

HORNSBY DISTRICT WOODTURNERS INC.

Established 1983.

NEWSLETTER JULY 2019.

A brief welcome to members preceded the immediate, (mini) demonstration from Colin of the Ball Games that we are turning for a local children's museum.



Details of the dimensions etc were emailed a couple of weeks ago and Colin showed the basics in the 10 minutes need to produce the unit.

Choose hardwood for utilitarian purposes, flooded gum in this case, gripping a 50 mm square about 150 long with a Vicmarc Short Shark Jaws chuck if available. Bring up the tail stock and rough and turn down the 'cup' end outside and the beginning of the handle as per the plans. Turn the outside lip of the cup to match the dovetail angle of the chuck jaws ready for reversing the blank.

Remove the tailstock and carefully turn the inside of the cup to 34 mm diameter to accept the 32 mm wooden ball, sand and polish.

Reverse the blank and carefully clamp the prepared dovetail in the jaws. Check for centring and secure with the tailstock. Turn away the large block to the handle dimensions, add a burn ring about 15 mm from the handle end, sand and polish. Cut the handle to length with a skew chisel and polish.

Drill a 2.5 mm hole through the handle 15 mm from the cup end for the string; and to the ball with a 4 mm hole half way through the ball to accommodate the knot.

Sand around the holes, polish, and tie the string, and the game is complete: thanks Colin.

At this time a full welcome was made to all present, (including an introduction of) visitor and demonstrator Brendon Venner, Shed president David Harrison and new woodturner Ian McKay. Our Convenor Lindsay was to demonstrate today however he was overcome with heavy flu and organised for Brendon to demonstrate in his place.

David briefly addressed the members in regard to the safety and operation of our table saws and their SawStop mechanisms. In summary: 'please take extra care to re-read the instructions before use and if you are unsure ask the supervisor for assistance.'

Brendon commenced his demonstration with details of his turning and woodworking background discussing a number of the aids and techniques he has applied in his woodturning 'life.'





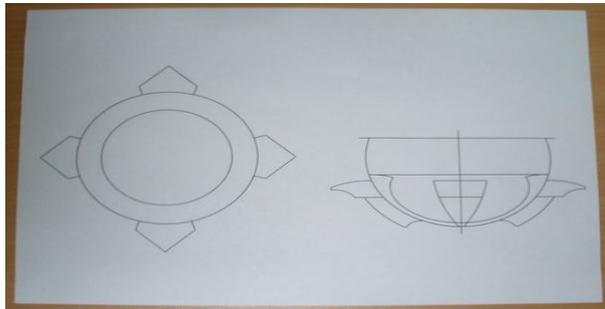
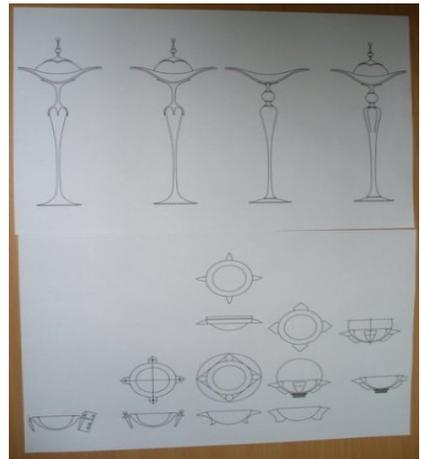
Brendon showed a complex musk burl bowl about 180 mm in diameter with protruding 'legs and flanges' accomplished using AutoCad Computer Design to draw



his proposal and then develop an initial design, while on the computer, to give the best design possible as well as getting what he wants from the turning.

Printing the Cad plan full size, and turning a prototype bowl in radiata pine, also allows scope for further design improvement prior to working on the musk blank. These planning and design stages generally take some

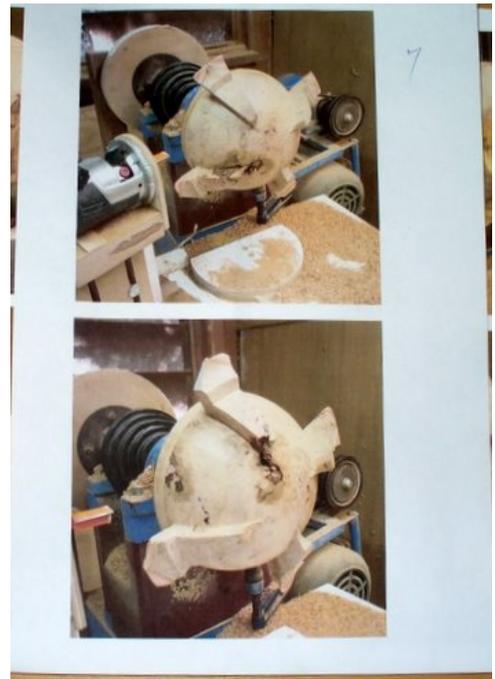
weeks, prior to turning!



