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Sourcing wood for turning


Well seasoned wood is expensive

Lots of timber available locally


Friends/neighbours
Tree surgeons
It is often freely given- I have not bought any recently, but often give back a turned object

And it is nice to use local timber

'Made in Marple from local trees'
How do you go about preparing it?
What trees are best to use?



From Marple Memorial Park
Jan 2023




What was left

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Preparing new/wet wood

- Freshly felled timber contains a lot of moisture.
- Most homes are much drier than a freshly felled log
- As the timber dries out it shrinks
- Obviously the outside of the wood dries first
- This creates stresses that lead to splits and cracks in the wood.
- While there are several ways in which you can reduce the likelihood of splits and cracks occurring you have to be prepared to deal with them when they do occur
 - Even if you buy seasoned wood






Part of my wood pile

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Preparing new/wet wood

- Seasoning refers to the drying out process.
- Seasoned wood has a lower moisture content
 - The wood still retains some moisture and if moved to a drier environment will shrink leading to further distortion splits and cracks
- If you season a whole log then some splitting/cracking is almost guaranteed.
- The amount varies with the type of wood and size of timber. Big logs-more splits and cracks
- Later on we will talk about funky wood. Wood that has become soft in places due to rot.
- In my experience funky wood does not split/crack as much as harder wood.

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Preparing new/wet wood

To reduce the likelihood of splitting etc

- Remove heart wood¹
 - I like to have bowls that incorporate the heart wood.
- Seal the ends with wax, or paint, to slow the rate of drying at the ends
 - Still splits, usually have to throw away ends
 - Takes ages
 - Requires a lot of storage space
 - Still danger of movement when finished item is moved to drier location, i.e. shed/cellar to living room






1. <https://youtu.be/a4VmwzGIdI>

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Preparing new/wet wood

- Problems with splitting vary with different types of timber and the log size
 - Problem timbers include, cherry, holly, lilac, apple
 - Less of a problem oak, ash, yew.
- With problem woods it is best to assume you are going to have to re-finish (re-fill splits) after the piece has been in its final resting place for a month or two.
- Often suggested that you rough turn first then leave a few months in a room with similar humidity to the final resting place before finishing.
 - My favourite
- If you have a big log with a few splits you might be able to avoid them in your final piece



Holly branch. Only hope is to make the splits part of the design.
Donated by Bob Evans.

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Microwave

- To rapidly dry wood before turning you can place it in the microwave.
- Only good for small items (size that can fit in microwave)
- Dries wood more evenly
 - The microwaves excite water molecules in wood which creates heat.
- I use it occasionally to finish off drying
- **Without care you can set the wood alight**
- **Lots of videos on how to dry in microwave that I advise you look through before attempting.**



Holly branch. Only hope is to make the splits part of the design.

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Don't give up

- Lilac vase- 3 attempts
- First attempt cracked so badly I put it in the log burner bin (for daughter)
- Second attempt showed some splitting
 - Splits filled with superglue and brass powder



2nd attempt

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Superglue and brass powder

- Excellent quick reliable method
 - Rough turn
 - Sand to a good finish- wait
 - Remove saw dust- if you are proposing to use filler other than sawdust
 - Sanding seal around split- to stop staining of adjacent wood
 - Fill with powder or sawdust
 - Dribble on thin super glue
 - May need to repeat until flush or slightly protruding
 - Sand smooth and finish.



3rd attempt

I did remove some of the heart wood and fill the bottom hole with a plug of different wood. Also helps hollowing out, giving access from both ends.

