

How to compost autumn clearings.

During the summer, nearly all our garden rubbish is soft, wet and nitrogen-rich. But in the autumn, fallen leaves, pine needles, rhododendron leaves, woody prunings and prickly rose stems are dry, slow to rot down and rich in carbon. So, we need to deal with them differently.

Deciduous leaves are fairly easy. Simply pile them into your home compost bin; they'll blend happily with weeds and kitchen scraps and produce good compost. It's even better to treat them separately by making a wonderful autumn harvest of leafmould. You'd be mad to throw out this perfect mulch, soil conditioner and potting mix.

Leaves break down quickly when exposed to winter rains, so, if you have lots of them, build a special leaf bay. If you have a small garden, soak the leaves and cram into a black plastic bag, with holes pierced on the sides. Leave the top open; otherwise it can be difficult getting the air/moisture balance right. You'll have good leafmould in 18 months. Builders' dumpy bags also work well.

Tannins in oak and beech slow down decomposition to 30 months. But pine and spruce needles and the shiny, almost rubbery rhododendron, magnolia and holly leaves are much harder. It takes several years for these evergreens turn in to compost or leafmould.

There are several reasons for this leisurely rot. Although deciduous leaves absorb water easily, the shiny coating on evergreens repels water and this slows down the composting process.

Evergreens also use thick, tough leaves to protect themselves from attack by pathogens and herbivores. Whereas deciduous trees prevent a build up of pests by discarding leaves every year, evergreens hang on to their leaves for several years. Insects find the thicker leaves much harder to break down and are repelled by the bitter toxins in the leaves.

Fortunately for us, research has shown that these toxins don't survive the composting process, so it's perfectly safe to compost these leaves. And there's no risk that pine needles will cause acidic compost. Although the needles have a pH of around 3.5 when first shed, the final pH of the finished compost isn't affected by this acidity.

So, how do you treat the slow rotters? You can reduce your wait by breaking up the leaves. This lets fungi and some water into the leaves to speed things along. Run a rotary mower over a pile of leaves to let the rotor blade act like a shredder. Or use a leaf vac to break them up.

However you treat waxy leaves, store them separately and leave for several years. Pine and spruce needles also make an excellent, natural, long-lasting mulch round trees and shrubs. They rot down slowly and are gradually incorporated into the soil.

Woody prunings also make a good mulch, when shredded. The wood contains very little moisture and the fungi that break down lignin in the wood need nitrogen for this. So you could bag up the shreds and mix with nitrogen-rich grass clippings next year. This combination gives you good mulching compost within a year.

You can safely put some chopped up woody prunings in the compost heap. But first put aside any twigs that look strong enough to act as natural [and free] plant supports for next year. Get your stakes in early and your plants will grow in and through them beautifully.

A 'dead hedge' is the best place for prickly rose prunings. Drive in 2 lines of stout poles, 45cm apart in rows 45-60cm apart. The prickly stems will rot down over a few years in a dead hedge, making room for later additions. The hedge becomes a magnet for wildlife, attracting insects and feeding birds, not to mention toads and hedgehogs. You could also weave willow, cornus, ivy or clematis prunings between the posts to finish off with a basketwork effect.