

Organic Lawn Care

Watering

Water infrequently but deeply. Water only about once every 7 to 10 days when there has not been a good rain. Light watering encourages shallow root growth. Shallow roots dry out quickly in dry, hot weather.

You should wet the soil down to the full root depth, about 6 inches. To know how deep the soil is saturated, stick a shovel or spade into the soil and press forward to see how far the saturation goes. If you do not know the rate of your sprinkler, place a coffee can within its range and measure the depth of the water collected. After an hour, it should measure 2 inches.

Do not over-water. Too much water can suffocate turf and encourage disease. More lasting damage can be done to a lawn by over watering than by drought. Organic lawns have better soil structure, more organic material, hold more water and can withstand dry weather better than chemically-treated lawns.

The best time to water is in the early morning. Watering should never be done at night and generally not in direct sunlight.

Mowing

Cutting grass higher will shade out weed seeds and keep them from germinating. Avoid cutting off more than one-third of the grass blade at a time, because more can shock the plant and increase the chances of infection. This means you may have to mow more than once a week. Keep the mower blade sharp. Dull blades tear grass, leaving larger surface areas vulnerable to disease.

Use a mulching lawn mower to return the grass clippings to the lawn, providing vital nitrogen to keep it green. In healthy organic soil, the clippings break down quickly. This will reduce the need for fertilization and watering.

Seeding

Seed with a tall-fescue blend. A blend is preferable to a single strain of seed, because different strains will survive different diseases and weather conditions.

Thick turf is the best way to prevent weeds. Seed bare and thin patches in late April or May.

Keep the lawn aerated. You can use a rake, attach a dethatching blade to your mower, or for best results, use an aerator. (You may need to rent it). Use core aeration instead of spike mechanisms because these tend to compact the soils at the side of each plug. Follow with a top dressing of compost, and apply grass seed to crowd out any weeds.

Fertilizer

Fertilizer is much less important for organic lawns than it is for chemically-dependent lawns. To build a healthy lawn that will squeeze out weeds, begin by using good organic fertilizers and compost, available at many lawn care stores. If your soil is low in nitrogen, consider an organic fertilizer, or add white clover seed. Clover can

take the nitrogen from the air, adding it to soil and grass. Keep in mind, however, that clover blossoms can attract bees.

Choose an organic fertilizer with low water soluble nitrogen (5% or less is good). Organic fertilizers will have much lower N-P-K numbers and will add up to about 10-15. Do not fertilize in late fall.

Earthworm castings are an excellent organic fertilizer, particularly for seedlings, gardens and plant beds.

Compost

Compost contains beneficial microorganisms, and organic material. These are vital for the first two years of transition to an organic program. Spread 1/4 inch thick on turf, then rake in.

Liquid Compost/Soil Conditioners are commercially available products that can be very good sources of food for microbes, but will not contain living microbes. Use when fungus is present or anticipated.

Soil Amendments

Lime

Test the pH of your soil before applying. Soil test kits are available at local garden stores. Keep the pH as close to 6.5 as possible.

Long Island soil is likely to be more acidic (less than 6.5). If your soil is too acidic, add lime to raise the pH of the soil (look for calcitic lime). Adding calcium will discourage dandelions. Pelletized lime is effective and easy to apply; avoid inhaling powdered lime.

Kelp

Kelp products are a natural source of micro nutrients, including vitamins, plant growth hormones, and trace minerals. Kelp can give your lawn a boost in the heat of summer and help grass seed get established.

Rock Dust

Rock dust adds trace minerals that are important for plant growth and can be spread any time of the year. Remineralizing your soil will improve turf vitality.

Rock phosphate

Rock phosphate is important for root systems and should be added in the fall.

Weeds

Weeds take hold in bare or thin patches. Small outbreaks of perennial weeds can be weeded by hand or killed with hot water. Cover large patches with a mixture of lime and compost, then seed on top.

Soil Pests

Grubs

Soil pests such as grubs can be controlled with beneficial nematodes. Apply nematodes in the early morning or late evening, or on a rainy or cloudy day, and in spring or late summer. Direct sunlight will kill these delicate microscopic worms. Milky spore will also control grubs for years, Milky spore is a disease specific to the Japanese beetle.

Pest insects

These pests can be controlled with a number of organic products, including garlic juice. Do not spray on flowering plants, or bees will not pollinate them. If you are having a party, spray a few days before (the garlic odor will disappear in about a day). Garlic will keep pest insects off your property for about two to four weeks.

Hot pepper wax will repel insects from your bushes, flowers and vegetables.

Dollar spots and other diseases

Apply a high-quality compost, composted wood bark, compost tea, or a microbial inoculant containing trichoderma fungus. When you mow, remove clippings to eliminate a possible source of the disease. Do not over-water, or water in the evening.

Feed the soil

Weeds, insects, and diseases are indicators of an underlying problem. If you only treat the symptom and not the cause, the problem will persist. The underlying cause is usually malnutrition of the soil and the plant.

Since Long Island's total water supply is drawn from the ground, it is important to reduce the use of pesticides and synthetic fertilizers, which can leach through the ground and contaminate the underground aquifers. Synthetic nitrogen, which runs off from fertilized lawns, also causes algae to grow in bays. As the algae die and decompose, they deprive fish of oxygen. Hypoxia, or a lack of dissolved oxygen, is already a serious problem throughout the western part of the Long Island Sound. Finally, your lawn can become addicted to toxic pesticides because they kill the beneficial insects that help maintain a healthy lawn. When these "good bugs" are gone, expensive pesticides are reapplied to kill pests the "good bugs" would have controlled.

Pesticides Pose Serious Health Risks

A nationwide mortality study of golf course superintendents, who worked with pesticides intensively, found that they died of brain cancer and non-Hodgkin's lymphoma at twice the rate of the general public.

(Kross, et al., Mortality study among golf course superintendents, Golf Course Management, 1994)