



If not you, who?



How to grow a healthy, no-waste Lawn & Garden

Caring for all the green and growing things in your yard can have a big effect on how much waste your household creates. From grass trimmings and leaves to pesticides and water, the eco-impact of your lawn and garden can be significant. But it doesn't have to be.

Your lawn and garden's effect on the environment

Lawns and gardens can create a lot of waste and pollution. Organic material, which includes lawn clippings, leaves, and food waste accounts for a significant portion of waste that cities need to manage. Collection and processing takes energy and money. (Yard waste has been banned from landfills in Minnesota since 1992.)

Fertilizers with high phosphorus and nitrogen levels can pollute local watersheds and degrade nearby lakes, streams, wetlands, and rivers. Excess phosphorus and nitrogen promote too much weed and algae growth, choking out fish life and reducing water clarity.

Homeowners — and not farmers — are the biggest consumers of pesticides and herbicides. When overused or misapplied, these chemicals can pose serious risks to animals and people, especially children. They can also kill beneficial earthworms and organisms, disrupting the ecological balance of your lawn.

What can I do?

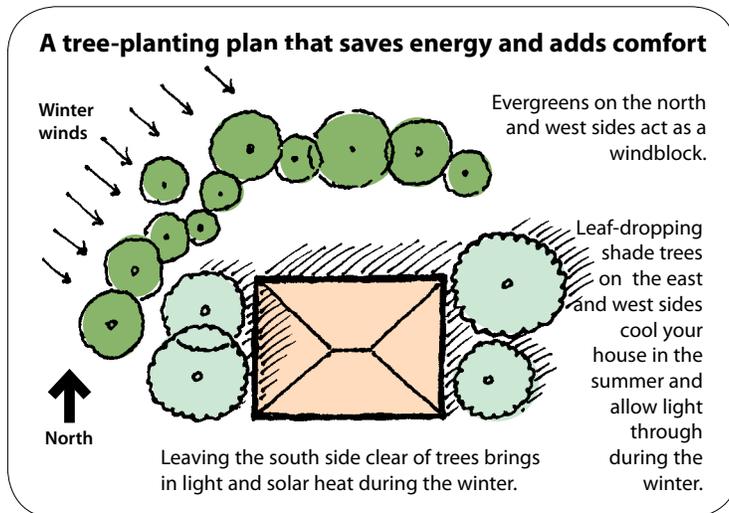
A healthy lawn and garden is the best way to combat weeds and pests. Over-dependence on fertilizers and pesticides may be a symptom of an underlying problem in your lawn and garden.

Growing plants that are appropriate for your soil type, amount of rainfall, and sun exposure greatly decreases the need for fertilizers and pesticides. Native plants often require less water, fertilizer, and pesticides.

Also consider growing plants that can provide habitat, food, water, and shelter to birds and other wildlife.

Planting trees

Your landscaping can also affect your home's energy use. For example, planting shade trees on the east and west sides of the house will keep your home cooler in the summer. Planting a windscreen of evergreens on the northwest side of the house will block winter winds, keeping your home warmer in the winter.



Compost yard waste and other organics

Composting is nature's way of recycling. Organic materials such as leaves and grass are broken down by bacteria and other organisms to provide nutrients and structure to the soil. Composting provides a free soil amendment that you can use to keep your lawn and garden healthy.

How to: Composting can be done in a free-standing pile or a container—homemade or store-bought—which can be made from wire, bricks, or wood. It should be at least three feet deep and three feet in diameter. Add equal parts of carbon (brown materials) and nitrogen (green materials) to your bin. Brown materials can be leaves, straw, cornstalks and sawdust. Green materials can be grass clippings, fruit and vegetable scraps, and trimmings from your garden. Turn your compost frequently to get the pile to decompose quickly and with little odor. Do not add meat, fats, oils, dairy products, or pet feces. Keep your compost moist, like a damp sponge.

Tips for a no-waste lawn & garden

Mow, fertilize, water, and rake less

You don't have to spend so much time maintaining your lawn. Sound incredible? Mowing your yard less, watering it less, fertilizing it less, raking it less, and using no pesticides may be your way to a healthy, environmentally friendly lawn.

