Bonsai Root Stands

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Today we will discuss:

- Wood selection
- Tools needed
- Steps in the process
- Finishing techniques

Start

Finished

Wood Selection

- Green Vs Dried lumber
- Dark colored woods
- Hard Vs Soft woods
- Figure woods
- Price
- Example Species

Green Lumber

Pros of Green Wood

- Easy to carve
- Nice to use with hand tools
- Good for beginners to practice different cuts
- Can be converted into dry wood
- Can be collected from a forest from recently fallen branches, therefore must not always be bought

Cons of Green Wood

- A wood that is wet and retains a lot of moisture, this can often cause the **wood to split.**
- More suited to outdoor projects
- Not so good for fine detail.
- Leaves a residue on your tools, making it very hard to clean.
- Shrinks when dries

Green Wood Splits

Dry Wood

Pros of Dry Wood

- Less likely to crack as it does not hold moisture
- More stable and better suited to indoor projects
- Better for fine detail
- Good for all levels of expertise
- **Great for power carving**

Cons of Dry Wood

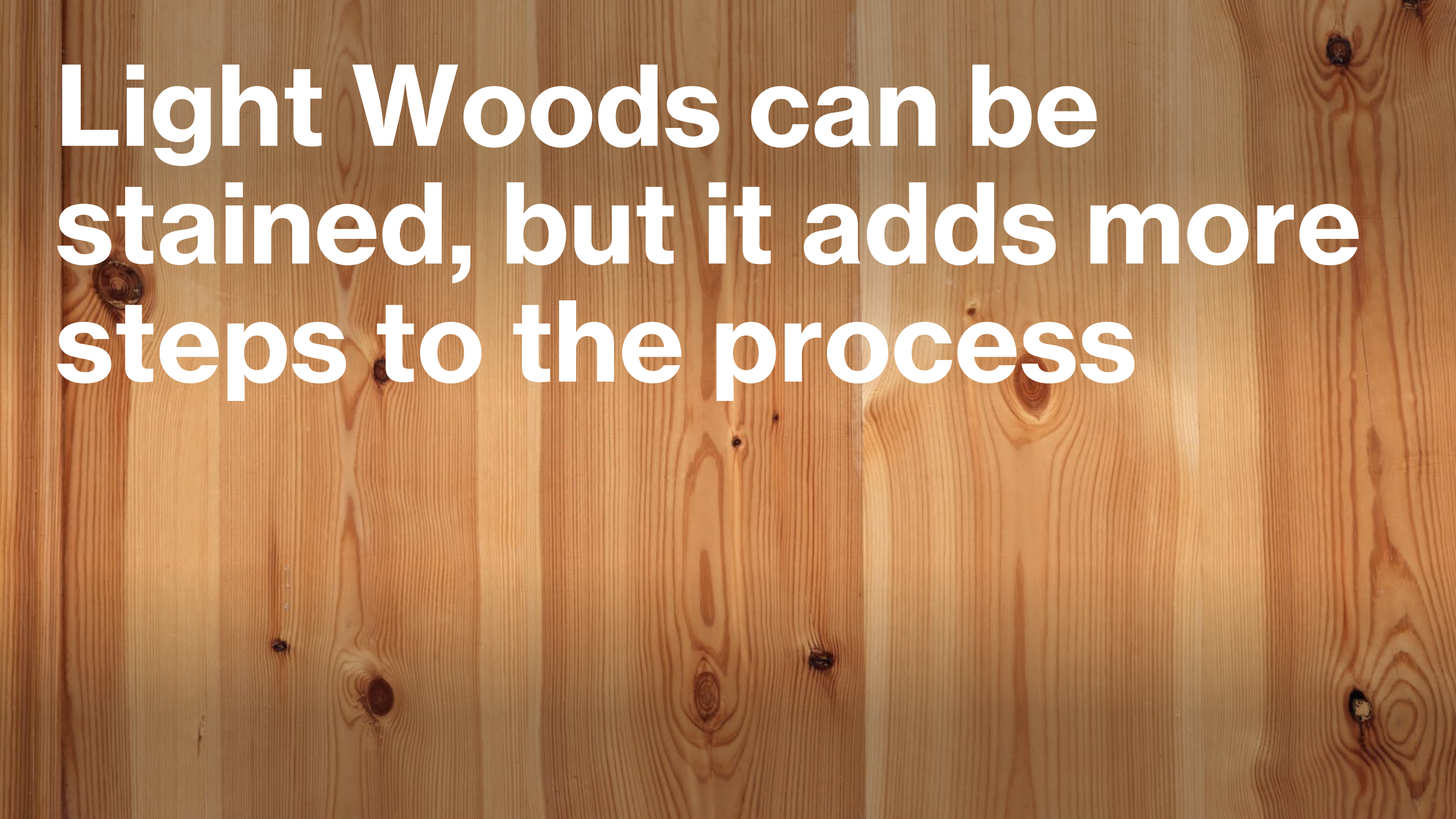
- Harder to cut than green wood with hand tools
- Some wood left to dry for too long may become stone hard and impossible to carve
- Requires more tools to work with (such as chisels)
- Hard to season yourself without experience, and therefore must be bought

