

# HORNSBY DISTRICT WOODTURNERS INC.

Established 1983.

## eNEWSLETTER OCTOBER 2020.

A quick welcome to everybody on what is now a regular ZOOM demonstration time, and nice to see past member Ted Utick watching.

As you know Lindsay is not well having tests etc in order to get on top of the problems. We wish Lindsay a quick recovery and trust that all other members are staying well: please advise if some help is required!

Not much housekeeping to advise except that the Shed will hold its 2020 AGM on Friday 27 November. As a result of Covid new allowances the committee has decided to running our 2020 AGM on Saturday 21 November from 10:15 am, [members - see specific email dated Friday 6 November for all details]. Thanks to Bert, Robert Ackerman, Jane, John Edwards and Elwyn for turning more honey dippers, much appreciated. Dipper blanks are available at the Shed for members who would like to continue building our stock for a possible December call. These blanks are somewhat problematic and seem to turn best with sharp chisels and at the highest safe speed!

Show & Tell, a couple of good photos only. Some nice pens from Colin, a nice bowl with bark retained from Lloyd and a Grey Mangrove bowl from John Dear showing his characteristic dual



grooves. Both Grey and Red Mangrove wood is not frequently seen so please check it out.

Lindsay was unable to run his planned demonstration so the Saturday demo was run by Greg Croker with the topic of *Wet Sanding and Finishing*. This fill-in topic was chosen following an article reproduced from Mike Peace's article in the AAW Journal on *Sanding Woodturning Projects with a Lubricant*.

It's recommended that this article be read prior to the demonstration description as the newsletter's text is brief.

Go to [hornsbymensshed.org.au](http://hornsbymensshed.org.au) click the Newsletters heading and look for the Cutting Edge Magazine Autumn, Winter 2020 edition, then page 15, for the comprehensive article. There is plenty of other interesting reading in this magazine too; ie the Ruby Princess and Charles Kingsford-Smith.

As a woodturner I have looked at many ways, papers and compounds to achieve the finish desired and on recently moving from a house with a workshop, to a unit with only a covered terrace available, sanding dust has become the major consideration not only for my health but also for the continuance of my hobby; hence the experiments with wet sanding giving virtually no dust production.

In the past, woven sanding cloths have been tried soaked with water, methylated spirits, mineral spirits (turps), paraffin oil and even Danish Oil running through to 400 - 600 grit with various results. The first three solvents were not that convincing so following seeing a Glen Lucas DVD using paraffin oil soaked sanding cloth on his range of turnings I too have found it the best so far. Also the use of '0000 Steel-wool' and Danish Oil for the final finish, presumably de-nibbing, has given good results and can add a hint of shine/gloss to turnings.



For the demonstration the Standard Finish was sanding of the dry billet, turned between centres with the best obtainable ex a ruffing gouge surface followed by 240, 320 and 400 grit sanding. Dry sanding to 400 grit was considered to give a more than adequate result and was followed by U-Beaut brand EEE Ultra Shine and Glow friction polishes. The EEE polish contains abrasive capable of 'up to 20-30,000 grit equivalent.' (As our turners also use U-Beaut Shellawax Cream over EEE this commercial product was also included with the home compounded products' tests).



Three woods were chosen, jacaranda a light cream coloured wood considered to give a good finish, Scots pine wood slightly resinous buff coloured wood also capable of a good finish and banksia wood showing strongly marked pink heartwood and grey sapwood. The banksia wood was chosen as probably a less frequently used and difficult wood to finish.

The woven sanding cloths used were standard abrasives used in the Shed. Abranet sanding abrasive gauzes were described but not demonstrated using the wet sanding technique. We were advised that wet sanding prolonged the service of both abrasive products provided the slurry was washed away with the solvent to re-expose the cutting edges.

Of the commercial compounds, EEE has been described, Glow and Shellawax Cream are both shellac, wax and solvent mixtures used on the spinning turning to burnish? a high gloss utility final finish.

The three trial compounds were straight paraffin oil, 1 in 4 w/w beeswax in paraffin oil and 1:1:4 w/w beeswax, abrasive and paraffin oil. The suggested abrasive was diatomaceous earth, but this powder couldn't be sourced in time for the demonstration and Ajax Powder Cleaner was substituted. Ajax powder abrasive is essentially fine calcium carbonate with a very small proportion of a chlorine compound.

