

Ten Tips for a Healthy, Pesticide-free Lawn

Garden chemicals can be harmful to humans, pets, wildlife, and waterbodies. The good news is there are many easy ways to care for your lawn that avoid putting family and neighbors at risk.

Follow these 10 tips for a healthy, pesticide-free lawn:

1. Just say no to pesticides.

Caring for your lawn without synthetic chemicals is easy and does not have to be costly. You will be satisfied with the results, especially if you are not in a big hurry to achieve that “golf course” look, or if you enjoy the pleasant naturalized color and texture variation that comes with a healthy mixture of plants. Make sure lawn products you choose are pesticide free – read the whole label – if the product says it is a hazard to humans or the environment, it is best to avoid it.



2. Check your soil.

It is hard to have a nice lawn without enough soil. Take a shovel and dig down. If you have 6 inches or more of topsoil, you are in great shape. If you have less than 4 inches, add ½ inch compost annually. Get a soil test and follow the recommendations for soil amendments such as lime, organic matter, and fertilizer. Most garden centers have basic soil test kits. Soil samples can also be sent to a soil lab such as Dairy One Cooperative, Inc. Erie County Cooperative Extension Master Gardeners can talk about sample preparation and test results.

3. Know what feeds your weeds.

Every weed tells a story about your soil. Crabgrass likes compact soil, so aerate. Cinquefoil likes poor dry soil, so add compost. Dandelions like high pH, so add lime. Use your soil test as a guide to make conditions favorable to turf and unfavorable to [weeds](#). Many plants you might consider weeds are beneficial to your lawn. For example, clover is a legume and helps to make nitrogen available in the soil.

4. Feed your lawn only lightly.

Use slow-release fertilizers such as organic compost or organic fertilizer. Feed when weeds are not actively growing; otherwise you will be feeding annual weeds. Fall, after top growth has stopped, is the best time to feed which will promote deep root growth and produce stronger plants that out compete weeds.

5. Plant a variety of grasses.

If you have problem areas, overseed in early fall after applying a 1/2-inch layer of compost. During September grasses grow rapidly in cool fall weather and have less competition from germinating weeds. Use a mix of grasses; mixtures grow better in different sun, shade and traffic conditions.

6. Don't cut grass too short, mow high.

Set your mower to 3". Longer grass out competes weeds, better withstands drought and is more resistant to pests and diseases. Save time, money and landfill space by leaving clippings on the lawn; they will break down and fertilize the lawn.

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7. Water less often but deeply.

You may not need to water at all. If you do, water in the early morning and use a rain gauge. Apply one inch of water, no more than once a week, at a rate that water soaks into the ground and does not run off. This encourages deep grass roots, and discourages fungus and weed germination. You can cut back further in August when water may be limited and your turf grass can go dormant; it will green up again when moisture becomes available.

8. Aerate to open up the soil surface.

Over time soil under grass can become compacted and may become crowned with a layer of thatch. The soil is no longer fluffy enough for oxygen, water and nutrients to flow through it, down to the grass roots. Thatch is a buildup of living and dead grass roots and stems between the soil and green grass blades making the soil even more impervious. Thatch looks like a thick tangle of dark brown roots above the soil level. If thatch is greater than 1/2-inch, core aerate the lawn in late summer. In lawns with a thatch layer over 3/4-inch-thick you should aerate then top dress with a thin layer (1/8 to 1/4 inch) of soil or compost which adds thatch-degrading micro-organisms. Core aeration is considered the most effective aeration - a machine (a lawn aerator) with hollow tines mechanically removes plugs or "cores" of soil and [thatch](#) from a lawn. Core aeration reduces soil compaction, creating a channel through which oxygen, water, and nutrients can penetrate into the soil.

9. Eliminate grubs with nematodes.

Insecticide application to lawns for grub control is common and another reason to go pesticide free. Grub problems are rare in chemical-free lawns, possibly due to high biological activity and plant diversity in the soil. However, if you do have an outbreak with damage (more than 10 grubs per square foot), you can kill grubs with beneficial [nematodes](#) – naturally occurring microscopic worms that are not harmful to humans or pets. Nematodes (usually in powder form) are mixed into water and the solution is sprayed on the lawn. Garden centers or internet vendors can supply nematodes and application information.

10. If you use a lawn service, ask for pesticide-free lawn care.

More lawn/landscape care companies are offering natural, chemical-free methods for lawn care. Ask companies to explain their methods and check references before hiring any service.

Source: 10 Tips for a Healthy, Pesticide-free Lawn; TURI – Toxics Use Reduction Institute; UMass Lowell



This tip sheet is part of the Erie County Environmental Management Council's "Make Your Lawn a Safe Home for the Gnomes" campaign to reduce the use of pesticides in Erie County. For more information about this campaign and managing a pesticide-free landscape please visit the Healthy Lawns page at: ERIE.GOV/HEALTHYLAWNS

The Erie County Environmental Management Council is a group of volunteers appointed by the County Executive to advise county government regarding environmental issues impacting Erie County and its residents. The volunteer council members represent local municipalities, as well as other public and private agencies and organizations operating within the county dedicated to protecting our natural environment and resources.

Quick Facts

- If the product has an EPA registration number, it contains a pesticide or herbicide. Pesticides are used to kill, prevent, repel, or in some way adversely affect some living organism (the pest). Pesticides by their nature are toxic to some degree.
- Inert does not mean non-toxic. According to the EPA, many 'inert' ingredients are also [toxic](#).
- Pesticides are mixed with fertilizer in products called weed and feed.
- All pesticides persist in lawns and soil longer than the posted 24-72 hours, some as long as two years.
- Many garden centers now carry some organic products - just ask. The more demand from you, the better the selection will be.
- You can make your own compost with kitchen scraps and leaves.

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