Working With Woody Heaps.

Twigs, prunings and small branches can be some of the hardest materials to dispose of. In a loose pile they will sit around for a good number of years doing nothing very slowly rotting away. Fine if space is not restricted, but not many people have enough room for a large sprawling heap of prunings.

Wasting Fertility

Many people resort to setting fire to the wood, burning it to a fine ash ,or very much worse, cart it off down to the municipal recycling centre, where they will shred it into compost. Both of these options waste nutrients, some part of the land's fertility is being lost. With burning it becomes gasses released into the atmosphere, and with municipal recycling, somebody else ends up with the nutrients.

Shredding the prunings yourself, allows them to be recycled through a regular compost bin. The nitrogen and the carbon dioxide in the prunings stay locked up in the compost, while the minerals and trace elements are retained in a slow released state, unlike wood ash that is highly water soluble.

Unfortunately shredding has it's drawbacks. Firstly, electric shredders are fine for tiny amounts that a small garden produces, but large amounts are excruciatingly frustrating and slow to do. Large petrol shredders handle greater quantities with variations of ease. Drawbacks are, they are expensive to buy, while hiring one is an option, you need a hill of prunings to make use of a days hire. stealing space once again.

More Ecological

A much more ecologically efficient way to handle woody and twiggy prunings is by constructing a slow acting woody heap that handles prunings, twigs, and small branches, separate from the faster working compost heap.

It's not generally realized that given the right conditions, branches, twigs and prunings will rot down very well, albeit more slowly than softer matter. But the finished product is an energy rich compost with extremely good soil building properties.

The woody heap is a more long term composting system than conventional composting methods . The end product becomes available in a number of years, rather than in a single season.

A woody heap needs care in the construction to achieve the results in as fast a time as possible. As with a conventional compost heap, the addition of nitrogen rich ingredients speeds up the process of decay. The nitrogen is not needed to achieve heating up in a woody heap, as the actual breaking down process begins with wood eating insects such as wood lice, borers, and spring tails who work alongside fungi. Both need cool conditions to work at their best.

Extra nitrogen helps to increase the activity of the fungi and cool living bacteria which continue to break all the contents down into a rich compost.

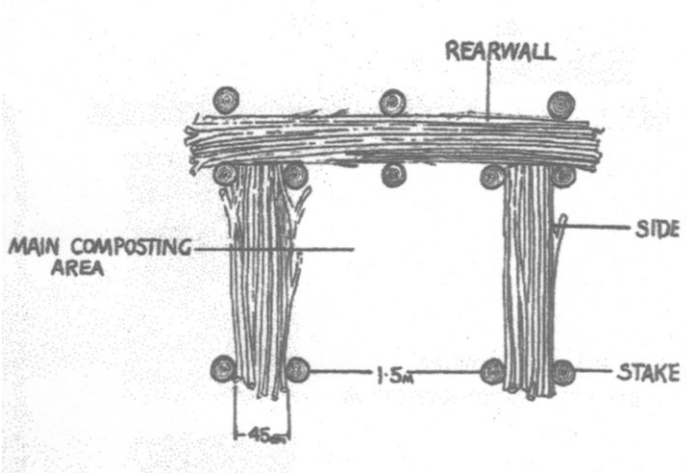
In the lifetime of the woody heap it also creates beneficial conditions for a whole host of other organisms that enjoy the environment. Many are very helpful predators in the garden.

Ground beetles, with their taste for slugs, lurk in the cool bottom regions of the woody heap, waiting for the night time to venture out and hunt down their prey. Centipedes, attracted by the scores of insects, still make quick forays out into the garden for other victims. Larger animals enjoy the undisturbed shelter it gives. Slow worms and grass snakes use it for nesting and egg laying, while hedgehogs find it ideal for over wintering in. The woody heap creates an ecology that shelters these creatures who benefit the garden with their presence.

Constructing The Woody Heap

Situating a woody heap should not be a problem, avoid soggy wet areas; cool shade or open areas are fine. A reasonable sized woody heap that can handle most average amounts of prunings is one of around 1.5-2 metres square (3-4ft square). If enough area is left for expansion, further bays can be added allowing one that has been filled time to rot.

Start by constructing the sidewalls and rear wall to hold the heap contents. Support posts need to be erected, use scrap wood, stakes from heavy pruning, anything to hold the walls together. Drive them into the ground in pairs approximately 45cm (18in) apart. Two pairs at the front of the heap, two at the rear to hold the sidewalls content. Then another four at the back to make the rear wall. Refer to the diagram to make it clear on positioning.



The side walls and rear wall are made up from heavier prunings. Anything from finger thickness up to a substantial log, that is if you cannot utilise the larger sizes for burning on a wood stove or open fire. The bigger the wood, the longer the walls will last for, but it will all rot down eventually.

Push the twigs and larger prunings down between the pairs of posts, tamping them down, a heavy piece of wood helps. By packing the prunings in the wall tightly, not only can you fit more in, but it helps the bottom layers rot away.

Eventually they become part of the compost as they rot down, allowing more prunings to be added on top.

