

22 Shredding and Shredders

It is quite probable that the waste that you collect for composting will include relatively large quantities of hedge clippings, prunings and other 'woody' waste. A mechanical shredder will quickly reduce a large heap of such items to a relatively small pile of woodchips which can then be added to a compost heap, composted separately or used as a mulch.

Shredding *Plus* points

- Shredded materials compost more quickly
- Woody items can be composted if shredded first
- Woody items can be converted into useful mulches
- Finer compost produced
- Good publicity – people are interested in ways to get rid of woody waste

Shredding *Minus* points

- Cost of machine – min £2000
- Cost of trailer if machine to be moved far
- Running and repair costs
- Insurance of machine and operators
- Safety equipment essential
- Operator training required
- Secure storage needed
- High energy use
- Noisy in use
- Shredding is time consuming
- Hazardous to use

To buy or borrow?

The minimum cost of a reasonable size of shredder will be around £2000, so it needs to get good use to be worth the investment. Unfortunately, even at this price the machine will be small in the shredder world. It will be relatively slow, and extremely noisy in use, which makes it unpleasant for both the operators and anyone in the vicinity. One option to consider is to persuade your local council to offer a mobile shredding service, bringing their large shredder / grinder (if they have one) to your site now and again (if you have the space). Large machines get through an enormous quantity of material in a short time, minimising the disruption. Of course all the expenses and responsibilities of owning and running a machine of your own are gone, and volunteers and workers have more time to devote to making compost.

If such a service is available you will need to stockpile material to make it worth while, so space is required for storage. It also means that materials have time to dry out, rather than be shredded green; green material shreds and composts much more effectively.

Buying a shredder

Power: Choose the most powerful machine you can reasonably afford. A petrol driven machine of around 8hp is the minimum that is worthwhile. Anything smaller will be slow to use and may not be up to the job you require of it. Tractor PTO powered models are available.

Portability: Do you have the means to move it around the site, or to other locations, if necessary?

Capacity: Check that the machine will deal with the maximum size (diameter) of material you will be dealing with.

Working height: Some models would be impractical for a short person to use.

Funding

See *Grants and Other Funding*

Health and safety

- Only named, fully trained and insured operators should be allowed to use the shredder. Shredder companies may offer training to one or two individuals.
- Always work on a level, hard surface where there is plenty of room to stack materials and move around.
- Full protective clothing – goggles, ear protectors and thick gloves must be worn at all times when shredding.
- People not involved in the process should keep well out of the way

Shredding hints and tips

- Pile up items, ready prepared where necessary, close to hand. Don't leave the machine running unnecessarily.
- Have one or two people supplying the shredder operator.
- Reject anything with soil on – it blunts blades.
- Fresh material will shred much more easily than dry or dead wood.
- Wet material does not shred well; alternate with dry items to reduce clogging.
- Don't try to push too much through at once.
- Don't shred *everything* – only the tough and woody materials that would otherwise take too long to compost.
- Turn the machine off as soon as it gets clogged.
- Never clear out the shredder chamber with bare hands. There is now a 'Nine-finger Club' for those who have lost digits while operating composting machinery!
- The maximum size for shredding stated by manufacturers is for guidance only.
- Some materials will be just too hard for it to cope with.
- When in doubt, use the chipper chute.

Alternatives to shredders

Tough materials, other than prunings and hedge clippings, can be chopped with a sharp spade. Do this on grass or soil – not a hard surface where you are likely to jar yourself. Soft hedge clippings will compost without shredding, but rather more slowly. Where space is available, woody materials can be made into separate slow heaps (see *Working Without a Shredder*).

What to do with the shreddings?

Shredded prunings, hedge clippings, brassica stems and other tough materials make an excellent addition to a mixed compost heap. They are particularly useful mixed with large quantities of grass mowings and other soft items.

Where there is a sudden influx of, say, Leyland cypress, this can be shredded and composted on its own – with the addition of lots of water, and something nitrogen-rich such as grass mowings or pigeon manure if available. The heap should be left for 6 – 12 months before being offered for use as a mulch. Unshredded, it can be useful to cover muddy patches around compost boxes!

Tougher, woodier material, shredded when it has dried out, will not compost so well. Small quantities can be added to a heap or use them to mulch paths. The alternative is to stack up the woodchips, watering them well as you do, and leave them to compost alone for a few months. The result can be offered for use as a mulch for shrubberies and other permanent plantings.

DO NOT offer woodchips for use on playgrounds – there are strict regulations covering this situation.

Other relevant cards

- Grants and Other Funding
- Working Without a Shredder

Useful contacts

- HSE