

Composting & Leaf Mould

Composting and making your own leaf mould is a brilliant thing to do in any garden. Although many councils offer green waste collections, do consider home composting as it removes the need for transport and the associated environmental costs.

Composting is done all year, as and when suitable materials are generated in the garden or home. However late summer to early winter is the peak time for making compost.



How to compost

The site and container

- Try to find a site that isn't subjected to extremes of temperature and moisture, as the micro-organisms (bacteria and fungi) that convert the waste to compost work best in constant conditions.
- Position the bin in light shade or a shade area of the garden..., which will probably also mean it's out of sight!
- An earth base allows drainage and access to soil organisms, but if you have to compost on a hard surface, then add a spadeful of soil to the compost bin.
- Compost bins retain some warmth and moisture and make better compost more quickly, but even an open heap (not enclosed in a bin) will compost eventually. Any of the compost bins on the market should produce compost as long as they exclude rain, retain some warmth, allow drainage and let in air.
- Bins less than 1 cubic m (1.3 cubic yd) in size are much less effective than larger ones.

Getting the right balance of composting materials

- Aim for between 25 and 50 percent soft green materials (e.g. grass clippings, annual weeds, vegetable kitchen waste, or manure) to feed the micro-organisms.
- The remainder of the materials used should be woody brown material (e.g. prunings, wood chippings, paper, cardboard, straw or dead leaves).

- The bacteria and micro-organisms that produce the compost function best when the balance of green and brown materials is correct.
- Avoid letting any single material dominate the heap - especially grass clippings - as these can become a slimy, smelly mess all by themselves.
- Kitchen waste and grass clippings are best mixed with brown woody material, as they tend to be wet and easily compacted, excluding air.

Some common composting materials

- **Green:** Grass clippings; soft, leafy plants including annual weeds; fruit and vegetables, uncooked kitchen waste; selected pet waste/bedding
- **Brown:** prunings and hedge trimmings (ideally shredded), woodchip, leaves, paper and cardboard (torn up or shredded), straw, plant stems.
- **Accelerators and activators:** products such as 'Garotta' are sometimes added where green waste is in short supply. They contain high levels of nitrogen (a nutrient found in green waste), but shouldn't be necessary if green waste is plentiful. It's also possible to purchase activators containing carbon (a nutrient found in brown woody waste); these are aimed at composting grass clippings or other green waste where there is insufficient brown waste.
- **Lime:** it's a misconception that lime needs to be added to a compost heap, there's no need to do so.

Turning the Heap

- Turning the heap adds air; which is necessary for composting to occur. If the heap is too wet or becomes compacted, then the composting process is slower as less air is available.
- Ideally, place a lot of composting materials on the heap in one go, and turn it periodically (perhaps every month) to introduce air. Failure to turn the heap is probably the main cause of poor results.
- Many gardeners are unable to fill the heap in one go, as they accumulate waste gradually. Because of this, home-made compost is seldom as perfect as municipal compost, but it is still effective.
- Remember to keep the heap moist in dry weather – turning will give you an opportunity to assess the moisture level.

When is the compost ready?

Garden compost can take between six months and two years to reach maturity. Mature compost will be dark brown, with a crumbly soil-like texture and a smell resembling damp woodland. It's unlikely that all the material in the heap will be like this, but any remaining un-rotted material can be added to the next batch of composting materials.

Problems

Sometimes the results of composting are not quite as you expected...

Wet, slimy and strong-smelling compost: the main cause of this will usually be too little air and too much water. Try covering the heap to protect against rain, and add more brown waste such as chopped woody material, shredded woodchip, straw, paper or cardboard.

Dry and fibrous with little rotting: this is usually caused by too little moisture and too much brown material. To correct, add more green waste, or try a commercial activator or accelerator such as 'Garotta'. Alternatively, try adding the following:

- fresh manure at one bucket for every 15cm/6" layer of compost
- fish, blood and bone fertiliser at 270g/9oz per 15cm/6" layer of compost
- sulphate of ammonia fertiliser at 140g/5oz per 15cm/6" layer of compost.

