

Knothole News

www.greencountrywoodworkers.org



PRESIDENT'S MESSAGE

Another month has come and gone and things are different still. I had a need for some birch plywood and decided to visit Dakota Hardwoods a couple of weeks ago. I was impressed with their selection of stock in a vast array of woods, both ply and dimensioned and rough. I was shown around by Brad Beers the Operations Manager. James Beers is his father and the Branch Manager. We discussed a Club tour and I think the time is getting closer when that is something we can safely try again to do.



Ray Hucek and I visited a garage shop that we are working with the son of the owner to provide disposition of the assorted woodworking tools. His interest is in seeing the tools go to a "good home" where someone can use and enjoy them. Currently thinking is that we can have a private auction in a few weeks and see what we can accomplish. Contents include a ShopSmith with Band Saw and other accessories, a free standing ShopSmith 4" jointer, Ryobi bench top 12"+ Planer, Delta 4" Belt/6" Disc Sander, bench top drill press, Craftsman Radial Arm Saw, General Mortising Machine, a couple of small air compressors, shop vac, saw horses, roller stands, clamps, hand planes, other hand tools, measuring and drafting tools, assorted wood, other small hand power tools, storage cabinets, workbench, hardware, woodworking books, etc., etc. More information to follow as we figure out how and when. Stay tuned.

Hope everyone stays well and I hope to see everyone soon.

Bill Nay, President

*"By All means read what the experts have to say.
Just don't let it get in the way of your woodworking."
John Brown (1932–2008), Welsh stick chairmaker*

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Vice-President	
Gregg Zumwalt	918-605-2761
Secretary	
Bill Morgan	918-369-6435
Treasurer	
Ray Hucek	918-618-2980

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Luncheon

Bill Morgan 918-369-6435

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Vacant

Name Tags

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Toys / Show & Tell

Betty Zumwalt 918-249-4663

Toy Wheels & Axles

Jim Rouse 918-636-9286

Webmaster & Photographer

Arthur Barber 918-671-2437

WHITESIDE MACHINE COMPANY

4506 Shook Road | Claremont, NC 28610 | Phone: 1-800-225-3982 | Local: 1-828-459-2141

Company History — Whiteside Machine Company was founded in 1970 as a general purpose machine shop in the basement of Bill & Bobbie Whiteside's home. Located in Western North Carolina near the furniture manufacturing town of Hickory, the company was often involved in making repairs or special parts for the furniture and woodworking industry. The business soon evolved into a manufacturer of woodworking equipment and tooling. Primarily through repeat business and referrals, the tooling business continued to grow to meet a demand for quality production router bits as well as custom application tooling. Today, Whiteside Machine occupies a 40,000 sq. ft. manufacturing facility and produces a complete line of solid carbide and carbide tipped router bits. As always, Whiteside Machine is continuously striving to improve our product through new technology, improved production techniques, and ongoing research and development efforts; along with rigid quality control, vital customer feedback and extensive field testing.

See how Whiteside makes their router bits.

Go to Youtube and search for "[Whiteside Router Bit Factory Tour](#)"

