All the News that fits

Southwest Louisiana Woodworkers Club November 2019

Mentoring Program - If you have a project, a problem in any woodworking area, these members have volenteered to help. Give them a call. Frank Tartarmella 802-8989; John Marcon: 478-0646; Eltee Thibodeaux: 436-1997; Ray Kebodeaux: 583-2378. Each have years of experience and knowledge.

October Meeting Highlights

The shop of Darren Hood was our meeting place this month and fortunately, Patrick LaPoint was present to take notes and photos as Barry was out of town that day at a conferene. We had a visistor this month, Mr. Jordon Andrepont at 11 years old who does scroll saw work, and son of Kyle Andrepont. Welcome Jordan.

Bill Fey said that Kyle Andrepont is working on our Facebook page. Kyle said it is up and running, the name is Southwest Louisiana Woodworkers. He said that you have to request to be a member of the page and you will be able to post pictures to the page yourself or he can post them. He said he would post pictures of the meetings each month.

Bill discussed possible upcomming demonstrations that will include veneering, hand cutting dove tails and constructing stained glass items.

Mike Dupuis discussed the selection and instalation of soft cl;ose drawer mounting hardware.

For Show and Tell, Aaron Andrepont brought a very nice coffee cup stand plus a great adjustable side table.

George Carr showed one of his delightful crosses that was chip carved and finished with a gel stain.

George Carr discussed chip carving begining with it's history. George told us about the different types of chip carving: fine triangle and free-form. Fine triangle chip carving involves cutting patterns using triangle shapes. The advantage is that the of this type of chip carving is that it is in itself a guideline and allows you to reproduce the same pattern over and over again. Free-form is where you make fine cutlines of different shapes and from different directions. This produces a random pattern and allows you to use your imagination to create any type of artwork. George also discussed the different types of knives used (stab and detail), sharpening and saftey when using the knives. The species of wood used with most carving includes aspen, butternut, bass and willow.. One type of personal protective item that some carvers use is a type of no cut gloves such as the NoCut and KingCut brands. I only wish I was wearing these last Summer when I sliced open my palm with an Exacto knife!

After George's discussion, everyone present got an apportunity to try their hand with chip carving from patterns that George brought to the meeting.

The next meeting in November will be at the shop of Sandy ad Ronnie Kramer and this is a great shop that you will all enjoy.

Our December meeting will be at the the Seaman's Center where we will have our annual Christmas meeting with great food and confirmation for all.

Comming Up . . . Saturday, November 9, 2019 at 9:00 A.M. at the shop of Ronnie and Sandy Krammer.

Very Good Glue and 50,000 Years Old

Fifty-thousand years ago, some Neanderthals living in Northwestern Europe put sticky birch tar on the back side of a sharp flint flake with a handle to make the tool easier to grip. Eventually, that tool washed down the Rhine or Meuse Rivers and out into the North Sea. In the 21st century, dredging ships scooped it up along with tons of sand, other stone tools, and fossilized bones, then dumped the whole pile on Zandmotor Beach in the Netherlands. I happened to see this pile of debris and it is very amazing as I was in Amsterdam at the time.

Despite all of that, the birch tar still clung to the flake with a wooden handle, and it provides evidence that Neanderthals used a complex set of technology to make elaborate tools.

Making birch tar at all is a fairly complex process. It takes multiple steps, lots of planning, and detailed knowledge of the materials and the process. So the fact that archaeologists have found a handful of tools that were hafted using birch tar tells us that Neanderthals were (pardon the pun) pretty sharp.

But the Zandmotor Beach flake tells us more than that. Making birch tar adhesive for tools was so routine that Neanderthals would do it even for a simple domestic tool like a small flake—even in the extreme environment of Ice Age Northwestern Europe, in the shadow of glaciers at the very northern edge of where Neanderthals could survive. And all the while, they were using fairly advanced methods for more efficient production.

