

February 2020



February's Program

Making your own indexing system

Demonstrator: Joe Davis

Joe will be going over the details step by step how to make your own indexing system to fit your individual lathe. He will then show the complete system on the club lathe and tell how to use it.

He will have two turned pieces. One is a small platter and the other a cup/vase for using on your desk to hold pens and pencils. He will lay

out an indexed pattern on each one for future embellishments and discuss tips and alternative



In this issue:	Page		Page		Page
February's Program	1	Programs/ Events	5	Safety Corner	11
The Call of the Lathe	2	Ya Gotta Eat	6	Favorite Tools	12
January Minutes	3	Skill Enhancement	6	Cutting the Segments	13
January Board Minutes	4	Show and Tell	7, 8, 9 & 10	General Club Info.	14

Flinthillswoodturners.org

February 2020

The Call of the Lathe



January, 5 years ago, my wife bought me a mini lathe for my birthday and thus began my woodturning journey. It's been quite the ride. It took me a couple months to actually get the lathe set up and mounted on a rolling table. I didn't even have any tools yet. A friend had some old Craftsman tools that were given to him that he never used and so he donated them to me. Next challenge was I had no way to sharpen them. On and on, one item and challenge at a time.

As I began my journey I needed to find ways to learn what to do or not do as a beginner. There are various ways to learn and I suspect that a large portion of our members would fall into the visual and hands on methods of learning. If you are like me, most of us are not ones to read a manual, article or book and have the ability to go straight to the lathe and perform the newly acquired knowledge with great proficiency. For me learning came in a variety of methods. First I spent time having others actually show and demonstrate. The ability to watch YouTube videos was my primary source of information. There you can find about anything you can think of related to woodturning. As a beginner I searched items for beginners or how to use specific tools. I searched and watched things like sharpening and how to secure the wood on the lathe. I saw videos on catches and spindle vs side grain. The list goes on and on.

Each time I viewed a video it gave me tips and tricks about what to do or not do. Then I would apply the new found knowledge at the lathe. I actually practiced. Repetition brings about muscle memory and leads to getting better and better.

Now practice only allows you to get better if you are doing it correctly. Just because I use my spindle gouge day in and day out doesn't mean I will get better from sheer repetition. If I simply do it for twenty hours I will have it mastered. No I need to be using it correctly during those twenty hours to become more proficient.

Another learning aspect was watching and learning from others who's skill level was way beyond my own. So over the last 5 years I have watched numerous demonstrations at our club meetings that have taught me and challenged me to continue on my journey.

Find your learning style and use those around you who have the expertise to help you along your journey. Our club has a wealth of experienced turners who I know would all love to spend time with you. Take advantage of this wealth of knowledge. What's the worst that could happen? You might actually get better.

As always:

"Turn what you Love and Pass on the Love"

Ray Case—President

Club Minutes

Jan 4th 2020

Location: Golden Prairie Honey Farms, 8859 Green Valley Drive, Manhattan, KS

Business: Continuing and new members were encouraged to get their \$35 membership dues paid to Tom Shields for 2020.

For Ray's cedar challenge, please bring in your piece next month, hidden. Members will vote for their favorites from the anonymous submissions.

Reports:

VP, Secretary and Operations: no reports

Treasurer: The club paid for 1000 new brochures. Members are encouraged to take a few and hand them out to anyone interested. A deposit was made from dues, raffle tickets, and donations. Checks were written to Tom for raffle items and to Golden Prairie Honey Farms for 6 more months of space use. The treasury balance to date is \$4064.

Programs: Joe Davis will demonstrate indexing in February. Tom Boley will demonstrate turning a vase with a vacuum chuck in March. In April, guest demonstrator Matt Monaco will provide a demonstration on Saturday and workshops on Friday and Sunday. Members should contact Dennis to suggest demo topics of interest as well as their interest in either of the workshops. Each workshop will be limited to 8 people and will likely cost ~\$70. The Flint Hills Festival- Meet the Makers is also coming up in April.

Raffle: Many great items were won by participating members including craft supply certificates, micromesh, a face shield, bocote wood pen blank and block, bowl finish, mirror coat, and the grand prize was a parting tool.

