

# Knothole News

[www.greencountrywoodworkers.org](http://www.greencountrywoodworkers.org)



## PRESIDENT'S MESSAGE

Greetings fellow woodworkers. Time flies, even if you aren't having fun, but having fun is a far better thing to do with your time. I hope that has included "shop time" for each of you. I just finished a quick review of some previous Knothole News issues and it reminded me of how much I miss our monthly meetings. I've had my first Covid shot and with it came renewed hope for the ending of our need to not have in-person meetings.



Thanks to all who have been contributing to the monthly newsletters. Included this month is a photo of the appreciation plaque from Toys for Tots for the 2018 and 2019 Club contribution. A hearty thanks to all for your part in making this happen and specially to Mike Mitchell for his part in being the contact with the Guard for our toy program. Which, by the way, it's not too early to start thinking about for this (hint, hint).

I recently watched a you-tube presentation on drawer slides, featured bottom mount which I had never used, made it look a whole lot easier than the side mount. (Bourbon Moth Woodworking). At times I have wished for internet access at the shop, but mostly think I would spend way too much time sucked into learning new or different ways to do things that I don't need to know or already have a way that works. Got to keep that balance between learning new things and forgetting the old things. Stay well my friends.

Bill Nay, President

*"One machine can do the work of 50 ordinary men.  
No machine can do the work of one extraordinary man."*

*Elbert Hubbard (1856-1915), author and teacher*

### Officers

<b>President</b>	
Bill Nay	918-492-8481
<b>Vice-President</b>	
Gregg Zumwalt	918-605-2761
<b>Secretary</b>	
Bill Morgan	918-369-6435
<b>Treasurer</b>	
Ray Hucek	918-618-2980

