



Cedar Valley Woodworkers

Cedar Valley Woodworkers Association

Volume 10, Issue 3

March 2009

End Grain End Grain

By Jeanine Begalske



Jeanine Begalske
President

Editors note; Again this month we have a guest columnist Eugene Wengert President, The Wood Doctor's RX, LLC

Professor Emeritus UnW Madison

Big Oaks from Little Acorns Grow

Gene Wengert

Oak (*Quercus* genus) is the dominate hardwood tree (broadleaf trees are called hardwoods) in our forests east of the Mississippi River. Almost 50% of these eastern forest trees are oak. The over 40 species of oak are divided into two groups...red and white. The red oak trees have points at the ends of the leaves and bitter acorns; white oaks have rounded ends and sweet acorns. In fact, white oak acorns can be dried, ground into flour, and used to bake bread.

Once the oaks are cut into lumber, it is impossible to separate the 40 species. All that can be done is separate the wood into two groups...red or white. The key difference between red and white oaks is not so much the color—many red oaks have more red coloration than white oaks, but not all—but the length of the ray cells. The ray cells are seen as lines running lengthwise. In red oak, the ray cell lines are seldom over 3/4" in length while in white oak they are much wider and often over 1-1/2" long (Figure xx).

USES

Additional differences are that most, but not all, white oaks have cells that have been plugged (technical term is occluded) with chemicals so that the wood is impervious to liquids. This is why white oak is used for wine barrels...they will not leak. Another reason that white oak is used for wine is that, when

properly air-dried for about 2 years, the oak will develop a strong vanilla flavor and aroma, adding a fantastic bouquet to the wine in the barrel. Red oak barrels would leak and also would impart a strong acidic flavor to the wine.

In addition to red and white oak, we often, because the growth rate affects processing (especially drying), color and overall appearance, divide the oaks into fast grown (over 1/4" growth ring spacing) and slow grown (Table xx). This division is sometimes called Northern or Appalachian oak (slow grown) and Southern or lowland oak (fast grown), but such a geographic division is not always correct.

Oak lumber is used for furniture (#1 species), cabinets, flooring (#1), pallets (#1), and myriads of other uses. Oak, in addition to having a wonderful appearance, is strong and durable. White oak, because it is naturally decay resistant, as well as resistant to wood-eating insects, is used in outdoor exposure for items ranging from railroad ties and landscape timbers to outdoor signs and outdoor furniture. In the "days of yore," white oak was the preferred wood for sailing ships, especially the keel and other structural components.

There is one oak species, live oak, or *Quercus virginiana*, that does not loose it leaves in the winter. It is not classed as a red or white oak, but is its own group. This wood has grain that is exceptionally intertwined. The wood is decay and insect resistant. The so-called interlocked grain made this wood especially attractive for use in the sides of sail-powered warships, as cannon balls would not splinter the wood with wood

(cont'd on page 2)

Inside This Issue	
Presidents Article	1
The Oak Bulletin Board	2
Minutes Treasurers report	3-4
Show and Tell	4-5
Cattle congress submission Rules	6
Mentors and Services	8
Sponsors	9
Officers and Committee Members	9

No For Sale items this month**The Oak Bulletin Board**

The regular CVWA Meeting at the Waterloo Center for the Arts. 225 Commercial Street, Waterloo, IA. Tuesday March 10, 2009 @ 6:30.

Corridor Wood turners Meeting will be at Acme Tools across the street from the former Fine Woodworking store Saturday March 14, 2009 @ 10 AM

The next Executive Board meeting will be Wednesday March 18, 2009, 7:00 PM at Hy-Vee Crossroads meeting room.

March 19 Tour @ Wood Components & Technologies 9:45 AM

OTHER DATES OF INTEREST

Shop Tours second Saturday of each month more info contact Dave Turner.

