



## Toxics Use Reduction Institute

## Tip Sheet

### 10 Tips for a Healthy, Pesticide-free Lawn

Beautiful, green manicured lawns are the envy of the neighborhood, they show off your house, and are pleasing to play on - unless the beauty is only skin deep. The chemicals often used to keep lawns green can actually weaken your lawn and harm the environment, and some have been associated with cancer or reproductive effects in children and pets. Follow these 10 Tips for a healthy, pesticide-free lawn:

#### 1. Read the label.

Before you purchase a lawn product, read the whole label. The label contains ingredient lists, safety and handling information, and instructions for use and disposal. If the product says it is a hazard to humans or the environment, it is best to avoid it.

#### 2. Just say no to pesticides.

Caring for your lawn without synthetic chemicals is easy and doesn't have to be costly. You'll be pleased with the results, especially if you aren't 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.

#### 3. Mow high.

Set your mower to 2"-3". This step alone is as effective as herbicides in eliminating most unwanted weed plants. Save time, money and landfill space by leaving the clippings on the lawn as fertilizer.

#### 4. Water infrequently, but deeply.

You may not need to water at all. If you do, water 1 inch (in a rain gauge), no more than once per week. Water in the early morning only. This encourages deep grass roots, and discourages fungus and weed germination. Cut back further in August when drinking water may be in short supply and your turf grass can go dormant.

#### 5. Feed your lawn only lightly.

Use organic compost or organic fertilizer. Do this only in spring or early fall, otherwise you'll be feeding your annual weeds.

#### *For the lawn aficionados:*

If you want a deluxe lawn, here is a sampling of some of the more advanced techniques in organic lawn care.

#### 6. Check your soil.

Take a shovel and dig down. If you have 6" or more of topsoil, you're in great shape. If you have less than 4", consider beginning a routine of adding ½" compost annually. It's hard to have a nice lawn without enough soil. Get a soil test. Send a sample of your soil to UMass Soil Testing Lab, 413-545-2311, <http://www.umass.edu/plsoils/soiltest>. Follow their recommendations for soil amendments such as lime, organic matter, and fertilizer.

### Did You Know That...

- If the product has an EPA registration number, then it contains toxic ingredients.
- According to the EPA, many "inert" ingredients are also toxic.
- Pesticides are mixed with fertilizer in products called weed and feed.
- Physicians have found associations between pesticide exposure and cancers of the brain, prostate, kidney, and pancreas. Also non-Hodgkin's lymphoma, leukemia, nervous system effects, and birth defects.
- Over 70 municipalities in Canada have banned cosmetic use of pesticides on lawns, including Quebec, Halifax, Montreal, and Vancouver.
- State law prohibits the use of carcinogenic pesticides in Massachusetts schools.



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## 7. Save money by working only on problem areas.

For barespots, topdress with ½ inch of compost, then overseed in early spring. Overseed thin areas again in fall. Use a mixture of grasses, including fescue. Aerate compacted areas.

## 8. Eliminate grubs with nematodes.

Grub problems are rare in organic lawns, possibly due to high biological activity and plant diversity in the soil. However, if you do have an outbreak with damage (usually more than 10 grubs per square foot), you can kill grubs with beneficial nematodes. Follow directions carefully as these microscopic worms need to be kept cool and moist. The bacterium Milky Spore is an effective control of Japanese beetle grubs. Ask your local garden center or order by mail (e.g. <http://www.extremelygreen.com/>; Fairfax Biological Lab 717-349-2789; <http://www.gardensalive.com/>).

## 9. Know what feeds your weeds.

Every weed tells a story about your soil. Crabgrass likes compact soil. Cinquefoil likes poor dry soil. Dandelions like high pH. 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 and useful to humans. For example, clover helps make nitrogen available in the soil, and plantain can be applied to the skin to soothe insect bites. And a diversity of species leads to lawns that are more hardy.

## 10. If you use a lawn service, ask for organic.

A list of Northeast Organic Farming Association accredited organic landscapers is available at Organic Land Care, [www.organiclandcare.net](http://www.organiclandcare.net). As always, follow good business practices and check references before hiring any service professional. If your landscaper is not confident caring for your lawn organically, suggest they take a course for professionals. Check listings at <http://www.organiclandcare.net/>

## Did You Know That...

- NOFA accredited organic landscapers must take a 5-day course, pass an exam, and attend annual organic update courses.
- 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.
- The Mass. Dept. of Environmental Protection offers organic lawn care and composting courses.

## MORE INFORMATION Pesticides and Health:

*Fact sheets:*

[www.pesticide.org](http://www.pesticide.org)

*Research:*

[www.ehponline.org](http://www.ehponline.org)

*Physicians:*

[www.ocfp.on.ca](http://www.ocfp.on.ca)

## Healthy Lawn Communities:

*Eastern MA:*

<http://healthylawnsforhealthyfamilies.com>

*Southeastern MA:*

[www.nsrwa.org/greenscapes](http://www.nsrwa.org/greenscapes);

*Northshore MA:*

[www.livinglawn.org](http://www.livinglawn.org)

*NY:*

[www.grassrootsinfo.org](http://www.grassrootsinfo.org)

*Source: Toxics Use Reduction Institute at the University of Massachusetts Lowell*  
This information is provided as a public service from the Massachusetts Toxics Use Reduction Institute (TURI) at the University of Massachusetts Lowell. Established by the State's Toxics Use Reduction Act of 1989, TURI provides research, training, technical support, laboratory services and grant programs to reduce the use of toxic chemicals while enhancing the economic competitiveness of local businesses. Visit [www.turi.org](http://www.turi.org) to learn more.



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