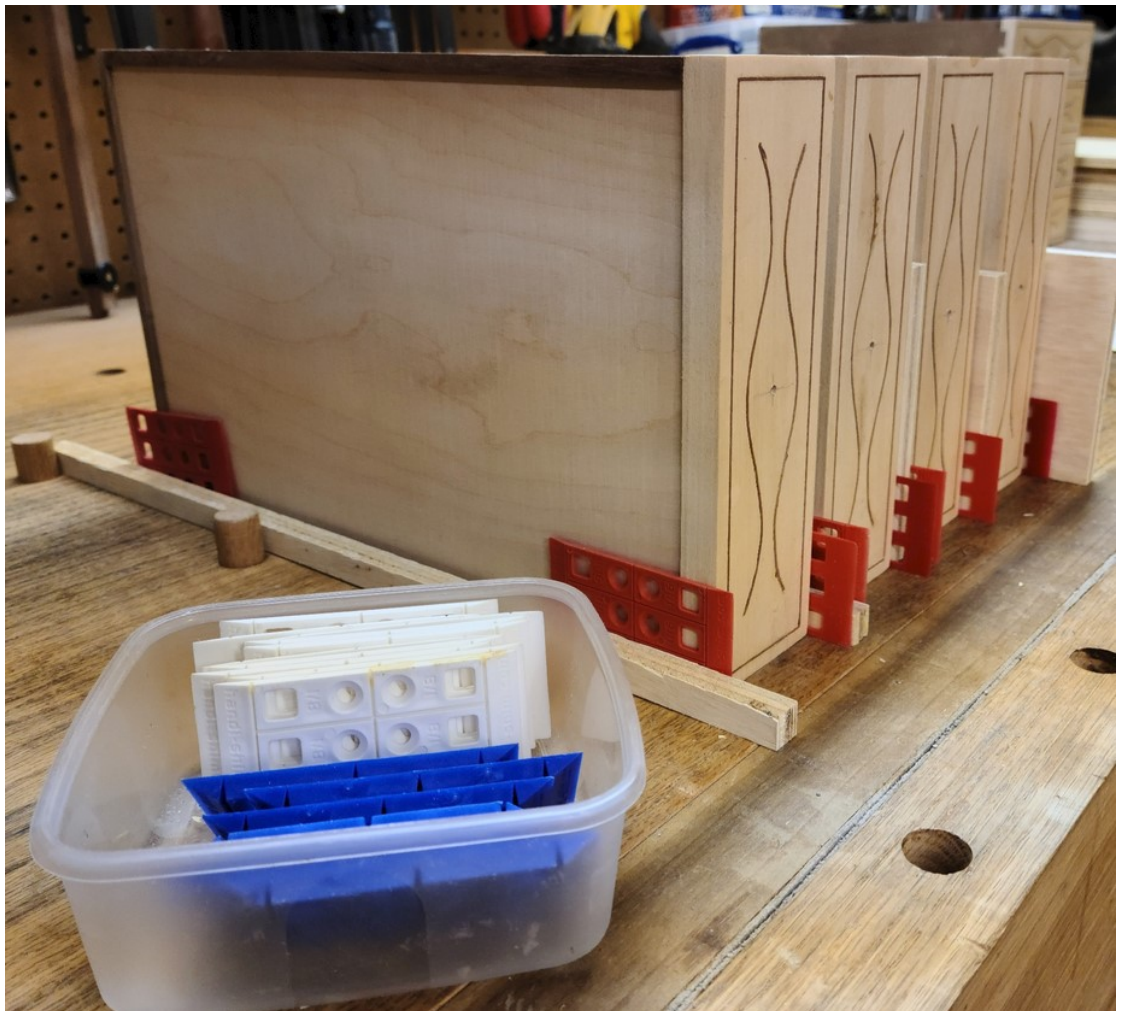
(Gregg Zumwalt)

Surprisingly useful shims. I use them for spacing insert drawers and doors etc. Great for measuring router bit settings with 1/16" increments plus many other shop tasks made easier. Don't know how I got along without them.

(Gregg Zumwalt)

Go to www.leevalley.com/en-us/ and search for "[shims](#)"

Assortment includes 1/32", 1/16", 1/8" and 1/4" thick shims (10 of each), all color-coded and stamped to identify the size you need at a glance. \$9.95



Content Submitted by Club Members (continued)

I made this clothes basket rack for my daughters friend. I made two racks that holds 3 baskets each. Something to do!

(Jim Rouse)



For Sale: Freud 8" Super Dado Saw blade Set 5/8" Bore, \$125.00

The carbide blades and chippers are in excellent condition. The package includes the original case, 4 chippers, shims and two 8", 24-tooth blades. It cuts smooth, square and flat bottom dados and rabbets up to 3/4" wide in a single pass. The reason for selling the dado is that my table saw (a SawStop) will not handle this particular size dado blade. Woodcraft's price is \$200. I guarantee it. If you are not satisfied with the dado, I will refund your money.



Earle Smith
918-286-7343 H
918-404-6443 C

PREMIUM SANDPAPER

(for article on the following pages)

- Norton ProSand
- 3M Fre-Cut Gold
- Mirka Goldflex
- 3M SandBlaster Pro

all
about



premium Sandpaper

Available in a range of grits, premium sandpaper lasts longer and cuts faster than conventional sandpaper.