Flies: well-run compost bins never produce swarms of flies, but if you do see flies, make sure you cover kitchen waste with garden waste after adding it to the heap, and check that moisture levels aren't too high, causing insufficient air in the heap.



Leaf mould is what's left when the dead, fallen leaves from deciduous trees and shrubs are heaped up and allowed to rot down. As the leaves slowly moulder, only the toughest bits remain, eventually forming spongy, dark brown crumbs to rival any dessert topping. Leaf mould is easy to make, free of pests, diseases and weeds (unless you gather it from where they're seeding), a delight to handle, and you can't possibly overdose your soil on it. The hidden alchemy that brings it about – the countless microorganisms that drive decay – gives leaf mould its almost magical quality.

Making Leaf Mould

Leaf mould is low on fast-acting plant nutrients; its effect is more of a catalysing one that encourages a healthy soil ecosystem in which everything works together to feed plants gradually and slowly. Soils bolstered with leaf mould become slowly darker in colour as their humus levels increase.

What leaves to use

All leaves and conifer needles will eventually break down into leaf mould but different types of leaves have different attributes:

- **Oak or beech** break down with little assistance and produce an excellent quality product.
- The leaves of **sycamore, walnut, horse chestnut and sweet chestnut** are thicker and therefore much slower to break down, so shred them before adding to the leaf mould pile,
- **Evergreens such as holly, Aucuba and cherry laurel** are better shredded and added to the compost heap, where they will break down faster than if added to the leaf mould pile.

- **Conifer needles** will eventually break down but may take two to three years to decay. Conifer hedge clippings are better added to the compost heap than used for making leaf mould.
- **Pine needles** are worth gathering and placing in a separate leaf mould pile as they produce acidic leaf mould, which is ideal for mulching ericaceous plants, such as rhododendrons, azaleas, camellias, *Pieris* and blueberries.

When and how to make leaf mould

Deciduous trees drop their leaves in autumn, so this is a good time to gather up leaves for starting a leaf mould pile. Pine needles may be shed throughout the year but more so in spring so need to be gathered gradually for a pine needle leaf mould pile.

Monty Don, who confesses he is obsessive about making leaf mould, recommends gathering the leaves before “mowing them to chop them up and then stacking them in a big open heap”. Leaving them in the heap will give them time to “break down into a lovely rich, crumbly texture and become an essential component of homemade potting compost”. Collecting leaves from the lawn using a rotary mower, not only shreds the leaves and hastens rotting but also adds grass clippings, so increasing the nutrient value of the leaf mould.



You can buy leaf mould cages from many outlets and there are useful guides online on how to create your own, but it's all very simple to do yourself:

- Acknowledge that you'll only get a quarter to a third in volume of leaf mould in relation to the size of the cage to begin with, and that most leaves will take about two years to break down.
- If space is tight, square or rectangular cages work better, but always make them at least 3ft (90cm) across and deep so the leaves stay moist and keep rotting.
- Or use chicken wire cages: make a square or round frame from chicken wire or similar, supported with stakes or bamboo canes at the corners if a square or at intervals around a circle.



- A porous builder bag filled with autumn leaves and with its handles lashed together works well and you can also use bin liners; moisten the leaves if they're dry, pierce holes in the bag with a knife or garden fork, tie the top loosely and stack the bags out of sight for up to two years.
- If you want to avoid using plastic, then consider buying leaf bags from outlets such as Sarah Raven:



Leaf mould that is less than two years old can be used as mulch, soil improver, autumn top-dressing for lawns, or winter covering for bare soil.

If your leaf mould pile is slow to break down into leaf mould, try turning it regularly to aerate the leaves and speed up the breakdown process. Make sure that the leaves do not dry out, moistening the pile if necessary, in hot, dry weather.