

HORNSBY DISTRICT WOODTURNERS INC.

Established 1983

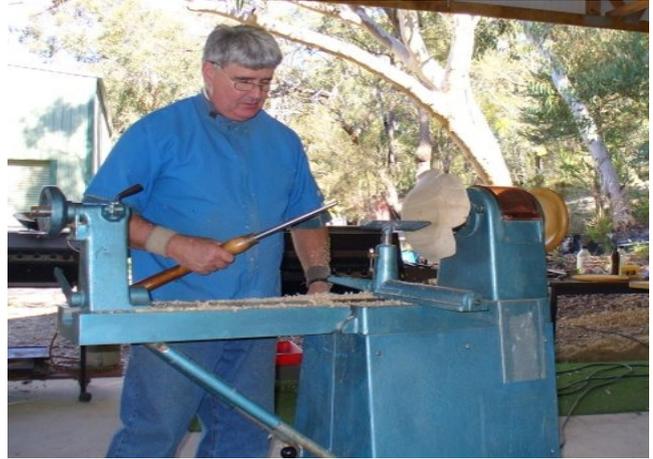
NEWSLETTER MAY 2018

A smaller group of members assembled for our monthly meeting and were welcomed by Greg.

There was sad news to report namely the death of SWG Life Member and Number 75, Bruce Leadbeater. Bruce will be remembered for his 35 years in the Guild, training,



mentoring and demonstrating continuously; designing and marketing his Leady Lathes and many chisels as well as his ground-breaking work (and publishing)



on the microwave drying of wood. The pics show Bruce speaking at the SWG 30th Anniversary in 2013 and Lindsay turning on our 'trusty and versatile Leady lathe.'

Housekeeping items. The WWW Show is now to be staged at Rosehill Race Track in July this year and as a result there could be an opportunity for the Shed to run a Friday afternoon of Sorby demonstrations in late June, a projectionist to work with Lloyd is still required, honey dippers as well as toys for charity are need to be made over the coming months, and very few suggestions have been received as to items and preferences for inclusion in our future activities.

Our Winter Luncheon will be at Pennant Hills Hotel from 12:30 on Wednesday 27 June.

Brian again ran Information Exchange starting with his Chinese internet purchases; bushes and other fittings for a proposed pressure device, and cutter rods to be incorporated in a turned timber pen body.

Nick showed a commercial internal scraper chisel. Bill showed a segmented salad bowl that had collapsed and requested the best 'solution' as to how to re-establish it. John Gillespie requested advise as to the best finish for his cedar box built to contain his relative's war honours.



Finally Russ showed an intriguing bright orange and green item, still alive, which 'turned out' to be a Burrawang palm seed broken from its large seed cone. Qi IE day today?

Our demonstrator for the day was member Colin Hunter on the subject of *Turning Thin*

Wood Using Hot Melt Chucking.

Starting with hardwood floor planks of various lengths, say 100 to 200 mm, and approximately 100 x 19 mm wide and thick respectively Colin showed how he marked out the blank and the designs required.

Surprisingly the 19 mm thickness allowed a variety of upturned, and downturned flanges, flanges becoming extended feet for the bowl once turned, and non-symmetrical flanges.

To mount the 'thin' blank Colin employed an aluminium cylinder and hot

melt glue in lieu of a faceplate, or a spigot PVA glued to the blank separated by brown paper, or a spigot turned from the blank, or a 50 mm recess drilled into the blank to expand the chuck jaws for gripping. The aluminium cylinder is approximately 60 mm in diameter and 10 mm thick and recycled from a defunct VCR slightly modified to accept the dove-tale jaws of the Vicmarc chuck and with a couple of minimal grooves made in the gluing surface of the cylinder. The cylinder is heated by means of a recycled domestic iron, cradled with the hot surface up, and on which the non glued surface of the cylinder is placed.

