

Club News

Club calendar 2024

We now have quite a lot of this year's meetings and events on our new calendar which can be viewed on the website. Thanks go to John Woods for all of his hard work in planning, organising and booking the demonstrators. It is a lot of work and made even harder nowadays since Covid as many demonstrators are no longer on the circuit or not keen to travel any distance to demonstrate.

One to pencil into your diary is the all-day demonstration on Saturday October 26th. This will be a repeat all-day demo with Colwin Way as it proved to be a very successful day last year. You will need to book with our secretary (see details on calendar and info page) as there may be limited places, first booking priority will be for club members with any spare places offered to members of other local clubs nearer the date.

Our next meeting on 15th April - Peter Taylor Memorial competition and multiturn

Please remember to bring your entries along on the 15th April for this annual competition on this evening. A reminder that the entries should be a footed item with a maximum diameter of approx. 200mm or 8". Qualifying entries could be something like a Tazza, a footed bowl, or anything else with a defined foot, and it's your choice to decorate if you wish.

On the same evening, we will be hosting a multiturn evening where members are encouraged to bring along their own demonstration. We usually have several small lathes operating. We have had many other techniques being demonstrated that have included pyrography, paint decorating, power carving, turning jigs and airbrushing on display. It is usually a really good evening to share ideas, ask questions or just have an interesting chat. Meeting starts at 7pm at the Village Hall.

Weird and wonderful wood 2024

We will be taking our club display to the two-day annual Weird and Wonderful Wood event held at Haughley park near Stowmarket Suffolk. This year it will be held over the weekend of 11th & 12th May 2024. The club usually has a lathe and demonstrations running on each day together with a tombola and sometimes a display of members woodturnings. The event is a major fund raiser for the club and we would be very pleased to have donations of small items as tombola prizes. These can be any turned object such as pots, boxes, bowls, small vase, toys, and novelties etc. It is vital though that any item such as candle sticks comply with our requirement of being fitted with glass or metal liners to avoid problems with candles or burners. Items may be brought along at any club meeting and will be greatly appreciated.

Last meeting

The last meeting was presented by Stuart Clarke and focused on finishing techniques from getting the best finish off the tool to applying the correct sealers, wax and oils to the finished work. The presentation was well received and a full report follows in this newsletter.

That's all for now,

Neil (Newsletter and website)

Members Table



Above : Martin Taylor - Oak twig vase



Above right : Martin Taylor - Holly scorched bowl



Above : Mick Favager rainbow wood Yo Yo and bottle stopper in olive wood.

Above left : Beginner turner Paul Thomas made these Maple and pine tea lights of good quality.

Left: Martin Taylor - Sycamore paint effect decorated wide rimmed bowl





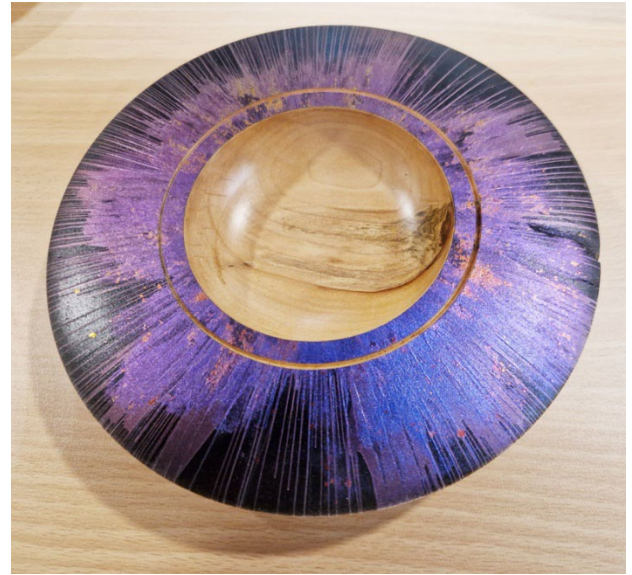
Left : Delightful character pieces made by Richard Court, comprising of Chickens, Penguins and Hedgehogs



Above left and left : Mixed decorated bowls and pots made by Malcom Kerr

Below: Australian grass root and walnut tall bowl made by new club member Janine Holland, (approx. 350mm, 13.8" tall





Above Left : Martin Taylor's similar sized wide rimmed and purple and gilt decorated bowl in Maple, Martin seems to be getting quite specialised in these techniques and has shown many of these over the past few months, each superbly decorated and finished.

Above right : Large sweet chestnut bowl by Martin Taylor around 12 inch or 200mm diameter

Left : Natural edge bowl by Janine Holland

Woodturning finishing presented by Stuart Clarke

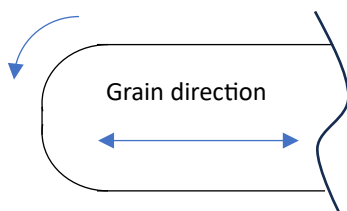
Stuart is our present club chairman and has been turning about nine years and started as a teenager. He explained that the subject of finishing is huge and it would be impossible to cover every technique in a single meeting.

