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SEND YOUR QUESTIONS TO:

"Ask the Expert"
Landscape Management
7500 Old Oak Blvd.
Cleveland, OH 44130

Please allow two to three months for an answer to appear in the magazine.

Critical moss

How do you deal with moss problems on the golf course?

—NEW YORK

Moss plants, like many weeds, establish in open areas where turfgrass is not very aggressive. This might be related to cultural practices such as shorter mowing and/or low nitrogen fertilization. Other factors include too much shade, soil compaction, wet conditions due to poor drainage, poor air circulation and improper pH.

Mosses are small, leafy plants which usually grow in large numbers close to each other. They vary in size and do not have roots. However, they have root-like structures which help them attach to soil or other surfaces.

Usually, moss plants begin to grow before bentgrass turns green in the spring. You could consider using 3 to 5 lbs./1000 sq. ft. of hydrated lime in late March to burn back moss. For ease of dry application, lime can be mixed with a sand topdressing. Lime is also helpful if the soil pH is too acidic for optimal turfgrass growth.

Moss problems cannot be satisfactorily managed unless growing conditions for the desirable turfgrass is improved. Consider providing the following:

1) Maintain good soil fertility to help improve turfgrass health and competitive ability. Maintain good nitrogen and potassium in your program.

2) Improve drainage.

3) Provide selective pruning and/or remove dense shade to improve light. This may require removing some less desirable trees.

4) Plant shade-adapted agressive turfgrass if shade is a factor.

5) Reduce soil compaction with yearly aerification. If you then apply sand topdressing, you create a system of vertical drains that helps water move from the surface.

6) Improve air circulation by removing low-growing branches.

7) Correct soil pH. Moss is tolerant of a wider pH range than turfgrass and can grow in either acidic or alkaline soils.

When these practices fail, consider using one of the three following chemical management options:

- When moss plants are actively growing, directly apply 10 lbs. of ammonium sulfate per 1,000 sq. ft. This treatment may cause some turfgrass to temporarily burn.
- Mix three level tablespoons of powdered copper sulfate in five gallons of water and apply over 1,000 sq. ft. Copper sulfate can stain clothes and non-target areas; therefore, use caution during application.
- Treat the area with herbicides such as Scott's Goosegrass Control (Betasan/oxidiazon combination), Siduron (Tupersan) or Bentazon (Basagran). Scott's Goosegrass Control may give the best control; however, it can cause turfgrass discoloration. Tupersan and Basagran may not be as effective, but they are less injurious to turf.

Read and follow label specifications for best results.

Clogged tines

When aerating a green, the tines often clog up, resulting in the core being pushed down into the green rather than ejected. Can this lead to problems by compressing the soil beneath the surface?

—NEW YORK

Yes, clogged tines can cause soil compaction similar to a "spiking" operation. During spiking, soil is pushed down and to the sides of the spiking tool, creating the possibility of lateral as well as downward soil compaction.

Ideally, aerification should remove at least a two-inch core to obtain optimum benefit. If the tines are not penetrating deep enough into the soil or the cores are not being ejected, you may not get any aerification benefits. First, determine the problem:

- Are the tines too small?
- Is the soil too dry or too wet?
- Is the equipment heavy enough?
- Is there too much thatch?

To get maximum benefit out of your aerification operation, make sure that the equipment is in good condition and that the soil is moist but not wet.