Demonstration: Ray Case made an excellent demonstration on multi-axis turning and use of the indexing system. Summary: First you start with a sphere. Mount the sphere on centers and draw a line around the center. Using the indexing system, mark 24 even lines intersecting the center line. Every second intersection will become an axis. Remount using one of the new axes and turn away a concave section around the sphere equal to the width of 2 sections. Repeat this process for all 6 axes. Remount on original axis and establish a tenon on one end. Drill a 9/16" hole at each of the 12 penetration points. Remount in chuck and hollow the center out. Remove tenon. Make sure to sand throughout the whole process.

Departing board members, Randy, Tom and Ned were thanked by the group for their work on the club's board and all enjoyed a cake in celebration.

The next meeting is February 1st.

Barbara Drolet—Secretary

Board Minutes

Jan 4th 2020

Attendees: Ray Case, Robert Kloppenborg, Barbara Drolet, Ross Hirst, Dennis Biggs, Steve Bietau, Tom Boley, Bob Holcomb

The AAW has Chapter instructions and duties of board members. It has good ideas on promotion, officer transitions, etc. and would be good for all board members to review.

Events this Calendar Year:

Discovery Center's Meet the Makers – March during spring break. We typically choose Monday for our demonstration/participation.

Flint Hills Festival – April. Last year they said they wanted to start charging admission fees for all volunteers. There was a lot of push back on this and they decided not to last year but may this year. Likely we will not participate if they are going to charge us.

Pumpkin Patch – October. Exact date will be decided when the football schedule is set.

Other possibilities discussed:

Smoky Hill River Festival in Salina, June 11-14. David Delker will be contacted by Ray and/or Steve to advise us on how to participate and the logistics involved.

Tulip Festival in Wamego, April 18-19. Steve Bietau will pursue getting information on participation.

MAC (Manhattan Arts Center) has offered the club one of their glass display cabinets in the lobby (not in the main gallery) as a year-long display for us. We could rotate items in and out throughout the year. Those bringing worthy items in for show and tell would be approached by the board to potentially display. Tom suggested to them that we should do a show in the main gallery, but they expressed concern that the walls of the gallery would be bare. The club may need to think about making pieces that could be hung in addition to the others displayed. Tom will organize for 2021.

Newsletter minutes were discussed. It was decided that the only minutes needed were the date, time and location of the meeting; officer reports; upcoming public demonstration events and member-provided meeting demonstrations; visiting professional demonstrators, workshops; decisions proposed and voted upon; changes made to the bylaws. Demon-

strators will be asked to provide a summary (can be narrative, bullet points, or just highlights) of their demonstration and the key points they wanted to convey. This will act as a reminder to those who did attend and provide a brief description to those who were not able to attend.

For the Manhattan Mercury column, it was decided that the information provided would be: meeting time, location and date, club events occurring in the next month, as well as a brief summary of the demo.

As far as requirements by IRS for our non-profit status, they care about our public education events and the budget.

Matt Monaco is confirmed for April 3-5. What he will demonstrate is TBD. Dennis will poll the club this month and next for preferences on the Saturday demo topic and the Friday and Sunday workshop topics. Tom proposed we charge \$5-10/person for the Saturday demo. Likely the workshops will be \$70/person with 8 people per workshop to be held at Tom's shop.

Our anniversary is coming up again in April, but that month is getting very full already with the Matt Monaco demo/workshops and either the Flint Hills Festival or the Tulip Festival or both. It was proposed that we move the gathering to May. It was also proposed that we do a lunch potluck/BBQ after the May 2nd meeting instead of an evening potluck to try to increase participation.

Hartsville tools needs a membership list update. Ray asked Robert to put together information on all the wood working vendors and the discounts they are willing to offer our club members. This will then be presented to the club next month and members can choose whether they would like their information to be shared and with whom.

Meeting adjourned.

Barbara Drolet—Secretary



Programs

Flint Hills Woodturners Calendar of Events

Upcoming demos:

This months program will be presented by Joe Davis who will educate us about indexing.

Tom Boley will give the March demo on making a beautiful unusually shaped vase with the assistance of a vacuum chuck.