Getting the best from the tool

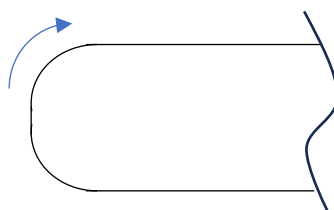
One of the best finishing techniques is from the quality of finish you can obtain from the tools using correct turning techniques. A good tool finish reduces marks and requires less sanding.

Stuart worked on an apple spindle blank to demonstrate. The first technique is to understand direction of tool movement, when using a spindle or bowl gouge it's important to cut with the grain so that the wood fibres are supported as the cut progresses then reducing the chance of tear out. Its important to use correctly profiles and sharp tools to ensure they cut efficiently and smoothly.

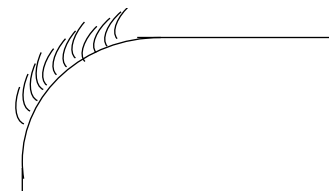
Cutting from out towards the centre supports the wood fibres



Cutting from the centre without supporting the wood fibres causes them to lift or rip out



Exaggerated effect of unsupported cut



To obtain a smooth finish a technique called shear scraping can be used, Stuart explained that the flutes on the gouge, especially one with a swept back profile can be used turned over and presented flute down and around 45 degrees to the surface with the tool handle lowered. By gently scraping a fine finish may be achieved and this may be applied in both directions of cut.

Scrapers are available and come in all shapes that will do the same job. Stuart demonstrated a tear drop shape which may be set to suit the shape, again applied at 45 degrees on the cutting edge. Keep them sharp by passing a stone or diamond file over the top of the cutter to create a minute hook or burr on the scraper tool edge, don't try and sharpen the thin sides.



A negative rake scraper has two differing angles and are designed to reduce tear out and leave a polished finish. They are ground with specific top and bottom angles so that their sum forms a profile called the included angle. Many turners use 65 degrees, where the top angle is at 25 degrees and its bottom 40 degrees. Included angles greater than 80° will not cut well and as it approaches 90 degrees and beyond it may not cut at all. A larger included angle will create a less aggressive cut but a smaller included angle can produce a much finer finish. 6



Scrapers may be sharpened as mentioned with stones or diamond files. They can also be burnished with special devices such as the Veritas burnisher fitted with three carbide pins of different tapers.

Carbide is harder than steel and will create a good fine burr, the better quality the burr the finer the finish.



Stuart explained that Cabinet scrapers are used primarily on flat surfaces to improve the surface finish prior to finishing. These also have a use in woodturning, even on **curved surfaces, and may be** purchased or simply made from the blade of an old fashioned worn out wooden handled saw. These have the required quality of steel.

They are sharpened again by raising a burr using a stone and oil and running along on their edges, or using a piece of carbide steel. It is possible to create various angles of burr by changing the angle of the stone to the edge and one tool could have a heavy, medium fine and extra fine scraping sides. A good starting angle would be around 5 degrees. Bend the tool as it is used to get the best cut.



Sanding

Stuart agreed that sanding is not a favourite job of the turner but is necessary and there are no shortcuts. He explained that the old saying that partially worn-out sandpaper grits may be used as a finer grit is a total myth as the grits cannot be worn enough to not retain their grit size!

Use good sandpaper as it is a cutter, it may be reused but check the wear.

It is important to work through the various grits in turn, if you need to sand out further it is better to return to a coarser grit and then work back through the finer ones in turn. It is important not to wrap sandpaper around your fingers to avoid injury and keep the sandpaper moving at all times. A final sand along the grain can produce a perfect finish.



Burnishing the surface

Nyweb type pads are available in very fine grits to provide a final burnish, they are long lasting and can be used to any woodturning shape. They are available in colours. The Code GROW is applied to the grit progression. The Green pads are 400 grit, Red pads are 600 grit, Orange pads are 1000 grit and finally the White pads do not contain an

abrasive and technically non-abrasive. According to Chestnut products the very texture of the white pads gives them an incredibly fine – but immeasurable – cut

Another alternative was shown by Stuart. These are sponge backed fine grit sanding pads sold under the name of Abrulon. These are available up to 1000 grit and are long lasting and may be washed.



A burnish of the final object surface can be easily achieved using a handful of shavings (of the same wood) and holding against the rotating work.

Liquid burnishing solutions are available but are usually used with sealed and lacquered finishes. A small amount is applied to cloth and held over the rotating work, further wetting can be applied to the cloth until the desired shine is achieved.

