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Volume 25, Number 1

Newsletter

January 2016

<u>Welcome</u>

President John Loftis welcomed a large group to the January meeting and asked for guest to introduce themselves.



<u>Guests</u>

Russ Wolf was invited to the meeting by Wayne Bower. Russ has taught wood shop, likes to build furniture and make musical instruments.

Homer Goode was a member back in the 90's and is from Sanger.

Jeff Backus is new to woodworking and heard about NTWA at the Plano Woodcraft store.

Dave Francis of Frisco is also new to woodworking and found out about NTWA at the Plano Woodcraft store.

Dan Eason has done mostly home repairs and now wants to do more serious woodworking. Discovered NTWA at the Plano Woodcraft store. John encouraged the guests to go to the NTWA webpage and sign up for email from the club.

Announcements

John reminded everyone about the sharpening program at Woodcraft on Saturday. You are to bring your chisels, plane blades, card scrappers and anything else you want to learn to sharpen. Also bring your sharpening stones and/or diamonds.

TJ announced that Lie Nielsen has donated a 4 DVD set on sharpening for the club library.

Dave Cassman brought in a Ryobi 1HP router to be given to a good home. He also brought in a bandsaw blade free for the taking.

John announced that Maria at the Rockler Dallas store has a router table with a Jessem lift for sale. \$675 takes all.

It was mentioned that Oneida has announced a price increase so if you're thinking of buying anything from them, you need to do it before February 1st.

For those attending the sharpening program, Scott at Woodcraft is having a special sale on stones, diamonds, strops and polishing compound at 20% off.

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See us at: www.ntwa.org

Volume 25, Number 1

Newsletter

January 2016

Guests and new members were reminded by President John Loftis that the raffles are for members only, but you don't have to join the club to attend meetings and receive emails.

The grand prize for the July potluck will be a \$500 gift card from Lee Valley instead of the board picking an individual piece. Thank you Steve Jenkins for that suggestion.

Johan Gustavsson said that there are requests on our Facebook page from the public wanting work done. If interested, check the page regularly.

Shop Questions

Mike Minarzick has a through tenon that is too loose and was wondering if wetting the tenon to swell it would work. The general consensus was no; it would just shrink when it dried and still be loose. Suggestions for a permanent repair were making a false or floating tenon, laminate one side of the existing tenon or use a wedge of a contrasting wood and turn it into a decorative fix.

Homer Goode asked if anyone has a Grizzly bandsaw and if so, do they like it? 3-4 members said yes to both. During the discussion, a caution came up to not over tension the blade for resawing.

Mike Blazier said he normally prefinishes doors before assembly, but he is now making doors that will

be inset rather than overlaid and is concerned about matching the finish on doors he may have to trim. John Loftis suggested he concentrate on the carcass to make sure it is the right size. Another suggestion was to make a dummy block and use it to get the desired fit then transfer that to size the door before finishing.

Owen Haggard asked if anyone has worked with one of the automatic risers for TVs. Steve Jenkins said he has and will get with Owen after the meeting.

Sundar "Sunny" Krishnamodrthy is selling a 6" jointer and a 12" Dewalt planer for \$400 each – or as he says, "Let's talk."

TJ announced that she has several mobile bases and dust collection hoses free for the taking.

Show & Tell



Greg Merrell made this bow ribbon box out of aspen and walnut and then lined it with deer skin.



See us at: www.ntwa.org

Volume 25, Number 1

Newsletter

January 2016



Mike Hollander turned these light/fan pulls and refrigerator magnets with cultured capstones.



Joe Polich made this scroll saw stand with \$23.00 of materials. The joints are held with lag screws penetrating dowels in the rails. The top is adjustable with a piano hinge at the front so you can angle the scroll saw if desired.



Steve Yauch turned a variety of snowmen and Christmas tree for decorations.

Greg Merrell won the \$10.00 Show & Tell drawing. Everyone asked if he was going to give it to his wife since technically it is now her box.

Raffle

<u>Gary Turman</u>: \$50 Lee Valley gift card.

<u>Frank Haas</u>: Popular Wood's ultimate sharpening guide "The Perfect Edge" by Ron Hock.

<u>Steve Jenkins</u>: Garlick Saw Co. card scrapper and sharpening kit (mill file and burnisher).

Thank you TJ for keeping with Saturday's sharpening program!



See us at: www.ntwa.org

Volume 25, Number 1

Newsletter

January 2016

Program



Rick McGaha of D&R Saw and Tool gave a great program on saw blades and router/shaper bits.

