

## June-July 2013

There is enough water in Lake Superior to cover all of North and South America with water one foot deep. (That's no joke!)

Find me on facebook! http://www.facebook.com/home.php?#!/prof ile.php?id=100000091394781&ref=ts

Please include your location if you write in with comments or questions.

Please feel free to forward this newsletter on and don't forget to invite your friends and family to <u>register</u> to receive their own copy or view previous newsletters at https://www.lylejamieson.com/information/n ewsletter.asp.

This will be a June-July issue. I am in the middle if remodeling my home and will be traveling a lot. I hope to see many of you at AAW in Tampa.

\*\*There is still room in my five day hands-on class at Peters Valley School of Craft in New Jersey. Class dates are from July 12 to July 16, 2013. <a href="https://www.petersvalley.org">www.petersvalley.org</a> 973-948-5200

# TABLE OF CONTENTS TIPS & TECHNIQUES

**Topic of the Month:** Hollowing with the pith in the wood. (Again this month, I will use a question\* from one of my students as an opportunity to cover some important topics.)

### **QUESTIONS AND ANSWERS**

- Set up for bowl gouge sharpening angles
- Cracking problems doing goblets with small branches\*
- Finishes and finishing
- Buffing and finishes
- Grinder set up for grinding the Jamieson grind bowl gouge
- Sharpening jig set up for bowl gouge
- Wolverine jig set up
- Defining bowl gouge features for sharpening
- Introducing a laser ring idea
- How to do deeper hollowing

- YouTube navigation
- Faceplate sizing rules

### **FEEDBACK**

### **CALENDAR**

### **TIPS & TECHNIQUES**

**Topic of the Month:** Hollowing with the pith in the wood

The pith in a tree is unstable and can crack on anything you turn that wood is dead and has been dead since the tree started to grow. All the life and growth of the tree is on the outside of the tree where the bark and fruitwood is transmitting the water up and down from the roots. Yes, people do goblets and hollow forms with the pith in it all the time, BUT, there is a risk. The pith and the wood near the pith is not good wood to begin with. It may already have cracks in it. The same shrinking stresses must happen in a small tree as it does in a big tree.

If the pith is left in the goblet stem the goblet will likely not survive. If the pith is off center in the goblet, the survival rate will improve. The pith is not usually in the center of the tree branch so the trick is to make the axis of the goblet in the center of the branch, not on the pith, or fudge the axis a bit so the pith does not run through the stem of the goblet.

That is the best way to minimize failure. But there is another BUT. With the pith in the bowl of the goblet, and in the base of the goblet, what is going to happen to the shrinkage stresses? The wood is trying to shrink into the pith and it cannot move or warp, so it cracks. In the best case scenario it will likely bulge out of shape. So, if the branch you want to use is already dry, really dry, like cut years ago, inspect it carefully and look for cracks, before you start, around the pith. I would discard any wood with cracks already in it. If you are using wet wood, turn the bowl of the goblet pretty thin. The drying stresses will result in warping the bowl. The thinner the wall the more you reduce cracking possibilities.

Turning a hollow form with the pith in it is just as risky. The pith can be placed right in the center of the mouth opening, right? What about the shrinking of the wood in the bottom of the hollow form? What about the shoulder area? The wood is trying to move due to the shrinking stresses and it cannot move, so it cracks.

Different wood varieties have different shrink rates, flexibility, and stability of the pith area. You will have to experiment with the woods in your area.

I still will stand by my rule of only using half the tree without the pith in whatever I do. In fact I like the grain patterns in a goblet or a hollow form done with half a tree better than the rings we get with the pith in it. Try it both ways and see which one you like better. You lose the capability of doing a natural-edge, bell-shaped goblet, with the bark on it, when you use half a tree. But I am not drawn to that shape most of the time and when I do natural edge pieces I usually take the bark off.

Goblets are fun to turn and they are excellent skill builders in several areas, bowl turning, thin hollow form turning, and thin spindle turning. Your creativity can get exercised doing goblets. Just tweak the proportions or shapes of the bowl or foot slightly, and the goblet takes on a completely different personality. I have been seen sitting in a restaurant sketching the glass shape I liked on the napkin. I am drawn to smooth flowing lines but what about adding some details? A bead or detail turned into the transition points between the stem and the bowl, or the stem and the foot, can be interesting. Any little differences in a goblet change it big time. It is a real fun series to get into and see where it goes.

