



# Backyard Composting

## Fact Sheet

### What is Composting?

Composting is a biological process during which naturally occurring microorganisms, bacteria and insects break down organic materials such as leaves, grass clippings and certain kitchen scraps into a soil-like product called *compost*. It is a form of recycling, a natural way of returning needed nutrients to the soil.

### Why Compost?

By composting kitchen scraps and yard trimmings at home, you can conserve valuable landfill space normally used to dispose of this material and help reduce air emissions from the incinerator plants that burn garbage. In fact, if you compost on a continual basis, the volume of garbage you generate can be reduced by as much as 25%! Composting is practical, convenient and can be easier and less expensive than bagging these wastes and taking them to the landfill or transfer station.

### Benefits of Using Compost.

By using compost you return organic matter and nutrients to the soil in a form readily useable to plants. Organic matter improves plant growth by helping to break heavy clay soils into a better texture, by adding water and nutrient-holding capacity to sandy soils, and by adding essential nutrients to any soil. Improving your soil is the first step toward improving the health of your plants. Healthy plants help clean our air and conserve our soil. If you have a garden, a lawn, shrubs, or even planter boxes, you have a use for compost.

### How to Compost.

Composting is easy. You can compost in your yard by saving yard trimmings (leaves, grass clippings, and garden debris) and certain kitchen and meal scraps by preparing them properly and placing them in a compost pile. Just follow these easy, basic guidelines:

#### **Step 1. Choose the right materials.**

Anything that was once alive will compost, but not everything belongs in a compost pile. In general, do not compost foods containing animal fats (such as meat, bones, cheese, grease and oils); plants infected with disease, invasive weeds, weeds that have gone to

seed, or dog and cat feces. Yard trimmings, like leaves, grass clippings, prunings, garden debris, and most kitchen scraps make excellent compost.

<b>DO COMPOST</b>	<b>DO NOT COMPOST</b>
Fruit and vegetable scraps	Meat and fat
Egg, peanut and nut shells or husks	Fish
Stalks, stems, vine	Poultry
Coffee grounds, filters, tea bags	Bones
Bark	Dairy products
Wood ashes (in limited amounts)	Plastic or synthetic fibers
Pine needles (in limited amounts)	Diseased plants
Manure (horse, cow, chicken, & rabbit)	Vegetable oils
Garden clippings	Dog and cat feces
Leaves	Weeds which have gone to seed
Grass clippings	Invasive weeds
Apple cores and citrus rinds	

**Step 2. *Select and prepare a site.***

First, choose a place in your yard or garden to start a compost pile. It doesn't really matter if it is in the sun or shade, but a place that receives a little of both during the day would be ideal. What's more important is that it is somewhere convenient to use. Then, decide how you wish to compost. There are many different ways to prepare a compost pile, and it's really personal preference which one you choose. You can choose to:

Use no enclosure at all. Simply pile the materials up, keeping them in a fairly dense heap.

Build your own compost bin. Enclosed bins will typically have a neat appearance, help keep out pests, and hold in heat and moisture. You can assemble wooden stakes and chicken wire or hardware cloth into a simple round enclosure; construct a wooden bin out of salvaged lumber or old pallets; fashion a three-sided enclosure by placing cinder blocks on top of each other, leaving the front open; or even drill holes in the bottom and sides of a garbage can.

Purchase a compost bin. Order a pre-built compost bin from a garden center, mail order garden catalogue or home improvement/hardware store. Also, check with your local

recycling coordinator or Public Works Department to see if they sponsor a bin distribution program.

### **Step 3. *Prepare the compost materials and build a pile.***

#### Prepare the materials.

Begin by cutting or shredding the ingredients into small pieces. This will help them decompose faster. Although shredding leaves is not necessary, it will shorten the time it takes for them to compost. The same is true for kitchen scraps and garden waste.

