

Club News

At this month's meeting we were pleased to host Jeremy Lain and Andrew 'Smithy' Smith from TreeIncarnated Ltd. They demonstrated how they make a Windsor chair. It was fascinating to learn that these wonderful chairs once made by bodgers in woods are still being made today. Some crafting techniques have changed but the basic design and product has remained much as it would have been made hundreds of years ago. This was a fascinating demonstration and some members were able to try 'hands on' steamed Oak wood bending to make the various parts. Over the evening they made about three quarters of the parts needed for a small child's chair which was very impressive. There is a comprehensive write up in this newsletter and published on the website.

Weird and wonderful Wood

Tombola donations are urgently needed please for this year's weird and wonderful show at Haughley Park that will be held on 13th & 14th May, 2023. The club will be in attendance over the weekend and it is a major fund-raising event for our club. Donations can be most objects large or small of good quality but with the exception of candle sticks or tea light holders that don't have the proper glass or metal liners fitted.

We would also ask if you would consider volunteering to help setup, attend and disassemble the club stand. We are short of numbers and any help would be much appreciated. Please let John Woods or any committee member know as soon as possible so that we may plan a smooth operation.

Large Range of items for sale

The club website has details of some items for sale including a superb lathe, in fact there is enough equipment and tools available that someone new to the hobby could instantly fit out their workshop! All sales enquiries to our Secretary, John Woods please.

Next meeting

We are very pleased to announce that Nikki Wheetman will be visiting the club to demonstrate resin inlay techniques, the meeting will take place on Monday, March 20th at the Village Hall.

That's all for now,

Neil (Newsletters and website)

Display Table



Above Martin Taylor – Minions in pine

Clockwise right : All Richard Court - Ash bowl,
Padouk dish, Padouk bowl and Ash bowl





Far left: Richard Court – Eucalyptus dish



Left: Tic Challis – Tortoise in mixed media



Left: Malcolm Kerr – Pedestal bowl and bowl in spalted beech



Windsor chair making Demonstration

We were pleased to host Jeremy Laim and Andrew 'Smithy' Smith from TreeIncarnated Ltd. at our last meeting, where they thoroughly explained and demonstrated the art of Windsor Chair Making.

Tree Incarnated is a specialist craft company that makes small quantities of bespoke including chairs. They use time honoured hand crafting and finishing to a very high quality with the intention that their products will last lifetimes and beyond like the craftsmen and women before them.

Jeremy introduced us to the definition of a Windsor Chair and explained that any chair where the back doesn't extend past the seat to form the legs, and the legs are separately fixed to the seat can be termed a Windsor Chair. The origin of the name is unknown.

There are several parts that form the chair that he was describing; namely the seat, legs and stretchers, rear and arm spindles, the vertical back bow and the horizontal arm bow. Other types of Windsor Chair may be seen to have a comb or splat back with regional differences rather than a back or arm bow.



This type of chair differs very little from their original bodger created versions as the structure is very stable and strong due to the strength, support and tension of the frame, this is enhanced as the timbers move and shrink over time making chair even stronger. Joints other than simple drilled holes and tenons are not required and the structure effectively holds itself together, although PVA glue is used to secure where needed initially.

The traditionally shaped seat is the most important part of the chair, this was traditionally made out of a single large blank of Elm but it is now becoming harder to

find the size due to Dutch Elm Disease. TreeIncarnated don't laminate wood, preferring to keep to solid wood and tradition. Some manufacturers like Ercol still make reproduction of this type of chair but tend to use laminated and thinner seat and structure sections.

Traditionally the seats were initially carved to shape by putting the seat blank on the ground and standing on it, then using a swinging axe between your legs to shape it. The creation and refinement of this could take two to three hours and would also require a day or more sanding time, let alone the obvious danger. This method has now been replaced by using a handheld Arbortec type disc carving tool which can create a traditionally hand shaped seat in minutes.

A blank of English Elm about an inch and a half thick was marked out with a template and supported ready for cutting. Smithy explained that he would rough out the template shape and finish by eye. The Arbortec is held at a slight angle to the wood, the lower the angle the gentler the cut.



He started by cutting a rear trench about 25mm deep away from where the back spindles would meet the seat and worked his way to the front where he would roll over the edge of each front 'thigh' section. The centre was cut around 20mm deep at its maximum and shaped to include a small centre rise between the seated person's legs. He explained that sometimes people could be measured up for their seat but the generic design suited most.



The Arbortec shaped seat without any finishing



We were then introduced to the rear spindles; these are an important part of the structure and traditionally one of the hardest parts to make. Long turned spindles tend to need support to avoid vibration on a lathe and need careful and constant gauging for size. To overcome this problem TreeIncarnated use a large hand-held dowel type cutter on a slow revolving lathe. This acts rather like a pencil sharpener to produce regular sized 13mm diameter spindles. These spindles are thinner at the top and become thicker to 19mm diameter at the point in which they will pass through the arm bow. After this thicker section the ends are finished to form a 13mm diameter tenon where they will meet the seat. The spindles all have to be marked and become thicker at the same point approximately a third or less of their total length. This is where they will naturally stop and rest on the arm bow when passed through the drilled holes. This is important as it sets and aligns the rear spindle to ensure they are all of the correct length when assembled to the seat and back bow.



