



# Compost Basics



**COMPOST HAPPENS!** This decomposition process happens slowly on forest floors, in prairies and even in our own backyard.

But we want to **SPEED IT UP** to:

- Get rich compost faster for our gardens, lawns, trees and shrubs
- Save money by reducing the need to buy peat moss and fertilizers
- Reduce the amount of yard materials set out at the curb or taken to municipal drop-off sites. This costs us all money!

## **Microorganisms Muscle**

Bacteria are the workhorses of the compost pile. They are present on leaves, grass and other yard materials, even in the air. They start the break down process so larger decomposers can finish the job.

### **Keep Microbes Happy and they will make compost much faster!!**

The bacteria multiply, give off heat and all those hungry mouths begin to change yard materials into black gold compost.

Bacteria need the same things people do:

1. Food
2. Water
3. Oxygen

## **FOOD**

To make compost you need a balance of:

**Carbon** + **Nitrogen**  
(brown dried plant material) (green plant material or other nitrogen)

**Mix equal** weights of brown and green. With other sources of nitrogen, less is needed. Carbon is the carbohydrate energy bacteria need. Nitrogen builds proteins needed for new cells walls.

## **Water**

**Compost piles need to be kept as damp as a wrung out sponge.**

Too dry and the bacteria die off. Too wet and they drown. Water your pile well as you build it, when you turn it and while it is just sitting there. Rain water helps but *IS USUALLY NOT ENOUGH.*



## **Oxygen**

**Turning your compost pile adds much needed oxygen and speeds up decomposition.**

Oxygen-loving aerobic bacteria keep a compost pile cooking and smelling like an earthy greenhouse. Reduce the oxygen and the decomposition slows down, anaerobic bacteria increase and odors can develop.

Turn the compost with a pitchfork.

If using a portable bin, remove the bin and reset it up next to the remaining pile. Transfer the composting material into the now empty bin. This works much better than stirring compost in the bin.

**Feel the Heat!** There are 3 ways basic ways to compost.

**Hot, fast piles:** should be built all at once, turned every 3-5 days for the first couple of weeks and kept damp. Hot piles can kill weed seeds and most diseases, if the pile stays at 130-140 degrees for 5-10 days. Then it will naturally cool down and other bacteria and larger decomposers will move in. You can get compost in 6 weeks to 12 months, depending on how often you turn and water the pile.

**Cool, slow piles:** are built as you get the materials and never really heat up much. However, compost does happen and if you are careful not to put weed seeds or diseased materials into a cool pile, you will get compost. It will take 1 year to get compost off the bottom and up to 2 years to get a whole batch.

**Trench composting:** dig yard materials or kitchen scraps right into the soil and let compost. Be sure to cover well materials well. This will add organic matter to your soil but will also rob it of nitrogen.

### **Macro organisms**

Fungus, actinomycetes (gray, cobwebby growth), nematodes, mites, springtails, centipedes, sow bugs, ground beetles and earthworms are all normal critters that help you make compost faster. They like a good lunch and will find your pile.

### **Compost Bins**

A bin is not required, but it really helps in backyard composting. Compared to heaps, bins are more attractive, use vertical space better and get you more organized. It is much easier to turn a bin worth of compost than tackling a big heap.

#### **Bins should be:**

- about 3ft x 3ft in size to hold the heat
- near a water source so a hose can easily reach
- convenient for you near a house or garden
- in sun or shade - both work
- have enough space to turn the bin (limited space? Use a tarp or cart to turn compost on and then return to bin)
- be 2 ft from a building to allow air circulation

**Check out the rest of the sheets in this handout for what you can compost, recipes, troubleshooting and uses.**

### **Composting is Easy!!**

**All you need is a good recipe and a few tips and you will be making rich compost for your yard this season!!**

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