. You don't need to reset the time clock. The controller picks up the irrigation cycle automatically, when watering is needed.

Rain shut-off devices are available in the irrigation section of garden centers, or at any irrigation supply company. One type of device consists of a water collection cup and a metal probe wired to the controller. When water collects in the cup and wets the probe, an electric circuit is completed, interrupting the cycle.

Another type of device consists of cork-like disks that expand when they are wet, and mechanically activate a switch. When the disks dry out, the switch resets to allow the irrigation cycle to operate. Adjustments in the sensitivity or depth of rainfall shuts the switch off, so that a light rain will not interrupt the cycle. Adjustments are available in 1/8, ¼, ½, ¾, or 1” settings. Locate rain shut-off devices close to the controller to save on electric wire. Use ultraviolet rated connecting wire above ground to slow deterioration. If you use wire that is not UV rated, run the wire inside conduit or PVC pipe. If buried in the ground, the first 18” of wire coming out of the ground must be encased in conduit or PVC pipe.

Rain shut-off devices must be placed in a suitable location, so they are in the open, and collect rainwater only. Don't install them under eaves or overhangs or under trees. Stay clear of air conditioner fans or pool heaters, as they will evaporate water from the device quickly.

The best irrigation controller is the person operating the system. Proper irrigation uses the least amount of water necessary for plant growth. Sometimes that means running the system manually when water is needed. Whether you have an automatic system or you hand water, apply only enough water to wet the root zone to the depth where roots are found. Too much water may cause runoff or deep percolation into the soil. This extra water carries fertilizer and pesticides away from plant roots and into surface ponds and lakes. Too much water can also cause plant health problems, such as leaf spot, root rot, or excessive weed growth.
If you have an irrigation system, dust off the manual, check for a rain sensor, and calibrate each zone to apply ½” to ¾” per application only as needed.

For more information on proper irrigation methods for lawns and landscapes, contact the University of Florida's Institute of Food and Agricultural Sciences. Search the EDIS link on our web page at http://osceola.ifas.ufl.edu or call (321) 697-3000.

See the following articles from UF/EDIS database:

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