What color / tone are most bonsai stands?

Light or Dark?

Dark Wood or Light-Colored Wood?

- Most Stands are dark
- Light woods more for summer display
- Light woods draw the eye
- Dark woods a less obtrusive
- Dark woods blend into a display


Light Woods can be stained, but it adds more steps to the process

Soft Vs Hardwoods

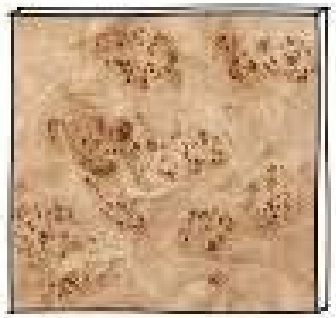
Soft

- Easy to carve
- Scratches easily

Hard

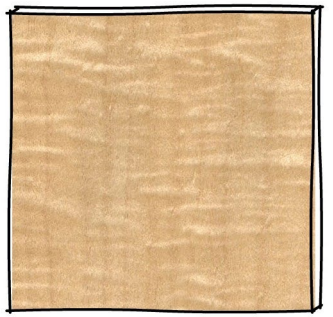
- Harder to carve
- More durable

Figured Woods



Burls

Features swelling grain around clusters of rings or eyes.

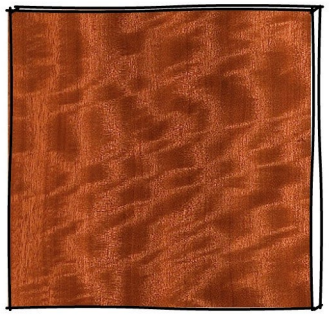


Curly

Known as "cross fire" with scattered curls and/or blisters.

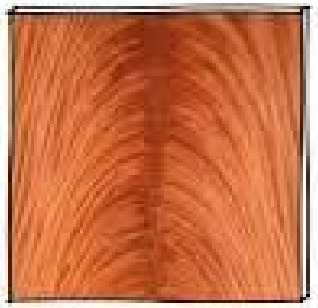
Pommele

Dense pattern of small circular rings enveloping one another.



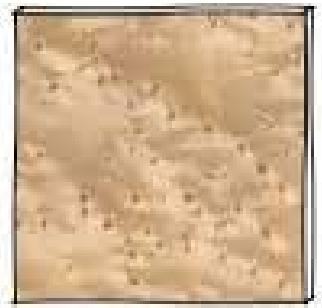
Block Mottled

An irregular form of figure that runs across the entire surface of the veneer, creating a spiral like, or wrinkled appearance.



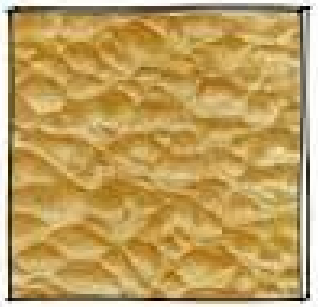
Crotch

A "flame" pattern of grain is created when a trunk or heavy branch is cut through its center.



Birds Eye

Gives the appearance of uniformed small round eyes.



Quilted

Blister-like patterns which creates a three-dimensional effect.

Fiddleback or Figured

Regular streaks running across the grain, the more consistent the streaks the more valuable the veneer.

