

Tools for Green Woodworking.

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Perhaps I should define what green woodworking is:

Green woodworkers start with fresh, unseasoned wood and generally make smaller items either by hand or on the lathe.

Most other woodworking is done with dried (seasoned) wood that is dried to the so-called equilibrium moisture content (EMC) – where the moisture in the wood is close to the surroundings. In contrast, green woodworkers start with wood that is saturated with moisture as it comes from the tree. Once the wood is shaped to the final sizes or close to them, it then dries down to the EMC, after which it can be further shaped and finished. Because the wood may shrink and distort as it dries, this needs to be accounted for by making the item oversize, avoiding the pith, and orienting the growth rings as best to suit the final intended shape.



Woodturners often start with green blanks. Green wood is readily available, typically from tree fellers or garden trimmings. It is softer and easier to work, with very little saw dust generated. Large logs are usually broken down using a chain saw, but thereafter, hand tools can be used.



Handtools were widely used for woodworking in the past, but nowadays powertools predominate. These old handtools can be found second-hand, but are quite scarce, so often one has to resort to buying new tools. There are not many sources for new tools available locally in South Africa – the ones given below are the ones I know of. If you know of others, I'd be pleased to hear from you.

Axes and hatchets. These are very efficient for shaping and trimming, although they do require skill to use. Every carpenter in the past had an axe in his toolkit – these may have been called a side axe or hewing axe and were used for trimming work close to the final size. Axes used for felling usually have a symmetrical bevel, whereas those used for fine work may have a left- or right-hand bevel, depending on the dominant hand of the user. They are sold as left or right-handed axes, also called side axes. The right-hand axe is for right-handed use and will have a flat on the left side of the edge and a bevel on the right, for use on the right-hand side of the surface being trimmed. *Toolcraft* in Cape town used to offer these from Narex, but unfortunately, they are not listed at the moment. The axes commonly available locally, such as those from Lasher usually have a 900g head (2 lb in old units) with a double bevelled edge. These can be used, but are a bit heavy for repetitive use. The edge can be reground, as I have done. The Narex axes have (if memory serves) 600g heads which are wieldier. For small work, a 450g head (1 lb) is handier. **Hardware Centre** list a Pfeil carvers hatchet with a 1300g weight and a sculptors hatchet weighing 550g, which are out of stock at present.



The traditional side axe has a wide blade with the bevel on only one side and a short handle. The handle may even be offset slightly to provide clearance for working close to a flat surface. I have not seen any of these specialised axes for sale locally.

Adzes. Apparently, good adzes are hard to find, although some artisan tool makers have started to produce them again. They are useful for hollowing out chair seats and wooden bowls. I have a small Pfeil curved adze, which I have not used much. There is a debate as to whether the bevel on the edge should be on the inside or outside. The Pfeil that I have has the bevel on the inside – this is



suitable for shallow hollowing, such as cutting a gutter. I haven't used it enough to form an opinion, but it seems that for deep hollowing I will need to grind a bevel on the outside. The adzes that David Fisher uses for his hand-carved bowls have the bevel on the

outside, which makes them more useful for deep hollowing. This image is from <https://davidffisher.com/blog/page/2/>. Fisher makes bowls from greenwood blanks.

Wedges. These are used for splitting logs. An axe head can be used, driven in with a large wooden mallet or maul. One or two steel wedges are very useful. I have found these second hand. When new, they are rather expensive when bought from Stihl or Husqvarna. Wooden wedges made from tough hard woods like oak are also useful. You will need several. I have the experience of knocking in a wedge until it is flush with the log without the log showing any signs of yielding. The solution is to knock in more, wider wedges until the log splits and you can recover your buried wedges. A metal hammer can be used for knocking in wedges, but I prefer to use a home-made maul, to stop the back of the wedges mushrooming over with use.

Drawknives. Toolcraft list a small one made by Narex with a 150mm wide blade. This may be a bit small, particularly if one is inclined to skew the blade in use.



I have drawknife made by Pfeil (listed as the curved drawshave ZugCd) bought from Hardware Centre some time ago. It works well, but I find the handles uncomfortable. Tools4Wood also list some drawknives.

My favourite drawknife is an antique from Henry Boker in Germany, but don't think they have been made for many years.

Spokeshaves. A variety of spokeshaves are available locally ranging from the metal bodied Stanley #151 and #152 patterns up to the premium Veritas and Lie Nielsen brands. With the metal bodied shaves that are not well-known brand-names, inspect the item carefully before buying, as I have seen some that are not fit for purpose as bought. Sometimes judicious filing can bring them up to standard.



Knives. These knives, intended for wood carving, have a small blade and an outsized handle to provide good control without tiring the user. The blades have a number of different shapes, and it is important to understand how they work before sharpening them. They are available from number of suppliers.



Toolcraft sell a spoon carving set made by Narex that I have. It has a small straight Sloyd style knife, two bent spoon knives and a cranked spoon gouge. This is a good starter set for greenwood spoon carving. I have found that the although the edges are highly polished, they need sharpening and there is some initial brittleness to the edges that makes them inclined to fracture. Once this has been ground away, the edge holding is good. The tools are also available individually if needed, but the total will be somewhat more than the set.



Toolcraft and Hardware centre list a range of small carving knives from Pfeil. Other brands to look at are Flexcut and Morakniv.

Other common tools used such as saws, chisels, augers, etc are the same as for normal seasoned woodworking, so I don't need to go into those here. Although I should mention that saws need more set (how much the teeth are angled outwards) to reduce binding in greenwood. This is easily addressed using a saw-set.

I haven't seen any froes offered locally, so I made my own, which is not too difficult given my limited blacksmithing skills.

The selection of green woodworking tools available locally is not good, and given the global supply chain problems at present (2021), many of the local suppliers list items but with no stock. Hopefully this will improve soon, so be patient.