ONE GOOD TURN

Meetings: Odd Months Second Tuesday 6:30 pm Dan Hershberger Shop

Winter Meetings Second Saturday 12:30

The April 8 Meeting

There were eleven people present at the April 8 meeting. The meeting started at 12:30 pm. Discussion of club business took approximately one hour. Camille's talk started at 1:30 pm.

Camille Good gave a talk on growing trees locally in the Great Falls area, mechanical qualities of wood, useful internet resources, and shop air filtration concerns.

There are not a lot of trees in north-central Montana, especially outside of the river valleys. Camille referenced a talk given

about fifteen years ago at the Montana State University Cascade County Extension office by Wade Crouch.

- We are far enough north that we have a short growing season.
- Many parts of the local area are under 15 inches of moisture per year, which is generally seen as the minimum needed for trees to grow without being planted or cared for.
- For plants to survive freezing temperatures, they need to produce their own antifreeze as the cells in the plant will rupture if water in them freezes. There are fewer plants that can survive temperatures of -20 F, and fewer yet that can survive temperatures of -40 F, which we do see every decade or so.
- In the summer, we are very dry with very low humidity and often very high winds. This will

suck a lot of moisture out of a plant.

- Result: There are very few trees which can survive all of those conditions.

There are many local areas where people plant rows of trees or bushes and refer to them as shelterbelts. A single row of trees or bushes is more of a living windbreak or snow fence. A true shelterbelt is three to six rows deep, with different bushes and trees of different heights, specifically planned to decrease wind at all heights and also manage snow that does fall on the downwind side of the shelterbelt.

- Chuck Kuether said he does have a shelterbelt which Wade Crouch helped him plan, years ago, and it is five rows deep.

For mechanical properties of wood, Camille referenced some talks given by Shannon Rogers. Rogers has multiple internet channels, including the podcasts *Shannon's Lumber Industry Update* and *Wood Talk*, the YouTube channel *Renaissance Woodworker*, and his online school *The Handtool School*. He often

goes deep into the mechanical properties of wood.

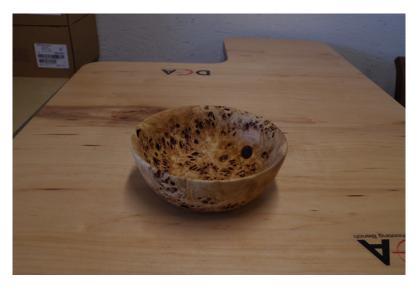


Unknown

- Specifically for this talk, she referenced Episode 5 of Shannon's Lumber Industry Update, "Lumber Technical Properties" (dated June 3, 2019) and the Renaissance Woodworker episode "identifying the Working Properties of Wood" which was a video of a talk Rogers gave at the 2016 Woodworking in America show.

Camille said she had searched for other sources on the properties of wood for woodturning, but almost all other sites she found talked about color, cost, and availability.

So, she mainly went with Rogers' recommendations. Rogers discusses mechanical properties of wood for many different applications, including turning. Rogers in turn frequently references the site *The Wood Database*, which has tons of information on different mechanical properties for different types of wood.



Unknown

After all this research, Camille found there were three important properties for turning:

- Porosity: How much of the wood is wood, and how much is channels that were used for transport of nutrients while the tree was growing. The

distribution of channels varies by species, with the general classification of diffuse porous, ring porous, and semi diffuse porous.

- Hardness: This is usually measured by a test to see how much force it takes to push a 0.444" steel ball halfway into the face grain of a piece of wood.
- Density: This is mass per a given volume of wood.

In general, her recommendation was to start looking those properties for woods you are used to working with. Then if you are looking at a new type of wood you have not worked with before, you can compare the properties of the new wood to what you are already familiar with. Also, when comparing properties, please be sure to check your units

Tom Bennett noted that Bell Forest Products has an excellent online site with a lot of information about wood and types of wood.

While looking at *The Wood Database*, Camille found a

page on wood toxicity and allergies. That in turn had a link to a site by Bill Pentz titled Cyclone and Dust Collection Research. There was a lot of information there about air filtration for shops, including for woodworking shops. The finer the dust, the deeper it will go into your lungs and the more dangerous it will be. Pentz said many home woodworking shops had air filtration systems which were vented into the shop; it is much better to vent your air filtration system outside as there can be particles so fine they are not caught the air filters. Alternatively, try to work with your shop door open so there is good air flow with the outside.

Wayne Petrini mentioned he often notices a lot of fine dust is kicked up by sweeping. He said there are sweeping compounds made to scatter on the floor and catch fine dust as it is swept up.

Links:

- Shannon's Lumber Industry Update, https://www.lumberupdate.com/.

EPISODE 5: LUMBER
TECHNICAL PROPERTIES,
Dated June 3, 2019. https://www.lumberupdate.com/episode-5-lumber-technical-properties/

- Shannon Rogers, YouTube:
 Title: "Identifying the Working
 Properties of Wood: WIA
 2016", presentation at
 Woodworking in America,
 2016, https://www.youtube.com/watch?v=1-akrEsHVVw
- The Wood Database, www.wood-database.com. "Wood Allergies and Toxicity" https://www.wooddatabase.com/wood-articles/ wood-allergies-and-toxicity/
- Cyclone and Dust Collection Research, https://billpentz.com/woodworking/cyclone/index.php

Instant Gallery





Greg Yeager



Unknown





Wenge and Holly Tom Krajacich





Black Oak and Resin Wayne Petrini





Chuck Kuether



Next Club Meeting

The May 9 meeting will be at the shop of Dan Hershberger. Chuck Kuether will be doing the demo.

Lethbridge Demo

Just received word that the Chinnok Woodworkers Guild of Lethbridge, AB will be sponsoring a daylong demonstration by Andrew Glazebrook on May 27,2023 at the CASA building in Lethbridge. Cost is \$60.00. More info will be sent to members.

Demos Needed

Many meeting dates are in need of demonstrators. Please consider signing up to share your knowledge and technique. Please contact Wayne Petrini if you are willing to do a demo.

Thanks

Thanks to this months contributors Camille Good for the story and excellent pictures.

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