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BEYOND PEAT

Six Experts Share their Compost Tips

With peat compost being banned in the UK this year, **Wade Muggleton** and five other permaculture growers share how they ensure healthy soil and plants through homemade compost and peat-free alternatives



As the era of peat-based garden compost draws to a close should we perhaps look more widely at the whole issue of compost?

On the face of it, compost is an innocuous material that we all take for granted and many of us who ‘grow our own’ no doubt get through a fair few bags of it every year. It symbolises something wholesome and embraces the hands in the soil element of gardening. Yet for decades we have denuded and eaten up a precious natural habitat, that of peatlands, in order to propagate and grow our own plants. Now at long last that is about to change and the ban on bagged peat-based composts begins in 2024.

Peat based or not, compost has a level of embodied energy; it is in polythene sacks, gets delivered on large fossil-fuel-powered lorries and has travelled significant distances to get to the garden centre and ultimately to our plots. So could we reduce our use of it full stop? Or at least significantly reduce our consumption?

Peat use is bad, it's far more valuable locking up carbon and forming a wonderful, rich and diverse habitat. Its phasing out has been on the horizon for a while so manufacturers have been working on peat substitutes. Compost, according to the dictionary, is decayed organic material used as a fertiliser for growing plants. So among

the peat substitutes are coconut fibre known as coir, bark, wood fibre, bracken, sheep's wool, municipal green waste and anaerobic digestate. A mixed bag of materials from very mixed sources, many of them apparently waste products, so making compost from them would seem an ideal use. Yet some, like coir, come from halfway across the world and as such have a considerable degree of embodied energy in processing and transport, let alone raising questions of whether they should be used in their country of origin, recycling organic matter at source.

What Can We Do?

Homemade compost seems an easy enough concept and there are countless initiatives, websites and books on how to make and use it. The end product has a range of uses from potting up plants to mulching and feeding the soil. The issue with homemade compost has always been that it isn't sterile and often contains significant amounts of weed seed. Whilst this is less of a problem on the open plot, when it comes to seed sowing it is problematic. Many of us ‘grow your own’ advocates have made and used compost for decades, but most of us still resort to bought-in bags of sterile compost for our sowings.



Photos pp.34-36 © Wade Muggleton

If we could make our own seed compost we could save money and reduce our carbon footprints – so is it possible? How do we avoid the weed seed and get a clean substrate?

Seed compost is essentially a medium in which to germinate seeds, and in horticultural terms is deemed low in fertility, so as not to create overly vigorous growth in the young seedlings.

One solution is leaf mould. Leaf mould is ideal as it is mainly broken down cellulose and lower in trace elements than garden compost. Leaves are a plentiful resource every autumn and if gathered up and left to decay will break down into a very friable medium. Many garden books advocate leaving leaves for two years, but I find in our wet Shropshire climate they break down well in just 12 months. If you are able to gather up just leaves then the resulting leaf mould ought to be virtually free of weed seeds.

The Permaculture Mindset

Whilst many people see the annual leaf fall as a seasonal nuisance that merely creates work, I view it as a bountiful harvest to be gathered in and stored away for future prosperity. I even go up the road and gather sacks of leaves from the pavements, not so much as an act of community good spirit but as a harvest of a really useful and free resource. I am sure the neighbours consider me crazy.

“Bagged retail growing media accounts for 70% of the peat sold in the UK and is frequently misused, for example being used as a soil improver rather than a medium in which to propagate plants.”

DEFRA, Natural England and The Rt Hon Lord Benyon press release, August 2022

Get Sieving

A couple of different grades of garden sieve are perfect for refining your rotted leaves. A finer one allows through all the finest material producing a great seed compost; the chunkier pieces can be used as general mulch under trees and shrubs or can go onto the compost heap to break down further. A larger grade sieve creates a slightly coarser grade material, ideal for mixing with homemade compost and for use in potting on or adding to vegetable beds.

The same technique applies to good garden compost. We have four of the standard council type bins and a larger pallet bin, so all waste material from our plot is composted. When digging it out in a dryish state, sieving it removes the chunkier uncomposted material and creates a lovely fine grade of beautifully composted material. It's not sterile but if your soil is in good health and full of life it follows that your homemade compost should be good and healthy too.

A great additive if making your own compost is mole hills; beautifully tilled, fine soil that if scooped up and added to compost introduces mycorrhizal fungi and trace elements to your mix – again not weed-free but adds these other benefits. With time and experience you will find your own preferred mix, be it garden compost, soil, leaf mould, etc.

The Pre-emptive Strike

One way to clean your compost from weed seeds is to spread it out in a greenhouse or even just fill trays with it and then leave them in light and warmth prior to use. The majority of weed seeds will germinate and can then be removed to create a cleaner substrate into which to sow. You may not get it 100% clean but getting rid of 90% ought to be achievable. On a bed scale, spread your compost, water and then cover with a clear plastic sheet, this will warm the soil and cause mass germination by letting the light through and you can weed, rake or hoe out the germinated weeds – again cleaning the soil (also called false-seeding).

Even if we still resort to buying one or two bags of sterile peat-free compost for certain more precious sowings, by substituting other compost requirements with our homemade material, we are making a contribution environmentally and saving money. I have reduced my annual usage of 8-10 bought bags of compost to maybe one or, at most, two. A combination of leaf mould, quality garden compost and well-rotted farmyard manure now substitutes bought bags of multi-purpose compost.



Wade Muggleton lives in Shropshire with his partner and two children. In 2013, he acquired a field and now has a collection of over 130 fruit trees. His recently reprinted book, *The Orchard Book*, is available via PM's online shop: <https://shop.permaculture.co.uk>



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gardening experts in PM121 –
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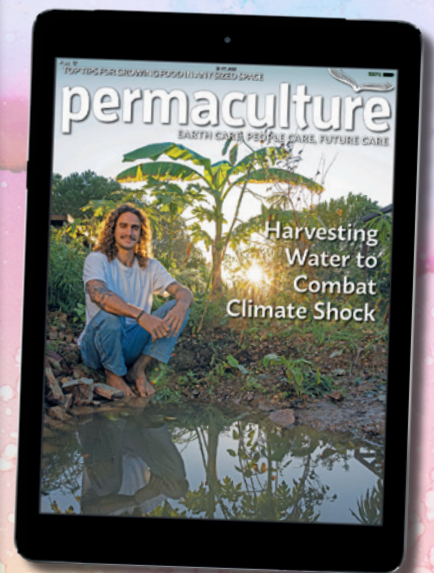
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