

# COMPOST BASICS

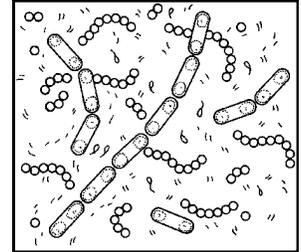
**What is Composting?** Composting is the process of breaking down organic materials such as food scraps, leaves, and grass to use to condition soil and add nutrients. The process is constantly taking place in nature on forest floors, prairies, and often in our own backyards. By actively composting, you are controlling and speeding up the decomposition process to produce a nutrient rich, environmentally safe, natural soil amendment!

## Speed Up Nature

Your compost pile is a living system and microbes are the work horses of your pile. Keep the bacteria and fungi happy and they will work to make compost faster for you. It's all about managing your pile.

## What do microbes need? Same as us.

- Food                      Carbon + Nitrogen
- Water                     Damp as a wrung out sponge
- Oxygen                  Turn the pile regularly to fluff up air channels
- Temperature            Best above 50 degrees outside, but you can compost year-round



## About Carbon & Nitrogen

**Nitrogen (Greens)** - The nitrogen source for your compost can come right from your kitchen! Food scraps such as potato peels, watermelon rinds, the ends of carrots, etc. can all go into your compost. You may also add plants (such as a vase of dying flowers) and simple foods such as bread. Egg shells, coffee grounds (with the filter), and tea bags can also be included. Think of these as your “greens,” and add as much **by weight** as your carbon materials.

**Carbon (Browns)** - The carbon source for your compost can come from fallen leaves, saw dust, mulch, or other yard-type waste of dried/dead plant materials. This is a good opportunity to use up the leaves that fall on your yard in autumn—bag ‘em up and store them so you have a good carbon source all year long! Think of these as your “browns,” and add as much as you do for your nitrogen source, **by weight**. Keep in mind that this dried plant material will weigh much less than the wet, “green” nitrogen materials. Keep equal weights, but remember that means by volume you will have more carbon; about two times more carbon material than nitrogen material by volume.

## How soon can I get finished compost?

- Fast, hot method:        2-6 months. If you keep microbes happy and maintain active decomposition.
- Slow, cool method:     1-2 years. If you don't have the time, this works fine.

## Finished compost:

- ⇒ is dark brown, crumbly & you don't recognize leaves, grass, food scraps
- ⇒ smells earthy like a greenhouse
- ⇒ doesn't reheat

## BENEFITS OF COMPOST

- ⇒ Feeds your gardens, lawn, trees, and shrubs with a healthy, rich soil amendment
- ⇒ Saves money by not needing to purchase peat moss and fertilizers
- ⇒ Helps the environment by not using fertilizers that may pose long term risks to water resources
- ⇒ Provides a constant, dependable resource at your finger tips, saving trips to the garden center
- ⇒ Saves burning fuel in hauling trucks to collect the material and haul to landfills
- ⇒ Saves on landfill space
- ⇒ Keeps the smell down in your garbage can
- ⇒ Reduces the impact of climate change. Decomposition sequesters carbon from the atmosphere.
- ⇒ Builds self-reliance by managing your resources at home instead of relying on others

## Get Started: 5 Simple Steps

1. Buy or Make a Bin - Recycling Connections sells the bin displayed here. Highly recommended.
2. Feed the Microbes; Keep Them Happy!  
**2 parts carbon (browns) by volume** + **1 part nitrogen (greens) by volume**  
 (dried plant material, shredded paper, etc) (green plant material, food scraps, etc)

Be sure the microorganisms in your compost are happy. Too much nitrogen (food scraps) without the balance of carbon (dead plant material) could result in a stinky pile instead of a productive compost pile. The top layer should always be a brown layer to manage odors & hold moisture.



3. Moisture (Water) in Your Pile - Get a feel for how much water is needed. It might be difficult at first. Too much water can drown the microorganisms and stop decomposition, creating a smell. That would indicate your pile has gone anaerobic (*without oxygen*). If that happens, let the pile dry out or add more carbon. Your pile should feel like a well wrung out sponge. If it is dry, add water or leave the lid open on a rainy day.
4. Keep the Oxygen Flowing - The microorganisms need oxygen to breath. Turning once every week or so is sufficient to maintain active decomposition if using the fast, hot composting method. Microbial communities will grow under optimized conditions. This means that if you turn your pile too frequently, those microbial communities can't establish. If you turn it too infrequently, then your microbes aren't getting enough oxygen to fuel their decomposition work. For those who compost using the slow, cool method, turning the compost 2-4 times a year is sufficient.
5. Cure, Give It a Rest - The final step is letting your compost pile sit for a final 4 weeks to "cure." This is the final stage of compost (and the easiest). Cover your pile with an extra layer of carbon, lid, or tarp and let it sit. Do not add any more material to the pile. (Start a second pile.) Once your pile appears dark & crumbly, it has matured into finished compost.

### YES

(C=Carbon/brown material, N=Nitrogen/green material)

- **Grass clippings** (C if dried / N if fresh)
- **Leaves** (C if dry / N if fresh)
- **Weeds / garden debris** (C if dry / N if fresh)
- **Small brush, twigs** (C)
- **Sawdust / wood chips** (C, use *small amounts*)
- **Egg shells** (calcium)
- **Coffee grounds** (N)
- **Hay** (C)
- **Manure from herbivores** (plant eaters) (N)
- **Paper, cardboard** (C)
- **Fur, hair, natural fibers & feathers** (C)
- **Food scraps** (N)

### NO

(Avoid or limit in your pile)

- **Meat, bones, fat**
- **Dairy products**
- **Oils - cooking & salad**
- **Whole branches, logs**
- **Pet or human waste**
- **Charcoal briquette ash**
- **Sawdust from treated wood**
- **Diseased plants** (unless hot composted)
- **Persistent weeds** (quack grass)
- **Thorny branches**

## TROUBLESHOOTING

Too Dry	Cracks	Add Water
Too Wet	Soggy, may smell	Turn to add oxygen. Hold off watering until it dries out
Smells	Ammonia smell, not like humus	The pile has gone anaerobic. Add carbon material and turn
Animals	Unwanted varmints	Keep meats, fat, and salad oils out. Cover fresh food scraps with a carbon layer. Put a lid on your pile.