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Another example, cherry wood



Large cherry fruit bowl- required second fill and re-finish after a few months



Close up showing typical radial splitting around the heart wood. Filled with brass powder and superglue

See video <https://youtu.be/1w0Ee-H58s>
I suspect the cherry vase in this video will split further when it dries out

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Other fillers

- Sawdust is often used as a filler for superglue
 - Often darkens with the glue and can be patchy unless you carefully select fine sawdust- I keep tubs of different coloured sawdust on the shelf
- Coffee grounds
 - Definitely darker. Need a fine grind.
- Other powders/pigments
 - Brass powder
- Black superglue
 - Not much success with this
- Best to accept that splits will remain visible and go for a contrasting colour



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Larger splits, small cracks and voids

- Superglue if fine for small splits but not so useful for larger split and cracks
- For larger splits I use epoxy glue (e.g. Araldite) as it gives a stronger bond
 - This can be mixed with powders, sawdust etc. to make it thicker
 - If the crack goes all the way through a piece then you need to tape it up to stop the glue from falling through. Frog tape gives a good seal.
- Easy to use
 - It shrinks a bit. Over fill first fill or use 2nd fill if want flush finish





Oak vessel including heart wood



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Resin use in woodturning




- Many U-tube videos on the use of resin
- Most involve casting bits of wood in a chamber that is then filled with resin and put in vacuum chamber to remove bubbles
- Requires a lot of high tech equipment
- Requires a lot of resin- expensive

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Filling cracks with resin

- Requires more preparation/time than other techniques
- I currently use GlassCast, 2 part mix
 - No problem with bubbles


Example: Badly cracked piece of Ash with nice infarcts.
Donated by Bob Evans

Rough turned to a bowl. Left thick as danger of breaking

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Filling cracks with resin

- Why use resin?
 - Excellent finish
 - Can get high polish
 - Get excellent penetration, soaks into wood much better than other solutions e.g. super glue and epoxy
 - Lots of colouring options





Outside turned to reveal extent of damage
A lot



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Filling cracks with resin

- Case example (continued)
 - Tape over cracks on the outside to stop resin seeping through when poured on the inside.
 - Frog tape is excellent.
 - Place bowl in a container so that any seepage is contained- it will find the smallest gaps!
 - Bowl is positioned within container so that resin will fill one of the cracks.
 - Left overnight.
 - Repositioned and second pouring to fill another crack.
 - Repeated until all cracks filled: 4 pours for this example, (4 days).
 - Remove tape and finish bowl on the lathe.

Inside turned
Outside tape over cracks






Fill with resin and remove tape

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Filling cracks with resin



- Case example (continued)
 - Finished and polished bowl.

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Bigger cracks and bigger voids

- Another example using resin
 - Split right through blank (apple I think)
 - Taped both sides
 - Filled from top with blue resin

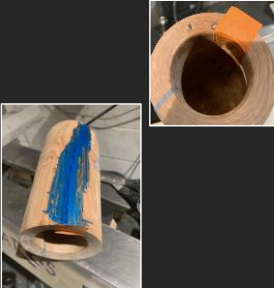



Apple wood

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Bigger cracks and bigger voids

- Another example (continued)
 - After resin had dried I remounted and drilled/hollowed
 - Heat of drilling caused a crack to appear
 - Taped and filled with epoxy



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Cracks and large splits

- Final vase




Nice bit of woodworm

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Cracks and large splits

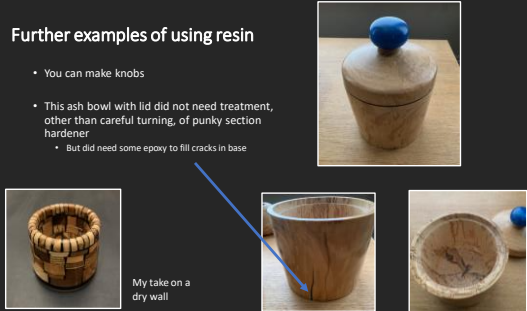
- Another example of using resin



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Further examples of using resin

- You can make knobs
- This ash bowl with lid did not need treatment, other than careful turning, of punky section hardener
 - But did need some epoxy to fill cracks in base



My take on a dry wall


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One last example of using resin to fill cracks

- Heavily split piece of holly
 - Rough turned
 - Microwaved a few times (no loss in weight)
 - Sanded
 - Cleaned out some of the splits with craft knife
 - Dusted with shop vac

Remember this example of a badly split piece of Holly- from Bob Evans

Here it is after rough turning



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One last example of using resin to fill cracks