Should you be sharing the iron with its 'domestic application' it is recommended that aluminium foil be placed over the iron's surface to protect it from glue spots and other contamination, neither of which would be appreciated!

Regarding the glue, rods of (solid) hot melt glue are inserted into a simple

heating gun and extruded onto both surfaces. Care is needed to make sure that the blank surface is flat, and together with the aluminium cylinder, are without glue residue build-up, clean and free from oil and dust in the vicinity of the area where the glue is to be applied.

When the cylinder is heated (say >200 C) and the glue gun is heated and ready, lay the blank so that its gluing surface is level and face up with the position required for the metal spigot clearly evident. Aluminium cylinders ex a VCR generally have a significant centre hole about 15 mm in diameter so it may be necessary to position the hot, glued disc using a centre finder and/or a pencilled circle drawn on the blank slightly greater in diameter than the disc. Where a cylinder without a central hole is used the latter is almost always necessary particularly with blanks only 100 mm wide to ensure accurate centring and a satisfactory result.

Using the gun extrude a generous amount of glue onto the hot aluminium cylinder and



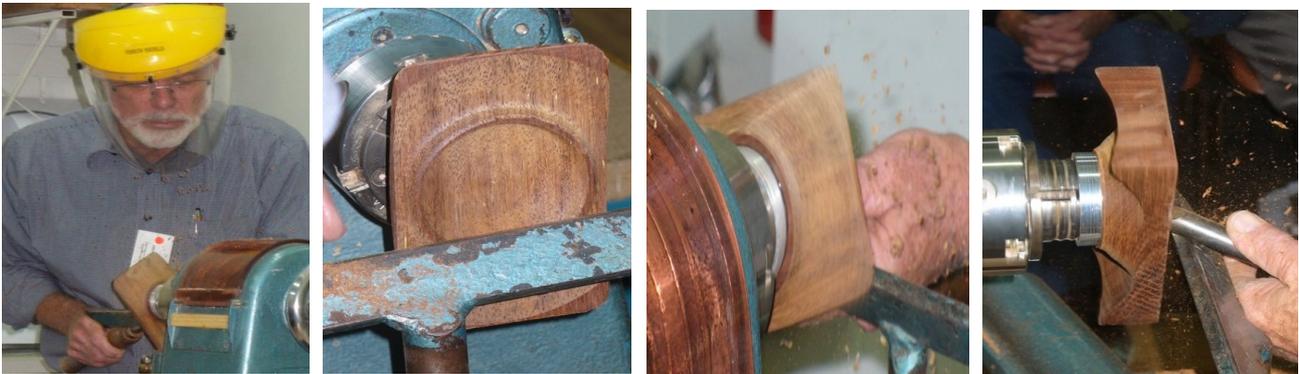
onto the blank within the area of cover of the spigot to ensure coverage over the surfaces common to both blank and disk. Do this quickly so that the glue doesn't cool.

SAFETY. The iron's plate and the cylinder are far too hot to touch so a convenient holder is needed, in this case long nose pliers. Also be careful of drops of glue as these are hot too and capable of causing a nasty burn. In fact do not be too generous with the glue – just enough to ensure the complete cover of the common surfaces.

Once the heated cylinder is placed on the blank push it down to spread the glue and to thin and level the layer if necessary. Mostly the hot glue will allow the cylinder to drift away from the centre position and will need to be recentred a number of times until the glue partially cools and becomes tacky. Glue cooling can be accelerated by attaching a cold metal cylinder onto the aluminium cylinder; it is almost certain that this operation will move the spigot so it is necessary to again check centring frequently. The cooling cylinder is best made of steel and cooled in the refrigerator freezer for an hour or two prior to use.

After the glue has 'set' the combined unit is chucked as normal. In this demonstration Shark jaws were used which allow greater room to manoeuvre when turning the reverse side of the blank. Also for this demonstration (hardwood) merbau floor boards were used which require some hard turning and therefore good gluing and chuck holding are required.

