Fall Care for Warm-Season Lawns
By Heather N. Kolich
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Fall may still seem a long way off, but preparing warm-season lawns for fall and winter begins in late summer. These tips will help get your bermudagrass, centipedegrass, or zoysiagrass lawn ready for dormancy, prevent weed and disease problems, and help your lawn thrive next spring.

August

Make your last application of nitrogen. Nitrogen stimulates growth, but as the active growing season comes to an end in August for warm-season grasses, we want to allow growth to slow down in preparation for dormancy. Fertilizing in September can delay dormancy long enough for warm-season turfgrass to suffer from cold injury.

Nitrogen in the fall also sets lawns up for Spring Dead Spot. It’s fine to make a final application of nitrogen in August, but as days get shorter and nights grow cooler, let warm-season turfgrasses go through the natural processes to enter dormancy.

Lower mower blade. The recommended mowing height for bermudagrass, centipedegrass, and zoysiagrass is 1-2 inches. If you raised mowing height by half an inch as recommended during the highest heat of summer, now is the time to lower the blade back to the normal mowing height.

Continue irrigation. For weeks with no rain, continue providing the lawn with 1 inch (total of rainfall plus irrigation) of water per week, preferably in two weekly applications.

September

Collect a soil sample for testing. Soil pH regulates nutrient availability to plants. Each species of turfgrass has its own optimal pH range. Fall is an excellent time to apply lime and other amendments to improve the soil that nourishes turfgrass.

<table>
<thead>
<tr>
<th>Turfgrass species</th>
<th>Optimal pH range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bermudagrass</td>
<td>5.5-6.5</td>
</tr>
<tr>
<td>Centipedegrass</td>
<td>5.0-6.0</td>
</tr>
<tr>
<td>Zoysiagrass</td>
<td>6.0-7.0</td>
</tr>
</tbody>
</table>

Lime can take several months to affect soil pH. A laboratory analysis is the only way to know how much of an amendment the soil
needs to create the desired change in individual lawn environments.

For lawns, collect soil samples from a 4-inch depth in several randomly selected spots throughout the yard. Place all samples into a bucket, removing rocks, roots, and other organic matter, and mix them together to create an aggregate sample of at least two cups in volume. Spread the aggregate sample on some newspaper and allow it to dry completely. Once dry, scoop the soil into a zip-top plastic bag. Please call Forsyth County Extension at 770-887-2418 for soil sample payment and drop-off instructions.

**Apply pre-emergence herbicide.** If you’ve had lawn weeds in the past, chances are strong that you’ve got weed seeds in the soil. A pre-emergence herbicide prevents seed germination so that weeds don’t get a chance to grow. That’s why it’s important to apply pre-emergence herbicides in September, or before nighttime temperatures drop below 60 degrees Fahrenheit. That’s when soil temperatures become cool enough to allow winter weed seeds to germinate.

Pre-emergence herbicides contain various active ingredients and typically control several broadleaf annual weeds and some annual grass weeds. The products continue working in the soil for several weeks. Note that products containing atrazine should not be used on bermudagrass lawns.

While we don’t want to fertilize warm-season lawns after August, a pre-emergence herbicide that contains potassium will enhance winter hardiness in bermudagrass lawns. Look for pre-emergence herbicides that have 0-0-7 or something similar, with the first two numbers (for nitrogen and phosphorous) being zeros.

Seasonal tropical depressions that bring lots of rain and days of cloud cover can cause late season fungal problems. Starting a rotation of preventive fungicide applications can fend off leaf spot and other fungal diseases – without creating fungicide resistance problems – as the lawn goes into dormancy.