"Despite [the] mounting evidence, the degree of Neanderthal technological expression is still under debate," notes a new paper by archaeologist Marcel Niekus and his colleagues (Niekus is at the Netherlands-based Foundation for Stone Age Research). "The Neanderthal tar finds provide evidence of a complex technology so ingrained in their behavior that it was maintained at the limits of their ecological tolerance: glacial northwestern Europe."

There's not much room left to debate Neanderthals' intelligence in the face of evidence that they used fire and created art. But a technology like producing tar adhesive—only one component of a complex, multi-piece tool—requires more than brains. Anthropologists usually assume that such technologies require a larger, relatively sedentary population; hunter-gatherers could still pull it off, but they'd need to live in larger groups, and move around less, than the archaeological record suggests for Neanderthals.

As far as we know, Neanderthals lived in relatively small groups, with a sparse population scattered across the Eurasian landscape. Based on the shape of their femurs, they walked much more than modern hunter-gatherers. Most anthropologists wouldn't expect them to be able to develop, much less routinely practice, a technology that's every bit as complicated as pottery or metallurgy. But it now appears that they did.

When Niekus and his colleagues examined the thick black tar with a micro-CT scan, they noticed fine grains of charcoal, sand, and iron oxide mixed in with the tar. Those contaminants were mixed in very evenly, as if they'd been worked into the tar while it was molten and flowing. To manage that kind of thorough mixing, birch tar would have to reach temperatures of 350ºC or more. The amounts of chemical compounds like botulin and lupeol in the tar also suggest a temperature in that range. To get the tar that hot, Neanderthals must have produced it in a relatively high-tech way.

As a study earlier this year pointed out, it's really not very hard to make birch bark tar; burning a roll of birch bark next to a flat rock will do the trick. But that's also a super inefficient way of making tar; Niekus and his colleagues—who tried their hands at tar production for the sake of science—estimate that it would have taken ten hours to make enough tar just to haft a single flake. If Neanderthals were going to the trouble of putting tar on a small, everyday domestic tool like a flake (whether to attach it to a haft or just to make a simple grip), then producing tar in usable amounts must have been routine. And that means they probably found a more efficient way to go about it.

The most efficient way to get tar from birch bark is to heat the roll of bark in a clay vessel buried inside an earthen mound. It's a more complicated process, which requires more steps, more planning, and more detailed technical knowledge, but it also makes more tar more quickly, and with about 40 times less bark required for the same amount of tar. It's also the only method that produced temperatures hot enough to explain the fine grains of sand and charcoal mixed with the tar (360ºC inside the vessel and 310ºC inside the bark roll).

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Old Glue continues

So the Zandmotor Beach flake suggests that Neanderthals were using Stone Age high-tech to make adhesives for their multi-part tools (which were pretty high-tech in their own right). It involved a complex process of gathering birch bark and heating it to extract the tar, then using the tar to haft a tool or shape a grip. That would have taken a lot of time and energy, yet "the technological investment must be worth the trouble," wrote Niekus and his colleagues.

That's especially true in an extreme environment like glacial Northwestern Europe 50,000 years ago, where resources where scarce and uncertain, and just surviving at a basic level must have been a challenge. But Niekus and his . colleagues suggest that the cold, inhospitable environment may actually have pushed the Neanderthals to develop more complex tools, and more efficient ways of producing them, in order to make a living.

Metal Drilling for Woodworkers

Drilling steel, cast iron, or brass is something that every woodworker needs to do from time to time. Most of us know how to do it correctly but just in case, here are a few tips and guidelines.

If you need to drill a wide hole, and you don't have or can not use a drill press, try to drill successively. Begin with a narrow hole and when you finished drilling through, replace the "hole initiator" with a wider drill bit. This technique, of incremental progression, is very practical when using a drill press too as well, but you will find it indispensable when drilling hard metals, particularly when doing this freehand.

Before you start drilling, indent the hole's center with a center punch to direct the drill and prevent it from wandering around at the beginning of the drilling process.

