# "GREENSCAPING" Your Lawn and Garden











merican homeowners spend hundreds of hours a year mowing, clipping, raking, and landscaping to keep our yards healthy and our property attractive. Our landscaping practices produce huge amounts of waste. So much in fact, that yard waste is second only to paper in the municipal solid waste stream. By following a few simple waste reduction practices, you can not only improve your lawn and garden, but also the environment.

To save space in landfills, prevent waste, and reduce gases associated with climate change, many local governments have banned yard waste from their waste disposal programs. Yard waste also is a major expense for municipal waste programs, and one for which we individually pay. In addition, most waste—even organic waste—can take years to decompose in a landfill. In fact, researchers have unearthed whole vegetables and readable newspapers that have been buried in landfills for decades. Landfills can produce methane gas, which is a major contributor to climate change, and incinerated yard waste produces carbon dioxide, another gas associated with climate change.

You can reduce the environmental impacts of landscaping your lawn and property by grasscycling, mulching, and composting. Properly managing your yard waste not only enhances your environment and but also saves you money.



### Give an Inch, Save a Yard

Grasscycling is a simple method for recycling your yard waste. If you mow your lawn so that grass is never more than 2 to 3 inches tall, leave the grass clippings where they fall and allow them to decompose. To foster healthy grass, do not cut more than one-third of the blade, and no more than one-inch total. The clippings return nutrients to your yard, and you do not have to spend time and money bagging or hauling them away. One study showed that, by not bagging clippings, mowing took about 38 percent less time.

Contrary to popular belief, grass clippings do not cause thatch. Thatch is actually a layer of organic material made up of grass roots, not mown grass blades. Grass roots contain lignin, a substance that decomposes very slowly and causes thatch. Grass clippings are about 90 percent water, so they decompose very quickly.

Mulching is another way to reuse so-called yard waste. Make mulch from chipped or shredded wood waste or dried leaves. Mulching

#### Take Your Cue from Mother Nature

Many people are now practicing xeriscaping, a technique that involves designing lawns and gardens to consider the natural landscape of a region. Using native plants and landscape designs that optimize local conditions can reduce water use and soil erosion, lower maintenance costs, and preserve natural resources.

involves spreading thin layers of dry organic waste around the base of plants to prevent weed growth, retain water, regulate soil temperature, and add nutrients back to the soil. Grass clippings also make excellent mulch. If you have healthy plants that you merely want to replace, donate them to community gardens, schools, or others for their lawn and garden use.

## **Create Some Space and Compost Your Waste**

Many lawn and landscaping products can be reused or recycled to prevent waste. Composting is one recycling method that turns organic yard waste into a natural soil additive rich in nutrients. Finished compost can improve soil texture, increase the soil's ability to absorb air and water, suppress weed growth, and decrease erosion. In addition, making and using your own compost can save you money and reduce pollution by reducing the need for you to buy and use commercial soil additives.

You can create a compost pile in your backyard or indoors, depending on your available space. To compost in your backyard, choose a level,

#### **Seasonal Composting**

Certain seasonal activities such as holidays and parties create more or unusual types of organic waste. In most cases, this waste can also be composted or otherwise recycled.

Many food scraps from parties or holiday gatherings can be composted, as can carved pumpkins left over from Halloween. In addition, many communities collect pine trees and garlands used for holiday decoration and recycle them. Chips from recycled trees can be composted or used for coastal erosion prevention, creating fish habitats, and landscaping.



#### **What Can You Compost?**

No national regulations exist that define what you can and can't compost, but some local governments have certain health-related restrictions, such as prohibiting open piles containing food waste or completely banning food waste known to attract pests and disease-related organisms. Because you need the right mix of "ingredients" to

encourage decomposition, you will achieve the healthiest compost if you follow these guidelines:

#### Throw in

- Grass clippings and leaves
- Straw/hay
- Manure
- Wood chips and sawdust

3-by-5-foot square spot in an area of your yard near a water source, but away from direct sunlight and child play areas. Clear the spot of sod and grass and set up a compost bin. You can buy a bin from a commercial retailer or build your own out of wood scraps, chicken wire, or concrete blocks. Remember to leave enough space in your bin for air to circulate, and make sure one side is removable for easy tending.

You will need to turn your compost pile every few weeks with a pitch-fork to distribute air and moisture. Make sure you also sprinkle water on your pile in dry weather. In most climates, you will have finished compost in 3 to 6 months, when the waste becomes a dark, crumbly material that is uniform in texture. You can then spread your compost in garden beds, under shrubs, or use it as potting soil.

If you do not have space for an outdoor compost pile, you can compost materials indoors using a special type of bin, which you can buy or make yourself. To make your own indoor bin, drill 1/2inch diameter holes in the bottom and sides of a plastic garbage can. Place a brick in the bottom of a larger garbage can, surround the brick with a layer of wood chips or soil, and place the smaller can inside on top of the brick. Wrap insulation around the outer can to keep the compost warm and cover the cans with a lid. Your compost should be ready in 2 to 5 weeks. Remember to tend your pile and keep track of what you throw in. A properly managed compost bin will not attract pests or rodents and will not smell bad.