**Fungicide rotation for lawns**

<table>
<thead>
<tr>
<th>Active ingredient</th>
<th>Diseases controlled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Captan</td>
<td>Brown patch, Large patch, Dollar spot</td>
</tr>
<tr>
<td>Myclobutanil</td>
<td>Brown patch, Large patch, Dollar spot,</td>
</tr>
<tr>
<td></td>
<td>Spring dead spot, leaf spots, rust</td>
</tr>
<tr>
<td>PCNB</td>
<td>Brown patch, Large patch, Dollar spot,</td>
</tr>
<tr>
<td></td>
<td>Fading out, leaf spots, rust</td>
</tr>
<tr>
<td>Thiophanate methyl</td>
<td>Brown patch, Large patch, Dollar spot,</td>
</tr>
<tr>
<td></td>
<td>fusarium, Fairy ring, Gray leaf spot</td>
</tr>
</tbody>
</table>
When using herbicides and other pesticides, follow the directions on the product label – including wearing personal protection equipment. Application rates are legal limits that define the minimum amount at which the product is effective and the maximum amount at which the product is safe to use for you, your plants, and the environment.

For more information on lawn care and soil testing, please visit the Forsyth County Extension website.

Laurel Wilt Confirmed in Georgia
By Shannon Kennedy
Agriculture and Natural Resources Educator
UGA Extension Forsyth County

Just last month, Hallie Harriman, a colleague from Cobb County, mentioned that a stand of sassafras trees in her county that were suffering from a mysterious disease. Their leaves were wilting prematurely, and the sapwood under the bark was discolored. Fortunately, I had not heard of anything in Forsyth County that would fit the symptoms she described.

Then, two weeks later, I received an email.

The pathogen afflicting the Cobb sassafras trees was confirmed as laurel wilt.

Laurel wilt was first identified at Port Wentworth in 2002. It has since spread throughout the southeastern coastal planes, as far west as Texas and as far north as South Carolina. This recent sighting is the furthest north this pathogen has been documented in Georgia.

Laurel wilt is caused by the fungus *Raffaelea lauricola*, and it attacks plants in the laurel family (*Lauraceae*). This includes ornamental and native laurels, native bays, sassafras, northern spicebush, and avocado trees. It has killed one-third of the redbay population, and it has caused heavy damage to avocado production in the Southeast.

The redbay ambrosia beetle (*Xyleborus glabratrus*), an invasive boring beetle native to Asia, carries the fungus. The beetles are transported in infested wood or when infested plants are moved.

Redbay ambrosia beetles are tiny insects, roughly two millimeters long, with brown-black coloration. They can be elusive, so you’ll be more likely to see boreholes or the

Avocado trees in Florida have been hard hit by laurel wilt disease. Photo by University of Florida Extension.

Map showing distribution of laurel wilt disease as of June 2020. Southern Regional Extension Forestry.
“toothpicks” of sawdust that the beetles push out of the trunk.}

When laurel wilt fungus infects a tree, it begins to clog the plant’s vascular tissue, starving the outer branches of water and nutrients. This deprivation becomes clear when leaves begin to wilt and discolor. In deciduous species the leaves die and fall from the tree, and in evergreen species, the leaves will fully discolor and remain on the stem. If the bark is peeled back from a diseased plant, the sapwood will have brownish streaks along the grain of the wood. Infection quickly kills the host tree.

Laurel wilt kills the host trees of some of our pollinator species, including spicebush swallowtail butterflies, spicebush silk moths, and tiger swallowtail butterflies, which depend exclusively on the leaves of spicebush, sassafras, and/or redbays to house and feed their caterpillars. As laurel wilt spreads, it limits the availability of food to these species.

If you suspect laurel wilt is present in your area please contact Forsyth County Extension, a Georgia Forestry Commission representative, or a certified arborist for confirmation. Once it’s confirmed, eradication and sanitation options can be provided; there is little chance that infected plants will survive.

In cases like this, prevention is the key to success. The more information we as a community collect on this disease, the better we will be to develop management strategies when we see it in our environment. You can contact Forsyth County Extension through our email uge1117@uga.edu or call us at 770-887-2418.

