

How to make compost

Making and using compost is the cornerstone of organic gardening - if you want to 'Grow Your Own', there's no better place to start.

The finished product is rich, dark, crumbly and sweet-smelling. It is made of recycled garden and kitchen waste, and can also include paper products. It is used to feed and condition the soil and in making potting mixes. Around 40 per cent of the average dustbin contents are suitable for home-composting so it helps cut down on landfill too.

Making compost is often considered to be complex but all you need to do is provide the right ingredients and let nature do the rest - however, a little know-how will help you make better compost, more efficiently.

Where do I make my compost?

There are a variety of bins on the market but they are all just a container for the composting process. A bin is not strictly necessary - you can just build a heap and cover it over with some polythene or cardboard. However, bins do look neater and are easier to manage. You can build your own, buy one from any number of suppliers, including or get one cheaply from your local council - contact the Waste and Recycling Department at your local council for more information.

The ideal compost bin is:

- easily accessible
- has no gaps in the sides and may be insulated with cardboard or straw
- has a lid or cover

It should be located:

- in a sunny or semi-shaded position
- directly on the soil or turf
- away from water-courses

What can I compost?

- **Anything that was once living will compost**, but some items are best avoided. Meat, dairy and cooked food can attract vermin and should not be home-composted.

- **For best results, use a mixture of types of ingredient.** The right balance is something learnt by experience, but a rough guide is to use equal amounts by volume of greens and browns (see below).
- **Some things, like grass mowings and soft young weeds, rot quickly.** They work as 'activators', getting the composting started, but on their own will decay to a smelly mess.
- **Older and tougher plant material is slower to rot but gives body to the finished compost** - and usually makes up the bulk of a compost heap. Woody items decay very slowly; they are best chopped or shredded first, where appropriate.

Compost ingredients



'Greens' or nitrogen rich ingredients

- Urine (diluted with water 20:1)
- Comfrey leaves
- Nettles
- Grass cuttings

Other green materials

- Raw vegetable peelings from your kitchen
- Tea bags and leaves, coffee grounds
- Young green weed growth - avoid weeds with seeds
- Soft green prunings
- Animal manure from herbivores eg cows and horses
- Poultry manure and bedding



'Browns' or carbon rich ingredients - slow to rot

- Cardboard eg. cereal packets and egg boxes
- Waste paper and junk mail, including shredded confidential waste
- Cardboard tubes
- Newspaper - although it is better for the environment to send your newspapers for recycling
- Bedding from vegetarian pets eg rabbits, guinea pigs - hay, straw, shredded paper, wood shavings
- Tough hedge clippings
- Woody prunings
- Old bedding plants

- Bracken
- Sawdust
- Wood shavings
- Fallen leaves can be composted but the best use of them is to make leafmould



Other compostable items

- Wood ash, in moderation
- Hair, nail clippings
- Egg shells (crushed)
- Natural fibres eg. 100% wool or cotton



DO NOT COMPOST

- Meat
- Fish
- Cooked food
- Coal & coke ash
- Cat litter
- Dog faeces
- Disposable nappies

How do I make my compost

You can make compost simply by adding compostable items to a compost heap when you feel like it. It will all compost eventually but may take a long time and if the mix is unbalanced, may not produce a very pleasant end product. With a little extra attention you could improve things dramatically. If you want to produce more compost in a short time, and are able to put more effort into it, follow the 'HOT HEAP' route.

An ideal mix

To make good compost you need a more or less equal amount of 'greens' and 'browns' by volume. You can also include small amounts of the 'other ingredients' listed.

The **Cool** heap route

1. Try, if possible, to collect enough compost materials to make a layer of at least 30cm or more in the compost bin. Weed the garden, mow the lawn, empty the kitchen bucket! Mix in some straw, woody prunings, scrunched up cardboard packaging eg cereal boxes - this helps create air spaces within the heap. It may help if you place a few woody plant stems or small twigs on the bottom first as this will improve the air circulation and drainage.
2. Continue to fill the container as and when you have ingredients. If most of what you compost is kitchen waste, mix it with egg boxes, toilet roll middles and similar household paper and cardboard products to create a better balance.
3. When the container is full - which it may never be as the contents will sink as it composts - or when you decide to, stop adding any more. Then either just leave it to finish composting (which could take up to a year) or go to Step 4.
4. Remove the container from the material, or the material from the container - whichever you find easiest. If the lower layers have composted, use this on the garden. Mix everything else together well. Add water if it is dry, or add dry material if it is soggy. Replace in the bin and leave to mature.