- ▶ Mow only enough to keep your grass length to 2½-3 inches high. Mowing your grass to the proper height is the single most important thing you can do to improve the health of your lawn. When you mow, don't rake clippings — leave them on the lawn instead. However, be sure to sweep up your sidewalk, driveway, or street so clippings don't pollute nearby lakes or streams.
- ▶ Get your soil tested to determine the right mix of fertilizer for your lawn. You may need less than you think.
- ▶ Water only when it hasn't rained for seven days and only water in the early morning hours before 10 a.m. Grasses naturally grow slower in the summer so brown grass usually means it's just dormant, not dead.
- ▶ A weed-free lawn is not necessarily a healthy lawn. Weeds can tell you something about what's wrong with your lawn. Identifying your weeds and

treating them accordingly can strengthen the health of your lawn.

Benefits: Take time today to figure out exactly what your lawn needs to keep healthy. This will decrease the amount of time and money you will have to spend caring for it tomorrow. By keeping your grass length longer, the roots of your grass are deeper and can reach more water during dry periods making it less necessary to water. Longer grass also creates more shade and makes it harder for weeds to get established. By leaving your clippings on the lawn, you will fertilize your grass throughout the summer. Controlling weeds by interrupting the cycle of seed production (either by digging them up or cutting off flowering stalks) makes it harder for them to get established in your lawn.



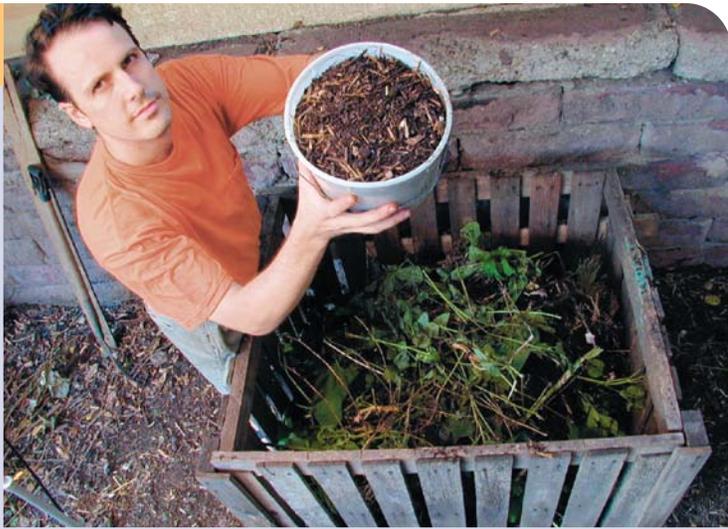
Get your soil tested

All soils are not created equal. Find out what your lawn needs before applying "just any old" fertilizer.

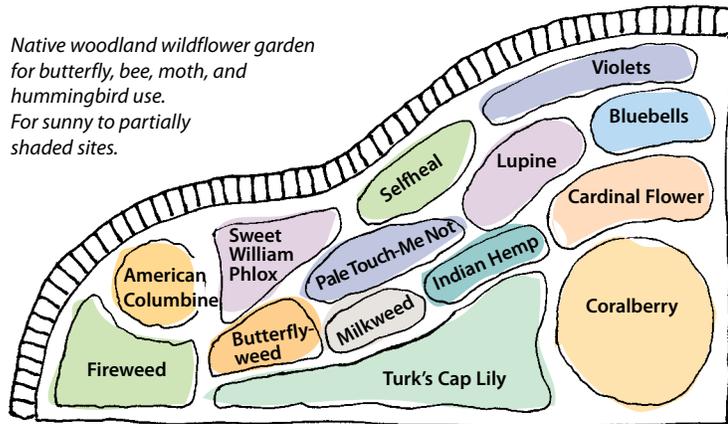
1. Call the University of Minnesota Extension Service at 612-625-3101.
2. Tell them you want to have your soil tested.
3. They will mail you a form to fill out and a bag for the soil sample.
4. You collect the soil sample and mail it to St. Paul along with the form and payment (a regular soil test is \$15).
5. The results are mailed back to you in about 10 days.

The Extension Service also gets a copy so that they can help you interpret them.

Source: University of Minnesota Extension Service.