When drilling metals use slower speed than what you would have used if drilling the same diameter in wood. Drilling fast will burn your drill bit and may destroy its tip. So shift the gears in your hand drill (or your cordless drill) to low speed/ high torque. When using a drill press make sure to reduce the speed setting accordingly.

For safety and efficiency clamp your work before drilling it. While you may be able to drill narrow holes by holding the workpiece in one hand and drilling with the other, this will be impossible to orchestrate safely when drilling wide holes.

Use oil to lubricate the drilling. Whatever you have around should work fine, AFT (best), WD40, 3-in-1, and even cooking oil (if this is the only oil you have) will help in alleviating friction and carrying heat away. Remember, a drilling lubricant or better off a cutting fluid is especially important when facing hard metals such as steel.

Chamfer or countersink the rim of the hole to make it look better and to prevent the sharp corners from catching onto pieces of clothing, scratching wooden surfaces, etc. I typically use a HSS Three-flutes countersink when working with metal. You should note that countersinks are made to a few industrial angle standards, where the most common ones are 82 and 90 degrees.

If the hole is meant for a wood screw or a flat head bolt, make sure to form and try a "mockup" countersunk hole first. If you have both 82 and 90 degrees countersinks you will want to make sure that you will use the right one, so you should experiment on a compatible piece (scrap that is made from the same metal) to decide which countersink to use. In most cases a screw made for the North American market will need a 82 degrees countersink.

Countersink bits come in a variety of stiles and sizes depending on the project, the screws you're using, and personal preferences. For utility shop furniture or other quick-and-dirty projects — especially temporary items — you often don't care much about the screws. They can be visible or not, proud of the surface or not; sometimes, it just doesn't matter.

But for most of your work, if a screw is going to be visible you want it to look good, seated smooth and flush with the surrounding surface whenever possible. Sure, you could forcibly drive a flathead screw flush, but that almost always tears the wood surface fibers and looks terrible. In hardwood, you might not even be able to set the screw flush.

This is where countersinking (or its close relative, counterboring) come in. When you top off a pilot hole with a countersink, the screw head seats perfectly: all its surfaces contact the wood with the same amount of force, making for a strong attachment and a clean look. This is particularly true with metal surfaces.

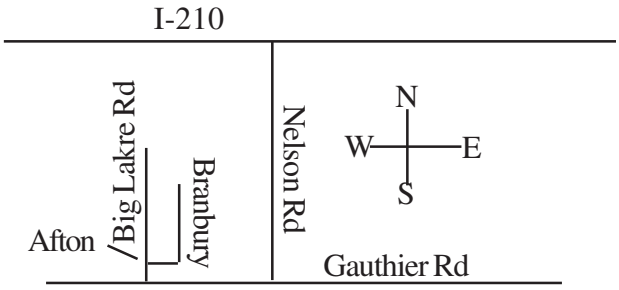
You can hide your flat-head screws with wood plugs if you drill your countersink deep enough to allow for them to be glued in over the screw. When you want those screws to disappear entirely, a properly sized deep-drilled countersink can accept a wooden plug that can then be cut and sanded flush for a smooth surface and an accented appearance. Handling these tasks, and more, is the job of a dedicated countersink. When I built my pool table, I used this very technique. The trouble, of course, is if I need to move this table to another location, it may be messy. *Barry Humphus*

November Meeting Location

We have the wonderful opportunity to meet at the shop of Ronnie and Sandy Kramer.

To get there go South on Nelson Road in Lake Charles going from I-210 on Nelson Road to Gauthier Rd and turn right going west. Travel to Big Lake Road and turn right (north) on to Big Lake Road. The first right on your right will be Afton Drive. Turn right and go to the next left (N. Branbury Road). The shop is at the back of 6821 N. Branbury Road on your right at the second home.

Should you need further instructions, please give them a call at 337-477-4651.



Like a few of my projects, this is not to scale!

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