D&R Saw is a 2nd generation business started by Rick's father in 1966 in his garage. His dad would go to various construction sites in the mornings to pick up both hand saws and power saw blades to take home and sharpen at night. Rick has been in the business since he was 6 years old. D&R is capable of making custom saw blades and router bits from scratch or just sharpening yours.

In addition, D&R does sell tools and some supplies.

You can take your blades in to them on Harry Hines in Dallas or you can mail or ship them and they will ship them back. In addition to sharpening, they can replace damaged or missing teeth and can do emergency grinds while you wait. And yes, they still do handsaws. Their hours are 7-4 daily and are closed weekends.

Rick brought along a great handout that illustrated saw blade terminology and described the differences in the different tooth grinds.

He stressed that blade design is determined by blade diameter and the speed it is expected to operate at. As an example, he said there are 20 different blade grinds for the 5 profiles shown on page one of the handout.

Rick says glue-line rip blades have 24-28 square, flat-top teeth. They build higher heat while cutting so you need to feed your stock at a steady rate.

Some pointers he gave regarding problems with a clean cut on one side and a rough cut on the other were:

- 1. Fence not parallel to the blade.
- 2. Carbide shoulder of one or more teeth out of alignment.
- 3. If crosscut, miter slot not parallel to the blade.

In response to a question on why some blades such as Forrest are more expensive than others Rick said Forrest blades have zero runout which is the leader in the industry. This is due to the steel they use for the blade blank.

Saw blades can generally be sharpened 15-20 times. Rick says



See us at: www.ntwa.org



North Tet

Volume 25, Number 1

Newsletter

January 2016

they don't sharpen tabletop planner blades because the blades are so thin they bow during the sharpening process.

Sliding chop saws need blades with zero or negative hook teeth because they are a "climb" cut. Stay with the saw manufacturer's recommendation on type of blade to use on their saw.

Saw blade teeth material have transitioned from HSS (high speed steel) to carbide, to insert carbide and now to diamond. Diamond is only on the front of the tooth which remains carbide.

The best finish is with HSS and the worst is with diamond. Life is better with the carbide, but better yet with diamond which is why some professional shops are using diamond. Rick says diamonds need more engineering with hook and angles to improve the finish they give.

Regarding the sharpening of router bits, Rick says if the diameter of the bit is 3/8" or less, don't bother sharpening.

D&R recommends setting the blade height to 1/8" or so above the work piece to extend the life of the blade. This will give you more teeth cutting through your wood.

He also recommends cleaning both the blade and arbor collars whenever

you change the blade. This will eliminate blade wobble. Use alcohol.

He closed the program with the answer to a question on when do you know the blade needs sharpening. He says the easiest way to tell is when it gets harder to push the stock through the saw. On carbide, you can also tell using a bright light. If there is a narrow line at the top of the tooth, the blade is dull.

You can reach D&R Saw at 11060 Harry Hines Blvd. in Dallas or at 972-243-7701. Their email is <u>drsawrick@aol.com</u>.

> *Next club meeting: Feb. 16th, 2016 7:00 p.m. The Party Barn*

Lynn Floyd – Architectural molding

Newsletter edited by: Joe Polich Pictures by: Sidney Futrell



Sharpening With Jonathan Schwennesen Heritage School of Woodworking



Presented by the North Texas Woodworkers Association

Class outline:

What is sharp?

Two highly polished planes intersecting forming a precise finite cutting edge

Practice-comfortable position

How does the edge dull?

Types of Stones:

--Japanese water stones

Advantage of water stones is that they cut fast and are inexpensive. The disadvantage is that they must be used wet and they dish out so must be flattened after each use or during heavy use. It is best to have a sink in the shop with these stones.

--Oil stones-natural and man made

These stones are harder than water stones and don't dish as readily, but you must still flatten them. Downside is the oil can contaminate your work if you're not careful.

-Ceramic

Jonathan said ceramic stones are not practical for sharpening chisels and plane blades and therefore did not cover their use.

-Sandpaper on glass

Good for initial minor maintenance

--Diamond

Can be used dry, but Jonathan used a spray bottle to wet the diamonds before each use to flush any old grit out. The advantage of diamonds is that they stay flat. The disadvantage is their cost and the highest grit is usually 1200. This requires a secondary process such as a 4000-8000 grit water or oil stone and a strop.

