## May 2012 demonstration - Greg Moreton RPT Table lamp with Banksia nut base and Monkey Puzzle shade

At our May meeting we enjoyed a demonstration by our esteemed ex-chairman, Greg Moreton RPT. He showed a series of techniques incorporated into making an unusual table lamp, consisting of a base made from 2 Banksia nuts together with a lampshade made from a monkey puzzle log, turned wet. He also spent some time explaining some sharpening techniques.

The Banksia nuts are prepared by removing the outer fluffy coating - do not put this through your extractor system as it will clog it up - and the hard nodules have to be knocked off. The nuts should be shaped with a bowl gouge as you are effectively always cutting against the grain. When buying these nuts always use a reputable dealer as some can be hiding unpleasant wildlife!

Having turned the nut to a cylinder it has to be bored through the middle to accommodate the wiring. Greg uses a long hole boring kit - he prefers the old style augur to a drill twist, which he found tends to flex and makes it difficult to drill straight. The drill must be used at low speed, maximum 500 rpm as it will heat up the wood and jam. Only drill in 1" at a time then draw out and turn round to empty the shavings.

Having drilled through from one end the nut is then reversed and drilled through from the other end to complete the hole



Greg joins the Banksia nuts together using a mortise and tenon joint to make an invisible join (Greg makes sure the nuts are parted at a point where there are no holes so the join between each nut doesn't show). He uses his 5/16" 4 prong centre and cuts down with a parting tool to the diameter of the 4-prong drive, making an undercut that allows a channel for excess glue when joining the pieces together. The 4 prong drive is then used as a drill bit that makes a tenon the identical size to the previously created mortise.











Greg finishes the nuts with sanding sealer and a wax finish - using a paint brush to remove wax from the holes, then giving them a final polish.

Greg reminded us about the rules and regulations on selling electrical devices - some depend on local Trading Standards, but you must ensure you supply a wiring diagram for the plug and only use a 3-amp fuse. The plug must be earthed if you are using brass fittings and the wire must have a mechanism to ensure it is retained in place.



2 Banksia nuts joined together with mortise and tenon join

The lampshade can be made from any wood but must be turned wet in order to make it thin enough to be translucent - a light colour wood is better. You must have extremely sharp tools to cut the wood cleanly as torn wood dried quicker than with a clean cut. The main body is turned and shaped and using a spindle gouge or skew with no scraping or sanding, which will create lines almost impossible to remove. A dovetail spigot is created as cleanly as possible with no bumps as the chuck will not hold it as well, Greg removes any excess at the top of the spigot with an electric carving tool.

Remember to bring the tail stock up before chucking and, as wet wood dries as you work, make sure you tighten the jaws regularly.







For hollowing out, Greg uses a spindle gouge as a drill to take out the centre, turning the speed down while doing this. He cuts from the centre outwards with a hook tool, finding the centre and drawing back towards himself. Remember to lift the tool rest higher as you go in further.

When the wall of the shade gets thinner you can shine a light from the outside to the inside aiming to get the light shining through and producing a steady curve on the inside.

The outside is then finished off - placing the light inside the shade once again it shines through.

The top of the shade is parted off straight through and it is finished with 4-5 coats of Danish Oil, which will give the wood a translucent finish.















## Sharpening

Greg spoke about sharpening throughout the evening and also demonstrated during the tea break. He reminded us to sharpen constantly as wood turning is made much harder if the tools are not sharp. He showed us how he sharpens a roughing gouge on a rest aligned at a 45 degree angle. You need a stone finer than the standard carborundum that is often supplied with grinding motors - a white wheel is perfectly adequate and the ruby one is ideal. Greg uses the blue ceramic stone, but this is not usually needed by amateur turners.

He marks up the centre of the gouge with a felt tip pen, rests it gently on the (still) wheel and turns it backwards by hand to check that the angle is correct showing an even line removed across the bevel. Turn the grinder on and start with the flute at a 90 degree angle - never start sharpening in the middle of the gouge. Just tough the stone lightly with the gouge while turning the it all the way round.

When sharpening spindle and bowl gouges Greg uses a Tru-grid system, supplied by Phil Irons - this holds the gouge at a constant angle while turning it on the sharpening wheel. Similar systems are available from other suppliers, including Axminster.





Axminster Storme Woodturner's Sharpening system