### **QUESTIONS AND ANSWERS**

## SET UP FOR BOWL GOUGE SHARPENING ANGLES

Hi Lyle:

I bought a bowl gouge from you 2-3 years ago and it's been great. I recently bought a CBN grinding wheel, which is also working out well. The problem is that I somehow messed up the settings on my Wolverine jig when I installed the new wheel and it has messed up the grind on my Jamieson bowl gouge. I've taken a few pictures so you can see. One of the problems is the gouge seems too pointed now. Can you tell from the pix what I need to do to bring the grind back into "Lyle specs"?

Thanks, Phil

P.S. Enjoying turning but still have A LOT to learn.

### Hi Phil, location unknown

Thanks for the photos, that makes is easier to see what is going on. You are really close and it could work that way, but could be tweaked a bit. Your <u>grinding</u> is right on. The set-up of angles can help get it back to mine. Remember to separate the set-up and the sharpening, they are two different things.

Your grind set-up has the side angles tilted in a little more than mine. To correct the side angles we move the sliding arm (pivot point) in a bit. I'd try about 1/8 to ¼ inch closer to the grinding wheel. Do this adjustment first. When the side grind angle is tilted in too much it creates the low spot in the grind when you sharpen the wing. The grind viewed from the side should have a slight arc or hump in the middle of the wing, it's almost a straight line from the tip to the wing, there's never a low spot or concave arc from the tip to the wing. The wing angle is not measurable; we just have to see how it looks, and changes, and how it works.

Your tip angle looks a little steeper than mine. Use a protractor and measure the tip bevel compared to the inside of the flute. Mine is about 60-65 degrees. Yours looks to be 45-50 degrees. To correct this you need to move the jig arm so the results makes the gouge handle a little higher and the bevel angle a little blunter. Hope this makes sense to you. Take another photo from the side view and a top view after you sharpen it with the new set-up.

# CRACKING PROBLEMS DOING GOBLETS WITH SMALL BRANCHES

Lyle,

I have a general question.

I see lots of people turning smaller hollow forms and thin goblets and things like that out of smaller branch wood. I have access to a lot of this type of wood and I think those projects are really neat looking and being smaller would be a better fit for my lathe.

Anyway, I never hear anyone talk about the pith and splitting on these projects and yet for bowls that's like the cardinal rule – to turn the bowl out of the half of the log get the pith out of the picture. So how come these smaller projects don't split at the pith? Or DO they split at the pith and to people just CA glue them when they do or something? I thought with your experience in hollow forms you might be able to give me a quick answer.

I don't want to do anything fancy, but I think a small natural edge goblet out of a tree branch or something would be fun but I don't want to get it done and have the stem split out on me or the base split in half because the pith of the branch is in the middle. Anyway, thanks for your time. I was just thinking about this tonight while I was on the computer and thought I'd ask you while I was in email.

Kevin

### Hi Kevin from Ohio

You are thinking in the right direction. Yes, the pith is unstable and can crack on anything you turn. Yes, people do goblets and hollow forms with the pith in it all the time. BUT, there is a risk. The pith and the wood near the pith is not good wood to begin with. The same shrinking stresses must happen in a small tree as they do in a big tree. If the pith is left in the goblet stem it will likely not survive. If the pith is off center in the goblet survival rates will improve. The pith is not usually in the center of the tree branch so the trick is to make the axis of the goblet in the center of the branch, not on the pith, or fudge it a bit so the pith does not run through the stem of the goblet. That is the best way to minimize failure. But there is another but, with the pith in the bowl of the goblet and in the base of the goblet, what is going to happen to the shrinkage stresses? It will likely bulge out the shape or start a crack. So if the branch you want to use is already dry, really dry, like cut years ago, inspect it carefully and look for cracks before you start around the pith. If it is wet wood, do the goblet pretty thin so the drying stresses will warp the bowl, and reduce cracking possibilities.

Different wood varieties have different shrink rates, flexibility, and stability of the pith area. You will have to experiment with the woods in your area.