Avoid Coarse Grain Woods and wild patterns

- Harder to work with
- Tends to chip out
- Large patterns also distract visually
- Example:
  - Oak
  - Sassafras

Influencing Price

- Dry Vs Green
- Species of lumber
- Thickness of lumber
- Figure

Example Hardwood Species

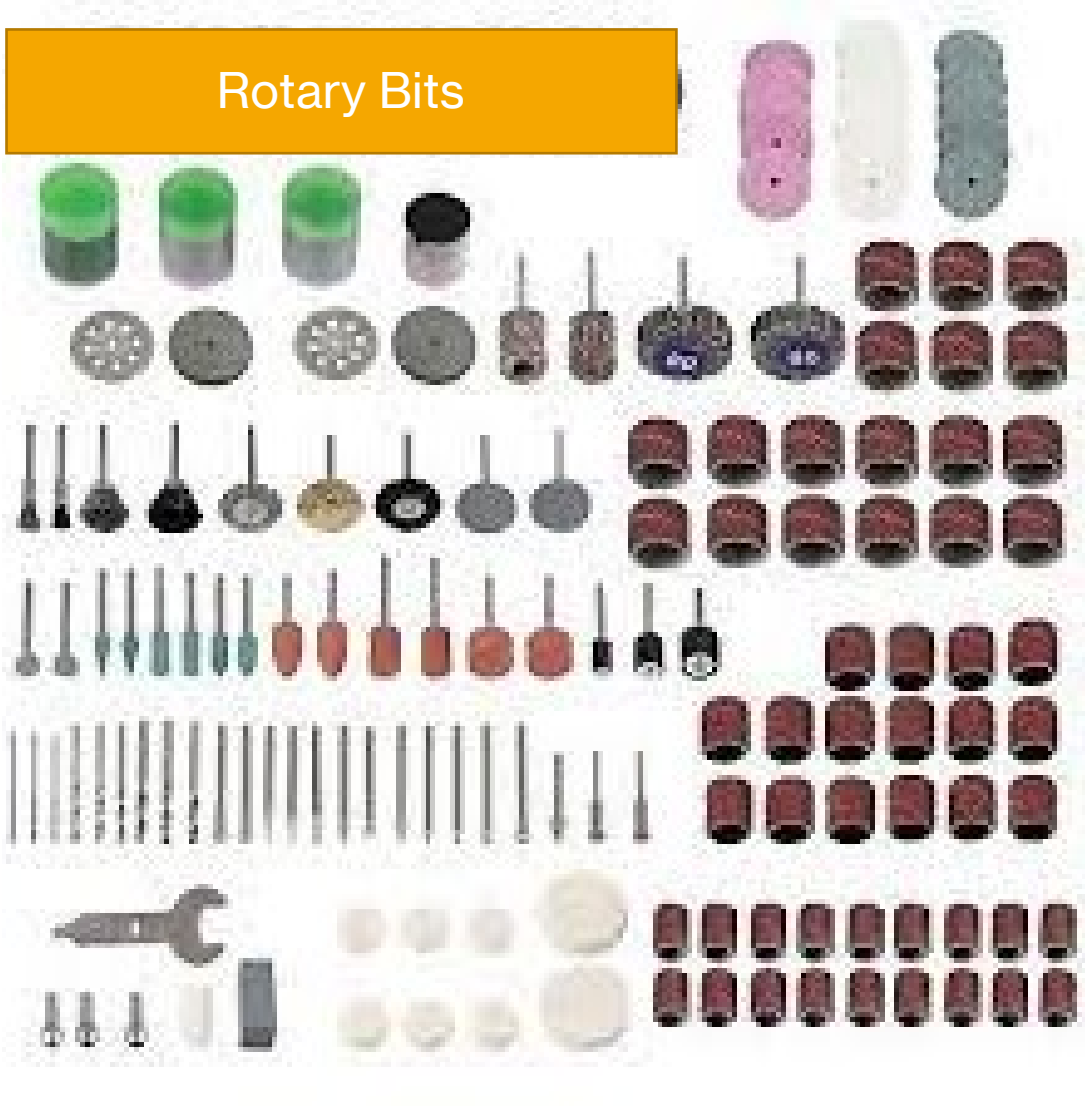
Domestic

- Walnut
- Cherry
- Maple
- Butternut

Foreign

- Mahogony
- Rosewood

Required Tools



Tools

- Safety gear
- Drill and drill bits
- Bandsaw
- Rotary tools
- Rotary bits
- Sandpaper
- Finishing tools

Specialty Rotary Burrs

Extreme Sphere Burr, 1/8" Shaft, Very Coarse (1/4" x 1/4")

Extreme Taper Burr, 1/4" Shaft, Very Coarse (1/4" x 1-1/2")

Extreme Cylinder Burr, 1/8" Shaft, Very Coarse (1/8" x 7/8")