I hope that the club is ready for our professional weekend with Matt Monaco from Springfield, MO in April. I have 8 members signed up for the workshops on Friday and Sunday. We have room for up to 8 each day. I will not be at the February meeting, please let Ray know if you would like to attend one of the workshops.

As always please consider volunteering and also if you have ideas for demonstrations please contact Dennis.

Dennis Biggs - Program Director

Feb 1st	Monthly Meeting Indexing Joe Davis	Golden Prairie Honey Farms 8859 Green Valley Drive, Suite #4, Manhattan
Feb 11th	YA GOTTA EAT NOON	
Feb 17th	Skill Enhancement 7:00-9:30pm	Red Oak Hollow Lathe Works, Wamego
Mar 7th	Monthly Meeting Tom Boley Vase	Golden Prairie Honey Farms 8859 Green Valley Drive, Suite #4, Manhattan





**YA
GOTTA
EAT**

Tuesday Feb 11th
at Noon
**SHOW AND
TELL ITEMS
WELCOME**

Skill Enhancement



February 17th
7:00pm
to
9:30pm
Red Oak Hollow
Lathe Works
4025 Walnut Creek Drive
Wamego, KS 66547

January: Show and Tell



Vaughn Graber



Dennis Biggs



Jeff Johnson



Peter Dorhout

January: Show and Tell



Ray Case



Victor Schwarz



Don Baker



Brad Hopper

January: Show and Tell



David Delker



Tom Boley



Tom Shields



Robert Kloppenborg

January: Show and Tell



Dennis Waite



Nyle Larson



Kenneth Stitt

Safety Corner

My past few columns have focused on chemical safety and managing chemical hazards in the shop. Prior to that, I wrote about being prepared for accidents with an adequate and accessible first aid kit in your shop. This month, I want to return to the use of adequate personal protective equipment (PPE) after one of our members, Ned Gatewood, shared a story about an accidental catch on his lathe and how wearing proper PPE saved his good looks.

Ned shared this photo of a bowl that he was working on that had broken rather unexpectedly quite close to the end of turning. In fact, he related to me that there were no noticeable cracks or weaknesses in the bowl, and as you can see, it wasn't particularly thin or unusually shaped. He also had it supported with a rubber stopper on his rotating tail stock, so most folks would have thought it highly unlikely to come out of the chuck, even if the tenon had sheared off. During these last final finishing steps you might ask, "why wear my face shield?"

Well, just like one might read on the map of an ancient mariner sailing into unknown waters, "here, there be dragons." Even all chucked up and supported, a bowl like this spinning at cutting speeds can still represent a hazard. Ned was using a scraper to finish the surface of the bowl when he had a catch. In the photo, you can see resting on the head stock two of the "splinters" that broke off the bowl. One hit him directly on his face shield.

As the ancient mariner would say, "it's rarely the cannon shot that gets you in a naval battle, it's the splinters!"

Thinking about the potential hazards during all phases of our work is important. Had our friend not been wearing his face shield, he might have found himself reaching for his handy first aid kit. His project wasn't so lucky, but he was, and it is a reminder to all of us to always wear proper PPE. Thanks for sharing your learning experience, Ned, and I'm glad you were not hurt.

Next month, I will go back to my chemistry roots and relay a caution about using silica-based epoxy thickeners for casting objects that you might machine or turn that Barbara Drolet sent to me.

In the meantime, keep your tools sharp and wear your PPE.

Peter Dorhout



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Some of my Favorite Tools

By: Ned Gatewood

In the months to come, I will be writing a column for the Flint Hill Woodturners newsletter talking about some of my favorite wood turning tools. I will do this as an effort to make the newsletter a more interesting and informative newsletter, to help new and experienced turners learn about tools they may not be aware of, and for not the least of reasons, to fulfill my need to write, something I enjoy doing very much. Sometime in the future, when I get tired or run out of interesting tools to write about, I'll be asking other members to step up and write about their favorite tools. So here goes. I hope you enjoy these columns.