10 • Woodsmith / No. 221

When it comes to buying a new tool for the shop, many of us will spend hours comparing specs and reviews before making a purchase. Yet for everyday items, we tend to just grab whatever is least expensive. But often there are differences in quality for even the most basic of shop supplies.

Take sandpaper, for example. The top abrasive manufacturers all offer at least one line of “premium” sandpaper. Norton’s line is called *ProSand*. 3M has *SandBlaster* and *Fre-Cut Gold*. And Mirka’s premium paper is known as *GoldFlex*.

These all cost a bit more than ordinary sandpaper, but there are several benefits. Premium sandpaper lasts longer, doesn’t tear as easily, and doesn’t load up as quickly in use. To understand why, it helps to take a closer look at how premium sandpapers are manufactured and what makes them different.

As you can see in the drawing at the top of the next page, sandpaper is comprised of three main elements — a backing, the abrasive material (grit), and an adhesive layer that anchors the abrasive to the backing. Although there are some slight differences among the manufacturers, premium sandpapers generally have high-quality materials in all three areas.

BACKING. Let’s start with the backing. Low-priced sandpaper often uses ordinary kraft paper as a backing. This material is inexpensive, but it’s not very durable. When hand sanding, it’s easy to catch the sandpaper on the edge or corner of a project and have the sheet rip or tear, decreasing its useful life.

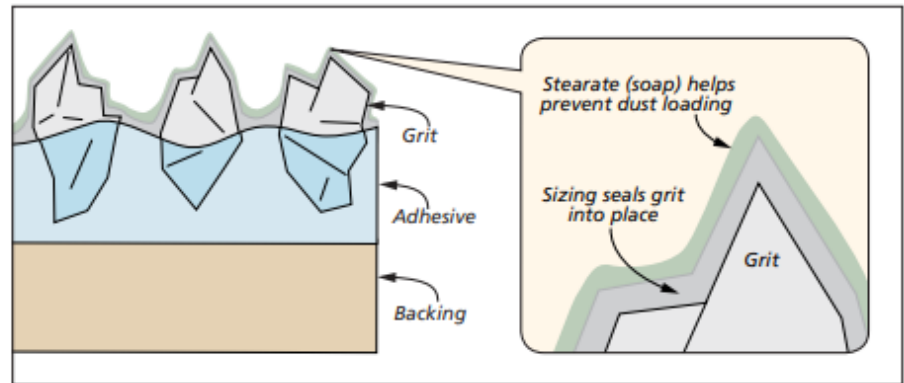
Premium sandpapers use a stronger backing material, typically reinforced with fiber and latex. This achieves two objectives. It makes the paper more flexible so that you can fold it or bend it to

conform to different shapes when sanding profiles. And it also makes the sandpaper more resistant to rips and tears.

In addition to being reinforced, the backing material used in some of 3M's premium sandpapers also has a special no-slip coating. The rubbery texture of this backing allows you to fold the sandpaper in half or quarters without having it slip while sanding.

ABRASIVE MATERIAL. The second element that goes into the making of sandpaper is the abrasive. There are three main types of abrasives used in the manufacture of sandpaper — aluminum oxide, silicon carbide, and zirconia alumina. For hand sanding of wood, aluminum oxide is generally considered the best choice. Aluminum oxide grains are sharp and hard, but also friable. This simply means the grains will fracture during use, exposing new, sharp edges.

However, not all aluminum oxide is equal. There are differences in the quality of aluminum oxide abrasive. The less expensive sandpapers usually use brown aluminum oxide, which is cheaper to produce but also breaks down faster. The premium sandpapers use a higher-quality abrasive. For example, Norton uses a white aluminum oxide. This abrasive material is heat-treated, causing the



alumina molecules to fuse together. The treatment makes the material harder to break down and the result is longer-lasting sandpaper. The abrasive stays sharp longer, giving you faster results.

ADHESIVE LAYER. The third component of sandpaper is the bond that holds the grains of abrasive to the backing. This is actually applied in two stages. First, a base layer of adhesive, known as a make coat, is applied to the backing. After the abrasive material is applied to the paper, a second coat of adhesive is applied to anchor the abrasive in place. This is known as the size coat.