Original Taper Burr, 1/8" Shaft, Fine (1/8" x 7/8")

Process of Creation

Step 1 - Layout

- Determine size of pot
- Locate any cracks

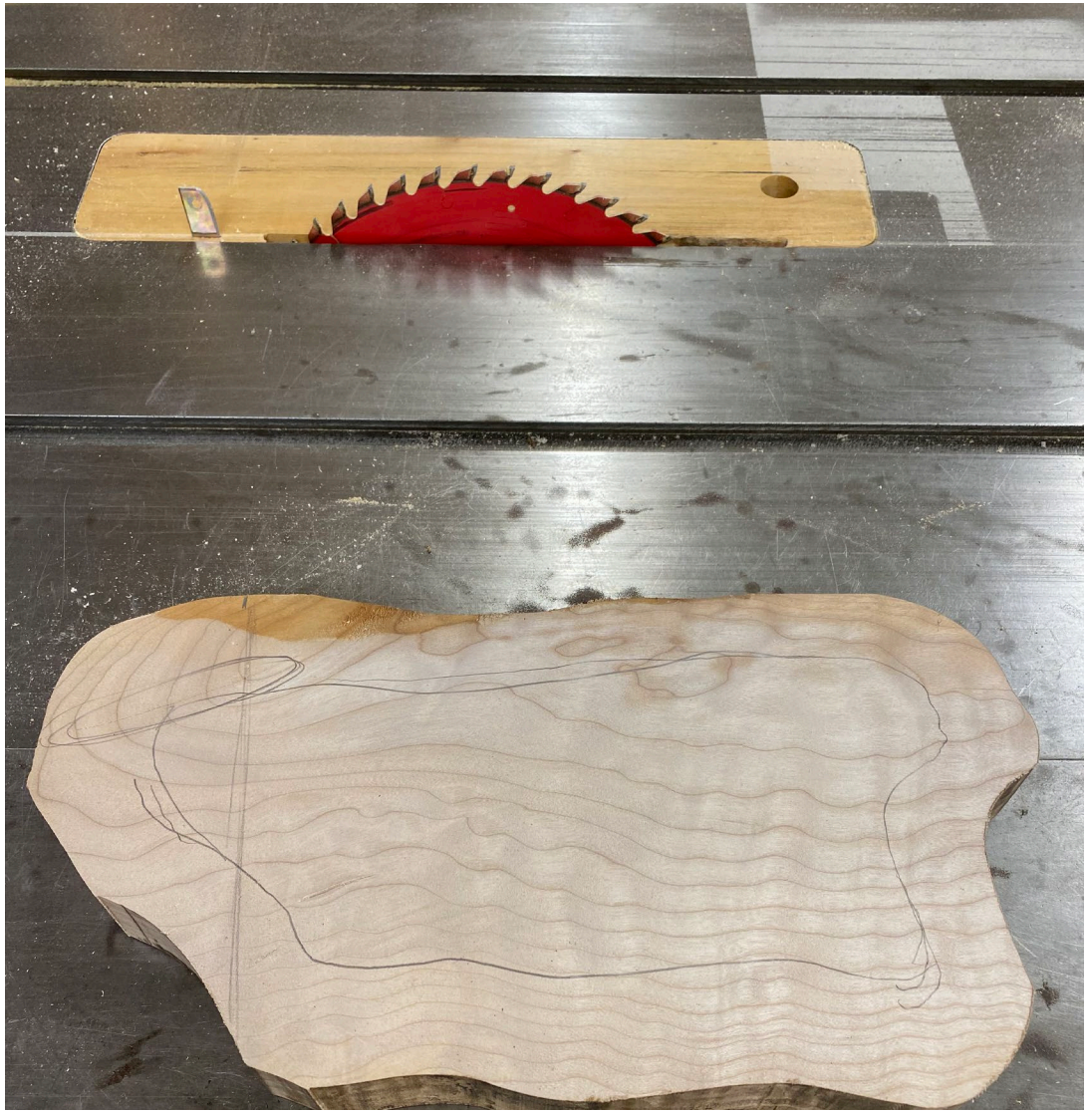
Avoid a Square Top and Base

Step 2 – Cut the desired Shape

- Use a bandsaw
- Cut around cracks
- Concave front

Step 3 – Layout of Underside

- Layout the area to be bored out
- Side wall thickness will vary
  - Depth of carving
  - Offset for directional carving
  - More slant to the face of carving