For this turning the bowl profile giving the best viewing was elliptical and completed by turning to the diameter of the 'protruding four arms' and routing away the wood between to get the desired result. The bowl's inside was turned normally. While Brendon uses AutoCad Design he recommends DraftSight Draw Tools as more than satisfactory and is free from the web. The attached plans and photos show the basis of



this complex turning as well as for an Olive and Red gum vase.



Note the fractal burning on the Red gum vase.

Known as Lichtenberg Fractals these patterns add substantially to the detail carried on this turning. Brendon demonstrated this 'electrical' technique on a number of different woods.

For the equipment a 10,000 volt neon sign transformer is required. This is connected via insulated and approved cables to electrodes of steel.

The wood is made conductive (particularly for dry wood) by rubbing into the surface an electrolyte which can be any 'chemical salt' solution such as baking powder (~10 g per 200 ml or straight Pepsi etc) which is allowed to absorb into the wood before commencing.



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Connect one terminal (electrode) permanently to the wood turn on the power and carefully move the other over the wet wood surface to give fractal patterns as desired. Beware of the bare metal electrodes or these will soon remind you with a nasty shock.

By adding an input voltage regulator, in this case a sewing machine pedal controller, the



'ferocity' of the burn can be moderated allowing finer fractals. When finished clean away the burnt wood/charcoal with a fine brush and sponge completely free of electrolyte, dry and finish as usual.

Remember caution is necessary with this technique as electrocution is not entirely unknown! More details on <https://youtu.be/91e25EqIQGI> and associated websites.

Surface colouration was next demonstrated.

As an example a small pine goblet was turned externally and air brushed with a number of contrasting colours along the turning as per the photos. Once the paint is dry, spray and seal with two coats of clear gloss lacquer and once dry artistically glue hot melt from a glue gun over the length of the goblet. Wait for the hot melt to set and harden.

Spray completely with black acrylic semi-gloss ensuring that there are no coloured shadows remaining, and allow to completely dry, say 6 to 8 hours. Carefully remove, by hand and/or with a scalpel, all the hot melt



glue to expose the colour below the glue.

Spray with a top-coat satin finish clear acrylic lacquer and when dry

polish the goblet with a wax polish to finish.



For platters with a wide flange of colours and a smaller diameter internal bowl start with the basic



design allowing a flange of approximately 80 mm wide. Sand to 400 grit and paint the entire surface with black spray acrylic as a contrasting base. Mark out the diameter where the centre of the platter is to be turned down and

'preserve' it. On the remaining annulus flange ladle multiple 1 ml quantities of Acrylic Flow Medium all around to form a pleasing patten.

Add acrylic colouring, drop by drop (to give a 50:50 mix), to each flow medium 'blob' and use the dry air brush to blow these various coloured blobs into each other and/or around the flange to give a random wavy effect which when dried and sealed will give a spectacular result.



The colours used should be Joe Sonyas 'Iridescent' type or equivalent to give the result shown on the platters. Once the colours on the flange have been completed turn out the 'preserved' centre of the platter, sand and seal to finish the turning.

The Flow medium can be substituted with water to cover a larger area which if immediately covered with Gladwrap and pummelled with the fingers to cover the complete black base can give an outcome not dissimilar to the previous platter.

Also flick colouration using a toothbrush can be used to give another interesting result, including the Australian cedar 'flick ebonised' bowl shown.



Checkout similar ideas from Gary Low's You-Tubes <https://youtu.be/S2IB4Smq6TI>

It is noted that Brendon was using the air brushing system available recently from Aldi Stores for approximately \$80.

To finish the day Brendon ran Show & Tell.



Brian's pens were shown first, controversial in so much as each was turned from cross grain wood.



Elwyn's set of bowls from various woods, one oval and a large Juniper bowl made from a large and a small bowl – very nice.



Tim's work, a pine bowl with multi colouring caused by drying and his completed cedar bowl.



Lloyd's large platter from a eucalyptus burl finished in Stylewood lacquer.



Greg's rescued, spalted and borer invaded she oak blank, finished with paraffin oil.

Thanks Brendon for a most engrossing day that was much appreciated by all present.

Next meeting Saturday 10 August including our AGM.