

Jeff Cormier, President
Joe Comeaux, Treasurer

Officers and Directors

Barry Humphus, Editor, Bubba Cheramie
George Kuffel, John Marcon, Chuck Middleton

Mentoring Program - If you have a project, a problem in any woodworking area, these members have volunteered to help. Give them a call. Jeff Cormier: 582-3278; George Kuffel: 478-2707; John Marcon: 478-0646; Chuck Middleton: 625-3134; Gary Rock: 433-1679; Eltee Thibodeaux: 436-1997; Dick Trouth: 583-2683. Each has years of experience and knowledge.

November Meeting Highlights

Dick Trouth was our host at his fine shop this month (thank you Dick for the switch).

Jeff Cormier announced that the final meeting of the year will be at the shop of Chuck Middleton. We generally have a few goodies to eat at this one and everyone should feel free to bring something special if you want.

Jeff also announced that he will be stepping down as President effective at the end of the year. Therefore, he is calling for one or more volunteers to step up to be President. The job is not a difficult one and requires only a bit of time each month to assist in organizing the meetings. The meeting places for January through June of 2010 have been set, so there is not much to do beyond contributing to the meeting topics from time to time. So if this is something you would like to do, please contact Jeff or any of the Board members as soon as possible.

Jeff's safety discussion this month was on the things hidden in the wood you are working. While pre-cut lumber is generally free of hazards, that which you mill your self or find may not be. For example, years ago, someone may have driven a nail into the tree from which your wood came and the tree, naturally covered up the nail over time. If your power tool runs into this, it could not only ruin a \$100 blade, but ruin your day as well as the bullet-like metal comes flying out.

Therefore, if you use this type of wood, you should probably acquire a metal detector. Several are on the market and range in price from \$20 to \$100. The lower cost ones should be used more slowly than the more expensive ones. For a review, see the article later in the Newsletter.

There was a discussion on working in a small shop and these vary a great deal among our group. Sometimes, it works out well depending on what you normally build. For example, Pie Sonnier's shop is quite small, but he generally does small items. Barry Humphus's shop is only 240 square feet and he built a pool table in it. So a lot can be accomplished, even if your shop is not as big as George Kuffel's, Micky Hart's or Larry Cooper's.

Making your tools mobile allows you to move them when needed for use or to make room for other tools. But it

comes at a price. Mobile bases cost at least \$35 each and can reach \$200 for one tool, but you can construct your own using 3/4 plywood and wheels you can purchase locally. Another issue is that they can make dust collection more of a chore. But if you have a driveway or smooth surface outside of your shop/garage, you can bring your work outdoors on fair weather days.

Some other suggestions included utilizing open doors. For example, locate your jointer such that the in-feed goes out the door instead of into the shop. Another idea is dynamically use exiting space for instance, using your workbench to double as the outfeed table for your table saw. A table saw fence extension can double as a router table. This allows you to use the same space for more than one purpose.

Spindle sanders, small belt sanders, grinders, small scroll saws, portable planers, drill presses, smaller compound miter saws, etc., can be bolted to sheets of plywood and moved to be stored on shelves when not needed and they can be quickly set up. Table saws, workbenches, radial saws, band saws, etc., often have space under their bases that is wasted. Each one of these is an opportunity to capitalize on that space.

Making the most of wall space, especially for tools and jigs that are often used is a great idea. It is convenient to have a handy tool in a handy space where it can be returned after each use and actually found when it is needed again. And of course, think through where that next tool is going to sit. If you are only going to use it very occasionally, rent it.

Christmas Time is Dues Time

It is past time to think of the new tool you will get for Christmas. In fact you already have it - it's in your hand or on your screen right now. And that great tool is the Lake Charles Woodworkers Club. It is available 24/7 and very low cost - only \$20 a year for a family membership. Renew your tool today by sending your check, payable to LCWW to Joe Comeaux, 1675 Campfire Rd., Lake Charles, LA 70611.

Coming Up . . . Saturday, December 12, 9:00 a.m. at the shop of Chuck & Charlene Middleton.

Little Wizard and Lumber Wizard

We all know how expensive good quality blades are to buy these days. Imagine a new \$100 circular saw blade or a nice set of 12" planer blades being destroyed by a stray nail or piece of metal buried deep in a piece of recycled hardwood you picked up from a demolition yard or second hand at a garage sale. Such foreign objects hiding in your lumber can easily be missed by the eye, or not seen at all.