I still will stand by my rule of only using half the tree without the pith in whatever I do. In fact I like the grain patterns in a goblet done with half a tree better than the rings we get with the pith in it. Try it both ways and see which one you like better. You lose the capability of doing a natural edge bell shaped goblet, with the bark on it, when

you use half a tree. But I am not drawn to that shape and most of the time, I do natural edge pieces, I take the bark off.

## FINISHES AND FINISHING

Lyle,

I did want to ask you about finishing. I'm going to get a sanding disk and I wanted to know if there was any particular type or brand I should get. I believe you just use the kind that you chuck in your drill right?

Also, I bought some Watco Danish Oil and also some MinWax Wiping Poly finish. I'm not sure which to use but from your DVD, it seems the wiping varnish is the best thing to use from your experience right? Since it actually hardens where oil doesn't? Anyway, was wondering if that is the brand you use and if there are any particular things I should watch out for on the finishing. With respect to the finishing, I will plan to wipe on the Watco then and not use the poly. Maybe I'll try one of each and see which I like better. Anyway, I'm still nervous about how to know when it is dry enough. I guess like you said on your DVD, if it's dry enough to sand then it is dry enough to finish. But even the Watco being slow curing would still lock in moisture in the wood right? I just worry that I'd be sealing in moisture that will eventually want to get out of the wood and cause problems. I'm assuming that Watco would remain flexible since it's not hard and that's one of the reason a poly might not be a good idea huh? Kevin

IXCVIII

Hi Kevin from Ohio,

Yes, any of the sanding disks and sandpaper will work. I use both the 2 and 3 inch pads.

Watco Danish is a slow curing wiping varnish. I use it because I do not want a plastic coating finish on my turning. If you mix it with other finishes test it before you put it on a good piece. Some finishes are not compatible.

I have put Watco on really wet wood with no problems. The surface is wiped clean. This is unlike a plastic surface coating that might fail on wet wood.

## **BUFFING AND FINISHES**

Lyle,

I just watched your YouTube video on buffing.

I was amazed at how good the piece looked just with buffing after sanding. So in that example, I'm assuming you wouldn't be using any kind of wipe on finish at all right? You just sanded and then did the buffing and you're done? Or do you normally use the Watco after sanding and then buff after that cures?

It looks like it's an "either-or" kind of thing and I was wondering how you decide on your bowls when to just buff and when to use the wiping varnish.

Also, where did you get that buffing system? I like it a lot. Is it homemade?

Hi Kevin from Ohio,

The Beall buffing system is available through Packard. I use it on almost all my work. In the YouTube clip I was showing the benefit of buffing but you pose a great question. "Do you buff only without a finish?" No, not normally. I want to protect the wood from future handling or kids with peanut butter and jelly hands. Wax is not a good protector. Wax is porous and will not prevent staining or fingerprints from developing over time. The Watco or other finish is needed to protect the wood and the buffing and wax gives me the shine I like. Again the finish is wiped off while it is wet so there is no buildup of finish on the surface but the finish is absorbed into the wood fibers to protect it from within. Make sure the finish is cured before buffing. Then I buff to get the luster and shine I want. The finish on the wood, and tool control, and sanding methods are more important than what you put on the wood for finish. A finish or buffing will not cover up torn out grain, or tool marks, or sanding scratches. A poor surface will be exposed, accentuated, and enhanced with the finish.

# GRINDER SET UP FOR GRINDING THE JAMIESON GRIND BOWL GOUGE

Lyle,

I just got your signature bowl gouge for my birthday but before I even think about touching it to the grinder (and ruining it) I have a question. Is your grind considered an Irish grind and if so would this set up tool sold by Craft Supplies USA work? I am going to be putting in an order for a Vari-Grind jig so I would like to get them both at the same time. Thanks for the great product and the great DVD, I hope to be able to take a class with you in the near future. Art

### Hi Art location unknown,

Yes, sort of. The grind is called many names, but mine is different than most. You have the set-up tool already in your hand. Use my gouge to set your jig. The CS set-up-tool might be close but not likely to be right on. For the gouge to work for the methods I use in my Bowl Basics DVD the grind has to be both the same angles as mine and ground the same as mine. These are two different things: 1.) Set-up and 2.) Grinding. Go back to my DVD or my YouTube clip to get the set-up procedure. <a href="http://youtu.be/0zUph9zEjck">http://youtu.be/0zUph9zEjck</a> Once the jig is set up to my angles the trick is not to move the jig. See the DVD again for the block idea I use to grind other angles for my spindle gouge etc. Once I set the jig up for my bowl gouge I never move it again.