### Club Committees

#### Continuing Board Member

Harold Blalock

#### Luncheon

Bill Morgan 918-369-6435

#### Membership Management

Vacant

#### Name Tags

Ray Hucek 918-618-2980

#### Newsletter

Mike Ruttgen 620-717-4520

#### Program Coordinator

Vacant

#### Toys / Show & Tell

Betty Zumwalt 918-249-4663

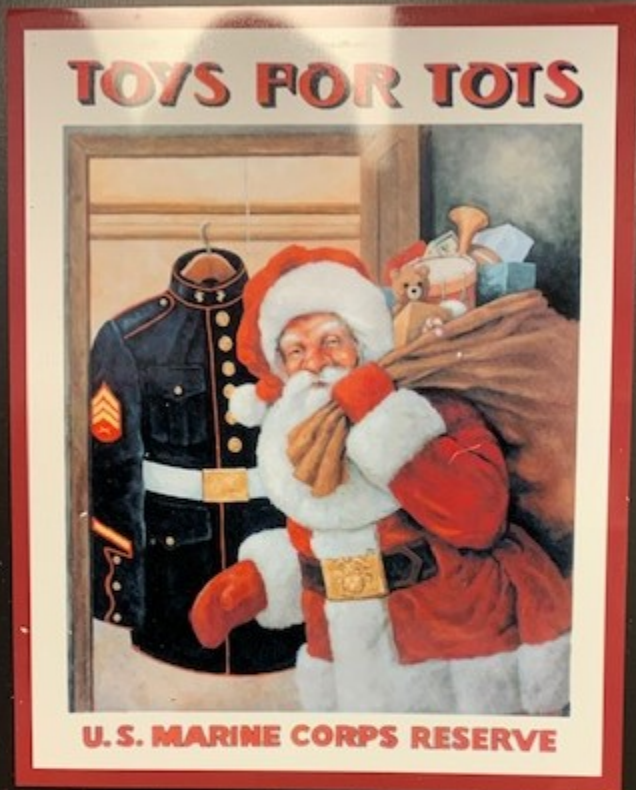
#### Toy Wheels & Axles

Jim Rouse 918-636-9286

#### Webmaster & Photographer

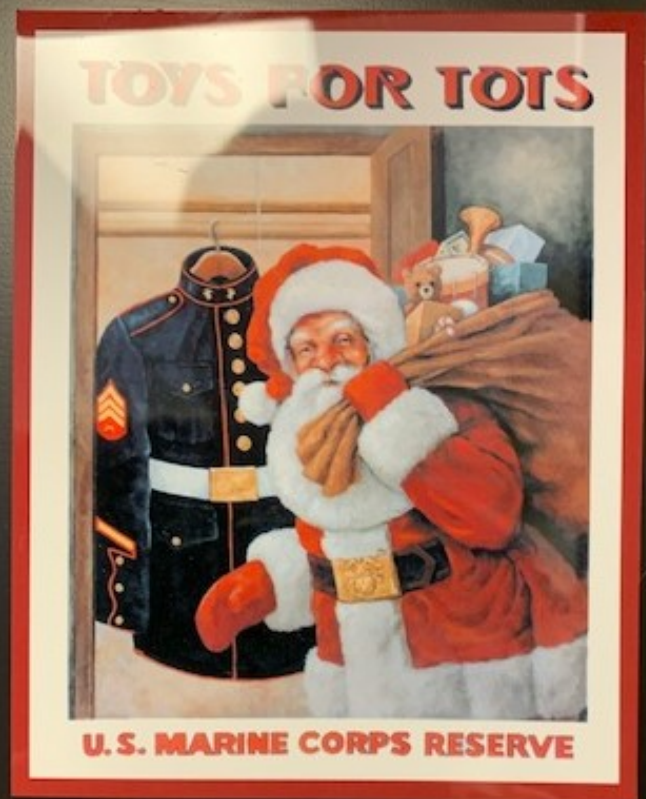
Arthur Barber 918-671-2437

Photos Submitted by Members



**In Appreciation of Your Support  
of the 2018 Rogers/Mayes Counties  
Toys For Tots Campaign**

**Green Country Woodworkers**



**In Appreciation of Your Support  
of the 2019 Rogers/Mayes Counties  
Toys For Tots Campaign**

**Green Country Woodworkers**

For Sale

Selling my roller outfeed, very adjustable and sturdy for \$150.

About 25" W x 38" H x 52" L extended  
25" W x 24" H x 19" L collapsed

9 rollers, 300 lb. weight limit, 4" locking casters

Use for infeed, outfeed or side support

Bill Nay, 918-492-8481



## Photos Submitted by Members (continued)



I finished the kitchen roll-out trays. The food pantry and under sink storage gained the most user friendliness of all the lower cabinet roll out trays.

(Gregg Zumwalt)



And, there are some interesting weekly podcast from the guys at Woodsmith:

[www.woodsmith.com/podcast](http://www.woodsmith.com/podcast)

(Gregg Zumwalt)

### IN THIS PLAYLIST

- ▶ **ShopNotes Podcast E055: Tool Hoarders Anonymous**
- ▶ ShopNotes Podcast E054: As the World Turns
- ▶ ShopNotes Podcast E053: Finishing Projects
- ▶ ShopNotes Podcast E052: Dust Collection Discussion
- ▶ ShopNotes Podcast E051: New Year, New Workbench

## Photos Submitted by Members (Continued)

I had a request for birdhouses and decided to build one of the designs published in Woodsmith magazine back in June 1998.

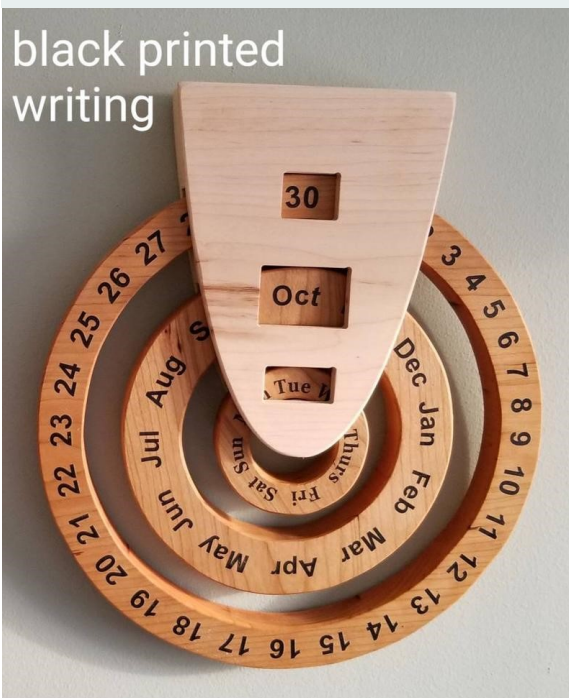
I have the windows framed, but I have not installed them yet because I need to decide whether to paint it or spray it.