Step 4 – Boring out Underside

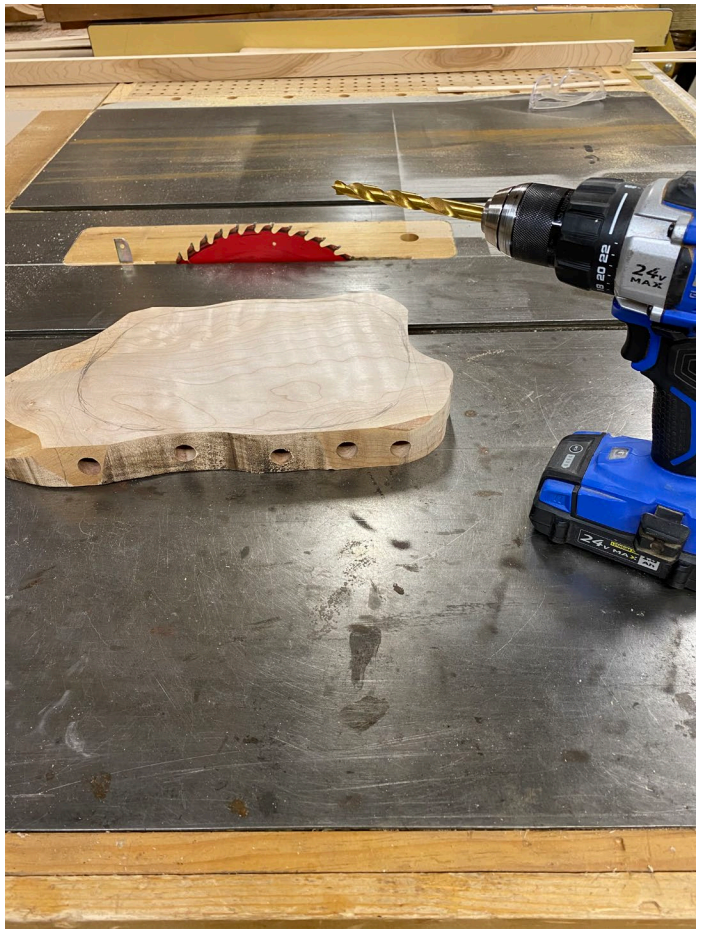
- Set bore depth
  - Leave ¼ inch from the point of the bit
- Use a forstner bit
  - Easier to remove large quantity of wood quickly

Step 5 – Layout the Top

Layout the area that you want to avoid carving

Step 6 – Drill Holes

- Use different size bits
  - ¼ in to ¾ in
  - Size depends on height of side wall
- Both a drill press and hand drill work
- Stagger holes so they are on different planes/levels



Holes Completed

Step 7 – Carve Outside Profile

Step 8 – Define the Top

- Remove the material back to the layout line

Step 8 – Carving (Waste Removal)

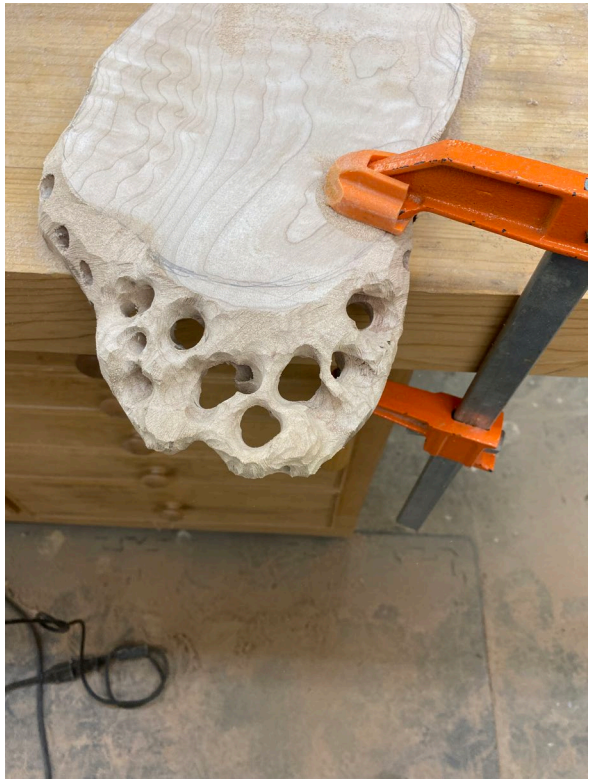
Use the extreme coarse burr to round over the holes

