

Organic Lawn Care

Did you know that Americans directly apply approximately 70 million pounds of pesticides to home lawns and gardens each year? In the pursuit of greener lawns, birds and other wildlife are killed and important water resources are affected. These chemicals collect on our shoes and are tracked in to our homes. In some neighborhoods it seems to be a contest to have the greenest lawn. A lot of water is wasted to maintain this artificial green. It may be time to start thinking of kicking the green lawn habit!

If you are thinking of transitioning your lawn to organic, here is an overview of what you need to know about going green. The key to a healthy lawn is healthy soil and good mowing, watering and fertilizing practices. Healthy soil contains high organic content and is teeming with biological life. Healthy soil supports the development of healthy grass that is naturally resistant to weeds and pests. In a healthy, fertile and well-maintained lawn, diseases and pest problems are rare.

But doesn't it cost more you ask? If your lawn is currently chemically-dependent, initially it may be more expensive to restore the biological life. In the long term, however, it will actually cost you less money. Once established, an organic lawn uses fewer materials, such as water and fertilizers, and requires less labor for mowing and maintenance. More importantly, your lawn will be safe for children, pets and your local drinking water supply.

Why go organic? Here are a few benefits of Organic Lawn Care –

- Safety, for humans, animals, insects and the planet
- Better Health, for humans, animals, the lawns and the planet
- Water Conservation & Preservation, since water does not often become contaminated in organic systems, which also require less water than synthetic programs
- Soil Health & Sustainability, since organics builds organic matter and life within the soil
- Pest Reduction, since insects tend to be more attracted to out-of-balance synthetic systems
- Resource Conservation, since synthetic fertilizers are derived from fossil fuels and organic systems encourage recycling, and because organic systems emphasize less mowing
- Financial Savings through time, since organic systems become more independent as the soil is improved
- Environmental Preservation, including a reduction in greenhouse gases and global warming
- Noise Reduction from decreased reliance on power equipment

Here is a recommended guideline that you can follow to start your organic lawn -

Early spring

Test Your Soil - The first thing you need to do this spring is to get to know your soil. It is highly recommended that you analyze your soil during the growing season by having it tested to determine specific soil needs. You can contact the UMass University extension service, specifically the Soil and Plant Tissue Testing Laboratory, at (413) 545-2311, or check them out online at www.umass.edu/plsoils/soiltest/, to find out how to take and send in a soil sample. In addition to nutrients (nitrogen, phosphorus and potassium) and pH, ask for organic content analysis, and request organic care recommendations. Ideal pH should be between 6.5-7.0, and organic content should be 5% or higher. You will receive an informative report and organic recommendations for your soil. It's a great place to start since having the soil tested will point out any important deficiencies, which you can then take steps to correct.

Clean-up and Aeration- After the ground has thawed and dried out, rake winter debris off the lawn. Then aerate your lawn (it's best to aerate when the soil is moist, but not too moist). You can rent a machine or, at a fraction of the cost, you can use spiked clogs. Aeration helps to alleviate the compaction caused by winter snows and gravity. The soil gets an injection of oxygen, which promotes activity in soil organisms and helps subsequent fertilizations penetrate deeper to root systems. Earthworms are your best soil aerators, and they will thrive in your organic lawn!

Overseed With the Right Grass Seed – Sprinkle grass seed throughout your lawn in the spring & fall. This will help fill in bare spots and choke out weeds. First loosen the soil, spread peat moss, compost or topsoil, spread seed and walk over to push seeds into the soil, then water. Add compost to your lawn once or twice a year (July through August). This greatly supports your lawns' health. Apply at a rate of 100 pounds per 1000 sq. feet.

Early-Late spring

Apply complete organic fertilizer- or compost. It's important to note that fertilizers and amendments should only be added to correct deficiencies or imbalances identified in soil test results. Unnecessary applications of any fertilizer or soil amendments can do more harm than good. Slow release organic fertilizers provide vital nutrients to grass without the risk of burning or harming the grass. These natural products help support the health and vitality of the soil and grass, lengthening and strengthening roots and helping the grass fight off pests, disease and weeds. Many soils, especially those that have been extensively treated with synthetic chemicals, require amendment to regain their health. Organic fertilizers and soil amendments, particularly compost, feed the soil, benefiting the plant by encouraging it to create a healthy root system.

