

# Managing Your Horseshoe Bay Lawn

For many property owners, a lawn makes a home complete. They strive for a thick, green mat of grass, free of weeds and bare spots.

This would be the kind of lawn that feels soft to the grand kids' bare feet on a summer evening and provides an eye pleasing site for weekend get-togethers or maybe just a quiet afternoon reading in the shade of that old, gnarled live oak.

Reaching this goal in Central Texas has always proven difficult. Growing attractive lawns becomes even tougher in a time of drought and watering restrictions.

Maintaining turf will remain challenging in Horseshoe Bay and Central Texas. Although the area may experience short term variations in rainfall, meteorologists expect the region's climate to stay on the dry side for at least the next few years.

Still, our residents should not lose hope when it comes to their grass. Despite these dry days, a great lawn remains possible. To achieve this goal, the homeowner must commit to learning more about their grass and their soil.

We put together some information here to help you in your lawn care efforts in Horseshoe Bay. The information comes from our own experience, from digging for information on the subject, and from talks and correspondence with local experts.

We contacted Wade Hibler, extension agent with the Texas AgriLife Extension office in Burnet; Ken Gorzycki, director of agronomy at the Horseshoe Bay Resort; Brett Briant, water conservation coordinator with the Lower Colorado River Authority; and Matthew O'Toole, an environmental designer with the Ladybird Johnson Wildflower Center in Austin.

Although this page is structured for someone starting a new lawn, the pointers here could be engaged whether you are just putting it in, or if you've been growing and mowing the same patch of grass since the Horseshoe Bay community began in the 1970s.

The body of information about this subject is huge, but perhaps these tips will give you a better idea about where to focus. We hope this page also will plant some thoughts about doing your own research and finding experts to tailor your lawn care efforts for your situation.

## Planning a lawn

Developing a great lawn requires careful planning. After all, besides being a major feature of your property, a lawn is a living thing that comprises its own ecosystem, so you should approach it as such.

First, look closely at the site. Vital questions include what kind of soil is at the site, and how deep is the soil? Also, what environmental factors affect the site? Determine which areas will lie in full sun, and which will be in partial or full shade.

What about the topography? Pay attention to slopes and consider how best to design and manage those areas. Slopes can produce irrigation runoff, and planting on slopes should take potential runoff into consideration.

## **Turf management and the soil**

When homeowners think about turf management, they might mull items such as how often to water, when to fertilize, and how short to cut the grass.

In reality, much of turf management involves the soil. As Ken Gorzycki puts it, "Soil is critical, since it is the component that holds moisture, nutrients and air for the plants to utilize."

In Horseshoe Bay this means an extra problem to solve. The city sits on the edge of a rock formation geologists call the Llano uplift, which is a dome of granite exposed by the erosion of overlying layers of limestone, shale and sandstone.

Consequently, we face more difficult growing conditions, because in many areas of the city little or no topsoil sits atop the granite. Homeowners and builders must often import soil.

Whatever soil you might bring here, remember that excessively sandy or gravelly soil will not hold moisture well, instead letting it percolate through and drain off the property. Unfortunately, the granite erosion leavings that comprise the native soil in Horseshoe Bay fit the description of excessively sandy or gravelly quite well.

Build the soil at least six inches thick. Adequate soil depth allows roots to go deep as the grass toughens itself against dry conditions. We'll stress here that six inches of soil depth is the minimum that will support a lawn. Make the soil as deep as possible.

## **Compost for your lawn**

When planting a lawn, the soil choice must contain enough organic material to assure it will hold moisture between irrigation cycles. Sufficient organic content is always a big help, but becomes even more critical during a drought.

If you have trouble finding good soil with sufficient organic content, or bringing in good soil proves impractical, get a tiller and mix-in organic material. Compost provides the best method to bulk-up sandy or gravelly soils such as we have in Horseshoe Bay.

Compost is largely composed of humus, the nutrient loaded product of the breakdown of natural materials such as leaves, grass clippings, or some household refuse such as coffee grounds or vegetable kitchen cuttings.

Experts suggest 1 to 2 inches of compost for each 6 inches of soil. Then, once a year apply an additional one-fourth to one-half inch of compost to the surface and promptly water it.