Carving Progression

Round over holes

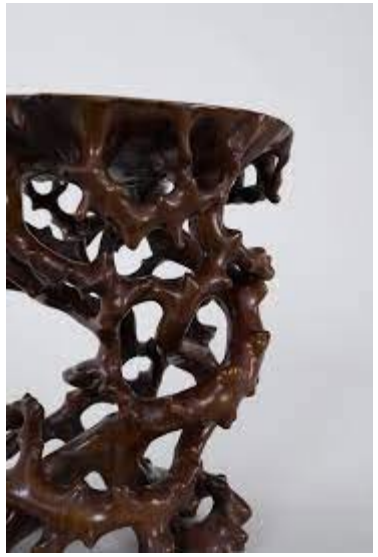
Open the small holes at the bottom

Start connecting holes



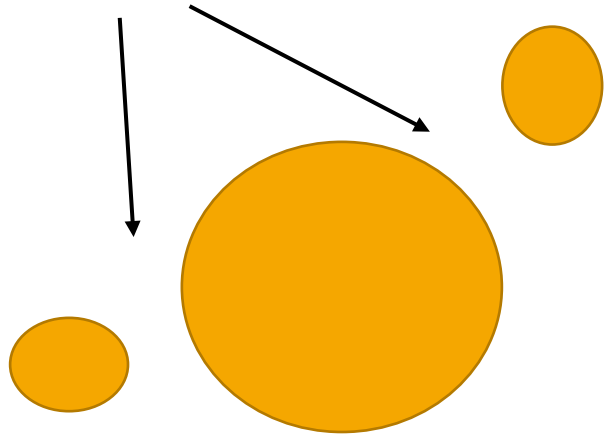
Avoid Round Holes

Elongate the Holes (Natural Look)