Is Your Soil Good Enough for Your Plants?
By Heather N. Kolich  
Agriculture and Natural Resources Agent  
UGA Extension Forsyth County

Did you know that many plant problems are directly related to the soil they are planted in? Soil testing is the best way to know if your soil will support healthy growth for your landscape and garden plants. That’s why one of the first questions we’ll ask when making a plant or landscape issue diagnosis is, “Have you done a soil test?”

Soil is the foundation of plant health. Plants draw nutrients and water from soil through their roots. Soil health is often reflected in plant performance. If the soil is low in nutrients, the plant will suffer from nutrient deficiencies that show up in a variety of
ways, including poor growth, leaf distortions, and changes in leaf color. Alternatively, the soil may have sufficient nutrients, but the soil pH limits their availability to the plant roots. When soil conditions prevent root growth or nutrient uptake, plants experience stress and may become targets for pests and diseases.

Undisturbed Georgia soils have some good things going for them. Remember the last time you saw our Georgia forests from an airplane? Those 24 million acres of green are proof of healthy soil.

Unfortunately, most of our urban and suburban landscapes are planted in disturbed and damaged soil. The topsoil was likely lost during construction, and the remaining soil may be compacted from the weight of equipment. These issues linger long after construction is completed. Under natural conditions – like in an undisturbed forest – it can take hundreds of years to form one inch of topsoil. And things much lighter than construction equipment cause soil compaction, including lawn mowers, pets, and people, especially when the soil is wet.

Laboratory testing determines the current pH and nutrient content of your soil sample. University of Georgia laboratory analysis also provides specific recommendations for amendments, such as lime and fertilizer, needed to begin creating the optimal soil environment for the type of plant you want to grow.

Thanks to our abundant rainfall and warm weather, organic matter in soil breaks down quickly. Amendments that add organic matter back to the soil help relieve compaction, improve absorption of water into the soil, and reintroduce soil microbes that increase soil fertility over time. Composted plant materials, composted animal manure, and grass clippings are sources of organic matter for soil improvement.

Improving soil condition is a process that takes time. Fall is the best season to test and amend soil so that it will be ready for spring planting. It takes a lot of organic matter to improve the structure of clay soil. In addition, it can take several months for a lime amendment to make the desired pH change in soil.

To learn more about soil testing and how to collect a soil sample, visit Forsyth County Extension.

Get Your Fall Garden Going

Learn which vegetables grow during our cool season and how to get them going with these short video webinars.

Cool Season Veggies to Grow from Seeds

Adding Transplants to Food Gardens
Preserving Tomatoes by Drying

Did you have a bumper crop of home-grown tomatoes this summer? Forsyth County Extension Administrative Assistant Sharon Machek did. After fresh eating and making several types of tomato sauces for freezing and canning, she decided to try drying tomatoes with a food dehydrator. Join her in this short video to learn how to dry tomatoes and preserve the flavor to savor later.

Check out more gardening, food preservation, and educational videos on the UGA Extension Forsyth County YouTube Channel.

Tele-medicine for Landscapes

Got plant problems? Try our Landscape Virtual Help Desk for convenient diagnostics by trained UGA Extension volunteers! Just answer a few questions and upload your photos of the plant, insect, or area of lawn. Forsyth County Extension Master Gardeners and Master Naturalists are waiting to help you!

4-H Program Virtual Open House

Join Forsyth County Extension 4-H staff online on August 31 at 6PM to learn about upcoming events, new programs, and updated procedures for the 2020-21 school year. We’ll also announce Summer Camp 2021 dates and locations. Preregistration is required for this event. Please fill out the Qualtrics survey below to attend. 
https://ugeorgia.ca1.qualtrics.com/jfe/form/SV_8oK3US1UASErOpT

Extension is Still Open – Just Differently

From drop-off boxes for agricultural samples, to distance diagnostics for plant pathology and insect identification, to online programs, Forsyth County Extension is still here to serve you. Please visit our website and Facebook page to see what’s happening.