



Trench composting, or trenching, is a way of composting by burying food scraps directly in the garden. This method of composting is good for composting materials that attract rodents such as meat, dairy, breads, and processed foods. It is also a safe and effective way of composting pet waste. Trenching is a great way of depositing nutrients into your soil at the exact place where plants need it – at their root zones.

Effort Scale:

Easy	1	2	3	4	5	Hard
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Involves some deep digging and a system for remembering where you buried your scraps

Trenching is the act of burying your organic waste directly into your garden soil. The advantage of this method over conventional composting is that it enables you to compost meat, grains, dairy, and cooked leftover foods that contain oil in addition to other kitchen scraps. Because these items attract rodents and flies, we recommend you don't put them into your regular compost. By burying them in a trench you can avoid these problems, since neither rodents nor flies will be able to access the material if it is 45 cm (18") underground. And all you need is a shovel!

Trenching is also a safe method for composting pet waste. Because the waste is buried in the ground, the risk of pathogen spread is very unlikely. However, you should not trench your pet waste near edible food crops.

Trenching is an excellent method to use in combination with growing annual plants, especially heavy feeding plants like cabbage, corn, and squash. It also encourages the development of deep, water conserving root systems. Trenching utilizes anaerobic (without oxygen) decomposition to create an underground band of nutrient-rich humus for your plants. This is a slower composting process than that which occurs in a well-managed backyard bin, but the trenched materials will retain more nitrogen during the process.

How to do it:

1. Dig a hole or trench in your garden 45-60cm (18-24") deep and as wide and long as is practical – a shovel's width is usually fine. Pile the soil up beside your trench.
2. Fill the bottom 15 cm (6") of your trench with your nutrient-rich food waste



and organic materials, and fill in the hole with the excavated soil. Make sure the materials are quite moist before you bury them.

3. Top with a layer of organic mulch material (i.e. leaves or straw). Alternatively, you can also sow a cover crop to protect the soil from the elements and suppress weeds in the time it takes for the trenched materials to decompose.

When to Trench?

You can trench compost at any time of the year. Trenching in late fall ensures that your soil is ready for your heavy feeding spring and summer plants. Summer trenches are also effective, building up the soil's nutrient and organic matter content.

Can I Plant Into a Fresh Trench?

In well-drained, humus-rich soil where micro-organisms abound, trenched materials will break down over the course of 2-3 growing season months. In poorly drained mineral soils, the process could take a year or longer.

There is much debate about how long you must wait before planting an edible crop into an area that has been trenched. Conventional literature states that you should wait several months before planting into a trench. This is because the anaerobic composting process that takes place in a trench is actually a fermentation process that produces alcohol, which is toxic to plant roots in extremely small amounts.



This trench was planted with a cover crop of winter peas and radishes. They were cut down two months later and left to mulch on top of the soil's surface. The next crop can be planted once the cover crop decomposes.

However, some organic gardening methods involve deeply burying active organic waste like hay, manure, okara (tofu by-product), or other organic materials and planting into them immediately. This method is particularly effective for growing heavy feeding crops like squash and pumpkins.

Plant roots tend to be quite 'clever' in finding adequate nutrients and avoiding detrimental growing conditions. It is unusual for plant roots to grow into a fermenting pile of organic matter, if that organic matter would harm the plant. That said, it takes most plant roots at least a month or more to reach a soil depth of 45cm (18"), at which point the materials will be less active. In a microbially active soil, soil organisms and worms would easily consume a small amount of trenched materials, leaving the area rich with humus and worm castings. If the material is still active, plant roots are more likely to encircle the active area and penetrate into the materials when they become more stable. Thus, careful monitoring of your own garden and growing conditions will be the best teacher for you. The composting process will be different depending on varying soil types and climates, so your keen eye will tell you how the trenched materials are working for your plants.

Trenching Pet Waste

If you are composting pet waste, you should not plant food crops above your trench. Instead, plant ornamentals or dig your trench in landscaped areas. It can be a good idea to transplant trees or shrubs above a trench containing pet waste, as this ensures that it remains buried and inaccessible by children or animals, virtually eliminating any chance of potential pathogen spread. Though pathogen spread from pet feces is very rare, taking these precautions makes pathogen spread even less likely.

Post Hole Digger/Spot Trenching Method

Another method of trenching is to use a post-hole digger to dig a row of pits in a garden bed, or even just outside the drip line of a fruit tree (this is the ring underneath a tree's outermost branches where feeder roots are concentrated). This is called spot trenching, and can eliminate the trouble of saving up large enough amounts of food waste at a time to make it worthwhile to dig a trench. Spot trenching is also a good method to use for individual plants like squash and tomatoes, or when planting perennials.

These holes were made amongst already growing plants – the post-hole digger makes it easy to work among plants.



Trenching Summary:

Trench composting offers some great advantages:

- ◆ It virtually eliminates all smell and rodent problems if materials are buried at least 45cm (18") deep and well covered with garden soil.
- ◆ The anaerobic process will retain more nutrients than hot composting which loses much of its nitrogen in the decomposition process.
- ◆ It requires no investment in containers or materials, all you need is a shovel!

Trenching Tips:

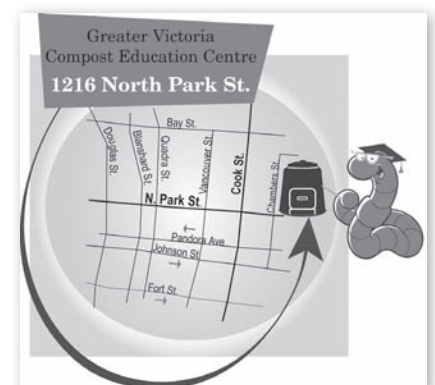
- ◆ Monitor your plants well to ensure they are not being detrimentally affected by anaerobic composting.
- ◆ Use a system to mark where you have buried your scraps so you do not dig them up accidentally.

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We sell composting equipment, gardening guides and more. Call, e-mail, drop by or visit our web site.

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