

From The Roots Up

The Shrub & Tree Newsletter Of Prestige Shrub & Tree, Ltd.
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This is your fourth shrub and tree care visit for the year.

During this visit we will be checking for pest activity and treating both preventively and curatively as needed. Our spray mixes always include a special additive which reduces breakdown by ultraviolet light and makes the spray very resistant to removal by rain or irrigation once the spray has dried. Normally the spray requires about twenty minutes to dry.

Although we have had decent rain so far, we must not forget our weather can turn dry quickly. Plants have a way of covering drought damage only to display its effects later the next spring or summer long after the drought period has been forgotten. Some plants don't put on as many flowers or bloom at all. Some plants will show die back in their branches. Remember, if we do experience drought conditions, and experience 95 degree temperatures for an extended amount of time, you can expect to see this kind of damage next spring.

The weather so far this year has been actually a bit on the dry side by the numbers. As of the end of May, Atlanta is right at 19.9" of rain out of our 49" annual average. Although we have been a bit under average through the first 3 months of the year, May was above average at 5.15". As we move into the summer months we may settle down to our normal summer time pattern of occasional, scattered afternoon thunderstorms.

As always, temperatures will heat up as we move into summer. Since the plants have been putting on a lot of new growth in response to the May rains, they are very susceptible to stress from lack of adequate water

if our rainfall dwindles and your irrigation is not set correctly.

In each newsletter, we remind everyone that if we are not getting consistent rainfall, you have to **maintain your one time per week irrigation** regimen to grow healthy plants. We cannot predict whether we will have adequate rainfall in any given year so stay vigilant!

Check all your trees and shrubs and be sure they are all getting adequate moisture. The soil should be moist to a depth of 6". Though your irrigation system appears to be working, you need to be sure that all the plants are receiving enough water on their entire root area to avoid root damage and subsequent loss of leaves and branches.

Watering

Water one time per week to get 1" of irrigation. Above 95 degrees water twice per week delivering a full inch of water at each watering.

Moving into the heat of the summer, our landscapes need more and more water to stay hydrated. Many times we see irrigation running at inappropriate times or see the evidence of a mismanaged irrigation schedule such as dry plants or saturated areas of over irrigation. Your main goal when providing water to your plants is to supplement natural rainfall with irrigation so the plants get their weekly allotment of water needed to maintain growth and plant vigor. Ideally, we would like to see it rain 1 time per week applying 1" of water preferably at night between 10pm and 5am. Unfortunately, we don't have control over the rainfall schedule but this schedule is what we hope to mimic.

Plant systems are designed to pull up moisture from the soil to aid in photosynthesis and plant growth and

are at their most efficient as they utilize this moisture almost to the point of drought stress. In most cases, with no rain, this happens to take roughly a week. After this point, the plant starts dehydrating and going into stress from lack of moisture. As the plant starts heading into drought stress it is ready for you to turn on your irrigation and re-hydrate the soil. This is called "watering on demand." Many times we see systems that are set for 3-4 days a week for 15-20 minutes per day. This schedule never allows the water or roots to progress deep into the soil. Many times in our heavy clay soils, it takes at least this long to begin to see the water soaking into the soil. A heavy irrigation of 1" will help work the water deeper into the soil. Your goal here is to irrigate down 6" deep into the soil if you can. Deeper irrigation allows the plants' roots to follow the water down into the soil protecting them from summer heat, excessive wear, and the insect and disease problems experienced by weak plants.

Lastly, it is important to adjust the timing of your irrigation to water between 10pm-5am (roughly dew fall). By watering at night you can avoid a heavy loss from evaporation during the day and reduce the hours of leaf wetness thereby minimizing disease (especially in plants such as hydrangeas and hawthornes). Of course mother nature quite often throws monkey wrenches into our best laid plans by not cooperating, but this is the blueprint and a starting point to follow and fine tune the irrigation of your landscape. Some areas may need more or less depending on other factors but by ensuring the landscape is properly hydrated using this outline, your plants will have less problems and be healthier overall.

