Southern Turners Project Sheet

Mortar & Pestle

This project explains how to make a mortar and pestle. Ensure all safety equipment is used appropriately.

Before starting this project think about the end use – consider:

- Wood toxicity – if in any doubt about the species don't use it. This is not a project for that nice piece of unknown wood you have had in the shed for years.
- Finish toxicity – if in doubt leave it unfinished
- Sharp edges or swiftly changing curves– not good as these could present a safety hazard or trap foodstuffs. Not a project for crisp detail.
- Weight of the components (it has to withstand constant use over time)

Mortar

The blank can be face grain or end grain. End grain hollowing tends to be harder than face grain hollowing, particularly for beginners.

Select a blank approximately 125 mm square and 75 mm thick.

Accurately locate and mark the centre of one face of the blank using an awl or other marking device.

Use a Forstner bit to drill a recess approximately 8 mm deep as shown in the photograph.

If you don't have a suitable Forstner bit, make a disc from scrap wood to use as a sacrificial tenon to suit your scroll chuck and glue onto your blank. Make sure it centrally located – this can be achieved by drilling a small pilot hole in the centre of the disc and using a nail or other centreing device to match up with your awl hole. Ensure the glue is fully set before turning.

Mount the blank by expanding the jaws of your scroll chuck into the recess made by the Forstner bit.

True up the base marking sure that it is slightly concave. You can use a bowl gouge or scrapper to achieve this.

Turn a recess approximately 6mm deep to suit you scroll chuck. I like to make the centre of the recess slightly convex to minimise the chances of turning through the bottom when hollowing the mortar.

Working from the centre outward turn the external profile as shown in the photograph. Use light cuts to avoid chipping out the trailing edges. There is no right and wrong for the external profile; just do what looks good to you. You could choose to make the external profile circular.

Ensure the curve has a continuous flow.

Sand the base and sides to whatever grit seems reasonable. Using a long piece of abrasive means you can hold it without getting too close to those revolving knuckle breakers.

Hand sand the flat edges.

Determine the width of the rim and mark using a parting tool or skew as a negative rake scrapper. This provides a positive edge for the bevel of your bowl gouge to engage.

You can drill a central depth hole if you wish.

Hollow out the centre ensuring you have a continuous curved profile. Don't leave lumps and bumps on which food can become trapped as this would reduce the effectiveness of the mortar and could result in health issues over a prolonged period.

Pestle

Mount a spindle blank of approximately 40mm square and 150 to 175mm long between centres. Reduce to round using a spindle roughing gouge or spindle gouge.

Shape the general profile of the pestle. Use a parting tool to clean up both ends of the pestle. This provides room for your tools when shaping the ends of the pestle.

Round over both ends of the pestle. The bottom end should be hemispherical or slightly flattened. The top can be any shape you wish but remember you may be pushing down hard on it so sharp edges should be avoided. Sand to your desired grit – remember this is a functional piece subject to regular washing so super fine grits are a waste of time and effort.

Part off using a parting tool, skew or saw depending on your skill level. Use a chisel or sharp knife to remove the nub. Hand sand both ends to remove all tool marks.

Your finished mortar and pestle may look something like this.

Finish with a food safe oil such as grape seed oil or leave natural.

Timber used here – mortar is Queensland maple and pestle is eucalyptus spp.