Compost is an ideal soil amendment, adding the much-needed organic content to your soil and suppressing many pathogens. In the spring, preferably after aerating, spread ¼ inch layer of organic or naturally based compost over your lawn. Compost tea and worm castings are also great additions. Also, the Needham Transfer Station offers compost to local Needham residents.

Early spring - thru fall

Routine mowing- For the first mowing, mow down to 2 inches to remove any over wintering fungus (and bag to remove clippings). For the rest of the year, keep it at 3-3.5 to shade out weeds and foster deep, drought-resistant roots. Insect and disease problems are also minimized when cutting high. For the last several cuts of the season, start cutting lower again. Bad mowing practices cause more problems than any other cultural practice. Mowing with a dull blade makes the grass susceptible to disease and mowing too close invites sunlight in for weeds to take hold. Keep your blades sharp, or ask your service provider to sharpen their blades frequently.

Your grass clippings contain 58% of the nitrogen added from fertilizers, improve soil conditions, suppress disease, and reduce thatch and crabgrass. Mulched grass clippings also shade the surface of the soil and make it harder for weed seeds to germinate. So, leave the grass clippings on your lawn to decompose and return their nitrogen to the soil for your lawn to reuse.

Early-mid fall

Dethatch- This involves removing that unsightly build up of decomposed stems and leaves sitting on the soil's surface and allowing fertilizer and water to penetrate and feed your soil. If you only have a few problem patches of thatch in your lawn, a thatching rake should be sufficient.

Overseed – You can seed your lawn at any time of year during the growth period, but fall is the best time to seed your lawn.

Apply winterizing organic fertilizer- You can apply this last application of fertilizer from the beginning of September through early November. Probably the most important application of the entire season. A winterizing fertilizer concentrates below the soil, strengthening root systems and developing plant hardiness. It prepares your lawn for the start of the next growing season.

Mid-late fall

Apply lime (if indicated by soil test). To maintain an ideal pH level of 6.5 – 7.0, typically apply 30 lbs of pelletized lime per 1,000 sq.ft. Pelletized lime costs a little more but is easier to apply than powder. (Note: If a soil test indicates that your soil is already high in magnesium, you will need to

use either Calcium Limestone Flour or Aragonite instead of dolomitic limestone.) Your soil test will indicate how much lime to apply.

Late fall

Final clean up - Reduce your cutting height for the final mowings, according to the recommendations listed above. Remove remaining leaves from lawn, or just attach a bag to your mower, chop them up, and add them to your compost pile.

One of the most common mistakes people make with lawn maintenance is their watering schedule. Lawns require about one inch of water once per week. The best time to water the lawn is early in the day. Watering late in the day may encourage fungal invasion due to insufficient evaporation. Your lawn needs to be watered when you apply seed or when it is showing signs of drought, and then you need to water it deeply. An easy check to see if you are watering properly is to place an empty tuna or cat food can or a cup under the sprinkler. Stop watering when there is an inch of water in the can. Watering deeply will encourage the grass to send its roots deep, deeper than most weed roots go. As the top few inches of soil dries out, the weeds and weed seedlings will die while the grass finds moisture deeper in the soil. (NOTE: Light and frequent sprinklings encourage shallow root growth – which is not good. Shallow, frequent watering also encourages "thatch" where the roots of the grass grow out sideways.)

For more information on organic lawn care tips, be sure to check out the Environmental Protection Agency's (EPA) website at: www.epa.gov/wastes/conserv/rrr/greenscapes/owners.htm. For more information on starting and maintaining your organic or natural lawn, and to find local resources in your area, see the National Coalition for Pesticide-Free Lawns website at www.pesticidefreelawns.org. Another good website to check out for more information is www.safelawns.org/.