March 21-22 Artistry in wood Woodsmith store in Des Moines

Scroll saw club meeting WILL BE Thursday March 26, 2009 in Art Mehman's shop @ 6:00 PM

Pine 2x4x8 CONTEST More info to follow

It is not too early to be thinking about toys for the Salvation Army

(Continued from page 1)

splinters then flying all over, but would "absorb" the cannon balls. The interlocked grain, although creating a unique appearance, makes this wood very difficult to machine.

GRAIN

Oak is considered as a coarse grain wood. This is because it has large vessel cells that develop early in the growing season within each ring, while the remainder of the ring is rather fine. It is these large vessels that are occluded in most white oak species. These large vessels in both red and white oak give oak its beautiful heavy grain. The ray cells also give oak its special character. The manner in which oak is sawn or veneered can accentuate the vessel and ray appearance.

When oak is sawn or veneered so that the face is parallel to the annual growth rings (called flatsawn or flat grain), then the grain on the face appears as a series of "V"s or pyramids (Figure xx). When the face is sawn or veneered so that the rings run face to face (or vertically or perpendicular to the face), the grain appears as straight lines with the ray cells give this quartersawn surface a striking pattern (Figure xx). These ray patterns are called ray flecks. (Note: Riftsawn is a term used for lumber that is not perfectly quartersawn, but is close and still has the ray fleck appearance.)

MACHINING

Oak is a dense wood; one of the densest native woods in North America. This means that machining will tend to create grain tear out and splitting if tools are not very sharp (this includes using fresh sandpaper with sharp, and not worn, particles, if cuts per tooth or per blade cut are too large (20 cuts per inch is probably ideal), if cuts are too deep (over 1/8" deep is often too deep), if planing or machining against the grain (hard to avoid at times), or if the moisture content is too low (under 6.0% MC is too low). The best advice is have patience and be sharp.

GLUING

Being very dense, oak is also very strong. Oak is too strong to "give a little" when the pressure is applied and the surfaces are not perfect mates. This means that two oak surfaces to be glued must be extremely flat and freshly prepared (within 30 minutes). Any glue works well with oak, giving a joint that is stronger than the wood itself.

MOISTURE

Oak is a wood that moves quite a bit when the moisture changes. The moisture changes when the humidity around the oak product changes, for whatever reason. The seasonal variation in a home or office is often 6% MC in the winter to 9% in the summer, resulting in a 1% size change in oak..

- (continued on page 7)

Minutes of CVWA 2-10-2009 Club Meeting

President Jeanine Begalske called the meeting to order on February 10th at the Waterloo Art Center. She welcomed everyone and reminded them to silence cell phones for the meeting. Jeanine mentioned that the newsletter was only available at the club website. That website is www.cedarvalleywoodworkers.com.

Jeanine contacted the Food Bank about the **Empty Bowl Fundraiser**. This event is only held every other year. John with the Food Bank will come to our April Meeting to collect the bowls made. This gives us a chance to give to a great cause!

Our next executive meeting will be held February 18, 2009 at the Crossroads Hy-Vee in the upstairs meeting room at 7:00 p.m. Ev Schilling will be our volunteer this month.

Show & Tell:

Kevin Bierman- Turned bowl, Raised lidded box
 Don Collum- Oak wall cabinet
 Bob Hewlitt- Rocking Horse
 Sid Sidler- Carved tree house from cottonwood bark

Tool Raffle:

Clamps- Vernon Tapper
 Tape Measurer- Marvin Widdel

Treats for the evening:

Kenny Degner
 Jim Brandhorst
 Gordon Pint
 Don Collum
 Don Gurney- coffee

Time for members:

Dave Turner brought up the Shop Meets. There are signup sheets available. This is held the second Saturday of the month. Any questions just ask him. Reed Craft wanted to share about the opportunity to show off our wood projects at the Cattle Congress. There would be the same categories as at our Christmas party plus ribbons and prizes. This is a great way to promote CVWA. **And you have plenty of time!!!** Rex Pershing had a box of pieces of box elder wood for sale. Contact him if you are in need of this wood. Tom James had a wood lathe for sale, just call. Hank Morris said he really liked the newsletter. It was brought to everyone's attention that the Woodworking Shows were to be in Kansas City, Feb. 13-15. Great time to see many demo's and also get some great deals. Bob Hewlitt wanted everyone to know that several of our members are in the hospital or just out. They are- Pat

Vollbrecht (heart surgery), Dennis Gilroy (knee surgery), Bob Glawe and Bob Colby (back surgery).

