Ten Steps to a Healthier Home Lawn

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The key to disease control is a healthy plant. Under proper turfgrass management, disease-causing conditions are often reduced and healthy turf is maintained. The following management practices will help achieve vigorous, healthy turf and reduce turfgrass disease problems.

1. **Prepare the soil properly for successful turfgrass establishment.**
   - Take soil samples to determine proper lime and nutrient requirements.
   - Remove debris such as rocks, tree stumps and other woody debris. Fairy ring has long been associated with rotted wood and other organic materials.
   - Provide proper drainage. The area should be graded to prevent surface water from collecting and making the soil soggy.

2. **Plant a locally adapted, disease-resistant turfgrass.**
   - Consult your local county Extension office for recommended varieties and cultivars for your area. Visit www.extension.uga.edu or call 1-800-ASK-UGA1.
   - Visit www.GeorgiaTurf.com, the University of Georgia’s turfgrass website.

3. **Purchase high quality, disease-free seed, sod or sprigs from a certified producer.**
   - Plant material that is certified for varietal purity and free of noxious pests.
   - Before planting, consider the time of year and the remaining length of the growing season. With adequate moisture and time, most turfgrasses will recover from the shock of harvest, transport and planting.
   - If the lawn is to be seeded, use fungicide-treated seed to discourage seedborne and seedling diseases.
   - Nematodes and disease problems can be brought in on infected springs and sod. Inspect the plant material and, if problems are detected, notify the contractor before the sod or sprigs are planted.

4. **Maintain the recommended mowing height.**
   - Mow turfgrasses often enough so that not more than 30 percent (1/3) of the leaf blade is removed in a single mowing. If more plant material is removed, the grass can become stressed and more susceptible to disease-causing organisms and insects.
   - Keep mower blades sharp. Dull blades will shred the leaf tips, causing the turfgrass to use more water, undergo undue stress and have a ragged appearance.
   - Raise the mowing height during stress periods such as drought.

5. **Follow proper irrigation practices.**
   - The most cost-effective practice that enhances turf growth is proper irrigation.
   - Apply water when signs of moisture stress (e.g., wilt) are observed on 30 to 50 percent of the lawn. For most turfgrass species, wilted turfgrasses will have a dull to bluish-green color, leaf blade folding or rolling, and footprints will remain visible for a minute or longer after walking over the area.
• Apply enough water to wet the soil 6 to 8 inches deep. This is usually equivalent to 1 inch of water or 600 gallons of water per 1,000 square feet. To avoid runoff, the amount of water that can be applied in any single irrigation can vary with different soils. For example, the same amount of water will penetrate deeper into a sandy soil than a clay soil.
• If the soil becomes compacted, loosen it through cultivation such as core aeration. This will help the water penetrate the soil.
• Irrigate during dry periods in early spring and late fall.
• Late afternoon irrigating can encourage disease development. Watering after dew development (approximately 9:00 p.m.) and before sunrise (approximately 6:30 a.m.) is most efficient and won’t increase disease problems.

6. **Apply fertilizer and lime according to soil test recommendations.**
• Disease incidence can be increased by imbalanced fertility and improper fertilization.
• On warm-season turfgrass species, withhold the first spring nitrogen application until soil temperatures at the 4-inch depth are consistently 65°F.

7. **Remove excess thatch.**
• If the lawn is not mowed, irrigated and fertilized correctly, thatch accumulation could create a problem.
• Excess thatch reduces water infiltration, creates shallow-rooted turf and encourages insect and disease problems. Disease-causing organisms and insects often survive and multiply in thatch.
• Excess nitrogen can lead to thatch accumulation.
• If excess thatch accumulates, the lawn will feel soft and spongy. For a thatch layer thicker than ½ inch, dethatching is advised.

8. **Allow for adequate light and air movement in shaded areas.**
• Raise the mowing height in shaded areas to help the plant absorb the light that does penetrate the tree canopy.
• Design landscape plantings so that trees and shrubs do not restrict light penetration or air circulation to the turfgrass canopy.
• It may be necessary to prune nearby trees and shrubs to improve light penetration and air movement.
• In shaded areas, excessive moisture can persist within the grass canopy. Disease-causing fungi use this moisture to survive and infect the grass.
• Reducing fertilizer amounts by 20 to 50 percent compared to grass in full-sun areas also helps the grass in limited light environments.

9. **Follow recommended disease, insect and weed control practices.**
• Correctly identify the disease, insect or weed prior to treating with a pesticide.
• Proper management practices can reduce pest problems and reduce the need for chemicals.

10. **Contact your local county Extension office for assistance.**
• If these measures are followed and disease or insect problems still develop, consult your local county Extension agent, visit www.extension.uga.edu or call 1-800-ASK-UGA1 for appropriate recommendations, including cultural practices and chemical recommendations to reduce disease damage.
• Your local Extension agent can supply additional turfgrass management advice and information.
• The UGA turfgrass website, www.GeorgiaTurf.com, also has information on maintaining a healthy lawn. Follow UGA Turfgrass Specialists on Twitter @GeorgiaTurf for timely information.