**How Can I tell When it's Done?** When your compost is done, it'll be dark in colour and have a crumbly texture. It might still contain pieces of partially broken down materials such as egg and nut shells or small bits of wood. These can easily be screened out and returned to your compost pile. Another clue is that your compost will start to absorb moisture, rather than using it as part of the decomposition process.

What to do with your Finished Compost Compost is one of the finest ways to improve the ability of your soil to retain moisture. It helps loosen up clay-based soils and adds texture to sandy soils. It's also an excellent source of many micronutrients that are typically not found in commercial fertilizer mixes. Add it to your flower and vegetable gardens, top dress your lawn, or include it as part of a seed starting mix.

### **Troubleshooting**

**Problem:** The centre of the compost pile is damp and warm but nowhere else

Possible Cause: Pile may be too small

**Solution:** Add and mix in more organic material to the pile, with an aim to creating a mass close to 1 cubic meter in volume.

**Problem:** The compost pile smells vinegary or like rotten eggs.

**Possible Cause:** The material in the pile is going into an anaerobic state, and is likely too wet.

**Solution:** Turn and fluff up the material in the pile on a daily basis for several days until the smell is gone. If the contents of the pile seem too wet, add coarse, dry leaves or wood chips to soak up excess moisture. Top dress with clean soil to help reintroduce aerobic microbes into the pile.

**Problem:** The compost pile smells like ammonia **Possible Cause:** There's too much nitrogenous material in the pile

**Solution:** Mix in well wood chips or leaves to bring down the C/N ratio and fluff up to ensure there's lots of porosity in the pile to encourage air movement.

**Problem:** The compost pile is cold, and there are large pieces of organic waste that don't seem to be breaking down.

**Possible Cause:** The particle size of the material in the pile is too large, which is allowing too much air movement and preventing the pile from heating up.

**Solution:** Screen or pull out the uncomposted material, chop it up and reintroduce it to the pile. Consider adding a pail full of water to the rebuilt pile and turning it again.

**Problem:** The compost pile contains earwigs, slugs and other insects.

Possible Cause: The pile is composting correctly!

**Solution:** The presence of insects in your pile is a sign that the organic material in your pile is well on its way to becoming good quality compost.



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With thanks to:



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# **Home Composting**

Use a combination of kitchen scraps and yard waste to create a free and nutrient rich soil conditioner and reduce your household garbage by at least one-third!

#### **How Does It Work?**

Millions of tiny creatures – ranging from tiny, microscopic fungi and bacteria to earthworms and beetles – are consuming food scraps and yard waste, and turning it into compost. This process happens in Nature all the time, but by building a compost pile or using a composting unit, you're helping to speed the process up. Consider yourself a microbe farmer!

Where to Locate Good water drainage is important. Set up your composter or compost pile directly on bare soil, in a convenient, sunny location, away from large trees.

**In the Kitchen** It's a good idea to set up a dedicated compost collection pail in your kitchen. Ideally it should be able to hold two or three days worth of kitchen organics and have a tight-fitting lid. Plastic containers tend to absorb odours, while metal ones don't, but both work just fine. To help keep food waste from sticking to the sides and bottom of the pail, try lining it with a sheet of newspaper. The newspaper helps keep the pail clean and adds a bit of carbon to the composting mixture.

## Do's

Kitchen wastes such as:

- Fruit and vegetable scraps
- Tea bags, coffee grounds and paper filters
- Stale bread and baked goods
- Paper towels or napkins



# What to Compost Do's

Yard wastes such as:

- Leaves, twigs and hedge clippings
- Plant trimmings and weeds
- Small amounts of grass
- Wood chips
- Straw

#### **Don'ts**

Do NOT add any of the following materials to your compost pile:

- Meat, fish or bones
- Any dairy products
- Sauces, oils or fats
- Pet wastes or kitty litter
- Woodstove ashes
- Diseased plants or weeds with seed heads
- Persistent, tough weeds like crabgrass

Compost Factoid: The more varied the mix of feedstock you add to your compost pile, the better the finished material.