After a coffee break, we enjoyed Joe Lecnia showing us how to turn a pepper mill. Thanks Joe.

Respectfully Submitted, Wanda Bailey, secretary
Minutes of CVWA 2-18-2009 Executive Meeting

The meeting was called to order by President Jeanine Begalske at approximately 7:00 p.m. at the Crossroads Hy-Vee meeting room. In attendance were: Gene Knief, Bob Anderson, Reed Craft, Ev Schilling, Bob Glawe, Dave Turner, Bob Hewlitt, Jeanine Begalske, Paul Bailey, Wanda Bailey, and Jim Wikle. Paul Bailey gave the treasurer's report. Expenses for the month was \$60.10 and income was \$232.24, with an ending balance of \$1593.56. It was accepted and filed.

Monthly demos were discussed. Due to Pat Vollbrecht having surgery, we needed to change the demo for March. Bob Hewlitt will check with ACME doing a demo on the Rockler CNC Router. Bob Anderson offered to demo screw threading. Bob Hewlitt offered to show how to change cells in batteries. April will be Tom Bussey on Cabinetry.

Tours:

A Tour at Wood Components & Technologies, 6122 Nordic Drive, Cedar Falls for March 19th at 9:45 a.m. Pat Vollbrecht has set this tour up for us. Thanks.

Dave Turner and Gene Knief volunteered to ask for volunteers for our executive meetings.

President Jeanine brought up the idea of a 2X4X8 Pine Contest. The contest would be final at our September meeting. It was decided that everyone would vote and ribbon prizes given.

ACME needs member's list in order to give a discount. Jeanine will ask at the March meeting for people who want to give their name to ACME for discount. Bob Glawe will submit it to ACME.

Reed Craft will talk to Tammy at the Waterloo Art Center to see if we can place a sign advertising Cedar Valley Woodworkers that meets there every second Tuesday evening. Also, it was suggested that the information about submitting wood projects for the Cattle Congress and all the wide range of categories to choose from be placed on the website.

(Continued on page 4)

(Continued from page 3)

Bob Hewlitt will talk to Dennis Gilroy about reserving the shelter for the August Picnic.

Jeanine found out from Woodsmith that March 21st-22nd will be **Artistry in Wood**.

She will bring up about the Salvation Army Toys. Gene Knief said that "pull toys would be good".

Newsletter deadline: February 27, 2009

Respectfully Submitted- Wanda Bailey, secretary

Cedar Valley Woodworkers

Treasurers Report February 18, 2009

Beginning Balance		1421.42
Income-		
Dues	150.00	
Raffle	82.00	
Dividend.	24	
Subtotal	232.24	
Expense -#2351-Betty Vollbrecht-Tools	60.10	60.10
Ending Balance		1593.56

Show and Tell

Sid Sidlers Carved Tree House from Cottonwood Bark



NEW PATTERN TEMPLATE LIBRARY

Your executive board has developed a new loaner program that might be of interest to each of you. Though the contribution of several different individuals the following full size templates are available for check-out by club members:

Nativity set:

Rocking horse:

Two different doll cradles

Should any of you have a pattern template set that your willing to share, call a board member!

Show and Tell

Bob Hewlitt's Rocking Horse



Show and Tell



Above: Kevin Bierman's woodturnings

Center: Don Collum's Oak wall cabinet



Demonstration by Joe Lecnia

Turning Pepper Mills

Bottom Left: Joe is roughing out a blank Lower Right: Finished product in a display case.