Partially finished spindle

13mm seat tenon will be turned here



13mm diameter

Point where spindle meets the arm bow when passed through the hole

19 mm diameter

TreeIncarnated often use frames made of Oak but can make chairs in most woods. Traditionally these parts may have used native trees of the area, for example in Suffolk we traditionally had a lot of fruit wood, apple especially due to the once extensive orchards. Ash and beech are also common woods for this type of chair, but as explained regional differences naturally occurred.

The legs and stretchers are regularly turned on a lathe again using simple tenon jointing.

Steam bending is used to form the rounded back bow and the slightly more angular cornered arm bow. TreeIncarnated had bought along a steamer made using a Burco boiler topped with a wooden box to which the solid Oak sections would be added.



Steaming is not an exact science. The technique requires just the right steam timing, gained from experience with different timbers, to allow the wood to be made pliable so that the wood fibres will slide over each other but not affect the cellulose structure too greatly and weaken it.

When formed into a bend the outside of the timber is in considerable stretch whilst the inner is compressed. The chances of breakage can be quite high and are hampered by natural features in the timber such as knots and voids. However sometimes these can remain to add a feature to the piece if they don't break and retain the required strength. The wood length will reduce typically around a quarter of an inch after bending and this needs to be taken into consideration.

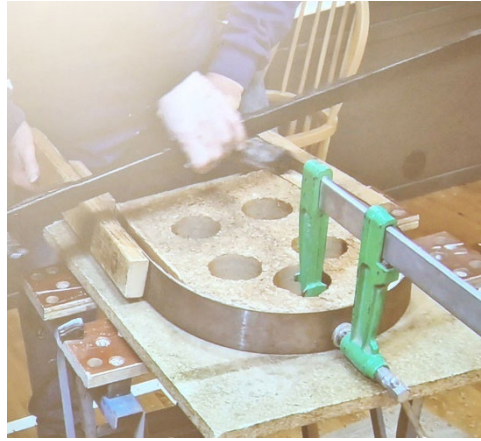


Long straight grained oak blanks for the bow were placed in the steamer for approximately twenty minutes. One was then removed and quickly fitted along a bending jig comprising of a spring steel strap and wooden ends and stops. Handling time is typically five minutes depending on ambient temperature, although if needed the piece may be returned to the steamer.

The steamed straight oak timber fits along the strap and meets the chocks at each end for perfect placement

The oak was correctly aligned on the strap jig and was bent by hand around a former being careful to align a midpoint marker with the top of the former. It is a two person task as clamps are fitted to the main curved bend(s) to secure the timber as it is being bent.





Securing the bend with a clamp across the strap and former

A single clamp for the rounded rear bow and a clamp at either 'corner' of the arm bow after it is 'tapped down' to square it with the former, if needed. The bend continues and a long clamp is used to secure the bend whilst it rests for two to three days or occasionally longer. When released there is little movement other than a slight outward spring but it was explained that this helps when assembling the chair by adding a small amount of tension.



Left: double clamped on arm bow 'corners' with help from our club member Trevor Branton

On this design the rear bow is affixed to the arm bow however on occasions the rear bow may be made longer to pass through the arm bow if the design requires.



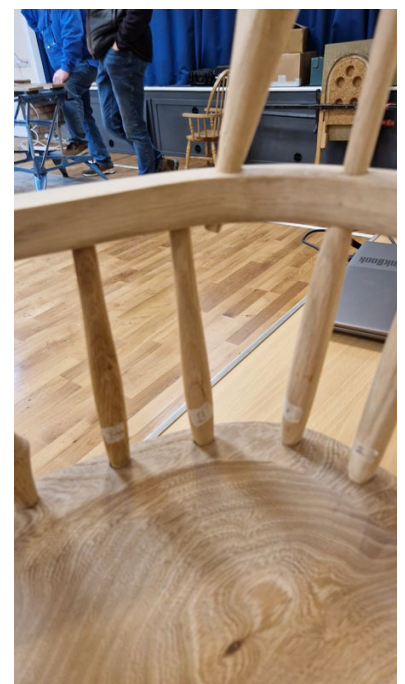
At this point the seat is drilled to accept rear tenons at 15 degrees and the side arm spindles are drilled to angle slightly further toward the front of the chair by eye. The legs are also drilled at 15 degrees. It was explained that the drilling was not overly exact but as close as needed since the chair and side spindles would knock in and the timber has some flexibility when assembled.



Drilled seat with further shaping applied, requires sanding and further finishing

The arm spindles and arm bow were test assembled and the rear spindles fitted. The lengths were marked where then cut to allow fitting in half inch holes in the seat.

The ends of the back bow are spoke shaved to form the required tenon and a small cut made across the end to accept a wedge to help make a solid joint when assembled. A small amount of PVA glue is used and a mallet is used to knock every joint tightly together.



Finally, once fully assembled, the chairs are given coats of French Polish.

For anyone interested TreeIncarnated are able to provide courses in chair making where you can make your own version otherwise you can always purchase a bespoke crafted chair that will last beyond lifetimes.

This was a great and informative demonstration showing that traditional crafts, albeit aided by power tools, are still alive in this day and age.

Thank you, Jeremy and Smithy.