(Jim Rouse)



I saw this "perpetual calendar" on ETSY.com.  
(Mike Ruttgen)

black printed  
writing



## Photos Submitted by Members (Continued)

I found this project on the Weber Woodshop website and there is a video at the link below.

I made it for my wife. I used maple and Padauk.

I learned a lot from doing this project and I am happy with it but I would like to make more to perfect it.

(Ray Hucek)

[www.weberwoodshop.com/projects/leaf-box](http://www.weberwoodshop.com/projects/leaf-box)



## Photos Submitted by Members (Continued)

Trying to see if I can successfully make something “like” a catalog picture of a curved spatula.

Bandsaw and belt sander shaped, hot water soak and crude bending jig gave me something that is, I can safely claim, “like” the picture!

(Bill Nay)



# choosing and using Oak

Here's the scoop on getting your oak project started off right.

When it comes to building furniture and cabinets, one type of wood stands above all the rest in popularity — oak. And there are good reasons. Oak has an unmistakable look. Its strong grain pattern always draws attention. And maybe most importantly for a woodworker, it's a friendly wood to work with and you can be certain the project will last a lifetime. Top this with the fact that oak is readily available and moderately priced, and you can see why it's so high on the list.

**ISN'T OAK JUST OAK?** But when you decide on oak for your project and make a trip to the lumber store to buy the stock, you discover the decision isn't always so simple. Right off the bat, you're usually confronted with a choice between white oak and red oak. And oak is one of



the few woods that's often available in different figures or grain patterns. So to make the right choice, it's very helpful to have a good "working" knowledge of the different types of oak.

**TWO MAIN TYPES.** The many species of oaks are generally divided into two groups — the red oaks and the white oaks. And out of these two groups come the two species that are widely marketed for lumber — Northern Red Oak and Eastern White Oak. You'll find other species of oak being used for lumber but not on a level with these two big guns of the oak world.

**RED VS. WHITE.** Since the appearance of the wood in a project is always a major (if not the number one) factor, the differences here are a good place to start. Then I'll get into a few other distinctions that can affect your choice.

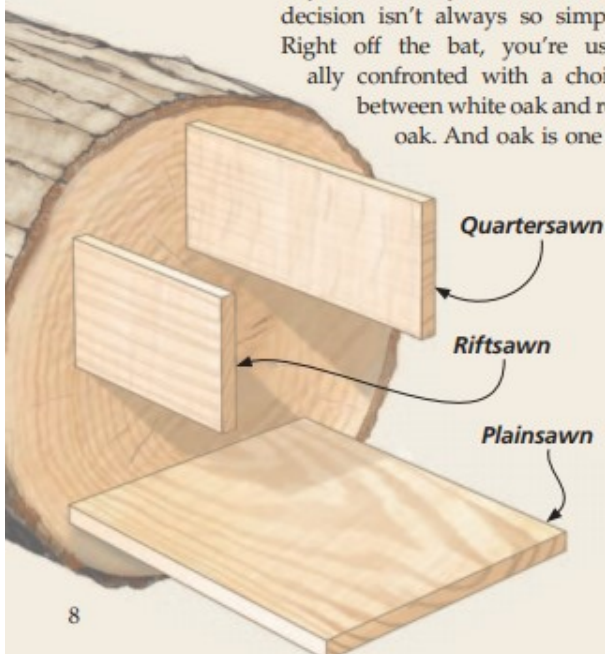
When it comes down to it, even experienced woodworkers sometimes have a hard time telling red oak from white oak without a real close look. Both are "open-grained" woods with fairly large pores. And the pores are concentrated in

distinct growth rings. The "ring porous" nature of oak is a major contributor to its appearance.