Cattle Congress Submission Rules

WOODCRAFT

NOTES:

1. Items entered shall be made by the exhibitor using mostly wood with the exception of knobs, latches, hinges, fasteners, clock works, and wheels etc. which are a necessary part of the item.
2. Exhibitors are limited to one item per class.
3. The exhibitor shall be the person who made the item.
4. Pictures, wall hangings or any item to be displayed by hanging shall have a sturdy hook included.
5. Judging will be on quality of craftsmanship and finish with consideration given to originality, unique use of wood and proportionality with the decisions of the judges final.
6. Exhibitors shall comply with all rules of the National Cattle Congress.

CLASSES:

1. **Furniture**, (any item usually considered household, office, shop or garage furniture, including a desk, bookcase, clock, tool box, cabinet and display case etc.)
2. **Toys**, (Items that a child would play with including a doll house, barn, child chair, rocking horse, doll cradle, wagon, tractor, boat, pull toys etc. and limited to 3' X 3" x 3' in size.)
3. **Carving**, (any carved wood item such as a duck, fish, animal, characters, busts etc.)
4. **Turning**, (a bowl, candlestick, platter, pen/pencil, vase etc.) etc.)
5. **Intarsia**, (Decorative or pictorial inlay work involving a mosaic of wood pieces.)
6. **Miscellaneous**, (Wall hangings, puzzles, picture frames, jigs and artistic decoration etc.)

PREMIUM SCHEDULE:

In each of the 6 classes; $\frac{1^{\text{st}}}{\$4.00}$ $\frac{2^{\text{nd}}}{\$3.00}$ $\frac{3^{\text{rd}}}{\$2.00}$

(Continued from page 2)

This high movement means that the lumber used in a project must be very close to the final moisture that will be achieved after the project is completed. For most homes and offices, this means that the wood should be at 7% MC, or in equilibrium with 38% RH. Note: Finishes slow the change in moisture but do not stop it. When buying oak lumber, always insist on lumber that has been stored indoors and not outside. Outside lumber will typically be 11 to 12% MC. Note: For shops in basements or that are not heated, always monitor the RH to make sure that conditions are about 37% RH; use heat or a dehumidifier to reduce the RH as needed. If not one, the moisture will change when the project is moved inside or upstairs. For exterior use, 12% MC is a common equilibrium value. When using dry oak for these projects, allowances must be made for expansion in-use.

A special problem with oak, especially the red oak group, is the color change caused when wet or dry wood is in contact with water that has a little iron in the water. The iron can also be a nail, staple, screw, flower pot, or other outside source. Iron plus tannic acid (oak is full of tannic acid) plus water will form iron tannate, which is dark blue to black in color. The good news is that a weak solution of oxalic acid (often sold as an iron eliminator for bathroom fixtures) will instantly remove the discoloration. However, oxalic acid is a weak bleach, so strong solutions or long exposure times are not suggested, as the grain will become bleached. Because of this iron tannate stain, when oak is used in exterior exposures, always use stainless steel fasteners.

FASTENING

Screws, nails and staples in oak have very high holding power. Exceptionally large diameter fasteners are probably not required. Pre-drilling the holes for screws is always a good idea (perhaps 90% of the inside diameter of the threads); pre-drilling for nails that will be within an inch or two of the ends of edges of the wood is also prudent to avoid splitting. Pre-drilling, if the hole is not overly large, does not reduce holding power.

FINISHING

As mentioned, oak, especially red oak, is very porous, especially in the early growth within each ring. When staining oak with penetrating stains, uneven absorption within each ring will be noted, giving different staining effects. In addition, it is not unusual to find that oak will have small regions or zones of fibers that have a lot of cellulose (tension wood is the technical name); these

zones absorb stain very well compared to the other regions. This uneven absorption will give a blotchy appearance to the wood. This difference in absorption can also create problems with film forming finishes. For this reason, it is often advisable to seal the oak prior to finishing, using a filler, sanding sealer or wash coat. This initial sealing step will assure more uniform finishing. Often, the stain pigments are put in the finish itself to reduce this uneven absorption.