## SHARPENING JIG SET UP FOR BOWL GOUGE

Hello Lyle,

I'm a new turner, new at 70 y/o, just started early this year. So I've been searching for information from any and all sources from PDF's, YouTube videos, local turners, etc. I have to tell you this. Your CD "Bowl Basics-The Easy Way" is the most informative, the most well written, and the most clearly understood information I have yet to

digest. I, like you, need to know how a tool works so that I can understand why it's doing what it's doing. You've got me convinced that the Ellsworth/Jamieson Grind is how I need to shape my bowl gouges. Now I need to learn how to put that grind on my tools so that I can learn to use it. I have an 8" CBN wheel and a Wolverine setup so the hardware is here. I now need to perfect that grind and then, with your CD, learn to turn properly and efficiently. Respectfully, Dale

Hi Dale location unknown,

Nice to hear from you! Thanks for the feedback. Welcome to my turning circle. I'd be glad to help you get the grind correct. First we need to get the jig set up for the right angles. You can borrow a Jamieson grind gouge from one of your turning club members and use that as a template for your set-up. Or take a photo from the side view (like my photo) and from the top view and I can help you make some adjustments. Once the jig is set up correctly, it's just a matter of grinding where it is high, and leaving the low spots alone until it looks like my bowl gouge.

Did you know I have 40 YouTube clips? Go to the YouTube home page then search Lyle Jamieson for my channel. I also have a newsletter broadcast every month and the old copies are archived on my web site. The Q&A covers topics from A to Z.

## **WOLVERINE JIG SET UP**

Hello Lyle,

The angle on the flute is a function of the distance of the jig socket from the wheel. What is that number? With that info I should have all I need to reproduce the grind.

Dale

Hi Dale location unknown,

It's not that simple. Every grinder is different. And there are two elements of the set-up, the jig arm position and the sliding pivot point. The tip angle is about 60-65 degrees and can be measured with a protractor. The side angle is not measurable because it changes as it goes from the tip to the wing.

## **DEFINING BOWL GOUGE FEATURES FOR SHARPENING**

Lyle, Haaaaaaa.... I just figured it out. What a dummy I am. I'm slow but I'll eventually get there!!

The Irish grind, the Ellsworth grind, the Jamieson grind have long flutes to make the gouge a more useful tool. The flute length is controlled by varying the pivot point to wheel surface distance. The shorter the pivot point to wheel distance the longer the flute length and the converse is true. Simple geometry dictates that phenomena. So first I set up the jig to get the desired flute length, with that established I then set the tip angle. Presto, all done. The amount of grinding on the flute will determine its' profile. I think I will probably prefer a profile with a slight elevation that is a slight vertical rise to the flute surface. With a little experience behind me I'll be able to come up with a flute length and profile that suits my cutting style. I'll

then make a jig that sets up the pivot distance quickly and easily time after time.

The next consideration will be flute interior shape. What's the difference in gouge performance between a "U" shape, a "V" shape or a "Parabola"? How do these shapes alter the performance of a given gouge?

Thanks Lyle, you've given me solid insight as to how I will now go about some intelligent cutting technique and flute design.

Dale

Hi Dale location unknown,

Close but no cigar! Let's define some terminology. The sharp edge of the tool on the side of the grind is called a wing. Yes, the wing is ground back, about half an inch from the tip. The wing length is established by grinding it that way. The wing length is not established by moving the pivot point. You are still confusing the two things. The set-up sets the angles of the grind - the grinding will make the shape you want. Don't combine these. Set it up to get the right angles and grind it to the shape you want. Go back to the sharpening section of the DVD when you get your jig and are ready to set up the sharpening system.

You talk about the "profile", I will assume you are talking about the shape of the wing viewed from the side. To use it like I do in the Bowl DVD and get the versatility of my grind it must be a straight line shape from the tip to the back of the wing. The hump that the Ellsworth grind has will result in some limitations and the "hump" gets in the way for three of the four cuts I do.

