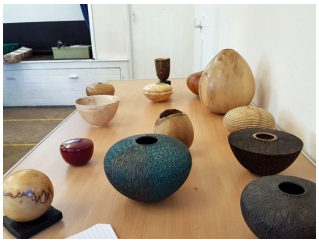
All day demonstration. 27 October 2018 - Mark Sanger.

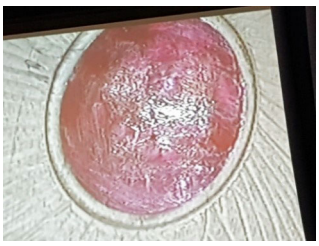
Mark introduced himself as a retired policeman, with an engineering background, from Devon who decided to do wood for fun! He went on to explain that in truth you only need 7 tools including 2 scrapers which after some practice and experience can be dispensed with as you become more proficient with the other tools. The tools were Spindle roughing gouge, spindle gouge, bowl gouge, parting tool, skew and the 2 scrapers (round and square end). Mark then emphasised safety by highlighting the many danger that are present in the workshop, concluding his introduction with the fact that he now always wears a full facemask, in his workshop it's a vented one but for the demonstration just a face shield so that he could be heard.



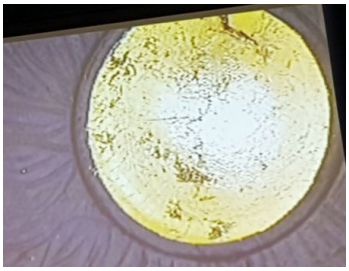
TEXTURED AND COLOURED BOWL WITH GOLD LEAF CENTRE

As Mark mounted a bowl blank, he chose a 10mm long (50°) grind bowl gouge explaining that he sharpened on a wet system, because he had been given it, but any grinding wheel with a white (aluminium oxide) wheel will do as long as you hone with a diamond plate. He demonstrated pull and push cuts with flute at the 2 o'clock position, and showed that providing you achieve bevel support, one handed cutting is very possible if you do not rush and let the sharpened edge do the work. While shaping the blank Mark discussed the shape of a long grind gouge wing cutting edge, emphasising that it must be convex and never concave as it will produce instability and cause catches. Moreover, Mark explained why he preferred sharpened edges with a wheel (hollow ground) as opposed to flat grind with a belt system, but he emphasised that everyone has their own preference. When discussing work mounting Mark prefers faceplate or four-pronged dog drive over a screw chuck, for speed and positive grip.

The production of the bowl included the use of a cheap (discount store) power carver which Mark believed to be perfectly adequate for the hobby turner, he also used a small hand carving chisel. Marks tip for this type of decoration is to divide the area to be decorated into 4 and complete 4 different design zones and fill the area so that eyes do not linger on gaps. Throughout the demonstration Mark continually honed his tool grinds with a 300G diamond card, emphasising another positive for a wheel ground face over a flat belt face on his tools. The bowl was then aged with vinegar and wire wool solution, you could also use pyrography tools to burn some of the wood. Abrade and reapply solution to "taste".



The application of several coats of denibbed gesso to the bowl centre preceded the brushed coat of red acrylic paint. Following the preparation of a sheet of gold leaf, which Mark buys from www.goldleafsupplies.co.uk, which also publishes a large amount of information for those who wish to experiment (no need to move directly to gold they have imitation gold at around ¼ of the price).

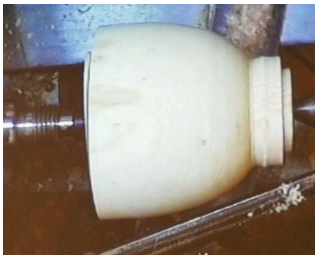


The leaf is applied in pieces which works fine for gold, but care must be taken with the imitation gold as the leaf is thicker and overlaps can show. The leaf is applied to a gold leaf size applied and allowed to go "tacky" just before application. If you are concerned that leaf might adhere to the textured part of the bowl talcum powder can be used to stop it sticking. Helpful hint from Mark use loose leaf as it is thinner and easier to apply and consider a gilders pad and knife with make-up brushes from Amazon. Other Ideas might include spirit stains dripped on flat metal leaf. To reverse chuck a decorated platter, use a friction plate dive with a rubberised covering and a revolving centre in the tailstock. Don't forget to vinegar and wire wool stain the base. Mark's Tip; keep a trial piece of wood with samples of numbers of coats of vinegar stain.