| Composting Elements   | Composting for All Seasons   |
|---|--|
| <b>Surface Area</b> The more unprotected, exposed surface area that is available for microbes to work on, the quicker the materials break down. (Just think how rapidly a crushed ice cube melts versus a whole ice cube!) This in part is why running over your leaves a few times with a lawn mower helps them break down faster. If you've got the time, chop up any plant materials or large pieces of food waste you're going to compost. This is an especially good idea for organic materials such as corncobs or melon rinds.   | <b>Spring</b> To get things off to a good start, give the contents of your composter a good stir, and if necessary, blend in a few handfuls of leaves or woodchips to help absorb any excess moisture and to rebalance the C/N ratio of the material in the pile. Be sure to try to reach right down to the bottom and centre of the pile, to prevent any pockets of anaerobic activity from developing.   |
| <b>Volume</b> As a rule of thumb, an active compost pile or container should be at least one cubic meter in volume otherwise it won't be able to hold the heat required to keep the microbes active. On the other hand, if there's more than 2 cubic meters of material in your pile, you may find that this limits the amount of oxygen available to the microbes in the centre, and may be more material that you can comfortably turn on a regular basis.  | <b>Summer</b> Whenever you add a pail of fresh food waste, be sure to top dress your pile with a thin layer of leaves or wood chips. Besides helping to maintain a good C/N ratio in your pile, it also works to prevent odours, and discourage fruit flies. When the pile is dry, pour a pail or two of water directly into the centre of the pile, then turn it to blend it in.  |
| <b>Moisture &amp; Aeration</b> It's important to make sure there is enough oxygen reaching the centre of the pile, while at the same time ensuring that the material being composted is good and damp – like a wrung out sponge. Regularly turning or 'fluffing up" of your pile will keep your composter supplied with oxygen. Ensuring that the material in the pile is moist – like a wrung out sponge – will keep the microbes happy.   | <b>Fall</b> This is the best time to do 'the big harvest' of any finished compost. It's also a good time of year to apply compost to your gardens and lawn, and it frees up lots of space in your composter for kitchen organics you'll generate over the winter months. Once you've separated out the finished product, replace any unfinished material in the composter, placing a layer of woody, high Carbon material on the bottom. Be sure to put aside a few extra bags of leaves to stack around your composter for insulation and to use as a source of carbon to blend with fresh food wastes you add to your pile throughout the winter months.   |
| <b>Time &amp; Temperature</b> The faster the composting process, the hotter the pile. How quickly your compost breaks down really depends on having a good sized pile of chopped up organic waste with a C/N ratio close to 30:1, and keeping moisture and oxygen at optimum levels.  | <b>Winter</b> The whole composting process really slows down over the winter months, often completely freezing up, but that doesn't mean you have to stop adding fresh materials to your composting unit. If you stockpiled a few bags of leaves the previous Fall you can add some of these with each input of food scraps. If you're at all concerned that you're adding too many high nitrogen products and you've got the space, consider putting excess fruit and vegetable scraps in a plastic tub in the freezer and add them to your composter in the spring.  |
| <b>C/N Ratio &amp; building your pile</b> All organic matter is made up of varying amounts of Carbon (C) and Nitrogen (N). Here are the C/N ratios of different types of organic waste. Examples of the C/N ratio for <i>high nitrogen</i> materials are: vegetable peelings 11:1 Coffee grounds 20:1 Grass clippings 17:1 Garden plant waste 25:1. C/N ratios for <i>high carbon</i> materials are: Leaves 60-80:1 Straw 90:1 Wood chips 250 to 400:1. While in theory the ideal C/N ratio is 30:1, the balance of carbon and nitrogen materials in your composter doesn't have to be perfect - you'll be able to visually and aromatically tell if the mix is way off. To build your pile, start with a thick layer of a high carbon material at the soil level and from there alternate layers of high nitrogen and high carbon materials. Keep the pile moist and turn frequently. From a volume perspective, a good mix of materials might be between 1 and 2 parts C by volume to 1 part N. See what works for you and adjust your mix accordingly. | Harvesting Compost Using a pitch fork or shovel, empty out the contents of your bin, either through a bottom access panel if the composter you're using has one, by removing material from the top, or by lifting the container off the pile itself. If you'd like, make yourself a screener to remove overly coarse materials. Return any uncomposted material back to the compost pile. If you're concerned that your compost is not finished off and you're looking to free up some composter space for the winter months, dig a trench in your vegetable garden, shovel in a thin layer, the partially finished material and cover it over. In all likelihood, the microbes in your garden soil will complete the process in the early part of the Spring, allowing you to plant your vegetables or flowers directly in the same area later in the season. |