Now, back to definitions, the flute is the internal shape of the gouge. The flute configuration comes from the manufacturer and is not changed by sharpening or grinding. My signature gouge and the Ellsworth gouge have a parabolic shape of the inside shape. To view this point the gouge at your nose and look down the flute and see the inside shape. The "U" and "V" will not do the things I do in the DVD. It is critical to have the right tool before you start the sharpening.

This can be a little frustrating and confusing. All of us had to go through the learning curve to understand all the different terminology and you will hear many different explanations that can even conflict with one another. Hang in there, it will come together. I suggest getting some help from your turning club. There are many good turners that already have the set-up you want and can get you off to the right start. Club members all over the country mentor each other. It's a lot faster than trial and error. Get up to speed faster and have more fun and less frustration.

## INTRODUCING A LASER RING IDEA

Lyle,

First let me say how much I enjoyed your hollow forms DVD and seeing your demo in Chicago last summer. I learned a lot from you. Thanks.

Now for something new (I think). I have an idea that I find is useful in my own work that I wanted to share with you since you have thought

so much about laser-guided hollowing and have probably seen it all. In particular, you are no doubt aware of the different rotating laser attachments that are out there to make adjusting the laser easier every time one takes a new angle of approach to the side wall. I have a simpler solution that seems to be working well for me so far and lets me avoid any laser adjustments at all: I use a laser that projects a circle rather than a dot.

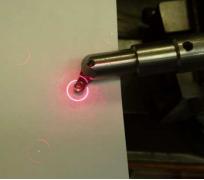
In my own case, I mostly use round Hunter carbide cutters that are about 3/16" in diameter. By projecting a laser circle around the cutter that is about 9/16" in diameter, I can hollow until any part of the circle drops off the form. This will leave me with a uniform 3/16" thickness. If I make the circle larger, of course, I can make the wall thickness greater. Importantly, there is no need to adjust the laser circle, in contrast to the laser dot.

Now for the best part -- the circle diffraction lens costs about \$3.50 and fits inside the standard 8x13mm and 12x30mm laser modules. You can get them at <a href="maixiz.com">aixiz.com</a>. I have not been able to find anybody else who sells this kind of item and I looked long and far.

http://www.aixiz.com/store/product\_info.php/products\_id/147/osCsid/c2d8dafd1f5eaab5671f0e8ee4d64784

The diffraction lens is a small piece of plastic that can be inserted in these modules by unscrewing the lens cap and dropping the diffraction lens into the cylinder. That's all there is to it. I have successfully added the diffraction lens to one of my laser pens, but note that it will not fit all of them. I have attached photos of the diffraction lens, my home-made laser guide with 12x30mm laser module housing, and the laser circle in operation.





The only part that is not simple and still needs to be worked out is how to adjust the diameter of the laser circle without physically moving the laser further away from or toward the cutter. With a 12x30 module, 12" distance translates into approximately 1/2" diameter, which is a bit small. To get more, I will either need to extend the laser further away from the cutter (about 14-15 inches) or figure out some way to adjust the focal length. Sometimes, in my own unusual circumstances, I need the laser circle to be exactly the size of the cutter, and this requires that the laser gets close to the cutter. I think some threaded brass tube will allow for the adjustment without moving the laser, but I haven't had a chance to go down this path yet, maybe this weekend.

Anyway, I'm curious what you think about this. Is there a better way? Am I missing something critical that will eventually show itself?

Have a great Memorial Day weekend.

Sincerely, Lars

Hi Lars, from Illinois,

Thanks for your feedback and photos, and sharing your idea with me. I will pass it on in my newsletter for others to use if they wish. The great thing about woodturning is that there is a ton of opportunity to exercise your ingenuity. I see you have home built or jury-rigged parts from other manufacturers to make your system. You may be using my process and my model but you have done your own thing very successfully. Congratulations!! I'm glad to help. Make sure you check out my installation instructions to see that your set-up is the same as mine. (It's new and different then in my original DVD) On the laser idea, I applaud you again. It will work just fine. As you pointed out there are obstacles and limitations that you must work out for your own needs. I have abandoned the general idea after working with it awhile. I have found in real life turning, I move the swivel position often so the ring or rotating laser position must move often. I found the fiddle factor of using it was more then I wanted to deal with. My laser moves so easy, so fast, and so accurately that it is better to adjust it, rather than fiddling with the circle. You are using the carbide cutter in a different orientation then mine. That in itself is apples and oranges. I use my carbide cutter with bevel support and slice cleanly through the wood fibers. You have your carbide cutter set up in scraping mode only. There are so many other variables, the cutter position, the perpendicularity, the shapes, the wall thickness, and they all mean the laser has to be moved, if it is a dot or a circle. My goal is to make it work without limitations and keep it simple for the masses that use it. You are way above the crowd in your understanding of the dynamics going on here and you can manage these variables, but I am afraid it might confuse many turners that turn once a week or once a month.