The answer to the problem is to own and use a metal detector. They come in all shapes and sizes from security guard types, to your floor stand or fixed models to the long pole seated models you see people on beaches with. Some of these are a little overkill, and rather expensive for most home or enthusiast woodworker's needs.

Wizard sells lots of stuff and two of the items they market are the "Little" Wizard and the "Lumber" Wizard. The smaller unit has a very small scanning field area, but it works well in lumber up to 2 inches thick. The issue is that you must move it very slowly to get a good reading. If you will only be using stock 2 inches or less in thickness, at about \$20, this may be the unit for you.

It's big brother, the Lumber Wizard is basically just a metal detector. It is well priced at \$99.95 recommended retail (although you can often get it cheaper if you shop around online) which also makes it affordable for the general woodworker. It's a small investment if it saves you even just 1 or 2 good quality blades from being destroyed in your lifetime.

There have been revisions to the initial model, and hence, if you buy new today, the model number you should receive is the Lumber Wizard III, which offers improvements over the older designs.

As a metal detector, the Lumber Wizard III will detect basically most metallic (but not lead) items you might find buried in your lumber. You might be saying... well I only ever use new lumber from a quality supplier. But don't take anything for granted when it comes to protecting yourself or your blades. Naturally, for recycled lumber users, such a device is a necessity!

According to the manufacturer, the Lumber Wizard III "responds equally well to all types of metal, steel, stainless steel, zinc, magnesium, and aluminum. Helps locate guns, knives, blades, and any metallic object."

This is pretty much the spectrum of coverage you would expect for woodworking needs. Most commonly you will find screws, nails or staples in your recycled wood. While some high quality woodworking blades will be able to slice through the odd small nail or staple without too much damage, it is the bigger objects that pose a problem, and the bigger they are, the more damage they are going to cause if you happen to run your blade through them, not to mention the risks involved with flying carbide teeth, sudden blade jams or kickbacks caused as a result.

It weighs 13 ounces so it is extremely light and won't

cause any fatigue in the hand, arm or wrist when scanning over extended periods of time. It's lightweight is especially handy if you need to use it overhead, for detecting metal in structure work if you were renovating.

The unit runs off a single 9 volt battery, and the manufacturers claim a quality 9V battery will last 40 hours of operating time. When your battery does start to run out however, the unit features some indicators and warnings (changes to light flashes and audible sounds in use) to let you know you might soon need to throw in a new one. Note that the vibration function will consume more battery power and hence decrease battery life when this function is used often.

Before first use, you need to calibrate the wand, and you may need to check calibration every month or so to ensure the machine is working well, particularly if you live in areas that experience large swings in temperature or humidity as these can affect the LW III's performance. This takes about 10 seconds and involves making sure the unit is well away from any metal. You simply turn on the unit and turn the adjustment screw slowly until the continuous sound just stops. The unit uses an automatic tuning transmit/receive circuit. It is designed to provide a precision detection pattern that helps eliminate errors or false alarms in use.

When it has detected the presence of metal, it emits a continuous tone sound or a vibration depending on how you set it. There is no volume control, but it should certainly be audible for most woodworkers. The unit can be set to vibrate when it detects metal. The vibration is well measured and not too overpowering, but not too soft that it is difficult to feel.

However, there is one more additional feature: a 3/32" mono submini plug on the lateral face of the handle allows you to plug in earphones to hear the sound that way as well. A little bit of extra thought has gone into this design. The unit also has a flashing green LED light to indicate the tool is switched on and ready for action.

Naturally, the larger the metal object, the easier it will be to detect. The Lumber Wizard does have some limitation ranges. It is difficult to detect a small wire staple buried more than 2 inches in dense hardwood, however, a standard 8 gauge woodscrew was picked up relatively easily in tests. It will detect larger metal objects in material over 4" deep. Considering that you can flip your material over and scan both faces (effectively providing twice the normal scan depth), this gives you probably all the scanning depth you will need for almost all regular pre-sawn stock dimensions and thicknesses.

You should make multiple scans to ensure that all of the metal is removed. Also, flip the piece and scan as this effectively doubles the depth it will work. Just go a little slower on thicker material and ensure the unit remains close to the surface. It does have a 6" wide scanning area so only the outer 6 inches of the tool will scan effectively, although in practice, the scanning area is more like 7 inches.

Chain Saws

Chain saws are handy tools for most woodworkers. They are a great way to prune large limbs, cut down dead or unwanted trees, and cut firewood. You can also use them to cut rough lumber or saw up billets for turning. But chain saws are also a safety hazard. A number of safety features have been added to chainsaws over the years because carelessness can result in severe injury.