The Robo Tool Rest

A favorite tool of mine is the Robo Tool Rest. This tool is made and sold by Reed Gray, aka Robo Hippy (no, I don't know what the aka thing is about) and costs \$100. I love this tool. www.robohippy.net/store

This tool does two things really well: it provides a dead-on accurate bevel angle on your skews and scrapers every time, and secondly, it saves a lot of time sharpening skews and scraping tools. What more could a wood turner want from a tool rest?

The Robo Tool Rest is compatible with Oneway's Wolverine Grinding Jig. You simply slide it into the square tube on your Oneway system. So easy. The tool rest needs to slide into the Oneway tube the same distance every time, so I drilled a hole into the portion of the tool that goes into the Oneway tube and screwed a machine screw into that hole; this serves as a stop that determines how close the tool rest can get to the grinding wheel (an important element for a consistent bevel angle).

First, regarding the accuracy of the bevel angle this tool rest provides. You put a pin (a modified allen wrench provided with the tool) into one of the holes in the tilting rest that are marked with angles from 30 to 90 degrees (in five degree increments) to establish the desired angle of the rest. That's it! There's no messing around in a hit or miss

fashion trying to match by eye the existing angle of the tool being sharpened. Adjusting the bevel angle of your tools by eye will undoubtedly result your tools' bevel angles wandering several degrees all over the place away from the intended angle. Seventy degrees will soon become 66 or 74 degrees. The Robo Tool Rest eliminates this inaccuracy. I write with a Sharpie the bevel angle I want on the collet of each scraper or skew so I won't forget it, and when I sharpen that tool, I set the pin at the desired angle, and bingo, I get that exact bevel angle every time.

Secondly, this tool saves a lot of time. The first thing I do when sharpening a skew or scraper with the Robo Tool Rest is to turn on the grinder. While the grinder is coming up to speed – five or six seconds - I insert the pin into the desired angle hole. That's all there is to it. Setting the angle takes less time than it takes the grinder to come up to full speed! I hate to admit it, but it's become annoying to wait for the grinder when I've already got the tool rest's angle set. When the grinder comes to full speed, I start grinding the tool. It's over so quickly.

So consider a Robo Tool Rest as your next tool. It will give you accurate bevel angles every time and save you a lot of time at the grinding wheel to boot.



Cutting the Segments

By: Victor Schwarz

Many people shy away from segmented turning because of the extra work figuring lengths and angles. Admittedly, one cannot just grab a hunk of wood and slap it on the lathe and start turning. To do it properly takes careful planning and preparation. The critical aspect is getting the segments cut properly. I have been doing segmented turning for 9 years and have probably made 500 segmented projects, so let me give you a hand if you would like to get started.

The segment is a small piece of wood that is the building block of any project. Think of it as the brick in a brick wall only it is a piece of wood in a round bowl. The two sides are parallel and the two ends are angled in toward the center so it will lay up in a circle. As with any other pieces of wood one needs to know the length, width and thickness. The other (that most people fear) is the angle.

First the thickness. This is up to the person doing it. I have made them from .125" to 2.5" thick. Since your boards probably are planed to .75", let's just work with that.

The width is determined by the slant of the side of the project. Where it is vertical I generally don't go under 1". Where it has a slope in or out I start with a 1:1 drawing and do a profile of both the outside and inside of the bowl. For planning purposes I will allow .375 to .5" wall. Then I draw horizontal lines to show the thickness of the ring at this point. With this, one can quickly measure how wide the segment must be to reach both the long point and the short point. It's advisable to add up to 1/2 in. for waste,.

Leaving the length 'till last let's look at the angle of cut for the ends. This is determined by the number of segments in the ring. This is an operator decision. I often gravitate to 12 per ring. I have done as few as 6 and as many as 48. One can design more intricate patterns with more segments per ring. Now think of a pie and cutting it in a given number of pieces. As you know a full circle is 360 degrees. If you cut

6 pieces the angle of the point will be 360 divided by 6, or 60 degrees. What we need to know is the angle at the outside end. Without going into the reasons a rule of thumb is that if you take half of that number off each end it will come out right. So a 12 segment ring will have an inside angle of 30 degrees [use this number below in figuring the length] and 15 degrees must come off each outside end. Set you gauge or saw at 15 off square and saw the ends.