## **HOW TO DO DEEPER HOLLOWING**

Lyle,

Going well so far! What do you think the depth of the standard boring bar is? I do get some vibration down deep when getting rid of the shoulder after doing the bottom-10 inch depth-any thoughts? Ed

Hi Ed from New Hampshire,

There are some variables, wet or dry wood, porous or tight grain, sharp tools, and experience to take light cuts. After 9 or 10 inches the cuts need to be smaller and smaller, lighter and lighter. It is just a matter of patience. The max for anybody is 12-13 inches off the tool rest without vibration. Do not go past the vibration point, bad things can and will happen. To go deeper or faster you need to use the jumbo bar. Stay within the scale of work that is achievable and don't push the envelope of size. The goal is to have the most fun

and get a series of work done. Go for the best piece, not the biggest.

Here is a link to one of my articles that shows some tips on going deep and the vibration issue.

https://www.lylejamieson.com/instruction-

<u>classes/documents/HollowFormsTurningTipsWoodturningDesignSummer2007.pdf</u>

## YOUTUBE NAVIGATION

I was very interested in this video segment, maybe I don't understand how the YouTube videos work. I would expect to be able to link onto the subsequent video. Instead, I must search for it. That is ridiculous. This is not a criticism of you, Lyle. It is a criticism of a problem that YouTube has chosen to perpetuate, for whatever reason. I guess they want me to be searching through a stack of things I am not interested in, like a disorganized person. The situation is an injustice to you too. Lester

Hi Lester location unknown,

Sorry, my YouTube clips are not sequential, even if you could access them that way. My DVDs have the process start to finish. You can see the 40 YouTube clips I have posted by going to my channel. Go to YouTube home page first then search for Lyle Jamieson. You get them all that way.

## **FACEPLATE SIZING RULES**

Hi Lyle,

First off I can't say enough good things about your system, works like a dream. I have done over 15 hollow forms and vases with it in the short time I have had it. My question is about the size of the faceplates to use when turning larger dia. pieces. Do you have a percentage rule to go by? I have a couple of logs that are 10 " dia. (raw blank with bark still on it) but only have a 6 " dia. faceplate, is that large enough or do you recommend going larger? Thank you for your time Brian

Hi Brian location unknown,

Thanks for the feedback. The faceplate or glue block for bowls should be around 40 percent of the diameter. This is a guideline only and you have to consider how far away the cutting forces are from its support. For taller and larger diameter pieces it is smart to have more than 40 percent. It's the same idea on keeping waste wood behind the vessel for support. So the combination of faceplate diameter and waste wood is needed to prevent vibration and prevent the wood from flexing. I have used a 3 inch faceplate for a 10 inch diameter bowl but the 6 inch will be better for hollow forms.

### **FEEDBACK**

Hi Lyle,

I ordered your hollowing system about 7 weeks ago and finally got around to picking up some wood and trying it out. Must say I am impressed with the ease of setup, use, and the nice action of the carbide tip. This is the first time I've ever tried to create a hollow form, photo attached.

Ben, from Missouri



\*\*\*\*

Lyle,

Thank you so much for your videos. They have taken a lot of the work out of turning and increased the fun of the hobby. The videos have been a great help.

Terry, from YouTube

\*\*\*\*

### **CALENDAR**

Check out my website calendar for more specifics. (http://www.lylejamieson.com/information/calendar.asp)

June, 2013 - Florida

July, 2013 – New Jersey

August, 2013 – Texas

September, 2013 – Georgia

October, 2013 - Ohio, Wisconsin

November, 2013 - North Carolina

February, 2014 - Tennessee

March, 2014 – New York

April, 2014 - Georgia