Internal Browning On Conifers

As we move into the hotter, drier weather, you may see the inside needles of your conifers turn brown. This can include Leyland cypress, hemlock, Italian cypress, cryptomeria, cedar, arborvitae, western cedar, and deodora. This is especially noticeable after we have had a rainy spring and the plants have put on heavier than normal growth. Once the trees move into heat stress they will begin to slough off all the extra growth they can no longer support. Although these symptoms look like disease, insect or mite activity, in almost every single case, this has to do with the soil becoming too dry at some point. This can occur in the winter months as well as the summer months but higher temperatures drying the soil are the most likely culprit. Shade can also cause thinning, but the browning is water related.

Unfortunately, once the needles have fallen off, they will not grow back. The final effect is a plant that is much more open than when it was first planted. This thinning is not what you want if these plants are being used for privacy. The key to reducing the thinning and needle drop is to monitor the watering and ensure the plants are receiving 1" of water per week applied one time per week resulting in soil that is moist to a depth of 6". You will have to check the irrigation system and be sure that the emitters are clear and functional or, if the trees are being watered by overhead irrigation, ensure the sprinklers are actually watering on all sides of the tree. This is where drip emitter systems excel, but even they will fail if you do not provide for the **entire root mass**. Keep in mind rainfall does not necessarily make it to the ground when falling through the very thick foliage of big evergreen trees. Most of the rain will evaporate instead of benefiting the tree. If these trees don't have irrigation, you may need to set up a hose or sprinkler under the canopy to

provide water throughout the root zone despite the rains.

In periods of exceptionally high temperatures you may have to water 2 times per week as the trees simply use more water. Overwatering also can cause thinning and needle drop so be certain you do not leave the trees sitting in puddles of water.

Summer Pests

White flies are still active, in part, due to the May rains but your plants are protected against infestation because of our previous treatments. Even though you have adults flying around they will not be harming your plants. We can never predict which pest will make an appearance in any given year, but as we move into June and July we will see the usual increase in pest activity.

Powdery mildew is always a summer visitor (roses, crepes, euonymous, dogwoods etc.) and will become worse as the rains become scarce.

Sooty Mold is a sign of aphid or scale activity. Sooty mold is a mold spore ubiquitous in our environment just looking for a host. As aphids and scale feed on your plants, they produce honey dew excretions coating leaves below. You may need to look up to determine the source of the honey dew. Overhanging trees may be to blame! Our sprays help minimize the aphid and scale activity on the plants therefore control the formation of sooty mold. Although the sooty mold may linger long after the scale and aphid populations are controlled, it will eventually breakdown and dissipate.

Leaf spot on hydrangeas, Indian hawthorns, roses and other plants are treated at each application but can be a challenge to control especially late in the summer. Removal of dropped leaves will help avoid reinfection. Avoiding over the top watering if possible can reduce leaf wetness thereby discouraging development. Our program is designed to help reduce these pests to manageable levels though depending on weather,

our treatments may not always be adequate to completely stop the issue.

Plant Spotlight

For this plant spotlight we will focus on Arborvitae. These trees add privacy to your back yard or can be a focal tree standing alone in a planting. Many landscapes in the Atlanta area utilize Leyland cypress trees in and around the houses as a cheaper fast growing tree to provide privacy from neighbors. Although the Leylands do fine in this role, they leave much to be desired when it comes to ease of care and insect/disease issues.

When planting an Arborvitae choose one that will fit your space and consider its mature size. There are many cultivars from which to choose starting with a small shrub like an Anna's Magic Ball® at only 15 inches to a Green Giant topping out at 30-40 feet. Your Arborvitae will not need much care once it has fully established itself in well drained soils and needs little fertilizer after establishment. You will want to pick a spot that gets at least 6 hrs of sunlight per day to keep the growth full. Shadier environments will produce more leggy and thinner growth.

As far as insect and diseases go, there is not much that will seriously bother arborvitae. Unlike Leylands, they are not susceptible to seiridium canker, which can and will eventually kill a Leyland, Arborvitae can get some minor tip blights, spider mites and some stem cankers but all are easily controlled with pruning along with our sprays.