There are several different types of adhesives that can be used. The cheapest



▲ The rigid adhesives used in some inexpensive sandpapers (left) tend to crack and flake off when the paper is folded, as shown above.

papers use animal glues. The problem with this type of bonding material is that as you use the sandpaper, the heat generated from the friction tends to soften the adhesive, and the sandpaper will start to shed the abrasive material.

But with the premium sandpapers, the bond is a resin mixture that combines strength, flexibility, and the ability to withstand temperature changes. Manufacturers tend to keep the exact formulas of the adhesives used on their premium sandpapers a secret. But you can see the difference in the photo above.

STEARATE COATING. The final element of premium paper is one that you probably won't find at all on cheaper sandpaper. This is a stearate coating that is applied to the surface of the paper. The stearate is a type of surfactant (soap) that serves to lubricate the sandpaper and prevent it from clogging up as quickly in use. This is especially helpful when sanding between coats of finish.

Premium sandpaper can cost two to three times more than regular sandpaper. But when you consider that it works faster (photo at left) and lasts several times longer, the difference in price isn't really all that difficult to justify. For more on where to find premium sandpapers, refer to Sources on page 67. [W](#)



▲ After 50 strokes with both premium and ordinary sandpapers, you can see the difference in the amount of material that is removed. The higher-quality abrasives in the premium sandpaper stay sharp longer. This means they cut faster and don't break down as quickly.

“Bloodwood” from (www.wood-database.com)



Color/Appearance: Heartwood is a bright, vivid red. Color can darken to a darker brownish red over time with exposure to light. Applying a thick protective finish, and keeping the wood out of direct sunlight can help slow this color shift. Well defined sapwood is a pale yellowish color, though given the large trunk diameters, it's seldom seen or included in imported lumber.

Grain/Texture: Grain is straight or slightly interlocked. Has a fine texture with good luster, and is also somewhat chatoyant.

Endgrain: Diffuse-porous; large pores, few; solitary and radial multiples of 2-3; tyloses and other mineral deposits common; parenchyma winged and confluent; narrow to medium rays, normal spacing.

Rot Resistance: Reported to be very durable, and resistant to most insect attacks.

Workability: Bloodwood is extremely dense, and has a pronounced blunting effect on cutters. The wood tends to be brittle and can splinter easily while being worked.

Odor: Has a mild scent when being worked.

Allergies/Toxicity: The wood's dust has been reported as occasionally causing effects such as thirst and salivation, as well as nausea. Can also cause skin irritation. See the articles [Wood Allergies and Toxicity](#) and [Wood Dust Safety](#) for more information.

Pricing/Availability: Widely available in wide boards, as well as smaller turning squares and blanks. Many boards exhibit only a dull reddish brown coloration; truly blood-red pieces are the ideal. Prices are moderate to high for an imported hardwood.

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

Common Uses: Carvings, trim, inlays, furniture, guitars, knife handles, and turned objects.

Comments: Traditionally known by the name Satine, it's no wonder that the wood (now more commonly called Bloodwood) has grown so popular as an imported wood species. Though it poses some challenges in working characteristics, its hardness, strength, and coloration make this a crimson favorite.

Common Name(s): Bloodwood, Satine

Scientific Name: *Brosimum rubescens* (syn. *B. paraense*)

Distribution: Tropical South America

Tree Size: 80-150 ft (25-45 m) tall, 4-7 ft (1.2-2.1 m) trunk diameter

Average Dried Weight: 66 lbs/ft³ (1,050 kg/m³)

Specific Gravity (Basic, 12% MC): .90, 1.05

Janka Hardness: 2,900 lbf (12,900 N)

Modulus of Rupture: 25,290 lbf/in² (174.4 MPa)

Elastic Modulus: 3,013,000 lbf/in² (20.78 GPa)

Crushing Strength: 14,310 lbf/in² (98.7 MPa)

Shrinkage: Radial: 4.6%, Tangential: 7.0%, Volumetric: 11.7%, T/R Ratio: 1.5

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

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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.

