TURF TIPS

The Turf Care Newsletter of Prestige Shrub and Tree, Ltd.®
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This is your fourth scheduled turf care visit for the year. We will be spot treating fescue turf and warm season turf for fungal activity and will also be applying slow release fertilizer to the warm season turf. You can water in these applications within 24 hours.

Because of the high summer temperatures, weed control will be limited to spot treatment of nutgrass, ground ivy and doveweed. The nutgrass control sprays can be done at temperatures up to 95 degrees.

For broadleaf weeds we will be using a new herbicide that allows us more flexibility when temperatures are above 85 degrees but all these weed control products have limitations above 90 degrees. Due to their aggressive spreading ability we will especially be treating dove weed and ground ivy in the bermuda turf and zoysia turf. You may see some slight yellowing from the weed applications but the spots will be small and the turf will recover rapidly.

Our big weed problem this year was f**ireweed**; that little, fast growing, light green weed. The other "weed" has been tree seedlings, which we covered in the last newsletter.

Fireweed appears some years and other years we never see it. The seeds blow in from the neighboring fields and roads. The problem with this weed is that the herbicides don't control it, at best they slow the growth and stunt the root system. This weed also colonizes lawns with heavier thatch levels, especially emerald zoysia, or areas where the turf is thin. This is where your weekly mowing and necessary dethatching comes into play. You must mow weekly to control all weeds but especially fireweed, tree seedlings and annual blue grass. Just because you have had pre-emergent and post -emergent applied doesn't necessarily mean you will be weed free.

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The Story Behind The Slow Green Up and Winter Kill In The Warm Season Turf

Let's begin with a **Turf Alert** that Dr. Clint Waltz sent out recently. (Dr. Waltz is the UGA Griffin Extension Turfgrass Specialist)

"We've received several calls this week from homeowners and landscapers with questions about their warm-season turf lawns. Many are concerned that their lawn has been a victim of "winter kill" and they are looking for a solution to the problem.

While some winter kill may be possible, it is difficult to define and diagnose. More likely, the turf hasn't completed its spring green-up.

It is important to remember that warm-season turf green-up is dependent on the soil temperature reaching **65 degrees Fahrenheit**. Based on monitoring yearly averages at the 4-inch depth on the UGA Griffin Campus, the soil is approximately **two to three weeks behind** in reaching temperatures conducive for root growth.

Also, we experienced a lot of rain late last summer and fall. With rainfall comes cloudy conditions and reduced sunlight. Warm-season grasses depend on light to produce carbohydrate reserves needed to recover from winter dormancy. In some circumstances lawns may have been less fit going into dormancy as a result of overcast, rainy days. Hence these lawns were not as prepared for spring re-growth.

We had some unusually warm weather in early April, which stimulated growth, followed by cooling later in the month. A return to cool temperatures coupled with lagging soil temperatures and less hardy grass as a result of last year's conditions, has slowed growth. At the same time, environmental conditions have remained favorable for spring diseases like large patch. While many lawns are showing good green-up, until our daytime temperatures are consistently in the 80's, complete green-up may not occur.

Monitor the turf during the next few months, and if it does not improve by June, testing for disease, insects, and fertility may be required. If the turf does not respond, replacement may be necessary."

You can see that the slow green up and disease issues with the warm season turf this year and in other years is very dependent upon the weather we experience the previous summer, fall and winter. But you

must understand that any turf that has pre-existing conditions, which result in marginal turf growth, are even more affected by these weather conditions. Non-optimal growing conditions include too much shade, tree root system competition, mowing too short late into September and overly wet soil. In general, trying to grow warm season turf where it doesn't belong or employing improper maintenance procedures **IS** the problem.

Further, when sod is installed at a home, the soil present on the property is not properly prepared. In fact, in most subdivisions any quality soil is stripped off as the builders seek to level lots. The subsoil is a very low quality soil for root systems and it takes decades to rebuild quality soil. Just adding "top soil " to the yard before sodding is not the same thing as completely constructing a specialized subsoil structure just for the turf.

If the lawn is then **top dressed with sand**, compaction levels increase even more. **Short mowing with a reel mower** will further increase compaction.

Root depth becomes shallow because the soil is too compacted for deep root growth and the turf cannot produce adequate food because the leaf blades are so short. Subsequently the turf is not healthy and is more susceptible to winter kill, heat injury and attack by fungal disease pathogens (see Summer Disease Development below). This compaction problem may take years to develop but **develop it will**.

As you move into September warm season mowing heights must be raised before the first frost to allow the turf to increase its top growth and produce food for storage in the roots and to build new roots. Without this recovery period, winter kill is not only a possibility it is a probability.

If you reel mow your turf there are cultural practices you must follow to reduce problems that are created by this type of mowing.

Even if you are not reel mowing and are using a conventional rotary mower to cut your bermuda or zoysia, it is essential that you **core aerate** your turf **EVERY YEAR**! If you are severely compacted then you may need to aerate 2 or 3 times per year.

Why Do I Have Dollar Spot And Brown Patch?

The two turf diseases that give us fits this time of year are Brown Patch and Dollar Spot.

Dollar Spot has attacked the bermuda aggressively this year. It can and does infect zoysia also. Dollar Spot is a stress related disease. The stress can come from drought conditions or an inability of the grass to absorb potassium either because there is a potassium shortage (this is not the case in our treated lawns) or from weak or shallow root systems not able to absorb the potassium present (usually the case). The weak, shallow root system is again directly related to poor growing conditions.

As the turf begins to green up it is under stress just from its start up procedure. If root system condition is not optimal, potassium cannot be readily absorbed and the Dollar Spot fungus easily infects the leaf blade. We always have Dollar Spot to some extent but this year the perfect combination of rainfall, humidity and temperature provided perfect conditions for the fungus and the stressed turf condition was the final ingredient for the heavy infection. Also, the weak condition of the warm season turf this year and in many cases non-optimal growing conditions such as listed above makes it more susceptible to disease attack.

It is interesting to note that reel mowed turf tends to have more Dollar Spot due to the mowing stress.

Brown Patch appears, usually in fescue, as brown blotches scattered through the turf. It is associated with a variety of conditions which may include any or all conditions such as: high humidity and temperatures and improper watering techniques.

Fescue is a cool season turf grass and, naturally and unavoidably, during our normal summer temperatures, it will continue to turn brown, die and thin severely **despite** proper watering and proper disease control. This is simply because it is not heat tolerant. At high summer temperatures, Brown Patch becomes inactive and any application of fungicide is not effective. If we find **active** disease we will apply fungicide as needed.

Mowing Guidelines

⏩ Mow weekly at the minimum.

⏩ If brown streaks appear after you mow then you are getting **firing**. Firing appears in warm season turf after mowing too closely or removing more than one-third of the leaf blade. Firing is not disease related. As with fescue, be sure to maintain a sharp blade on your mower and keep the engine rpm's high.

⏩ Mowing height for fescue turf should between 3" and 4".

⏩ Rotary mower mowing height for warm season turf should between 2" and 2 ½".

⏩ Healthy warm season turf usually requires a five day mowing schedule during the summer because of the rapid growth rate.

Watering

Use your rain gauge and water one time per week to get 1" of irrigation. Above 95 degrees water twice per week.