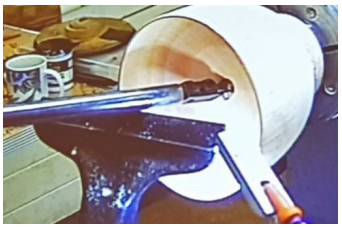
THIN-WALLED, END-GRAIN, OPEN BOWL.

Mark began this session with a discussion on woods. His favourite is Irish Yew, a closer grained timber to English Yew. He then moved on to wet versus dry timber, the amounts of movement to expect, he then moved on to grain density and reaction woods. Before starting the end-grain project Mark showed how a cross-grained set up could be as easily produced by drilling into the side of a branch with a Forstner bit to accept a 4-pronged drive bit inside in order to produce a tenon on the foot side at the tailstock.

During the discussion Mark turned a wet 6” cube of Ash between centres to produce a cylinder with a large tenon. Importantly use a supporting shoulder to ensure easier rechecking accuracy. During the process he demonstrated and discussed the use of both Spindle roughing gouge and long grind bowl gouge for roughing out blanks. Throughout this project you should consider keeping the timber wet if you are working in warm dry environment.



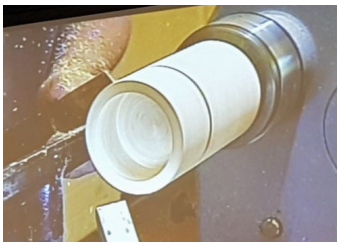
Mark shaped and finished to outside shape, re-chucked and faced off the vessel top. The next step demonstrated the use of a spindle gouge as a drill to remove the centre core and provide a depth guide. He then demonstrated the use of a spindle gouge for hollowing showing its weakness, in strength and edge capability, when approaching the bottom of the vessel. The choice now being bowl gouge or scrapers, both equally good but bowl gouge easier to produce good finish off the tool to reduce sanding. Mark demonstrated a large range of hollowing tools, both scraper and cutter, including Ring and hook tool. The demonstration now concentrated on the range of covered cutter tools, their strengths and weaknesses, the use of articulated tips, the need for cranked tools to produce internal undercuts. Mark stated that many turners who do not “get on with covered cutter tools” fail to keep them sharp and either have too big or too small a gap between the cutting tip and the cover – it should be approximately 0.5mm. Another tip from Mark was to concentrate on keeping the tool handle up and the cutting tip down when hollowing. The process continued with stepped hollowing to a thin wall. Discussion moved to cracks, which were inevitable, at which point Mark gave another tip: if you use CA glue to repair cracks it always shows so use an oil first and then CA. Use a light on the outside to achieve a wall thickness of 3mm in 3 sections. Rim to 1/3; 1/3 to 2/3 and 2/3 to bottom, don’t forget the finishing cuts.



As the hollowing progressed Mark pointed out that cuts may become more aggressive, especially if you are hollowing through a small opening. In an open vessel lower the tool rest, in an enclosed vessel consider using a remote foot operated switch and starting with the tool inside the vessel. Moreover, if hollowing an enclosed vessel consider a cheap vacuum unit with hose reduced to a small diameter to clear swarf, this is healthier than blowing it out. If you end up with a pip at the bottom which will not come off cleanly sharpen your bowl gouge switch lathe off turn vessel to have the grain vertical carve the pip of in an upwards direction. Finish with grits and lemon oil or water use 80G if you need to deal with imperfections and remove slurry with brush. To remove the tenon and finish the base Cole jaws will not work on a thin walled vessel and a jam chuck is likely to split the walls so return to a friction plate and revolving centre. Don’t forget to keep oiling and abrading, the lemon oil will evaporate over time. This session finished with a discussion on compound honing tool edges with homemade MDF disc (1000g wet and dry) with groves or coves to match tool edge shapes. Use of leather honing strops (old leather belt on outside of MDF disc with chamois leather on face).