#### Other Ideas

If you can't compost, grasscycle, or mulch at home, you can still collect yard waste and donate it to a community composting program or other local business. Farmers often buy compost to enhance crops; landscapers buy it to improve soil conditions and for decorative purposes; nurseries buy it as potting soil; and public agencies buy it to landscape public property such as highway medians and parks. Contact your local solid waste authority to find out who collects compostable materials in your area. Some communities even have curbside collection—if yours doesn't, maybe you can help get a program started.

- Fruit and vegetable scraps
- Tea bags
- Coffee grounds and filters
- Eggshells
- Vacuum cleaner lint
- Hair clippings
- Shredded newspaper
- Fireplace ashes
- Wool and cotton rags

#### Keep out

- Diseased plants
- Pernicious weeds
- Human and pet waste
- Chemically treated wood products
- Barbeque grill ash
- Meat and fish scraps and bones
- Oils and other fatty food products
- Milk products

# Change Landscaping to "Greenscaping," Practice the 4-Rs

By reducing, reusing, recycling, and rebuying when you landscape, you can save money and reduce waste.

Reducing: Using manual garden tools instead of gas- or electric-powered ones can reduce fuel waste and protect air quality. Push mowers and mulchers, rakes, hoes, and shovels might require more work, but their use prevents waste, reduces air and noise pollution, and helps you get exercise and active time outdoors. When you do use large lawn and garden equipment such as driving mowers or chainsaws, you can reduce waste (and save money) by borrowing or renting this equipment. Organize a neighborhood equipment sharing plan, or rent these items from a local hardware store or landscaping company.

Reduce the amount of harmful pesticides you use—all pesticides are toxic to some degree. Spot treat areas whenever possible. In most cases, treating your entire yard is not necessary, especially when a problem is confined to specific areas. Treating more than necessary is wasteful and can be environmentally damaging. When using commercial chemical treatments, make sure to use them safely, and to read and follow the manufacturer's label instructions for use and disposal.

Reusing: Use rain barrels to collect rain water from your roof. Water your plants and garden with it and reduce your water bill, too. Such simple changes create huge ripples effect that improve and safeguard our environment.

**Recycling:** Be sure to recycle as many products as you can. Especially remember to recycle the used oil and tires from your landscaping vehicles and equipment.

**Rebuying:** Rebuying means rethinking your purchasing habits. Look for products that still meet your needs, but are better for the environ-



ment. Many gardening products and tools are now made from recycled materials. Buying recycled-content products means manufacturers have to extract and transport fewer virgin materials and expend less energy during production. Buying recycled items also boosts the market for these products, encouraging more communities to recycle and more companies to sell recycled-content items.

Some lawn and garden products made with recycled materials include garden and soaker hoses made from recycled tires, garden edging made from recycled rubber, paths and play areas lined with wood chips, and stepping stones made from recycled glass. If you are building a new deck, bird house, flower bed, play equipment, or some other landscaping project, consider using plastic lumber made from recycled products

such as milk jugs and plastic bags, or from recycled plastics mixed with sawdust, fiberglass, or resins. Plastic lumber is very durable and low-maintenance, is water- and insect-resistant, will not splinter, and will not absorb bacteria. You can also buy products such as planting pots and watering cans already made from recycled plastic.

# Use alternative products and practices

Fertilizers made from organic materials such as plant extracts and worm castings are available at many garden stores. You can also use several types of plants and beneficial insects that act as natural deterrents to common garden pests. Planting marigolds alongside other plants protects your garden bed from many types of beetles, for example, and ladybugs will eat plant-munching aphids.

#### **Ban Backyard Burning**

In many areas of the country, people burn their yard waste as a way of disposing of it. Burning yard waste is both a safety and a health hazard. Burning yard waste is not only a fire hazard, but it also can create toxic fumes and potentially toxic ash. The air pollution it causes can aggravate respiratory conditions, such as asthma. No national regulations prohibit burning your yard waste, but it is not a recommended disposal method. Compost your yard waste instead. If composting is not an option, dispose of your yard waste according to your local laws and regulations.

#### Web Resources

#### Greenscaping

U.S. EPA Office of Solid Waste www.epa.gov/epaoswer/non-hw/green/index.htm www.epa.gov/epaoswer/non-hw/compost/index.htm

#### Composting

Cornell Composting, the Cornell Waste Management Institute www.cfe.cornell.edu/compost/Composting\_Homepage.html

#### **Xeriscaping**



United States
Environmental Protection Agency (5305W)
Washington, DC 20460

Official Business Penalty for Private Use \$300

EPA-530-K-03-002 www.epa.gov April 2003