The Texas Commission on Environmental Quality publishes information about compost on its [Take Care of Texas](#) web page. Other, private sources of information are widely available. One example is [Nature's Way Resources](#).

## **Consider microclimates**

Structures and trees on the yard form microclimates. Microclimates are smaller areas where growing conditions consistently differ in exposure to sun, wind, temperature and moisture from other areas of the

lawn. This means different maintenance, and sometimes the grass used will be different from other areas of the property.

Shade is one of the most common considerations when it comes to microclimate. Some grasses will struggle or even perish in shade.

Note which areas grow in full shade, which areas lie in partial shade through the day, and which areas experience shade for only part of the day.

Structures at the site block the wind. In areas behind wind breaks, evaporation rates will be lower than on areas not shielded from wind.

In some areas maintaining grass is difficult regardless of what is done at the location to prepare the site and establish the grass.

Remember that the answer to dealing with an area where it is especially challenging to grow grass is often simple: do not plant grass there. In heavy shade, for instance, the homeowner might want to consider a planting bed.

### **Which grass to use?**

When considering the Central Texas summer heat, the probability of recurring drought, and the need for thrifty water use, Bermuda grass stands out.

Turf experts classify Bermuda as one of the warm-season grasses, which fare better in the high temperatures of our summers.

Bermuda is heat and drought tolerant, and many varieties of this grass exhibit strong disease tolerance. Note, however, that Bermuda performs poorly in heavy shade. Bermuda also goes dormant in the winter.

Further, Bermuda grows aggressively. This means that without diligent edging of beds and lawn borders, this grass will spread into adjacent planting areas.

One variety of Bermuda developed in Australia, called Celebration, is drawing attention for being extra tough, and for being easier to manage, however.

St. Augustine is another warm-season grass widely used in Central Texas, but it needs significantly more water than either Bermuda or Buffalo. St. Augustine, however, tolerates moderate shade, which gives it an advantage in some circumstances.

Because of its need for water, Horseshoe Bay property owners might want to steer clear of St. Augustine. For moderately shaded areas, some varieties of another warm season grass, Zoysia, offer an alternative.

As with other grasses, Zoysia exists in a number of varieties with varying characteristics. Some experts point to Palisades Zoysia as a good choice for this region. Palisades consumes less water than other varieties, bears up to both cold and heat, while performing well in shade.

### **Native grasses**

Turf experts emphasize that Texas native grasses can best stand Texas growing conditions, and so best fit the need.

Buffalo grass is one species with that natural advantage. Buffalo grows native in semi-arid areas of the south-central and southwestern U.S., including Texas. Slow growing, Buffalo needs less mowing than many grasses and it tolerates a variety of soil conditions.

At the Ladybird Johnson Wildflower Center, researchers have developed a mixed-grass approach called [Habiturf](#). This resilient turf results from a combination of three Texas natives: Buffalo, Curly Mesquite and Blue Grama grasses.

The result is a turf that is soft, comfortable to bare feet and thrives with minimal watering. Habiturf also tolerates foot traffic well and needs less mowing and weeding to maintain its appearance.

For a natural look, Habiturf does fine if you opt to never mow it.

Nurseries offer similar mixes of the three grasses, which are spinoffs of Habiturf, under the names Thunderturf and Sun Turf. Websites of [Native American Seed](#) and [Blade Runner Farms](#) carry information about these turfs.

## **Installing**

Lawns can be sodded, seeded, or installed with sprigs or plugs.

Sod, while the most expensive in labor and materials, has its advantages. Sod remains more resistant to runoff, even several years after planting. Sod establishes in the shortest time, as well. While you pay more for the sod, you pay less for water while it becomes established.

Regardless of your installation method, pay attention to the best times to install lawns. Warm season grasses do best when planted in early to mid-spring.

Avoid starting during the late spring or summer. High temperatures stress new grass more and the new grass will require much watering at a time when reservoirs are under a huge demand.

Another important point is to remove unwanted grasses and other plants before installing. Thorough removal becomes even more important while installing native grasses. Otherwise, a non-native such as St. Augustine may reappear to invade and push out the native grass.

