



Rolling Greens May Gather Some Moss

About 50 different species of moss are commonly found in grass. Unlike seed-bearing plants, mosses produce spores that are blown from one area to another by the wind. These spores germinate to form thread-like structures.

Mosses are opportunistic plants that will develop and grow in bare soil or where grasses are weak and thin. They generally appear in areas with shallow, rocky, or poor fertility topsoil, in acidic soils, or in areas of heavy shade and excessive moisture. Because these conditions are tough on turf grasses, mosses can invade and establish themselves. Moss will not crowd out healthy turf grasses, but once moss is established, grass plants will not spread into those areas.

Should I get out the rake?

Although it may look as though you are reducing the moss by raking, you are only spreading and reseeding the moss spores and fragments. If the moss infestation isn't too severe, a better alternative would be to regularly scout your lawn and carefully pull out any moss present.

Acidic Soil

The ideal soil pH for most lawns is 'neutral', about 6.5 to 7. A pH below 6 is considered 'acidic' and over 7 is 'alkaline'. Acid soil will often be associated with poor fertility, and may encourage moss growth in bare areas. Limestone is the common remedy used to 'neutralize' acid soils. If you live in southern Ontario, you will not need lime, as the soil pH is usually neutral, at 6.5. If you live in some parts of northern or eastern Ontario, soil tests may show pH levels of 4 or 5. In these cases, applying limestone twice each growing season, in addition to regular fertilizer applications, should significantly improve the pH level.

Moisture and Shade

Moist soil conditions, caused by poor drainage, low air circulation, and excessive shade, support the growth of moss. What are some remedies?

Try to alter the soil surface to encourage moisture to drain away. Dig a gentle trench that will divert water away from the moist area, or bury a drainage tile that will pick up excess





moisture and carry it away. Raising the soil level by adding new topsoil can help move water away from that area. Sometimes aeration may help improve compacted soils.

If shade is the limiting factor for good turf growth, prune some tree branches to allow sunlight to filter in. Reseeding with grasses that are more adapted to shade may help, however even shade-tolerant grasses will not survive too long under extremely heavy shade or in soils that are saturated for long periods.

Finally, if pruning and draining are not feasible, consider a more permanent solution by building up the soil, and replacing the grass with pachysandra, periwinkle, or other shade-loving ground cover.

Poor Soil Fertility

If your soil is in a dry, and fairly sunny area, then the appearance of moss is probably caused by poor soil fertility. Recent studies at Ohio State University and at Cornell University in New York indicated that fertilization with a high nitrogen fertilizer had a significant effect on moss reduction, and supported the growth of healthy turf. Monthly applications of iron and potassium, in combination with nitrogen, were also helpful.

Specific moss control fertilizers are available that contain nitrogen, potassium and iron. These are most effective in a four-application per year program, with applications in early spring, late spring, mid-summer, and early fall. As with all fertilizers, carefully read and follow the directions on the product

