

Simple Steps to Lawn Care

by Susan Decker, Travis County Master Gardener

Lawns can seem difficult to keep healthy in our urban environments, with our hot, drought-prone summers and our alkaline, easily compacted heavy clay soils. But there are some simple ways in which you can boost your lawn's health and avoid the problems with diseases and pests that are so common in our area.

1. Give your lawn a great soil and it will vastly improve its overall health. Lawns need 4"-6" of well-drained, organic-rich soil for the roots to be able to access oxygen, moisture and nutrients. Compacted clay soils do not



Let the grass poke through the compost

have good air flow, and can prevent water from soaking down to the roots, or conversely can hold moisture at the roots for too long once it does finally soak in. Organic matter in the soil breaks up those hard, compacted clay lumps and allows air and water to flow through the soil, while also feeding beneficial microorganisms.

Before you seed or sod turfgrass, till compost or a good garden soil into the native soil. You will be able to feel the difference right away. If you already have a lawn and need to amend the soil under it, apply compost annually as a thin top dressing and let the grass grow up through it.

2. Choose the right turfgrass for your yard.

Each of the four turfgrasses that grow well in our area have widely different growing needs, so they are not interchangeable. If you have a lot of shade, you will need St. Augustine; if you have a combination of sun and shade then Zoysia will better fit your needs. If you have full sun you can grow bermudagrass or buffalograss, which are both drought tolerant, but only bermudagrass will tolerate a lot of walking on it. If you want a low-mown grass, go with bermudagrass, if you want a grass that needs no maintenance once established, try buffalograss. If you have the right grass in the right spot, you will have a lawn that thrives, but if you try to grow grass in conditions it does not like, then it will always look stressed.

3. Mow your lawn at the right height to avoid stressing it out. St. Augustine is a shade grass, and so in order to get enough light to photosynthesize it needs to have long, wide blades that are kept cut at about 3.5" in height. That means you let it grow to 4" and cut it back to 3.5". If it is cut too short it cannot make its own food and will stress



Bermudagrass likes to be short



St. Augustine likes to be tall

out, making more runners and fewer blades. Zoysia japonica varieties prefer to be kept at a height of about 2.5".

Bermudagrass likes to be kept mowed low, at about 1.5" depending on the variety. When bermudagrass is not mowed low frequently, it gets leggy and less dense. Buffalograss likes to be left alone or kept high at about 4".

One sure way of killing St. Augustine is to grow it in full sun and mow it low. If you don't like the shaggy look of St. Augustine, it would be better to try a different turfgrass.

4. Train your grass roots to grow deep into the soil by watering 1/2" once a week. If turfgrass is

watered too frequently, and only a little at a time, the moisture stays in the upper one or two inches of soil and that is where the roots stay. But then in the heat of summer that top two inches of soil dries out very quickly, leaving the roots literally high and dry, even if you watered that day. By watering deeply and infrequently, you put moisture in the lower part of the soil profile, and when the upper few inches dry out over the course of the week, the roots grow deeper to access the moisture that is still there at the bottom. When the summer comes, the roots are happy and so are you. To test your irrigation system to check how long it takes to put 1/2" of water on the lawn, put out a straight-sided can marked on the inside at 1/2" up from the bottom, and time how long it takes for the water to reach the mark.

5. Aerate high traffic areas with hard, compacted spots to allow more air flow. When we walk on the grass, we press down on the soil, squeezing out air pockets and compacting the clay. To help your grass roots get oxygen in areas that still get compacted, you can aerate the soil, which involves removing plugs of soil at intervals to create columns of air holes. If you top dress with compost immediately after aerating and water it in, the compost can filter down into the holes to amend the soil and still allow air flow.



Aerating with water through PVC

To aerate successfully, you need to remove soil rather than create holes with spikes that simply compact the sides of the holes even further. Using a hose-end attachment works great because the water easily digs the hole and fluffs up the surrounding soil at the same time.

6. Fertilize lightly, and only when the grass needs it. In our climate and soils, heavy applications of high nitrogen fertilizer can do damage to turfgrass, by attracting insect pests that feed on the lawn, by burning the lawn with high levels of mineral salts, and by forcing a heavy flush of growth that can lead to fungal diseases.

Weed and feed type products can stress some turfgrasses, especially St. Augustine, and can damage tree roots. Young trees can especially be harmed by the broadleaf herbicides in some weed and feed products. Mature tree roots extend far beyond the drip line of the tree, and so if you have a tree anywhere in the yard, its roots will be affected by what you apply to the lawn. Besides, the time to apply pre-emergent

herbicides to kill weeds here is in late winter, while the time to fertilize is not until we are well into spring, so the two should not be applied at the same time in a single product—one will always go to waste.

Leaving grass clippings on the lawn when you mow is the best way to fertilize during the growing season. The leaf blades contain all the nutrients the grass needs, and the clippings filter quickly out of sight to the soil surface, where they can decompose and return the nutrients to the roots.

In the spring when the grass has come out of dormancy and is actively growing, which means you have had to start mowing it, apply a light fertilizer of 1/2 lb of nitrogen per 1000 sq. ft., or just a top dressing of compost. Going light on the fertilizer will keep your lawn from getting damaged from over-application, and will still provide enough nutrients to get it growing well.

If your lawn is not doing well, look for ways to improve soil depth and drainage, change the mowing height to match the needs of the lawn, check your watering time, or aerate if the ground is hard. Do not try to fix a problem by adding more fertilizer, or you will add to the stress on the lawn and make it look worse. Remember that fertilizer is not plant food per se, it is merely nutrients that the grass uses to make leaf blades so it can photosynthesize and make its own real food.

Following these simple steps will help keep your lawn healthy throughout the year, and will reduce the need for chemical pesticides.