Now for the critical measurement - the length. The length will determine how large each ring of segments is. There is a quick and dirty and an exact method. For smaller pieces the quick and dirty will usually give good results. Find the circumference of the circle and divide by the number of segments. In case you have forgotten, pi (3.1416) times diameter equals circumference. Now add a bit to make it slightly larger for waste.

I won't go into the trigonometry of it but here is the formula for the more exact method. $\text{TAN}(1/2 \text{ inside angle}) \times \text{radius} \times 2$. Now to unpack this. It's best to add a waste factor of .25" to the radius to begin with. For the first part use a scientific calculator or the calculator on your computer. If inside angle is 30 enter 15 and then hit the tangent (tan) button. Multiply that by the radius plus waste. Now multiply by 2. If you did it right this should give you the exact length of the segments. I use a digital gauge to set the stop to 2 places (hundredths). This sounds complicated but give it a try. You don't need to know trig, just follow the instructions.

Yes, this is more complicated than turning natural edge bowls, but it opens up a whole new world of possibilities to use your imagination. Once you get the hang of it the sky is the limit of what you can do.

Flint Hills Woodturners is a 501(c)(3) non-profit composed of individuals who are interested in learning and promoting the art of turning wood. Formed in March 2015 for hobbyists in the Flint Hills region of Northeast Kansas, the club welcomes all interested people to visit our meetings to get a sample of this inspiring hobby. You will find warm people from novice to expert willing to share with you. Flint Hills Woodturners is a chapter of the American Association of Woodturners (AAW).



President

Ray Case

president@flinthillswoodturners.org

Vice President

Robert Kloppenborg

Secretary

Barbara Drolet

Treasurer

Ross Hirst

Program Director

Dennis Biggs

Operations

Steve Bietau

Member at large

Bob Holcombe

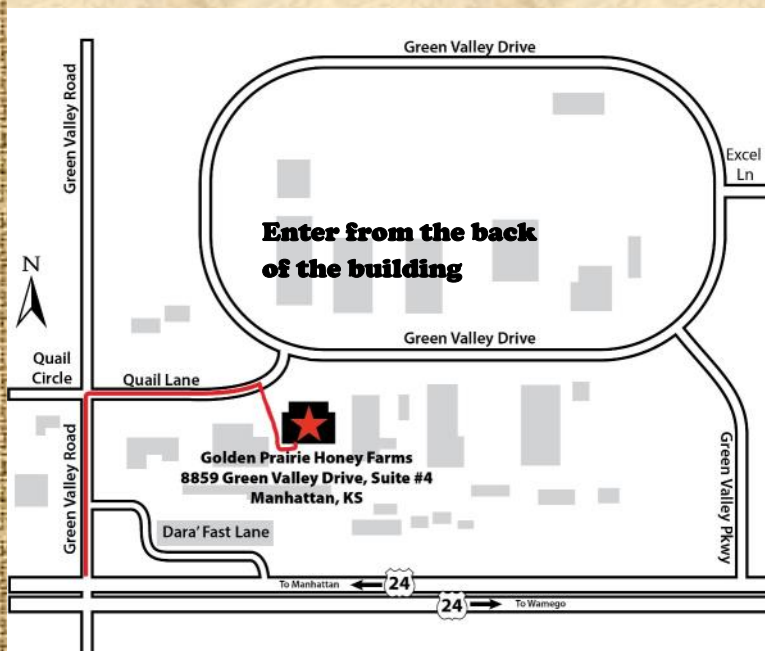
Past President

Tom Boley



Unless otherwise announced, meetings are held at 8859 Green Valley Drive, Suite #4, Manhattan KS
Meetings start at 9:00am but come any time after 8:00am.

Enter at the rear of the building



The American Association of Woodturners (AAW) is a nonprofit 501 (c)(3) organization, dedicated to advancing the art and craft of woodturning worldwide by providing opportunities for education, information, and organization to those interested in turning wood. Established in 1986, AAW currently has more than 15,000 members and a network of more than 350 local chapters globally representing professionals, amateurs, gallery owners, collectors and wood / tool suppliers.