



Maintaining Quality Turfgrass under CT's Lawn Care Pesticide Ban Information for Schools and Day Care Centers

1. Is it possible to maintain healthy turfgrass without pesticides?

Yes, but groundskeepers will have to rely more on mechanical treatments and other cultural control methods to grow and maintain healthy grass like they did prior to the widespread use of synthetic pesticides and fertilizers. These methods include vigorous overseeding, aerating the soil to relieve compaction, adjusting mowing heights, monitoring for pests, and application of fertilizers and other amendments based on soil test results. These practices help the turfgrass better compete with weeds and can help reduce damage created by other pests, such as insects and diseases.

2. Why should I get the soil tested and how often?

Relying on soil test results will allow you to use only the fertilizers and other soil amendments needed for good growth of the turfgrass, which will save you money and help prevent pollution from runoff of excessive fertilizer. Soil nutrient analysis estimates the availability of nutrients (potassium, magnesium, phosphorus, and calcium) to turf plants. Soil tests also determine pH and the amount of organic matter in the soil. Soil scientists at the University of Connecticut recommend that you test your soil every year.

3. What should I do with the soil test results?

Apply the amount of nutrients recommended in the soil test report. If the pH is low, apply lime according to the recommendation in the report. Maintain records of the soil test results and compare your new results with the results from previous years. If the soil test values, especially phosphorus, have increased into the "above optimum" range, you will want to reduce or eliminate phosphorus applications to avoid polluting surrounding water bodies.

4. What is soil organic matter and why is it important?

Soil organic matter is decomposed organic material in the soil. It is important because it provides a reservoir of nutrients for the plants. Soil organic matter also improves the structure and water-holding capacity of the soil and reduces the likelihood of drought-stress on plants. Adding amendments to the soil such as leaf compost can increase soil organic matter. Applying compost made from manure is not recommended because this will often increase soil phosphorus to levels that can cause water pollution.

5. What other benefits do soil amendments, such as compost, have?

Soil amendments (for example, compost or alfalfa meal) can provide nutrients for plant growth. Some can increase the number and diversity of beneficial organisms in the soil, which may provide some protection against certain weeds, diseases and insects.

6. Are there benefits to using organic fertilizers?

Organic fertilizers have benefits beyond providing nutrients for plant growth. As organic fertilizers break down, they add organic matter to the soil. They also release their nutrients slowly so they are less likely to pollute streams, ponds and other waters -- as long as the fertilizers are applied according to soil test results and not in excessive amounts. Organic fertilizers are usually more expensive to purchase than synthetic products. However, the cost difference has been decreasing in recent years because organic products are produced using fewer fossil energy inputs -- another environmental benefit.

7. How do I keep weeds from taking over my fields if I'm not using pesticides?

Vigorous overseeding along with adjusting mowing heights is the best defense against weeds. Overseed regularly with grass species/varieties that are drought tolerant and disease and wear resistant, concentrating on bare spots. Core aerate or cultivate the fields in the fall after the crabgrass growing season. Adjust the mowing heights between the different sports playing seasons so that you can take advantage of periods where you can let the grass grow taller -- shading out the weeds and allowing the grass plants to get stronger.

8. How can I reduce the costs associated with applying compost?

Despite their budgets being reduced, some turfgrass managers have continued important cultural practices by utilizing a variety of creative strategies. Towns like Wethersfield and Manchester are making quality compost from municipal leaf collection to apply on turfgrass. Some, like Branford, are buying compost from commercial or municipal composting operations and have begun renting or sharing equipment, such as screeners or compost spreaders, to cut down on costs. Although it may not be possible to manage all fields using sustainable land care practices that may require more funds or labor, many municipalities have focused these efforts on more heavily-used fields or ones used by school-age recreational groups.

FOR MORE INFORMATION:

Connecticut's Lawn Care Pesticide Ban and for Questions on Allowable Products Go to www.ct.gov/dep/p2 for a FAQ factsheet or contact CT DEP Pesticide Management Program at 860-424-3369.

Organic Land Care Standards, Practices and Methods

Contact CT DEP Office of Pollution Prevention at 860-424-3297, www.ct.gov/dep/p2 or CT NOFA (Northeast Organic Farming Association) at 203-888-5146, www.organiclandcare.net

Turfgrass Management recommendations, including soil testing, contact UCONN at www.TURF.uconn.edu

This factsheet is a cooperative effort between the Connecticut Department of Environmental Protection, the University of Connecticut Department of Plant Science and Landscape Architecture and the CT NOFA Organic Land Care Program, funded in part through U.S. EPA PPIS grant.

