

Why an **Organic** Lawn?

Green, suburban lawns are beautiful, but are they worth the price? Frequent watering depletes our finite water supply while excessive pesticides and fertilizers harm our bays and bayous. Runoff from rainwater carries lawn chemicals to our waterways. Fertilizers feed algae that remove oxygen from the water and pesticides are toxic to many forms of aquatic life. Lawns and turf are one of the largest "crops" grown in the United States. An organic approach to lawn care minimizes the use of toxic chemicals and produces a beautiful green lawn. One of the main causes of disease in Gulf Coast lawns is excessive watering. Organic lawn care methods help reduce this wasteful practice. Our population is growing, but not our water supply. Organic lawn care is not just replacement of chemical pesticides with organic pesticides. Organic lawn care is a combination of practices. It is about making sure the conditions for good growth are maximized and the conditions for weeds and disease are minimized.

Tip #

1 Mow at the right height and Grasscycle.

Recommended heights for St. Augustine grass is 2.5-3.5 inches, Bermuda grass, 1-1.5 inches. Taller grass develops deeper roots and thus makes better use of water in the soil. Never mow more than 1/3 of the grass length. Cutting too much at once stresses the grass and leads to disease or insect problems. Never bag your lawn clippings. Remember to grass- cycle - lawn clippings are free organic fertilizer and supply 25% or more of your lawn's needs. Consider a "mulching mower" next time you buy a mower. Mulching mowers make smaller clip- pings and blow them down into the grass where they can quickly turn into fertilizer.

Tip #

2 Fertilize Organically

Even an organic lawn will need some additional fertilizer to stay green. Organic fertilizers are slow release in form, providing a long-term green up of the lawn. This healthy fertilizer might be composed of fishmeal, bone meal, blood meal, seaweed, cottonseed meal, compost, or other materials. Organic lawn care is based on the premise of feeding the soil as well as the grass. The "soil food web" is a complex ecosystem of microorganisms, insects, spiders, etc. Organic fertilizers nourish microorganisms as well as provide nutrients for plant growth. And lawns grown in soils rich in organic matter require much less water.

Yes, organic fertilizers are more expensive than chemical fertilizers, but they do many jobs. Not only do they feed your plants and soil, but they also reduce pollution on land and sea. The best

organic fertilizers will come with a “guaranteed minimum analysis”, a set of three numbers which indicate the amount of nitrogen, phosphorous and potassium in the formula.

How much is enough? The recommended rate for our region is 1lb. of nitrogen per 1000 square feet for any single application of fertilizer. To figure out the amount of fertilizer you need to, divide 1 by the percentage of nitrogen (the first of the three numbers on the label) and then multiply by 100. For a fertilizer with 5% nitrogen, apply 20lbs. of fertilizer/1000 square feet ($1/5 \times 100 = 20$). Fertilize twice a year, spring and fall. With any fertility program, it is important to have a soil test completed every 2-3 years to learn how much fertilizer is really needed, and to make sure excessive levels of nutrients such as phosphorous do not occur.

Tip #3 Good compost is the ultimate soil additive

Compost is the ultimate organic practice. It simply returns to the earth that which has been removed. Yes, compost is organic waste, but it is not wasteful. It is much more than simply a fertilizer. Good compost acts as a soil stabilizer and a sponge that not only retains water, but also releases it when needed. It is nature's ultimate slow-release fertilizer.

Commercial organic fertilizer is similar to compost, but true compost usually has a higher content of plant material, and thus has more of the “humus-like” materials that act as true soil stabilizers. Because compost usually has a lower nutrient content than commercial-grade organic fertilizer, you may need to occasionally apply commercial organic fertilizer to have a solid green lawn.

All compost is not the same. Low quality compost – the kind most commonly available – may actually tie up nutrients needed to feed your lawn. High quality compost is fully decomposed and has no odor. It should feel “smeary” with few wood chips or obvious plant parts. Finely screened (1/4”) compost works best. Let the cycle of nature work for you.

Care should be taken with composts with high amounts of manure or biosolids, as the application rates given above could easily result in excessive amounts of nutrients that could end up in runoff. Always ask about the source of the compost and what went into it.

Tip #4 Use less water.

Overwatering is the most frequent mistake a homeowner will make in lawn care. It is one of the main causes of brown patch and fungal diseases. A few simple rules will help you maintain a beautiful yard with minimal watering.

- Wait until it wilts. Grass will not suffer with a little wilting. Most grasses will turn a bit dark or dull when the plant is in water stress. Grass under water stress shows tracks after someone walks across the lawn.

- Apply water in a series of short intervals. Before the next application allow $\frac{1}{4}$ to $\frac{1}{2}$ " of water to soak into the earth

Most lawns perform quite well on 1" of water applied each week during the growing season. Never apply water to the point of runoff.

- Water early in the morning. This will minimize loss due to evaporation and wind.

Know your water usage. Place a small container such as a tuna can, in the lawn while watering.

Note the time necessary for collection of 1" of water. Thus you can time your water application.

Pest Management

The goal of good organic management is the development of healthy turf that resists pests with little intervention. However, a lawn is an artificial system and subject to attacks by various pests. Organic solutions require organic materials made from plants and animals. On the Upper Gulf Coast, our main problems are chinch bugs and brown patch. Chinch bugs thrive in dry, stressed grass. Proper irrigation is the best way to keep these pests at bay. Do not allow grass to wilt when the threat of chinch bugs is present. Little research has been done on organic treatment of chinch bugs. Neem oil is reported to be somewhat effective against chinch bugs. Do not treat dead grass areas. It is the edges around the dead areas where chinch bugs thrive and need control. A diverse lawn is often the best prevention for chinch bugs. A mix of Bermuda grass and St. Augustine provides great protection, although this mix is not appealing to some homeowners. Excessive water and fertilizer promotes Brown Patch. Reduce irrigation in the spring and fall to avoid the wet conditions necessary for Brown Patch. Use organic fertilizer and decomposed compost to build the soil food web under your grass. Brown Patch does not destroy a lawn. It is a cosmetic issue that can be reversed by appropriate watering and fertilization.

A weed is just a plant out of place. A little toleration is the best remedy for most situations. A "hand remedy" is the best solution for the larger variety. The key to promoting healthy turf is by crowding out weeds.