#### Build the pile.

Put a layer of course material, like wood chips, or small twigs on the bottom to facilitate drainage and aeration. Then add materials in layers 2-6 inches thick alternating between "greens" (food scraps, grass clippings, manure) and "browns" (leaves, straw, woody materials) to help balance the proportion of carbon and nitrogen. Water and mix well after every two layers. If you don't have "greens" and "browns" available at the same time, build the entire pile out of "browns" and then add the "greens" as they become available. When adding food scraps, bury them completely in the center of the pile. Add a shovel full of garden soil periodically. Save a few bags of autumn leaves to use during the following spring and summer. Ideally, the pile should measure at least 3 feet high by 3 feet wide by 3 feet long.

#### Keep it moist.

The pile should be kept moist, but not soggy, about the consistency of a wrung-out sponge. If it's not moist, it won't decompose.

#### Give it air.

Oxygen is essential to the organisms breaking down the materials. Fluff the pile with a pitchfork or hoe every time you add material. If you can manage to do a more aggressive turning in the spring and fall (so that the pile is turned completely inside out and upside down), you can usually get finished compost in one year. Less frequent turning results in slower composting.

#### Observe your pile.

As composting takes place, heat is generated. Don't be surprised if you see steam rising from the pile, especially when it is turned. This means the conditions for decomposition are at their best. If your compost pile is properly prepared, contains no animal fats and is turned periodically, it will not attract pests or create odors.

#### **Step 4. Test whether the compost is ready...**

Decomposition will be complete anywhere from two weeks to two years depending on the materials used, the size of the pile, and how often it is turned. Compost is ready when it has cooled, turned to a rich brown color, and has decomposed into small soil-like particles.

#### **Step 5. Use the compost.**

About one month before planting, apply 1-3 inches of the finished compost and work it into the top four inches of soil. Compost can also be used in the garden as a top dressing or mulch throughout the summer. Screened through a ½" sieve, compost can be used to create a potting soil by combining equal parts of compost, sand and loam. Large particles can be put back in the compost pile. Lawns can benefit from a ¼" application of compost which helps stimulate biological activity in the turf. If you have more compost than you can use, give it to a friend or neighbor!

#### **Troubleshooting.**

<b>SYMPTOM</b>	<b>PROBABLE CAUSE</b>	<b>SUGGESTED REMEDY</b>
The pile has a bad odor	Not enough air or too wet	Turn pile thoroughly
The center of the pile is dry	Not enough water	Moisten materials while turning the pile
The pile is damp and warm in the middle, but nowhere else	Pile is too small	Collect more material and mix old material into a new pile
The pile is sweet smelling, but not heating up	Lack of nitrogen	Mix in a nitrogen source such as fresh grass clippings, fresh manure or bloodmeal

#### **Mulching.**

Before they decompose, chipped woody debris and leaves make excellent mulch or garden path material helping to keep the soil weed-free and moist. As they decompose, these same materials will enrich the soil. Simply place them up to 1" deep beneath the plants, but not touching the stems.

**Grass clippings** should be dried before using as mulch or simply leave clippings on the lawn where they will return nutrients to the soil. Do not mulch grass clippings that have been treated with herbicides, or it may harm your plants. Composting them first, however, will break down most commonly used lawn herbicides.

## **Don't Have a Yard? Did you know you can compost indoors with worms?**

### **Composting with worms.**

For information on worm composting (aka vermicomposting), please see our Composting and Organics Resource Page to consult one of the references devoted to this subject.

[Compost and Worms](#) (short slide presentation) – CT DEEP

## **Want to collect food scraps for composting, but not at home?**



**Municipal Food Scrap Collection Programs** - Many towns accept food scraps at the transfer station, contract with commercial food scrap collectors or you can subscribe with a food scrap collector directly. Municipal Programs Best place to start is by contacting your local recycling coordinator or public works using the QR Code.

**Contract with a Food Scrap Collector Directly** – There are many companies that provide food scrap collection programs, learn more here using the QR Code.