JAPANESE TEA BOX

Mount Piece of 4” x 4” x 6” between centres; in Mark’s demo the timber was Sycamore. Turn to a cylinder and cut a tenon on the tailstock end, remount tenon in chuck. Square end and hollow out end grain to lid depth as this will be the lid reversed. Mark emphasized the criticality of getting the inside walls parallel to the lathe bed and suggested a box scraper and inside callipers to achieve this end. Marks proportions were 1/3 to 2/3 and the lid was carefully finished internally ensuring exact internal parallel sides. Following questions Mark clarified that as the box was to be painted and not natural grain it was OK to cut the pieces this way around. Checking the proportions, part off the lid.



Turn a small spigot to fit the lid on base of box. Continually checking with finished lid. When happy with the lid fit extend the spigot (lid lip) to achieve a deeper fit from long taper to eventually a parallel slightly looser than “pop fit” having finished to 400G. With the external mating surfaces cleaned up and the length of the internal lid spigot finalised. **Note:** The lengthy spigot technique was also used to assist in achieving an exact smooth fit for the lid from taper to parallel.

Mark explained that the next step was to create an internal lid (2nd lid) with a button on top to assist in removal. He created a stepped double cylinder internal lid. He did not finish the smaller diameter cylinder to a button to improve the jam chuck fit at the next step. The larger diameter cylinder will fit inside box. Part off lid and form a jam chuck in remaining box base on lathe to support 2nd lid reversed. Finish internal face of 2nd lid with decoration/texture as required, reverse and finish outside of 2nd lid and create a removal button. Throughout this 2nd lid creation Mark used the tailstock to hold the lid in the jam chuck and after achieving bevel rubbing, he removed the tailstock to allow access to finish using fine cuts so that the gouge bevel pressure kept the lid in place in the jam chuck. (A great exercise in tool control). Place the finished 2nd lid to one side.

Finally, Mark hollowed the box leaving a small lip to support the 2nd internal lid. Finish internals and, if necessary, paper towel jam the lid to the box base and decorate the externals.

Mark used a variety of decorating techniques with Formica burned rings to outline the pyrography burned patterning, emphasising the need to brush after burning. Mark suggested using patterns of flowers through your home computer, tracing around the paper patterns of print and stick the patterns on the surface and burning through them, taking care with the flames. Mark suggested exploring Dover Publications for free sample patterns. Mark's burning through tracing paper patterns was deep, (almost 2mm) using a pyro spade nib, 2mm ball and his own Nickel Chrome wire ring. Interestingly Mark utilizes a pair of 3 x magnification detail glasses.

After brushing off the loose carbon Mark brushed on Red spirit-based paint inside the Formica burned lines. Using masking tape and cutting with a Skew point Mark added an aging effect with a mix of green and dark red. Tip from Mark always add dark to light colours when mixing as it is quicker and always use more of the dark colour than you think. Think about painting the flower petals with Gold acrylic then cover with red and rub off. Also think of Dry Brushing (almost dry brushing) with gold using many light strokes applied with a big cosmetic brush, or gold leaf one of the flowers.

Finally, part off the box base, reverse jam chuck and decorate the base of the box. Comment: If like me you find there was a lot of detail in this procedure, take Mark's advice and review the basic procedure on YouTube, searching for: "woodturning project: Tea box with inner lid", by Yasushi Kawaguchi.

As the day came to a close, and following the presentation, a huge amount of excellent information and a thoroughly enjoyable day, my memory and notes become confused!! I'm not sure, but I think that Mark created a curved base to the tea box with similar decoration as shown below, or did he? Maybe he used these pieces to demo the pyro technique, answers on a postcard to.....