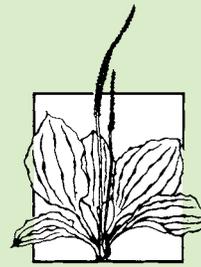
Benefits: Backyard composting reduces the amount of waste you create in your yard and kitchen by converting it into a useable soil amendment. Composting saves you time — no more bagging and hauling leaves and grass clippings to the county compost site, or paying your garbage hauler to pick up your yard waste. In Minnesota, it is illegal to mix your yard waste with trash. Adding compost to the soil increases its organic matter, which in turn enhances the soil's ability to hold nutrients and water. Using compost in your lawn and garden reduces dependence on fertilizers. Compost can also make good mulch for new plants.



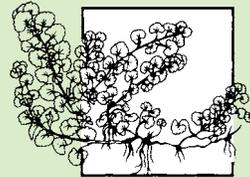
Garden and landscape to encourage wildlife and shade

Your garden and landscape can provide habitat for birds and butterflies as well as save energy. When you plant the right plants given your site, soil type and rainfall, you reduce the amount of pesticides, fertilizer, and water used in your garden. Native Minnesota plants often require less water and fertilizer. The types and location of trees in your yard can reduce heating and cooling costs.

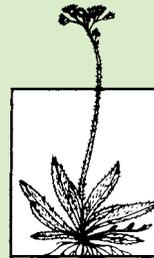
What your weeds are telling you.



► **Plantain** may indicate the soil is compacted or poorly drained.



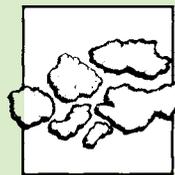
► **Creeping Charlie** may indicate the site is too shady or the soil is poorly drained.



► **Hawkweed** may indicate that the soil is low in nutrients.



► **Dandelions** may indicate that the grass is too thin.



► **Moss** may indicate that the site is too shady or too wet for grass to survive.

Source: The Green Thumb Project sponsored by the Western Lake Superior Sanitary District Zero Discharge Project.

Examples: Get to know your garden site. For example, how long is it exposed to sunlight? What is the soil type? Does the soil hold moisture? What will you keep and what will you take out? How will your plants influence wild native plants, or be influenced by nearby weedy exotics? Once you've answered these questions, you can plant your garden and landscaping to fit your needs and budget. When planting native plants, remember that

continued on back

your garden may take a few years to establish since these plants tend to grow slower.

You can save energy in your home by planting trees for shade on the west and east windows, avoiding trees

south of windows. Plant shorter, denser trees, such as firs, to create wind breaks.

Benefits: Healthy plants in your garden and landscape create less waste and need less chemicals and water. Planting plants that are native or work well in the conditions of your garden site will reduce the need for fertilizers and pesticides; and you won't have to water as often. Trees planted to reduce energy use in your home are an added bonus.

Greener Growing

Integrated pest management (IPM) is an ecosystem-based strategy that focuses on long-term prevention of pests or their damage through a combination of techniques such as biological control, habitat manipulation, modification of cultural practices, and use of resistant varieties. Pesticides are used only after monitoring indicates they are needed according to established guidelines, and treatments are made with the goal of removing only the target organism. Pest control materials are selected and applied in a manner that minimizes risks to human health, beneficial and nontarget organisms, and the environment.

Source: University of California Statewide Integrated Pest Management Project

A checklist for storing household chemicals

Household chemicals such as pesticides and fertilizers become wastes if they're not stored carefully. Follow these easy tips to keep products usable for future projects.

- ▶ Always store chemicals out of reach of children and pets.
- ▶ Never store chemicals near sources of heat, sparks, or flames.
- ▶ Store chemicals in a dry place.
- ▶ Keep chemicals from freezing. However, DO NOT store gasoline or other fuels in your house — they're a fire hazard.
- ▶ Store chemicals in their original containers with labels intact.
- ▶ When a container is leaking, place the whole container into a larger one and call your county for disposal advice.

When pesticides and fertilizers are no longer needed, they should be disposed of properly. Call your county solid waste office for information on where you can bring them.

To learn more about what you can do:

www.reduce.org



**Minnesota
Pollution
Control
Agency**



- * Your county solid waste office is a great resource for waste reduction materials, including local waste and environmental information, education resources, and speakers.