While measuring and weighing should be accurate the exact proportions are not critical.

The compounding of the trial mixtures is fully described in the printed article and is not discussed here except to ensure safe operation; ie no excessive heating using direct gas or electricity, and remember hot oils will scald/burn and are inflammable. It is not necessary to use a Crock Pot for dissolving the beeswax. Grated wax is easily, though slowly, dissolved in



warm paraffin oil (~ 50 degrees) the later being pre heated in a jar in a hot-water bath with water from the hot water system. The abrasive can be stirred in while the solution is warm. Both products can be expected to thicken on cooling.

The jacaranda wood billet was trialled pre the demonstration in order to test the finishes for suitability. This billet is shown in the first photo with comments from the turners on site for the Zoom presentation.



From the left end of the billet the treatment was:

- A Standard dry sanding followed by EEE and Glow.
- B Standard dry sanding followed by EEE and Shellawax.
- C Wet sanding (240 to 400 grit) with paraffin oil\*.
- D Wet sanding (240 to 400 grit) with beeswax dissolved in paraffin oil\*.
- E Wet sanding (240 to 400 grit) with beeswax and Ajax in paraffin oil\*.
- F Raw untreated wood turned with a ruffing gouge; extreme right in the picture.

The results and comments were:

- A & B Both good smooth and glossy surface finish, as expected.
- C Surface finish OK but not as glossy, smooth, or slippery with somewhat darkened wood. The surface looked somewhat dry or unfinished by comparison.
- D Very similar to the finish on C.
- E Similar to C & D but may be smoother.

Following on from the assessment above the demonstration was commenced with the billet of Scot's pine wood being treated on live Zoom.



Again from the left:

- A The standard (240 to 400 grit) dry sanding but with a finish of only EEE.
- B Wet sanding using the beeswax, Ajax and paraffin oil mixture through the grits.
- C Dry sanding with Abranet through to 420 grit.
- D The finish from the roughing gouge only.

The results and comments were:

- A & B Smooth non gloss surface, wood colour unaffected, should benefit from an additional finish.
- C Well sanded with smooth finish but dry and in need of an additional finish.
- D Untreated finish ex the roughing gouge. Pine wood is inherently smoother, resinous and perhaps finer to start. Also the grain was far more pronounced than the jacaranda.

For the final test a billet of banksia was trialled. Banksia grain is very prominent and interesting, even before treatment – see the untreated billet.

The comparison was only between:

- A Standard dry sanding followed by EEE and Glow.
- B Wet sanding (240 to 400 grit) with beeswax and Ajax in paraffin oil followed by Glow.

The results and comment were:

- A Good smooth glossy surface, as expected.
- B As for A; a good smooth glossy surface equivalent to A?



Summing up, perhaps we can say;

- 1 for the jacaranda the commercial standard mixtures gave the best results with the oil trials darkening the wood significantly,
- 2 for the Scots pine wood, which compared only the abrasive properties of the trial, the standard dry sanding plus EEE and the compounded beeswax and Ajax in oil sanding were found to be virtually equivalent. Abranet dry sanding was satisfactory leaving an expected dry finish; of course this abrasive can be used 'wet.' The pine colour was not noticeably affected,
- 3 for the banksia comparing the standard dry sanding plus EEE and Glow with wet sanding with the beeswax and Ajax in oil treatment there was no immediate difference.

\*As a final test the jacaranda billet's wet sanded areas were treated with 2 additional coats of Danish Oil, one day apart and de-nibbed with 0000 Steal-wool between coats, with good results.

So can we conclude that in addition dust free sanding there is good promise for finishing our turnings with the oil, beeswax and Ajax mixture? The real need is to work with diatomaceous earth replacing Ajax and judge the result which other turners have found to be most satisfactory.

Thanks again to Elwyn and Colin for their provision of a workshop and Zoom control.

Our final (ZOOM) demonstration for this year will be on Saturday 14 November from 10 am.

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For further interest or to join-in woodturning go to [www.hornsbymensshed.org.au](http://www.hornsbymensshed.org.au)