Paste grits

Many products are available that have fine grits suspended in a paste. These can be applied and buffed off to create an even finer finish after sanding.

Typical products are Yorkshire Grit or True Grit. A small amount is worked into the surface using a cloth and then buffed. These finishes are often wax based and therefore change what later finishes may be applied due to compatibility issues.

Stuart explained that its important to hold the polishing cloth correctly, never wrap it around your fingers and adopt a supported two hand application as shown.



Finish compatibility

Stuart explained that the compatibility of finishes is important as it may preclude you to add colour or a specific oil-based finish, varnish and acrylic water-based finishes. For example, sanding sealants and wax can be used together but shellac finishes and friction polishes can not be used over wax.

He said that it is worth purchasing (up to an impressive A2 printed poster size) or printing out a printed chart from Chestnut Products which details product compatibility. You simply read the first finish on the left of the chart and read along the top for the second finish and if there is a Y it is compatible. The chart is available in the public domain and free for all to use from <https://chestnutproducts.co.uk/>

Chestnut Products Compatibility Chart

How to use this Chart. Select your first coat from the list, and follow the line across. Y=Yes, you can use the coating indicated as the next coat. Repeat for each change of product.		NEXT COAT/PROCESS																														
		Acrylic Lacquer	Acrylic Sanding Sealer (both)	Burnishing Cream	Cellulose Sanding Sealer	Finishing Oil	Food Safe Finish	French Polish	Friction Polish	Hard Wax Oil	Lemon Oil	Melamine Lacquer	Shellac Sanding Sealer	Tung Oil	Acrylic Gloss Lacquer	Acrylic Satin Lacquer	Ebonising Lacquer	Melamine Gloss Lacquer	Liming Wax	Wood Wax 22	Microcrystalline Wax	Cut'n Polish	Woodturners Stick Wax	Carnauba Wax Stick	Microcrystalline Wax Stick	Spirit Stain	Liquid Wax	Pine Stain	Gilt Cream	Iridescent Paint	Buffing Wheel Kit	
FIRST COAT	Acrylic Gloss Lacquer			Y										Y						Y	Y	Y	Y	Y	Y						Y	
	Acrylic Satin Lacquer			Y											Y						Y	Y	Y	Y	Y	Y					Y	
	Acrylic Sanding Sealer (Aerosol)	Y		Y				Y	Y					Y	Y	Y					Y	Y	Y	Y	Y				Y	Y	Y	
	Acrylic Sanding Sealer	Y		Y				Y	Y												Y	Y	Y	Y	Y				Y	Y	Y	
	Acrylic Lacquer	Y		Y																		Y	Y	Y	Y	Y					Y	
	Burnishing Cream								Y												Y	Y	Y	Y	Y	Y						
	Cellulose Sanding Sealer	Y		Y				Y	Y			Y			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y		Y		Y	Y	Y	
	Cut'n Polish																				Y	Y		Y	Y	Y				Y		
	Ebonising Lacquer			Y											Y	Y	Y			Y	Y	Y	Y	Y	Y				Y	Y	Y	
	Finishing Oil			Y		Y															Y	Y	Y	Y	Y	Y					Y	
	Food Safe Finish						Y															Y	Y									
	French Polish			Y				Y														Y	Y									
	Friction Polish			Y					Y													Y	Y	Y	Y	Y						
	Gilt Cream					Y	Y				Y	Y		Y							Y	Y		Y	Y	Y		Y		Y		
	Hard Wax Oil			Y						Y											Y	Y	Y	Y	Y	Y					Y	
	Iridescent Paint	Y													Y	Y					Y	Y		Y	Y	Y					Y	
	Lemon Oil										Y										Y	Y		Y	Y	Y						
	Liming Wax					Y				Y				Y						Y	Y	Y	Y	Y	Y	Y						
	Liquid Wax Clear																				Y	Y		Y	Y	Y		Y				
	Melamine Lacquer			Y								Y									Y	Y	Y	Y	Y	Y					Y	
	Melamine Gloss Lacquer			Y				Y											Y	Y	Y	Y	Y	Y	Y	Y		Y		Y	Y	
	Microcrystalline Wax																				Y	Y		Y	Y	Y					Y	
	Pine Stain	Y	Y		Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y		Y	Y	Y	Y	Y	
	Shellac Sanding Sealer						Y	Y													Y	Y	Y	Y	Y	Y					Y	
	Spirit Stain	Y	Y		Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
Tung Oil												Y								Y	Y	Y	Y	Y	Y							
Wood Wax 22																				Y	Y		Y	Y	Y							

Sanding sealers

A sanding sealer provides a surface that seal the wood fibres and allows other finishes to be applied successfully. They can be as simple as Shellac or more usually cellulose or acrylic water based and are available in tins or spray. They all need to be shaken well before use and cellulose should be used in a well-ventilated environment.