But take a look at the photos at the bottom of the opposite page and you'll see some of the subtle differences. The pores of red oak are a little larger and more densely bunched, so the grain pattern is a bit stronger. And the smaller pores of white oak make the surface seem a little smoother.

Red oak and white oak also differ a bit in color. But every "authority" has a different description. To me, red oak has a more consistent "tan" color from one board to another, and across a single board. White oak is usually slightly darker and is often much more variable from board to board. This difference can be an important point when choosing which oak to use for a project.

**FIGURE.** Whether you're talking about red or white oak, one of the things that affects the appearance of a board is the way it's cut from the log. Oak can often be purchased in three different cuts or figures — plain or flatsawn, quartersawn, and riftsawn. The figure



difference relates to how the surface of the board is oriented to the growth rings of the tree. The drawing on the opposite page and the photos at right illustrate this.

**PLAINSAWN.** As the name implies, plainsawn boards are cut from the log with no special consideration to grain pattern. The annual rings usually form concentric arcs on the end of the board and the surface grain has a typical “cathedral” pattern. This is the easiest and most efficient way to cut boards from a log. And this is the type of red oak and white oak you’ll most commonly find at the lumberyard.

**QUARTERSAWN.** There’s another way to cut oak that gives the boards a very unique figure. A quartersawn board is cut so that the annual rings are as close to perpendicular to the face as possible. When oak is quartersawn, the large, flat “rays” are exposed on the surface. These simply appear as dark, linear streaks on the surface of the plain sawn boards in the photos below. The result of this is the characteristic “flake” figure often found on Craftsman-style furniture.

The rays of white oak are longer, so white oak usually has a more pronounced quartersawn figure than red oak. For this reason, quartersawn white oak is more sought after and commonly available than quartersawn red oak. But when a slightly more subtle quartersawn figure would look better, red oak can be a good choice.

**RIFTSAWN.** Riftsawn oak falls in between quartersawn and plain sawn oak. This milling technique takes advantage of the ring porous nature of oak to create lumber with a linear figure. Here the boards are cut so that the annual rings are 30° to 60° to the face. This avoids the flake look of quartersawn oak while emphasizing the almost striped look created by the pores.

On a project, riftsawn oak gives you a very uniform look and makes matching boards much easier. If a strong riftsawn look is what you’re after, the larger pores of red oak give it the nod. The hall bench on page 22 is a good example of this.

**LOOKS AREN’T EVERYTHING.** Besides appearance, there are a few other characteristics that can affect your choice. Both oaks own a well-deserved reputation for being hard and heavy when compared to other commonly used woods. White oak can claim top prize in this category. It’s about 10% heavier than red oak and consequently a bit denser and harder. Just another point to keep in mind.

As any woodworker can tell you, different woods have their own working characteristics. The two oaks are no exception. I don’t think you’ll notice too much difference between red and white oak when working with power tools. Both can be cut on the table saw, jointed, planed and routed easily.

But when it comes to hand work, you’ll notice a bit of a difference.



The hardness and density of white oak can make operations like hand planing or paring with a chisel a challenge. So if your project involves hand work, red oak may be the wiser choice.

**AN OUTDOOR PROJECT.** Finally, I should mention one other distinction. If you’re building an outdoor project that will be exposed to the weather, your best choice is usually white oak. White oak is essentially waterproof (it’s the oak used to make barrels) and is fairly decay resistant. Red oak doesn’t have these properties and won’t hold up to the elements nearly as well.

**PLYWOOD TO MATCH?** What about mixing solid wood and plywood in a project? Due to availability, this can sometimes be a sticking point. Plainsawn or rotary cut red oak plywood is easy to find while white oak plywood is becoming more common. And both types are sometimes available with a quartersawn or riftsawn figure, but you might have to do some serious searching or put in a special order with your lumber supplier.

I guess the really good news here is that building with oak gives you lots of options and it’s hard to go wrong. Whichever oak you choose, your project will look great. **W**

▲ As you can see in the photos above, the three different “cuts” of oak can be very different in appearance.



▲ **White Oak.** You’ll often find a slightly darker color and denser texture in a white oak board.



▲ **Red Oak.** The larger pores and lighter color give red oak a slightly stronger grain pattern.