The **Hot** heap route

1. Gather enough material to fill your compost container at one go. Some of this may have been stored in a cool heap and have started to rot slightly. Make sure you have a mixture of soft and tough materials.
2. Chop up tough items using shears, a sharp spade (lay items out on soil or grass to avoid jarring) or a shredder.
3. Mix ingredients together as much as possible before adding to the container. In particular, mix items, such as grass mowings and any shredded paper, which tend to settle and exclude air, with more open items that tend to dry out. Fill the container as above, watering as you go.



4.

Give the heap a good mix

Within a few days, the heap is likely to get hot to the touch. When it begins to cool down, or a week or two later, turn the heap. Remove everything from the container or lift the container off and mix it all up, trying to get the outside to the inside. Add water if it is dry, or dry material if it is soggy. Replace in the bin.

5. The heap may well heat up again; the new supply of air you have mixed in allows the fast acting aerobic microbes, ie those that need oxygen, to continue with their work. Step 4 can be repeated several more times if you have the energy, but the heating will be less and less. When it no longer heats up again, leave it undisturbed to finish composting.

A hybrid route

There's nothing wrong with doing a bit of both. Fill your heap as you create waste (as for the cool method), then turn it when you have time. This will help it heat up. You can turn it as much or as rarely as you please - the more often you turn the heap, the quicker your compost will be ready.

When is it ready?

Compost can be made in as little as six to eight weeks, or, more usually, it can take a year or more. In general, the more effort you put in, the quicker you will get compost.

When the ingredients you have put in your container have turned into a dark brown, earthy smelling material, the composting process is complete. It is then best left for a month or two to 'mature' before it is used. Don't worry if your compost is not fine and crumbly. Even if it is lumpy, sticky or stringy, with bits of twig and eggshell still obvious, it is quite usable. It can be sieved before using if you prefer. Any large bits can be added back into your new compost heap

Compost hints & tips

Autumn leaves

These can be added to your compost heap but the best use of them is to make leafmould. Stuff wet leaves into black plastic sacks (loosely tied), or an open wire mesh container. The resulting leafmould is ready to use after a year or two.

Grass mowings

Mix well with browns to avoid a slimy mess. Alternatively, leave on the lawn whenever possible - they will soon disappear and feed the grass; this will not cause 'thatch'. Can also be mixed into a leafmould heap, or used directly as soil mulch.

Diseased plants

Plant materials suffering from soil-borne diseases such as clubroot and white rot should not be added to a compost heap. Anything else can be safely composted in a hot heap. Diseases that don't need living matter to survive, such as grey mould, mildews, and wilts, may survive in a cold heap. But heat is not the only factor that will kill diseases: the intense microbial activity in a compost heap also helps to dispose of them. Some diseases, such as tomato and potato blight need living plant tissue to survive and will not last long without it. It is fine to add foliage suffering from these diseases to your hot or cold compost heap.

If in doubt, leave it out. Problem materials can be sent to your local council green waste recycling facility where the composting methods are hot enough to kill any problem organisms. - .

Perennial weeds

Some perennial weeds will be killed in a hot heap; avoid really persistent horrors such as celandine, docks, bulbous buttercup, ground elder and bindweed. Don't burn or dump these weeds - they are rich in plant foods. Mix with grass mowings in a plastic sack. Tie it up and leave for a few months until the weeds are no longer recognisable, then add to the compost heap. Or send them to your local council green waste recycling facility where the composting methods are hot enough to kill them off.

Weed seeds

Weed seeds may survive a cool heap, but should be killed in a hot one. If your finished compost tends to grow weeds, dig it in rather than spreading it on the soil surface.

Hedge clippings and prunings

Chop or shred tough prunings and clippings from evergreen hedges before adding to a mixed compost heap. Compost large quantities separately; even unshredded they will compost eventually.

Mix with grass or other activating material; water well. Tread down the heap, then cover. In anything from a few months to a few years you will have coarse mulch which can be used on perennial beds.

Animal manures

Straw horse and cattle manure composts well. Manure mixed with wood shavings should be left to rot until the shavings have decomposed. If it is dry, water well, and mix with grass mowings, poultry manure or other activating (ie: green or nitrogen rich) material. When rotted use as a surface mulch.

Small pets, like hamsters, don't produce many droppings but you can still use their waste as a straw addition to the compost heap. Guinea pigs are marvellous - they love eating weeds and convert them quickly to prime compost material!

Paper products

Newspaper can be added to a compost heap, but in any quantity it should go for recycling into more paper. Cardboard, paper towels and other paper items can be scrunched up and composted. They are particularly useful where kitchen scraps

make up a high proportion of the compost ingredients. Glossy paper takes a long time to rot down. Coloured inks are quite safe to compost.

Sawdust and wood shavings

Very slow to decay, raw or un-composted wood shavings incorporated into the soil can lock up soil nitrogen, making it unavailable for plants for a year or more. Add in small quantities; balance with quick-to-rot activating materials. See also 'Animal manures' above. Do not use if treated with wood preservatives.