

## LAWNS – A Short Primer

Spring – Gypsum is used in areas where snow has been piled, where salt has been used and where people or vehicles may have cut corners or parked on the lawn during winter. Gypsum relieves soil compaction and the effects of salt by chemical binding it. It is better to use calcium chloride rather than sodium chloride around any landscaping to melt snow in the winter. Gypsum and grass seed should be applied to any bare spots.

In the spring, it is advisable to rake, aerate and put down lime. Lime is used to change the pH, to sweeten the soil, and to move the acidity to a more neutral pH. Fertilizing, the natural cycles of decay and acid rain are some of the events that contribute to the ongoing acidity of the soil. Grass in particular thrives better in a more neutral pH environment which allows it to take up nutrients at the optimal rate.

When re-seeding look at the light conditions and buy sun or shade tolerant seed. Always purchase mixes and drought tolerant varieties to reduce single variety diseases and blights. Apply seed and then cover with a thin layer of compost to hide it from birds. Keep the seeds damp initially, watering twice a day for no more than 15 minutes. This is long enough to ensure dampness without seed or compost erosion. Water in the afternoon, no later than 3 PM, so that the incidence of fungus attacks is minimized. After two weeks, cut this schedule to once a day, in the morning. There is no need to water this much if it has been raining, or if it is cool and humid.

Corn gluten meal is an organic weed seed suppressor. It CANNOT be used when one is trying to also re-seed bare patches in the lawn. Corn gluten meal also adds a significant amount of nitrogen to the soil, so if one is planning to use it then the rate/type of fertilizer must be adjusted accordingly. However, a liquid form of corn gluten with a lower nitrogen content has recently been developed. Most fertilizers advertised on the market for promoting grass growth have an excessive rate of nitrogen. The more nitrogen, the more mowing is needed! But perhaps more importantly, excessive nitrogen is leached through the soil and can create serious ecological problems with wetlands, rivers, ponds and aquifers.

The best way to suppress weeds is to keep the lawn re-seeded on a regular basis AND to mow the grass high all summer long. Three inches at a minimum and four inches is better. Mowing the grass high will cause more competition for weeds and will also shade the soil so that weed seeds do not germinate readily. The shaded soil stays cool and moist longer and the grass is less prone to drought stress. Stressed plants are vectors for insect and diseases. Consider higher lengths in areas where the lawn is not readily visible (e. g. “the back 40”) and/or adding in meadow flower plugs.

Irrigation is necessary to keep the lawn green in July and August. Watering once a week in a given zone, approximately one inch will promote the best root growth and help prevent drought stress. Watering lightly and frequently promotes shallow root growth, and allows fungal diseases to develop because the lawn is frequently damp. Deep roots are also less prone to grub attacks. There will always be grubs, but if there are more roots the grass can withstand a grub attack and can regenerate the roots faster.

Fall - In the fall, the last mowing should be cut short and a light fertilization applied to promote root growth for the cooler months. If the soil is very acidic, another dressing of lime can also be applied.

**Designer of Greens** is a member of the Ecological Landscaping Association as well as an active member of the New England Wildflower Society and the North American Rock Garden Society. We are an accredited, organic landcare company as well as licensed pest applicator in the state of MA (required by law to apply materials to another's property.)