



# Securing Deep Bowls

A Problem with Several Solutions

Santa Cruz Woodturners

March, 2021

Wells Shoemaker

# Show and Tell...*Tells a Lot!*

The SCW President's Challenge for March was "Mutt and Jeff" ...something large and something small turned from the same wood.

Linda Anderson, our 2020 VP and undisputed Muse of Tanbark Oak, submitted a bowl with two small eggs all made from the same blank.

One of the "eggs" was turned from a "knob" Linda created within that deep bowl so that she could engage the tailstock while rough turning an otherwise potentially wobbly assembly.

# Linda's Display

Spalted Tanbark Oak with Manzanita base...and Eggs



Linda  
Anderson

Nice photo, too, Linda!

# That Got Me Thinking

- Linda used that “knob” to safely enable an artistic turning of the large bowl...with the bonus of an extra turned object to dazzle the onlookers.
- But the whole challenge of reaching deep inside a bowl is worth discussing, because it can also be a safety issue. There are a number of solutions. So here goes.

# Securing the Deep Bowl

- Even in a good chuck, if the bowl is deep and heavy...the torque on the tenon gets dicey even at moderate RPMs without the security of a tailstock...
- ...especially in roughing out when the blank may be unbalanced, knots and defects lurking, and catches vulnerable

# Troublesome Mechanics

- The twisting action under power can deform the compressible fibers in the tenon, and that's trouble
- If the tenon is small (2"), or the wood spalted or grain structure weak, without a tailstock securing it, that bowl can become a UFO:

*Unintended Flying Object*

# Cool in Movies, Not in Your Shop



Jaws, however, are Cool in your Shop





# Get a Grip for Starters

- Invest in some larger diameter jaws for your heavy duty Oneway or Vicmarc chuck if you plan to make deep bowls. 3" jaws not bad for an 8-10" bowl, 4" better for 10-12", 5" for bigger ones.
- Make the tenons as deep as your chuck will accommodate (max 1/2" usually)
- That helps, but still doesn't solve the deep reach challenge with a standard tailstock quill

# Regular Tailstock Quill

4" Range may be too Short to Reach that Far Inside



One Solution: Leave a protruding knob in the bottom so the tailstock can reach



This is a rather shallow one...It can be 2-3 inches if necessary. Pare it off late

# Here's Another Solution: The Morse Taper Tailstock Extender

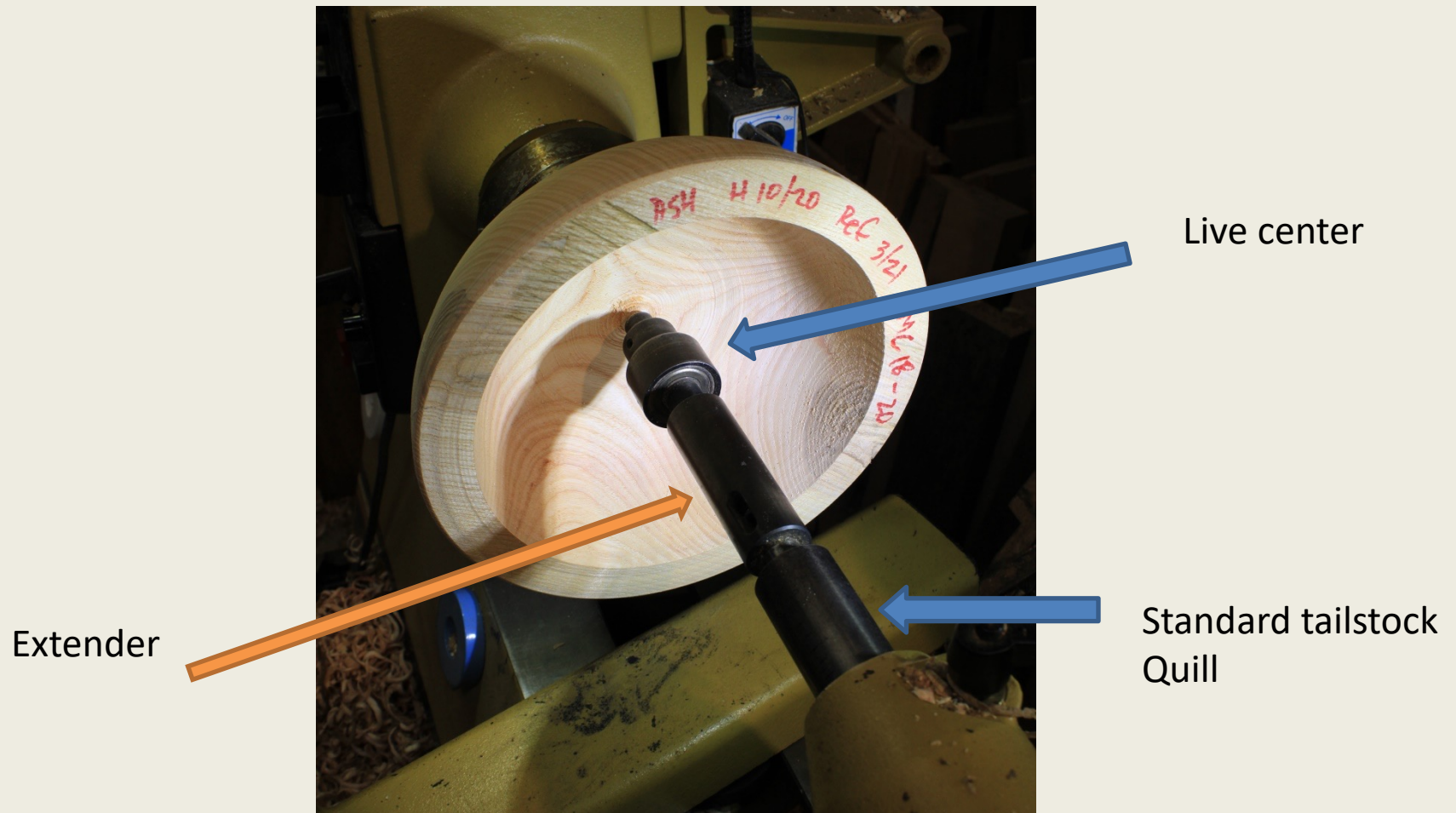


Extends reach 3-4"

Can use with any  
fixture with  
Morse taper.

Cost <\$25

# Ready to Turn...and stay put



# Another solution: A scrap spindle



# Spindle extender engaged



You ain't  
goin'  
nowhere

# If the bottom of the bowl is irregular

- Don't want to damage the bottom with a point, but don't want the extender to slip off
- Use a piece of old wet suit, leather scrap, canvas, or rug pad for better grip
- Turns out this doesn't have to be perfectly centered...just close. Only purpose is to keep the bowl from wandering



# Last thought

You can always core your original blank... solves the problem another way, and it gives you an extra bowl...or two

