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. 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

Lawn and garden maintenance can generate a lot of waste. In 1996, organic material, which includes lawn clippings, leaves, food waste and paper, accounted for about one-sixth of municipal solid waste in Minnesota. (Yard waste has been banned from landfills here since 1992.)

In addition to the waste that is created to maintain your lawn and garden, fertilizers with high phosphorus and nitrogen levels can pollute local watersheds such as nearby lakes, streams, wetlands and rivers.

Pesticides — insecticides, herbicides and fungicides — are used to control weeds, insects and other pests. These chemicals are toxic to some degree and can pose a threat to people and pets if overused or carelessly applied. 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.

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.

**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 3-3 1/2 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.

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**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 should be done in a container or structure, either homemade or store-bought, which can be made from wire, bricks or wood. It should be at least three feet deep and five feet in diameter. Put equal parts of carbon (brown materials) and nitrogen (green materials) in 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

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**Do you need to fertilize your lawn? Have your soil tested to find out.**

1. Call the University of Minnesota Extension Service toll-free at 888-624-4771.
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 $7).
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.
with little odor. Do not put meat, fats, oils, dairy products or pet feces in your bin. Keep your compost bin moist, like a damp sponge.

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.

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

Native woodland wildflower garden for butterfly, bee, moth and hummingbird use. For sunny to partially shaded sites.

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.

Source: Minnesota DNR
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.

Source: Minnesota Pollution Control Agency

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

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

A checklist for storing household chemicals

To learn more about what you can do: www.reduce.org