Problem Areas in the Landscape Often Caused by Faulty Irrigation

Photo by David W. Marshall, Leon County UF-IFAS Extension: Good irrigation coverage is important to plants, especially during extended dry periods.

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Thursday, June 12, 2008
Tallahassee Democrat

During these days when temperatures are soaring, it’s difficult to be outside long without needing to take a drink of water. In fact, you wouldn’t think of going outside to work in the yard for hours without having a supply of water nearby. We need to remember that the high temperatures are hard on our plants, too.

Every year during extended dry periods, I can predict that I will receive numerous phone calls about what the callers think are lawn pests. However, the real culprit in most cases is simply a faulty irrigation system. The callers mistakenly believe that just because they are watering the problem cannot be caused by a lack of water. However, there are many less-than-perfect irrigation systems out there. During times of adequate rainfall, rain masks the irrigation system’s imperfections. But during extended dry weather, the problems are revealed.

The possible imperfections are many. The homeowner may easily fix some irrigation system problems. The cause for dry spots may be as simple as a maladjusted spray head, a broken spray head, a plugged nozzle, a tree trunk or tall shrub blocking the water, or grass that has grown over a pop-up spray head. Other problems may require the expertise of a licensed irrigation contractor. There may be too few sprinkler heads for adequate coverage, insufficient pressure to operate each zone, not enough zones, or incorrect choice of nozzles. Sometimes stream rotor heads are mixed with spray heads in the same zone, creating a situation of under-watering with the stream rotors while over-watering with the spray heads.
Regardless of the cause, there are a couple of simple tests that can help confirm if the problem areas are to be blamed on lack of water versus some mysterious pest. First, check affected areas by taking a soil sample in the root zone. Take out a slice of soil to a depth of six to eight inches with a shovel. Visually inspect and feel the soil in the root area for moisture. Then do the same in an adjacent area of the lawn that looks normal and compare the difference. It should be obvious if there’s a difference in moisture between the areas tested.

The second test involves placing several empty straight-sided cans (such as tuna cans) in the affected area and several in a normal area of the lawn. Then turn on the irrigation system and let it run long enough to collect some water in the cans. Compare amount of water collected in the two areas. Again, it should be obvious if there’s a difference in the amount of water applied in the areas tested.

Your irrigation system probably runs in the very early morning when you don’t see it. Occasionally, it is advisable to inspect your irrigation system while it's running for any maladjusted or broken spray heads. Probably the number one cause for failures of new plants in the landscape is under-watering. It is important to remember that the root system of a new plant is limited to the small root-ball that was contained in the pot. That root-ball can dry out much more quickly than the vastly more extensive root systems of older, established plants in the landscape. So a properly designed irrigation system, calibrated properly to water existing plants, may not water new plants often enough.

Use your finger to check the moisture in the root-balls of new plants at least every other day to see if the soil is moist. If the root-ball isn’t moist to the touch, you will need to hand-water each individual new plant in between the times that you water the rest of the landscape. Or, better yet, set up an inexpensive and easy-to-install micro-irrigation system to water the new plants.

Plants are becoming more and more expensive, especially as transportation costs have increased. Water is also becoming more expensive and precious. So it is increasingly important that we water our landscapes wisely and efficiently.

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