Sharpening made simple--Five Steps: (based on the use of diamonds)

-Coarse (250)--Reestablish bevel. Continue until a burr appears. Take off burr on the back (flat side) with fine stone



- --Medium Stone (600)--Sharpen bevel side until the burr appears on back side of chisel. Take off burr with fine stone
- -Fine Stone (1200)--Sharpen bevel side until burr appears. Take off burr with fine stone
- -Extra fine stone(4000)--Sharpen bevel until burr appears. Take off burr with extra fine stone
- --Strop--Pull bevel back across leather strop 10-15 times. Same process for flat side of blade being careful not to raise it up and create a round.

A micro bevel adds strength to the leading edge, but Jonathan typically does not recommend adding one to make maintenance much easier.

The goal is to get a sharp edge as quickly as possible. If you are just starting out, Jonathan suggested a course (250 grit) diamond and a fine (1200 grit) diamond. If desired, you can add a medium (600 grit) diamond between the course and fine diamonds to eliminate scratches quicker. You can then go straight to the strop charged with chromium oxide to get the final polish or to a 4000-8000 grit water/oil stone before using the strop. Jonathan recommends the green colored jewelers rouge.

Start the sharpening process by stroking your chisel/blade across the stone with the chisel/blade held at the proper angle. Don't stroke with the chisel/blade parallel to the stone; stroke with the chisel angled off parallel.

Angles--25 degrees--30 degrees

Jonathan says the most common angle is 25°, but an angle up to 35° will work.



Member Gary Turman said a quick reference for a 30° angle is to imagine a triangle from the leading edge back toward the handle. Double the thickness of the chisel for the length of the long edge of the triangle and you'll have a 30° angle every time. Lengthen it for a 25° angle.

<u>Tips:</u>

- With new chisels you need to check the back of the chisel and flatten if necessary. Only 1" of the leading edge need be flattened and it's okay for the center to be lower than the front edge and sides. Keep in mind that the back of most Japanese chisels are hollow ground. Flatten and polish the back of the chisel using the same steps as you would for the angle on the face.
- 2. On used chisels, if the leading edge is rounded or nicked, it is usually quicker to grind it blunt rather than try to use the stones to take off enough material to remove the

nick or rounded edge.

3. Stay consistent on the use of your stones. Don't jump back and forth using water/oil stones one time then diamonds the next. This does not apply to using a water/oil stone after the diamonds and before the strop, however.

Plane Blades:

You follow the same basic steps to sharpen a plane blade as you do for a chisel. The only difference, says Jonathan, is that flattening and polishing the back is not as critical for the plane blade. You still create a burr, remove the burr and end up with two shiny surfaces that meet at the proper angle.

Jonathan recommends starting out your plane experience with a 4 or 4 ½ smooth bench plane then possibly adding a rabbet plane. You should flatten the sole of the plane, especially if it is a jointer plane. The higher the polish, the easier it is to push the plane.

The cast iron chip breaker should be positioned 1/16 - 1/8'' from the leading edge of the blade. The frog opens and closes the mouth of the plane and secures the blade and chip breaker to the plane body. If the chip breaker is too tight, it will be difficult to adjust the depth of the blade's cut.

One last bit of advice from Jonathan was to "roll" the side edges of the plane blade at the tip making the side at the leading edge "rounded" instead of square.

Cabinet Scrapers:

Jonathan says that cabinet scrapers are the most versatile tool in the shop. 80-90% of your sanding can be replaced with a scraper, but only if the scraper is sharp. It is especially good for figured wood. You should get a nice, fine curl with a properly sharpened scraper. Follow these six steps demonstrated by Jonathan to create a perfect edge on your scraper.

- 1. Clamp the scraper in a vise, then using a flat mill file, file the edge of the scraper flat and parallel and square to the surface.
- 2. Remove the scraper from the vise and using a course stone, work the scraper at 90° to the stone to reduce the scratches from the file.
- 3. Repeat step 2 using a medium stone.
- 4. Flatten the faces of the scraper with an extra fine stone to remove the burrs.
- 5. Keeping the burnisher flat and using a lot of pressure, burnish the faces of the scraper to create a burr that is parallel to the face of the scraper on both sides.
- 6. With the scraper in a vise and keeping the burnisher flat (perpendicular to the faces, use less pressure to gradually roll the burr 5° down to the right, then flat on the edge and finally 5° to the left using 5-7 strokes each time.

You can generally recreate a burr 2-3 times without having to file the edge of the scraper.

The cabinet scraper works best on hard woods and tends to tear soft woods. You still need to sand your work piece before applying finish. Use short strokes with the scraper to reduce heat buildup.

Note: the burnisher is made of a hard steel (harder than the scraper) and must be highly polished.