



Florida Woodturning Symposium 2020

## Casting Botanicals Jon Hollingshead



Have you ever been out walking your dog and come across some little bit of nature sitting on the sidewalk that caught your eye? Then, after confirming it wasn't left there by some prior dog walker and their pooch, you picked it up, only to learn it was a hickory nut, or acorn, or an insect gall or perhaps some desiccated piece of an unidentified plant. Or maybe it's a piece of splintered wood, soft and perhaps punky from decay but left beautifully colored or figured by the same decay or spalting that has occurred. Did you then wonder what it would be like to turn it and see what it looked like as a pen, bottle-stopper or as a bowl? Well I have. In fact, it is where a lot of my inspiration for my projects comes from.

But while most botanicals can make for interesting pieces, they are usually too fragile in their natural state to be turned on a lathe; they need to be properly prepared. This usually involves casting them in acrylic, or stabilizing them with

resin, or sometimes both. Although no method is 100% fool proof, there are many steps and approaches you can take that will significantly cut down on your failures. This demonstration will cover those I have found along the way.

- RULE 1: Limit the moisture in your materials
  - Storing
  - Heating
    - Microwave ovens
    - Toaster Ovens
  - Desiccating materials
  - Freeze drying



- Rule 2: Stabilize if necessary
  - Need to if punky or soft
  - Can use to add color if desired



- Rule 3 Form your mold (or mold your form)
  - Less waste is good
  - More release is good



#### Rule 4 Mix your medium well

- Various acrylic products on the market
  - Allumilite Water Clear
  - Reynolds Advanced Materials Epoxacast 690
  - West System Epoxy Resin and Hardener
  - Casting Craft Clear Polyester Casting Resin
- Advantages and disadvantages
- Follow direction



- Rule 5 Remove what air (and air pockets) you can
  - Degassing
  - Arranging and pouring
  - Vacuum chamber & vacuum pump
  - Pressure Pot & air compressor
  - Vacuum vs Pressure?



- Rule 6 Patience (Are we there yet? Are we there yet? Are we there yet?)
  - Don't rush the cure

- Rule 7 Tips and Tricks for Turning and Sanding Success
  - The Grandma Billie Analogy
    - Sharp Cry = Sharp tools
    - Soft Touch = Light touch
    - High Energy = High speed
  
- Rule 8 Hard finish to keep moisture out
  - CA finish
  - Friction Polish