

Ten Reasons to Ditch Your Lawn and Garden Chemicals

REPRINTED FROM NOFA'S ORGANICLANDCARE.NET, ADAPTED FROM A FACTSHEET BY THE ORGANIC LANDSCAPE ALLIANCE, TORONTO, [HTTP://WWW.ORGANICLANDSCAPE.ORG/](http://www.organiclandscape.org/)

- **Lawn chemicals are unnecessary.** Historically, organic lawn care has been practiced for much longer than chemical lawn care and it can easily be implemented on any lawn. Safe and effective alternatives exist for most chemical pesticides and fertilizers. There is no need to expose our families, communities and local wildlife to chemicals that are known or potential hazards.
- **Chemical pesticides and fertilizers contaminate surface and groundwater.** Lawn pesticides and fertilizers can contaminate surface and groundwater. This diminishes the quality of our drinking water as well as the quality of aquatic habitats and health of aquatic life forms. Many fish and aquatic insect species are highly sensitive to fertilizers and pesticides.
- **Chemical pesticides threaten the health of children.** Children are the most vulnerable segment of our population due to their small size and their underdeveloped physiology. Children are also often the most exposed to pesticides due to their behavior (putting contaminated grass, soil and toys into mouth, breathing close to the ground). Increased exposure puts children at an unacceptably high risk from lawn pesticides.
- **Chemical pesticides threaten the health of outdoor pets.** Outdoor pets are highly exposed to lawn chemicals due to their behavior (licking contaminated paws and coat, breathing close to the ground, eating contaminated grass, soil and toys) and are highly vulnerable due to their small size.
- **Chemical pesticides threaten the health of local wildlife.** Turf-dwelling and feeding species such as the American robin, Canada goose, American widgeon, European starling, common raccoon and eastern gray squirrel are highly exposed to lawn chemicals. Granular formulations pesticides can severely impact birds that mistake the granules for seed or other food items.
- **Chemical pesticides and fertilizers reduce the activity of beneficial organisms.** Healthy soil is alive with a variety of beneficial organisms that actually kill pest insects, decrease the spread of disease and help plants gather nutrients and water. For example, earthworms improve air and water circulation, decompose thatch, deposit nutrient-rich castings and help to neutralize soil (plants prefer this pH). Many of these beneficial organisms are highly exposed and highly sensitive to lawn chemicals. Pesticides and fertilizers reduce their activity levels, thereby reducing a lawn's natural ability to control pests and diseases, gather nutrients and water and maintain overall health.
- **Local wildlife needs safe places to live.** As more and more suburbs encroach upon natural habitats, wildlife is forced to flee or adapt to less ideal, often crowded habitats ripe with potential dangers. Exposure to lawn chemicals is one such danger. Direct exposure to these pesticides and fertilizers is dangerous, as are the effects of chemical use including decreased shelter and food opportunities. We can make our cities and towns more habitable for local wildlife by avoiding lawn and garden chemicals. You may even consider naturalizing a section of your yard to provide a greater diversity of shelter and food types.
- **Chemical fertilizers are a waste of money.** Chemical fertilizers usually contain three macronutrients - phosphorus, potassium and nitrogen. They lack other macro as well as micronutrients and include no organic matter or microbes. In contrast, finished compost from your backyard bin is an organic and natural soil amendment that provides a more complete package of nutrients, organic matter and microbes. Finished compost is a free resource that also constitutes sustainable waste management, extending the lifespan of local dumps and landfills.
- **Chemical pesticides have the potential to cause damage throughout their lifecycles.** All stages of a pesticide's lifecycle – production, transport, storage, use and disposal - have the potential to degrade environmental and human health. Explosions, spills and volatilization may occur in manufacturing plants, storage facilities and en route, exposing potentially huge numbers of non-target organisms to pesticides. Disposal is an expensive and controversial proposition as people campaign to keep stockpiles out of their communities.
- **Chemicals actually degrade the over-all long-term health of your lawn and garden.** Chemical lawn care is the wrong approach. By frequently applying pesticides to your lawn, you may create a chemical-dependent landscape. As pest species become resistant to the chemicals designed to kill them, more concentrated doses and frequent applications are required and a never-ending cycle of increasing pest resistance and pesticide use is established. When this happens, your lawn's health is spiraling downhill.

Organic Lawn Care Program

Feed The Soil – One of the best things you can do for your soil is to rake one-half inch of compost into your lawn each spring and fall. To speed up this soil building process you may want to add microbial inoculants. These "good" bacteria and fungi support beneficial microbes that are essential to growing healthy turf. A soil test may identify the need for other soil amendments, such as rock dust or lime.

Feed The Grass – Leave grass clippings on the lawn. They provide nitrogen and reduce the amount of fertilizer needed by about one half. If you want to give your lawn an extra boost in the spring, choose a low nitrogen water insoluble organic fertilizer with a NPK (nitrogen-phosphorus-potassium) ratio of approximately 3-1-2.

Re-seed Annually – A thick turf is one of the best ways to control weeds. Seed in late summer or early fall with a mixture of indigenous grasses. Core or slice aeration of the soil before seeding will improve germination and alleviate compaction.

Mow High – Cut grass at 3-3½ inches, allowing it to shade its roots, conserve moisture and keep out weeds. High mowing is a better method for controlling crabgrass than herbicides. Keep blades sharp so they do not tear the grass, making it vulnerable to disease. Rotate mowing patterns.

Water Less, But Longer – Once-a-week watering in the early morning for several hours is the best method. Take into consideration the rainfall and type of soil you have. Sandy soil needs more water than clay-based soil.

Control Those Weeds – If you really don't like dandelions, dig them out! But you can also use an organic corn-gluten product that prevents weed seeds from germinating. It must be applied to established (not newly seeded) lawns early in the spring for several years to control problem areas. For spot weed control on driveways and walkways, use a vinegar or vinegar combination product.

Control Pests Without Chemicals – Common pests (grubs, sod webworms, chinch bugs) can be controlled with applications of beneficial nematodes. Milky spore powder is another effective control for Japanese beetle grubs. Fungal diseases can be treated with several light applications of compost or liquid compost "tea". Beneficial organisms in healthy soil will out-compete unwanted pests.

GRASSROOTS

Environmental Education

www.grassrootsinfo.org

Reprinted by **Otsego County Conservation Association**

7193 State Highway 80, PO Box 101, Main Street, Cooperstown, NY 13326
607-547-4488; www.occainfo.org; admin@occainfo.org

To read OCCA's "Herbicide and Pesticide Use" position statement, visit
<http://occainfo.org/documents/PesticidePositionStatement.pdf>