Compact the soil lightly during planting, and avoid inadvertent re-compaction during the landscaping project by foot or vehicle traffic.

Employ a backing-out technique while working, suggests Mr. O'Toole. With this method installation starts at the interior of a property, never re-compacting newly prepared soil.

If construction trucks or foot traffic on your property have pressed the soil, stop and break it up, add more soil, or take other steps to make sure you are not planting in soil that is too firm.

## **Maintaining**

### **Mowing**

For most homeowners the main activities for lawn maintenance consist of mowing, watering and fertilizing. When mowing, avoid scalping and mow with a high setting during drought.

Mowing high prompts the roots to grow deep, and shorter leaves mean shorter roots. The longer leaves also insulate the soil from evaporation and reduce stress on the turf.

Another tip is to make sure the mower blades are sharp so they cut cleanly. Torn and shredded grass blades will cause water to pass through the plants faster and lead to more water loss. You may also want to consider a mulching mower.

## **Irrigation**

When it comes to watering, homeowners often overwater. Overwatering can do as much damage as not watering enough, because it chokes the plants and carries off nutrients before they can be drawn in by the roots.

The trick is to moisten the soil enough so the roots will have adequate water to draw upon, but not leave more water than the soil can absorb and hold snugly in the matrix of soil particles. Puddles and runoff are signs of overwatering.

To prevent runoff and for more efficient water use, break the total watering time into two cycles separated by two or three hours. Generally this method allows the soil to absorb more water in less time than doing one longer session.

For example, if you wish to water 30 minutes on your watering day, you could water in one cycle for 10 minutes, wait an hour or two, and water in a second cycle for 20 minutes. The first cycle loosens the soil and helps it take in more moisture on the second cycle.

Steeper slopes may require three or more shorter cycles to prevent runoff.

It is important to consider that the most efficient watering happens when done with an irrigation system installed and maintained by licensed professionals, and which meets the requirements of state and local regulations.

Irrigation systems installed haphazardly waste water and can lead to a non-uniform appearance, runoff, or dead spots. Correctly installed systems put water in the right places at appropriate precipitation rates, and therefore conserve water.

Set each zone separately based on each zone's need, rather than setting all the stations for the same amount of time. Watch each zone and increase or decrease each according to need as they grow more green or less green over time.

Be familiar with your irrigation system's operation, including how to set controller times. Review your controller settings and run the system in daylight monthly to check for problems.

Further, learn about the kind of sprinkler heads on your system and find out about the precipitation rates of the heads. This knowledge will help you apply the correct time settings on your controller.

Manufacturers keep precipitation rates and controller manuals available online. You can also find training videos about how to set controllers on the internet, as well.

While working with your system, consider that its unique design and operating conditions will have an effect on the heads' precipitation rates. Because of this, you should take time to measure the precipitation rates in your yard.

A way to do this is to set down two tuna cans under each sprinkler's spray arc, placing one near the head and the other near the end of the radius. Run the sprinklers for 15 minutes and measure the water depth in each can with a ruler.

Then, add the depths collected by the cans and then divide by two to see how much water the measured head puts down in 15 minutes.

This measurement will yield a better idea of how long you need to run your irrigation stations and put down the correct amount of water. The goal is to set up your system so it will water about 1 inch per week.

To sum up, when it comes to your irrigation system, we advocate staying involved in its operation. As Mr. Gorzycki says, "Manage your irrigation system...don't just set it and forget it."

## **Fertilizing**

Fertilize carefully and deliberately. Fertilizing should only occur when really needed and in appropriate amounts.

More fertilizing means more growth. More growth adds to water consumption by the lawn. Read fertilizer directions and if possible, consult with turf experts before proceeding.

Soil tests can be a great help in determining your lawn's needs. The Texas AgriLife Extension offers testing through its soil laboratory.

Basic tests for a residential lawn can cost as little as \$10. For a more complete picture, however, consider more detailed testing including a routine soil work-up, plus an analysis of organic matter and a texture analysis.

The more detailed analysis will run \$50, but the information will be valuable in caring for your lawn.

Information about soil testing is available at <http://soiltesting.tamu.edu/files/urbansoil.pdf>.