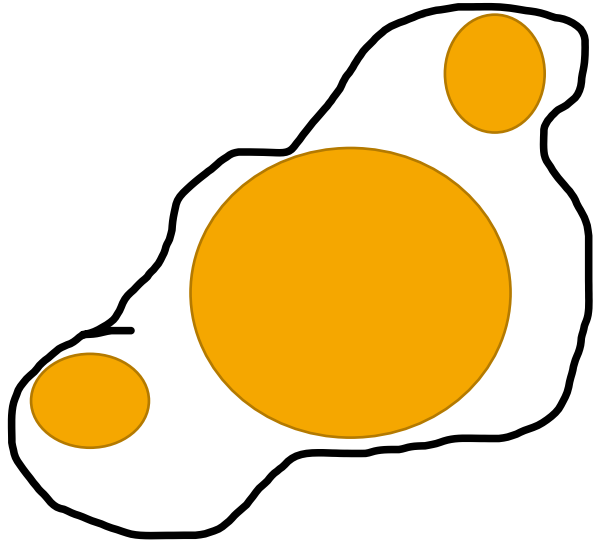


How To Elongate The Holes

- Remove Material



- Shape after removal



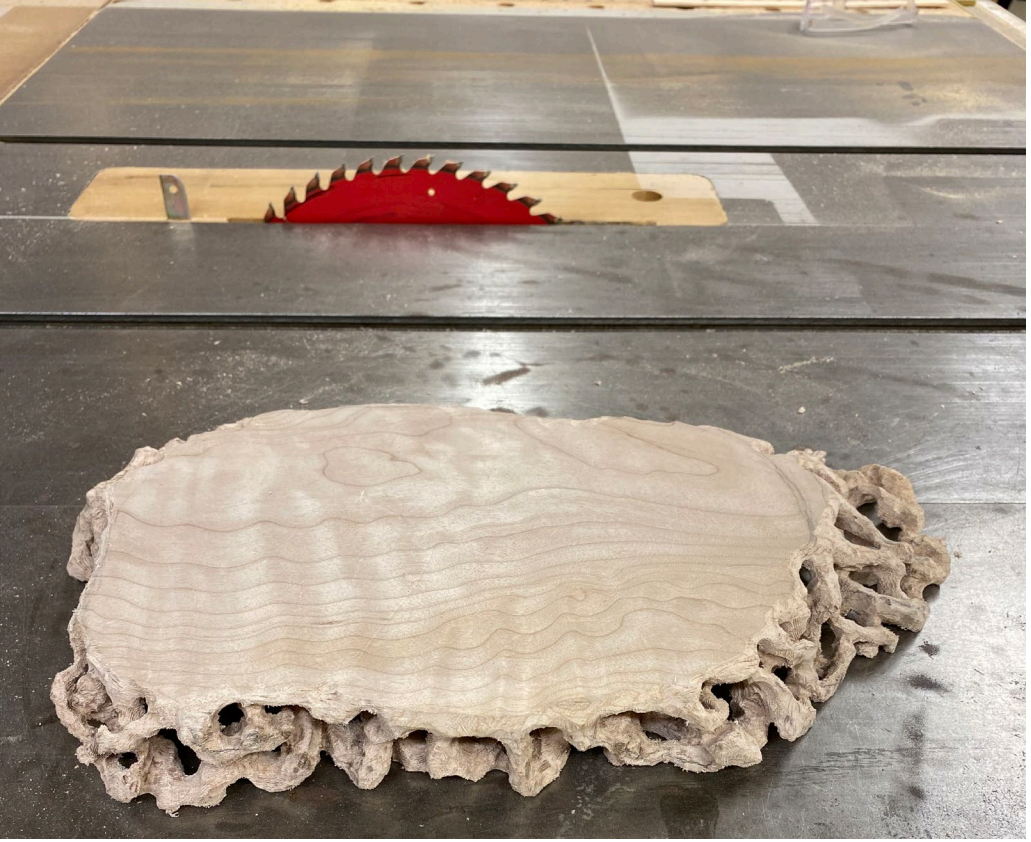
Carving Progression

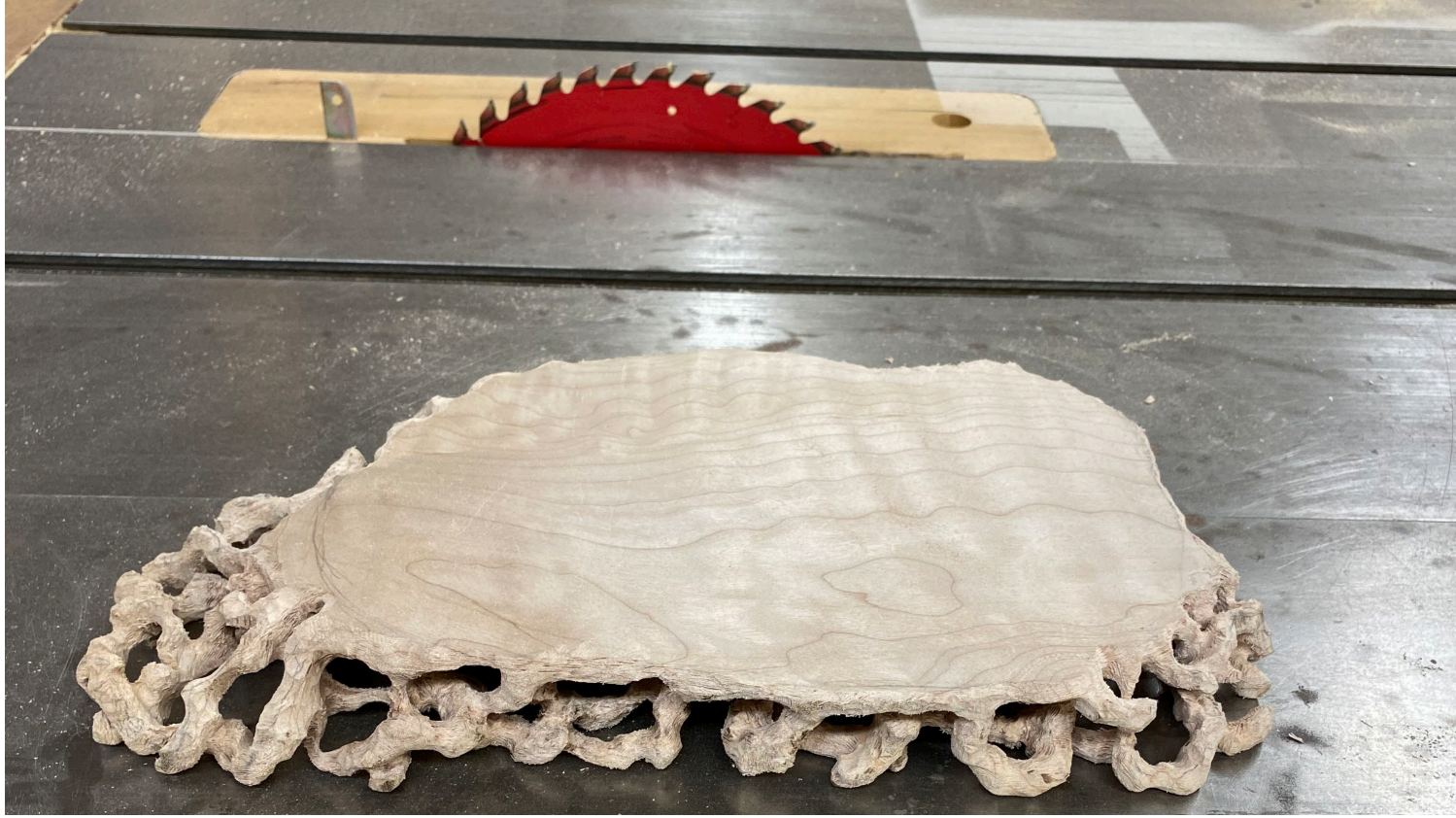
Layout the path of the roots

Remove wood to give depth and dimension

Step 9 – Refinement Carving

Use a smaller tip burr to refine and round over each root





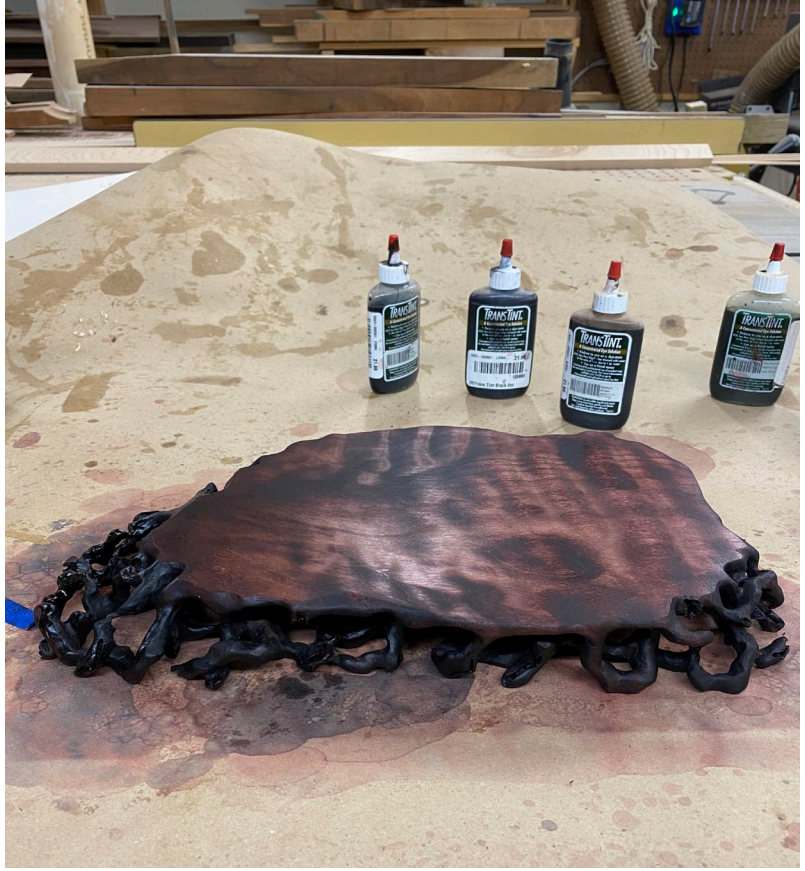
Carving Progression

- Give dimensions to your carving

Step 10 – Sand the Inside Flat

Step 11 - Sanding

- Dremel tips
  - Wire brush bits
  - Sanding bits
- Finish with hand sanding
  - 100 to 250 grit



Step 12 - Finishing

- Stains or Dyes
- Osmo-coat
  - 1101 clear satin – Extra Thin
  - 3043 Polyx oil clear satin
- Rub in oils
  - Tung oil
- Oil – varnish blends
  - Danish oil

[7 Types Of Wood Finishes - Woodworking Guide 101 (woodworkingtrade.com)]

Step 13 – Buffing

- Hand buff 30 minutes after applying oil-based finishes
- Dremel buffing tips
  - Use lowest speed (burning issues)
  - Avoid tips that make dust when buffing wet finishes
- Electric Buffer can be used for the top

Step 14 – Enjoy The Final Product

Example work