Many woodworkers find electric chain saws to be just the ticket for what they need. These saws are generally less powerful with shorter cutting bars than their gasoline powered brethren. But, these handy little saws are lightweight and certainly powerful enough to prune limbs, cut up fallen limbs and even cut down smaller trees in the back yard. The limitation of these saws is the power cord. You must be near an electrical outlet to use them.

When I got home after Hurricane Rita, I got out my trusty gasoline chain saw and started the long process of clearing my yard of debris. After 3 hours, my hands and arms were numb and I really couldn't hear much, even wearing ear protection. But because I had a portable generator, I had electrical power and got out the electric chain saw. The job went a bit slower, but I kept my sanity.

By the way, Stihl chain saws are one of the most respected names of all chain saw makers. Andreas Stihl built the first electric powered chain saw in Germany in 1926. The next year he produced one of the first practical gasoline engine powered chain saws. Today, the company, widely recognized for its quality and innovative engineering, manufactures powered saws and lawn equipment in several countries, including the Germany and the U.S. These products are marketed worldwide.

If you use a little common sense and are conscious of safety, you will find either electric or gasoline powered saws to be extremely useful tools. Here are a few basic tips.

Read the instruction manual and follow its recommendations for maintenance and operation.

Study chainsaw reviews and ratings which will allow you to compare chain saws from different power tool companies.

Wear safety goggles to keep wood chips and sawdust out of your eyes. And always make sure the saw is cutting away from you.

Do not cut with the very tip of the bar as this may result in the saw kicking back toward you.

Keep the chain sharp to make cutting easier. This results in less wear and tear on the saw, less effort on your part and a straighter cut. *Barry Humphus.*

Sharpening Forstner Bits

Conventional Forstner bit anatomy works like this: the center brad is the first part of the bit to touch your work. Next, the curved rim of the bit must contact the work before the straight

flutes begin paring out the waste. If you lay a straightedge across the rims, it should clear the straight flutes by at least 1/64 or so. It's important to maintain this relationship, lest you end up with a bit that requires too much feed pressure because the rims are too high or which won't cut cleanly because they're too low.

Conical grinding points such as those used in Dremel or Foredom tools are the best tools I've found for the job. Chucked in one of those tools at medium RPM, or in a drill or drill press at its highest RPM, an aluminum oxide grinding point sharpens quickly and effectively. The tool should be stationary; it's a lot easier to rotate the bit smoothly than to move even a small handpiece around the bit's curved edges.

Start sharpening on the bevels on the inside of the bit's rims. Bring the bit to your spinning stone and rotate it through a light, smooth stroke along the entire length of one bevel, maintaining the angle ground at the factory. Count strokes; give one half-rim several strokes then give the other half-rim the same number. Once both sides of the rim are sharp, the outside surfaces may be touched up very lightly with a fine sharpening stone held flat on the rim's surface.

Next, sharpen the straight flutes. Bring the center brad into light contact with the grinding point, then stroke outward smoothly all the way to the edge. As with the rims, count strokes to assure even stock removal. Check with a straight-edge to make sure the flutes are slightly below the rims. Finally, give the two exposed faces of the center brad a light lick to sharpen its edges, and the bit will be ready to go back to work.

Carbide tipped Forstner bits actually may be easier to sharpen than conventional steel Forstner bits. In this design, the bits' carbide flutes do all the cutting and the rim serves only to guide the bit; it has been relieved of cutting duty. All you have to work on, just as with a router bit, is the flat face of the carbide flute.

Diamond paddles are ideal tools for this job. Coarse abrasive can chip carbide edges; it's safest and most effective to sharpen with fine (600 grit) and super fine (1200 grit) paddles only. These will work best if you sharpen regularly. If a bit becomes very dull, resharpening with fine grit will take a while, so try to make a habit of regular maintenance. Wet the diamond abrasive with water to keep it from clogging. Lay the paddle against the flat face of one flute and give it five or ten strokes, then move to the other flute and do the same. Do not work on the narrow edge of the flute, whose relief angle is critical to good bit performance. Inspect the flutes often as you work to be sure you're wearing them flat and even. When they feel sharp, you're done. Wipe the bit clean and it's ready to go back to work.

I've resharpened my set of Forstner bits twice in their life-time. This works well and instead of pitching, re-sharpen. *Barry Humphus*