Apply to the surface and allow to dry. It is surprising but some sanding sealers can have a best before date which is important.

Wax finishes

Stuart explained there are basically three types of wax finish. Was is easy to use and fairly foolproof but may not be durable as moisture and finger prints can affect the long term finish.

- Natural beeswax – Soft paste and not overly durable, sustainable and natural as a by-product of bee keeping,
- Carnuba wax – Plant based hard wax, usually in stick form, that produces a more resistant finish. Carnuba wax is applied at high speed in order to melt it in application.
- Microcrystalline wax – A semi-synthetic wax isolated as a by-product from the refining of petroleum, it is better for object which are frequently handled.



There are also a few blended waxes that may contain beeswax and carnuba in one. A product called Hampshire sheen is a mix of carnuba and microcrystalline and is very economical in use and very effective.

Wax needs to be used over sanding sealer for good results,

Oils

Wood finishing oils may be obtained from many sources, plants, nuts, fruit and the refining industry. They can produce a sheen rather than a high shine like waxes and need to be used on bare wood in order that the oil penetrates the surface. Several coats are required to build up a finish. All oils need to be well shaken before use.

The durability depends on the type. Mineral oils like paraffin will add little enhancement to the finish, likewise lemon oil that is food safe. Simple vegetable oil may also be used for a food safe finish.

Safflower oil, Tung oil and Linseed oil may be used independently or in blended finishing oils like Danish oil. Blending oils may enhance the performance and sheen of the various available products. They may take time to cure.

A recent addition that is known hard wax oil is exactly that, a mix of oil and wax that set to a durable finish.

Apply oils allow to dry for a few minutes and wipe off any excess. Buff when fully dry.

Stuart explained **that it is important to dispose of cloths used for oil application carefully**. Some finishing oils may cause self-combustion of crumpled up application cloths. He advocates unfolding them flat and laying them on a non-combustible floor or even putting them in a bucket of water.



Friction polishes and lacquers

Lacquer finishes may be shellac (french polish) or derivative mixes with other products. Stuart explained how he makes his own using methylated spirits, shellac and boiled linseed oil. He said it can separate and needs to be well shaken. It is applied to the work using a cloth pad and it is important that it is worked with the pad 'wet' with the shellac at all times otherwise it will dry and drag to surface finish and ruin it.

Proprietary Friction polishes are available for purchase. These are also shellac-based polish carried in methylated Spirits and can quickly create a high gloss finish. They need to be used over unsealed and well finished surfaces. A liberal amount is applied to a lint free cloth and applied to the rotating work, it dries quickly and takes a little practice and are more suited to smaller pieces.

Both shellac finishes are very decorative and useful for items that are not handled regularly as they are moisture prone and not durable finishes.

Melamine lacquers are basically plastic, they are never shaken as bubbles are introduced causing the surface of the lacquer to be impaired. They are applied with cloth or by aerosol spray and should be used in well-ventilated areas.

Acrylic lacquers are also available in several finishes from satin to gloss. Many are in aerosol sprays and durable.

Temperature

Stuart explained that most sealants work best in ambient temperatures of 10 to 25 degrees, too cold or too hot and the finishing product may produce very disappointing results primarily from thickened cold products drying too slowly or conversely drying far too quickly as they are applied.

Alternative finishes for smaller items

Stuart then demonstrated a durable finish for small items such as key rings or pens can be created using super glue. Please note that super glue (cyanoacrylate) fumes are strong and it is not recommended to use this technique without consideration of your ventilation and personal protection equipment. Stuart used a face mask which is rated for chemical odour at FF3 to protect his breathing.

Stuart held some finished blanks on a mandrel and applied sanding sealant and allowed it to dry, he then uses 1000 grit Abrulon pad to key the surface and wiped it with methylated spirit.



He then applied a small amount of boiled linseed oil to paper (kitchen roll) to which he then dropped over a small amount of thin super glue. He applied it evenly across to the slowly rotating work.



The surface will dry quickly and can be sanded using very high grit pads with a final application of liquid burnishing cream. The result is a very glassy but durable water proof finish but the technique is best used with non-open grained woods.

Finally, Stuart warned against using unknown plastic pots and containers to store or decant finishing products as they may react with the contained solvents or compounds. They may not react immediately and may also not be suitable for safe storage of products which may be combustible. He recalled an early case of incompatibility when he poured some sealer into a plastic pot (probably polythene) which then melted into a 'gloop' all over his Lathe bed. He advocates using glass jars if you must but the original container is probably the safest and most fireproof.

This was another very good and informative talk from Stuart, thank you.