As oak darkens when exposed to light, the initial stain appearance should be a little lighter than the desired color. In outdoor exposure, it is probably impossible to prevent the wood from developing a grey patina; the best approach for outdoors is to use a water repellent stain and then re-stain every few years as needed

Bits and Pieces

Shop Tours the second Saturday of the month see Dave Turner

New Contest Pine 2x4x8 Come to the meeting to find out more.

Salvation Army Toys it's not too early to start thinking about what to make Christmas will be here before you know it

March 19 Tour of Wood Components and Technologies 6122 Nordic Dr. Cedar Falls 9:45 AM

Artistry in Wood March 21st and 22nd Woodsmith Store in Des Moines

Thought for the day: In wood working there are no mistakes just opportunities to reevaluate the design

(Jim Tolpin Woodworking Wit and Wisdom)

List of Mentors for Club Members. I believe the mentor's time is free, but the person being mentored is expected to cover any material costs.

Canoe/Kayak construction, Chip Schmidt, 277-8504, cschmidt@cfu.net

Detailed Toys, Bob Anderson, 232-9813, wtoys@yahoo.com

Jack of all trades (enjoys a Challenge), Hank Morris, 235-0692, hankannam@aol.com

Has the Ability to figure MOST problems out—Dick Buchanan, 277-2477, rbuchanan@cfu.net

Intarsia, Pat Vollbrecht, 232-1923, patV35@mchsi.com

Fretwork, Garylee Thurm, 279-3219, flytying4u@hotmail.com

Cabinet making, Tom Bussey, 641-435-4354, tebussey@gmail.com

Wood carving, Sid Sidler, 233-1396, sidsstudio@aol.com

Furniture and cabinet building, Jerry Krug, 475-2391, jkrug@netins.net

Classes and Services for Pay by Fellow Club Members

Wood Carving Class by Sid Sidler

Waterloo Center For The Arts

Sid Sidler will again be teaching a carving class at the Arts Center. Classes will start on Thursday February 5 from 6:30 to 9:30 for the next 6 weeks, this class is open to all skill levels ,participants must be 18 or older

. The Art Center has carving tools so beginners will only have to pay the class fee \$75 plus a very small amount for carving wood.

Any one interested in participating in the class should call the Waterloo Center For The Arts to enroll. 319-291-4490, class size is limited to 8 students.

Mr. Sidler will be offering a second carving class starting April 15 for the next 6 Wednesdays the class will be open to all skill levels, the fee is the same. If interested contact the Arts Center at 319-291-4490.

Sharpening services by Glenn Johnson, 641-435-2511

Sharpening Services by Carl Leavell, 319-233-4491

Please remember to patronize our Sponsors!

** Member ID required for discounts



**Woodsmith
Store****

10320 Hickman
Road

Clive, IA 50235

515-254-9494 or

1-800-835-5084



**501 West 1st

Avenue

Durant, Iowa 52747-
9729



10% Club Discount

www.hartvilletool.com

**Contact Rick Ruport for
details**

**Glenn's Sharpening
32446 Floyd Line St, Nashua
641-435-2511**

**Acme Tools
1943 Blairs Ferry Rd.
Cedar Rapids**

**Sherwin Willams
5212 University Ave,
Cedar Falls**

Officers and Committee Members

Elected Committee Members

President Jeanine Begalske

1st Vice President Reed Craft

2nd Vice President

Secretary Wanda Bailey

Treasurer Paul Bailey

Appointed Committee Members

Committee Member Rick Rupert

Committee Member Gene Knief

Appointed Committee Members

Committee Member Dave Turner

Committee Member Robert Hewlitt

Committee Member Dennis Gilroy

Club photographer John Mason/Bob Glawe

Refreshment Chairman Bob Anderson

Newsletter Jim Wikle