## “African Padauk” from ([www.wood-database.com](http://www.wood-database.com))



Padauk (sanded)



Padauk (sealed)

Common Name(s): African Padauk, Vermillion

Distribution: Central and tropical west Africa

Tree Size: 100-130 ft tall, 2-4 ft trunk diameter

Janka Hardness: 1,970 lbf (8,760 N)

Crushing Strength: 8,130 lbf/in<sup>2</sup> (56.0 MPa)

Shrinkage: Radial: 3.3%, Tangential: 5.2%, Volumetric: 7.6%, T/R Ratio: 1.6

February 8, 2021, No. 346

**Color/Appearance:** Heartwood color can vary, ranging from a pale pinkish orange to a deep brownish red. Most pieces tend to start reddish orange when freshly cut, darkening substantially over time to a reddish/purplish brown (some lighter pieces age to a grayish brown). See the article [Preventing Color Changes in Exotic Woods](#) for more information.

**Grain/Texture:** Grain is usually straight, but can sometimes be interlocked. With a coarse, open texture and good natural luster.

**Rot Resistance:** Has excellent decay resistance, and is rated as durable to very durable. Padauk is also reported to be resistant to termites and other insects.

**Workability:** Overall Padauk is easy to work; tearout may also occur during planing on quartersawn or interlocked grain. Padauk turns, glues, and finishes well.

**Allergies/Toxicity:** Although severe reactions are quite uncommon, Padauk has been reported as a sensitizer. Usually most common reactions simply include eye, skin, and respiratory irritation. See the articles [Wood Allergies and Toxicity](#) and [Wood Dust Safety](#) for more information.

**Pricing/Availability:** Widely imported as lumber in a variety of lengths and thicknesses, as well as turning and craft blanks. Should be moderately priced for an import.

**Sustainability:** This wood species is not listed in the CITES Appendices or on the IUCN Red List of Threatened Species.

**Common Uses:** Veneer, flooring, turned objects, musical instruments, furniture, tool handles, and other small specialty wood objects.

**Comments:** Padauk has a very unique reddish orange coloration, and the wood is sometimes referred to by the name Vermillion. Unfortunately, this dramatic color is inevitably darkened to a deep reddish brown color. (See the article [Preventing Color Changes in Exotic Woods](#) for more information.) UV-inhibiting finishes may prolong, but not prevent the gradual color-shift of this brightly colored wood.

Padauk is moderately heavy, strong, and stiff, with exceptional stability. It's a popular hardwood among hobbyist woodworkers because of its unique color and low cost.

## GREEN COUNTRY WOOD- WORKERS

The Green Country Woodworkers are made up of men and women who are interested in woodworking as a hobby.

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The monthly meetings are conducted as educational forums for the benefit of our members and guests. We have idea exchanges, problem solving sessions, safety tips and tool tips plus a main speaker on topics related to woodworking in all its phases.

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The club sponsors community service projects such as making Toys for Tots at Christmas and supporting Beads of Courage by turning bowls and making boxes for children undergoing cancer treatment at Children Hospital at Saint Francis. The containers hold the children's beads. The beads represent their treatment progress.

## KNOTHOLE NEWS

c/o Mike Ruttgen  
rruttgen@att.net  
(918) 200-9332, home

## OBJECTIVES

- To provide the Knothole News, a monthly newsletter
- To promote woodworking and participate in woodworking and craft shows to inform the public of club activities
- To make wooden toys which are donated to selected organizations throughout the year
- Monthly Show & Tell; all items entered in the show and tell will be presented to the membership by the builder

Membership applications are available at each meeting from the club secretary or treasurer. At this time, no membership fee is charged.

## MEETINGS

The club meets on the second Thursday of each month at 6:30PM, typically at a designated member's shop. The upcoming location and topic are published in advance in the Knothole News.

We also have a monthly dinner/social on the 4th Thursday of the month at 6:00PM; the location is determined during the regular monthly meeting.

## WWW.GREENCOUNTRYWOODWORKERS.ORG

Please be sure to check out our new web site for more information about the organization, past Knothole News publications, pictures, resources, etc.