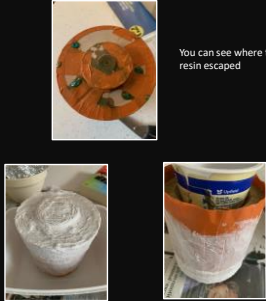
- Internal diameter set to match plastic cup.
- Outside taped to stop resin escape
- Cup with weights placed inside
 - To take up a lot of the volume and reduce amount of resin needed which would later need to be removed
- Bowl placed within container to catch any seepage
- Poured in resin which slowly seeped down the splits



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One last example of using resin to fill cracks

- Ooops
 - Most of the resin found a hole and seeped into outer container
- Next day more extreme measures
 - More tape
 - Silicon sealer over tape edges and the bowls bottom where most seepage occurred. due to tape not fitting well on complex curves.




You can see where the resin escaped

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One last example of using resin to fill cracks

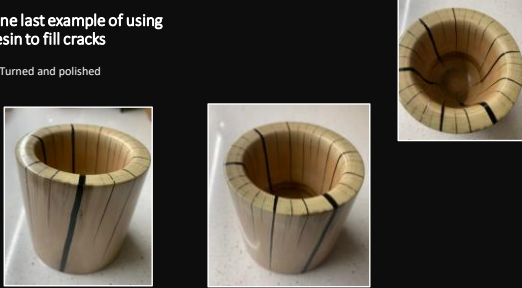
- Success
 - No/little seepage
 - Removed cup, tape and silicon sealer
- You can see some seepage radiating from the splits



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One last example of using resin to fill cracks

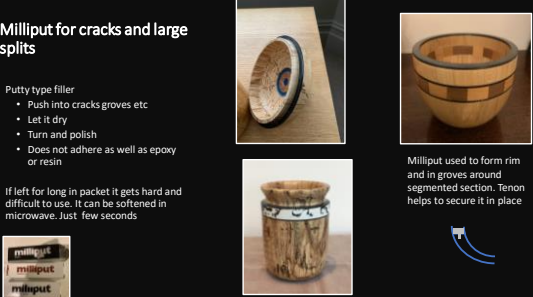
- Turned and polished



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Milliput for cracks and large splits

- Putty type filler
 - Push into cracks groves etc
 - Let it dry
 - Turn and polish
 - Does not adhere as well as epoxy or resin
- If left for long in packet it gets hard and difficult to use. It can be softened in microwave. Just few seconds




Milliput used to form rim and in groves around segmented section. Tenon helps to secure it in place

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Pewter !!


- I have only used it to put a rim on bowls
- Could be used to fill voids
 - Difficult to think of a method to seal around area of fill
- Surprisingly easy to turn once cooled
- In this example the pewter was poured into a groove the sides of which were then turned off
- Alternate method is to cast in scrap wood and then glue to bowl - easier



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Punky wood

- Often enhances timber with a range of colours and textures
- Problem is tearing
- Can you sand it out?
 - Yes but your sanding will remove more of the punky wood than the surrounding wood and you will create a dip- not nice
- Try to improve by
 - Sharpening chisel
 - Do fine cut pushing the heel of the chisel onto the wood
- If finish still not good enough
 - Use Hardener



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Harden the Punky wood

- You can try soak the wood with sanding sealer and repeat final cut/sanding
 - I have not found this very helpful
- Use wood hardener. For this project I used Rustins Wood Hardener, which I found to be excellent.
 - Soak the punky area
 - It will be rapidly absorbed into the punky area. More so than sanding sealer
 - Leave to dry.
 - Keep adding coats until surface is saturated.
 - Leave to dry
- Sharpen chisel again and undertake final cut/sand



The punky wood was hardened with Rustins wood hardener

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Final bowl that had an area of punky wood



Local ash tree with a section of soft cream punky wood

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The end

- I hope you will look at those punky, split and cracked pieces of wood in your workshop with new enthusiasm and that you find plenty of wood locally to hone your turning skills
- Remain curious and experiment



Workshop

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