Set the rotation as fast as safe and work to obtain the best finish possible from the chisel to reduce sanding of the difficult and dangerous areas of the winged turning and commence turning the 'back' prior to the face of the bowl. Turning seriously oblong blanks requires considerable care to achieve personal safety and the placement of the cutting chisel to address the 'ghost' surface. This should be best viewed at the far side of the turning and carefully attempt any deep cutting especially of the winged area extremities.



The first bowl was turned from a 200 mm length of blank with a 12 mm bowl gouge hollowing the winged wood under the bowl. This is the area that is difficult/dangerous to sand. Next turn the bowl face concentrating on the flange 'wings' to give a thickness at the periphery of 8 mm maximum. Watch particularly the 4 corners of the wings ensuring that these remain square. Turn down the flanges at the circumference of the bowl such that a bead can be formed around this circumference following the hollowing out of the bowl's inside. Wall thickness around the bowl should be about 6 mm with the bottom somewhat thicker. Note that the outside flat bottom of the bowl remains unturned being sanded only to match the remainder of the turning.

The hot melt glue can be softened using methylated spirits and the aluminium disc then easily removed and this was demonstrated, alternatively the disc can be heated to soften the glue before removal. Clean up and remove any attached glue with methylated spirits and a flat chisel.

For the second bowl Colin showed turning an oblong blank preserving the corners, and the shorter two sides entirely, which will then act as 'outrigger' legs.

Start with a blank similar to the previous blank in size and 'chucking.' Turn away the face



hollowing the inside of the bowl incorporating an almost hidden chucking ring at the top of the bowl to suit the expanding Shark jaws, then include a prominent bead at the circumference to the bowl.

Turn away the wing from the bead to about 6 mm thickness at the extremities of the blank to give the desired effect. Sand through the grits and finish the bowl top.

Remove the turning from the lathe and place the aluminium disc on the hot iron, or use the spirits removal method to separate the turning and chuck.

Secure the turning in the chuck by expanding the jaws carefully (to avoid indenting the turning) into the chucking ring at the top of the hollowing, check for symmetry, and carefully turn away the blank base to achieve a standard thickness of about 6 mm throughout the bowl. Remember to turn with care as the blank is being held only by a small chucking ring and merbau is tough wood. Turn away about 8 mm of the base, or more if necessary, to allow the turning to rest on the winged feet and add a couple of circular grooves to the base to embellish the piece and sand as above.



Finally Colin turned a circular small bowl almost 100 mm in diameter. Turning was orthodox with no wings to worry about and with the inclusion of a re-chucking ring as for the second bowl. Prior to reverse-chucking sand and finish as required and remove the aluminium cylinder. Reverse chucking allows the underside of the blank to be turned and finished providing a very significant shallow small bowl.

Turning finishing. Colin used a wax stick to finish all the bowls. As expected the stick is applied to the spinning turning which melts the waxes into the wood giving some protection as well as a wax coating to highly polish. This wax product is made locally from a blend of hard and soft waxes which works very well - hence its name.

To finish the day Greg ran



Show & Tell.

John Gillespie showed a couple of high quality toys part turned, one a Bat Mobile and the second reminiscent of a Lego unit.

Rusty brought along another well finished Japanese doll, that squeaks! Also shown was a Love Plate finished with Impasto Gel Medium Cream to preserve the photo included.



David Madden showed a lidded bowl about 100 mm diameter made from three woods including the finial, also shown was a turned segmented wooden tumbler cover fitted carefully to a stainless steel tumbler and therefore suitable for hot drinks and with a pyrographed gecko burnt into the wood.



John Edwards showed 4 bolt action pens well turned from various woods.

Lastly the day ended when Keith showed a Japanese insect? wooden carving with an unborn off-spring inside and as well a marking knife from Japan of quality and tradition.

Thanks again Colin for a good insight into hot melt chucking and its use particularly for shallower wood turnings.....much appreciated.