Inside the walls is the main area of the woody heap where smaller prunings and twigs are rotted. That is anything well below finger thickness, approximately 1.5cm (1/2 inch). Harder slower to rot woods should be kept at 1cm (3/8 in) maximum in diameter.

As you go about pruning, rough cutting the prunings to lengths of around 30cm (1ft), helps the handling of them when adding to the heap. Shorter pieces are even better,

A whole heap of just pure prunings thrown together will gradually rot as it settles over a period of time, but it will take a number of years. The aim is to speed up the up the process. The time can be reduced from 5-6 years for the base of a pure wood stack to break down, to around 2 1/2- 4 years for a woody heap, depending on the type of woody prunings added.

Adding Extra Materials

Leafy sappy prunings have a head start in rotting, compared to dry twigs that will take longer. So to speed up the process, wetter higher nitrogen materials need to be added. Grass cuttings can be perfect for the woody heap. Often too much is produced through the season for an ordinary heap, where it will turn it into a stinking mess. Added to twigs and prunings, they compliment one another. The wood prunings need nitrogen and moisture to rot, the grass need the carbons for balance, plus the twiggy wood stops the grass from compacting.

Prunings also have the added convenience of being able to be left to one side until the grass cuttings become available, without becoming difficult to handle. If they dry out a touch, they will just absorb more water from out of the grass cuttings. As the two are combined into the woody heap in any quantities, the cuttings should be worked into the wood by lifting the prunings slightly and agitating them to get the two reasonably mixed together. Keep grass cuttings to 10cm (4in) thick, this ensures they do not compact into non composting layers.

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Course weeds and long grasses can be an added benefit and be treated the same as grass cuttings. Once the wet green stuff is added to the prunings, the whole heap can be firmed down with a fork. Depending on the springiness of twigs, it may even need treading down. This creates good contact between the two materials and ensures good composting.

Anything can be added to the woody heap. It is ideal as an overflow for the ordinary compost heap or bin if too much becomes available for composting. Extras enrich the end product of a woody heap. The woody heap is an ideal place for autumn leaves, making it unnecessary for a separate leaf heap. Whereas leaves will slow a conventional composting system, it does not effect a woody heap at all. Merely adding more texture to the final product.

Other ingredients rich in nitrogen will help to rot woody particles down. Fresh manure if

it can be spared. But it needs to be used in very reasonable layers. Anything more than 10cm (4in) thick can end as just layers of rotted manure, separated by walls of sticks and staying like this for a couple of years, before any composting takes place. If an abundance of chicken droppings or in fact any bird droppings are available. These fine nitrogen rich additions work wonders. Woody prunings will need to be moistened though, as the droppings will be too dry to do the purpose. Wood fibres need adequate moisture for efficient composting to take place.

Not everyone can get hold of these high nitrogen additives, but there is a free regular supply that adds most of the moisture needed, urine. It may be inconvenient to collect the whole of the days resource, but the first on rising from bed, collected in a bucket, is often the richest in plant foods such as minerals and trace elements. Poured on the heap each day encourages fantastic fungal and bacterial activity that rapidly breaks the wood fibres down and improves the quality of the compost.

The Finished product

The final product can be ready in around 2-2 1/2 years. This will depend on how well the woody heap was made and the type of wood included in the heap. A realistic time span though, of mixed wood types can be 3-4 years. A woody heap cannot be rushed, it must be allowed to sit and rot in it's own time, improving with age. By having an area to expand in, extra capacity for composting can be increased, simply tack another bay onto the side of the existing one.

After two years of standing it is worth testing a woody heap to see if it is ready. First remove the semi and unrotted material that the front of the heap will consist of, it's no fair indication as it has been exposed to the air rather than the rotting process.
Once this is removed, chop down into the compost with thin slices using a spade. If the spade cuts through easily and cleanly without meeting resistance from unrotted wood, the compost is ready. But if there is any resistance at all, the woody heap needs to be left longer, at least another year.

An adequately rotted woody heap will still have twiggy bits and wood pieces present. But they should break easily when cut with a spade, indicating they are nicely rotten. A very well rotted woody heap will look like rich woodland debris with some woody bits present.

As the woody heap is emptied out, the very base of the sidewalls will also contain rotted compost. Dig as much out as is possible without bringing unrotted wood with it. Then push the wall down more, ready for further additions. The walls of a woody heap are a continuous but slower composting process than the main heap.

Using The Woody Heap Compost

Use the woody compost around the garden or holding. As a precaution it is best used as a mulch in case some of the woody particles left have not fully rotted. It will stop the wood pieces from stealing nitrogen out of the soil. Whereas as a surface mulch, bacterial action will effect a final breakdown safely.

Plants that respond well to the woody heap compost are all trees including fruit trees, shrubs, fruit bushes, raspberries and most perennials. The woody heap compost supplies plants with a long lasting food source containing many minerals and trace elements that have been harvested by deep rooting woody plants.

The woody heap is one of the most ecologically friendly methods of disposing of wood-stuffs, creating an ecological niche in the garden while utilising high carbon compounds to create a soil building compost.