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August Meeting: Design Concepts with Angie Kopacek

The creation of a beautiful piece of furniture requires not just quality materials and craftsmanship, but also creative and thoughtful design. Angie's talk focused on the design aspects of a furniture piece as she discussed concept, esthetics, visual vocabulary and design methods.

Full Story...



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September Meeting: Puzzled to Pieces - Keith Winegar

Keith Winegar designs and builds 3D wooden puzzles; some that are simple, some incredibly complex, some diabolical, but all of them are fun! Keith brought samples of his work and talked about the jigs and tools he uses in the pursuit of his "hobby."

Full Story...



What's on Your Bench?

Carole Magnuson is in the process of restoring four beautiful oak chairs with cane seats. Read the story about these chairs and learn the process steps that Carole is following as she gives new life to otherwise unusable furniture.

Full Story...



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Minnesota Woodworkers Guild Proud Member Logo

We now have a Minnesota Woodworkers Guild Proud Member logo available for use on your personal and social media websites.

Full Story...



Proud Member

Ash Trees to Ashes

Guild member Ronald Corradin recently listened to the sound of chain saws in his front yard as the city removed 100 year-old ash trees in a pre-emptive strike against the emerald ash borer. As if

that wasn't bad enough he learned that the wood is burned.

Full Story...



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September Meeting: Puzzled with Keith Winegar

Story by Jerry Beutel Photos by Angie Kopacek

The September meeting started with the introduction of two first time attendees, a couple of show and tell items (puzzles, by the way) and a great door prize giveaway. A dozen attendees went home with one of Keith's perplexing puzzles, sans the solution. We also gave away a gift certificate generously donated by Rockler. In addition, Gretchen from the Bloomington Rockler store told us about their plan to restart the gift certificate program for the Guild. Everytime a Minnnesota Woodworkers Guild member makes a purchase at Rockler, not only will they receive a 10% discount, but they will also create a credit for the Guild that will give us additional gift certificates to be used as door prizes - it pays to be a member!



Member Larry Wilson demonstrates a string puzzle at Show-and-Tell.

What happens when a person retains his childhood fascination with puzzles while pursuing a career as a computer programmer? For Keith Winegar it means designing dozens of different puzzles; some that are simple, some incredibly complex, some diabolical, but all of them are fun! Nearly 50 Guild members were treated to an overview of Keith's 30-year "hobby" as a puzzle maker.

Keith Winegar grew up in a household that always had lots of puzzles around and he enjoyed them. But it was the birth of a nephew when Keith was a young man that started him down the slippery slope to becoming a well-known puzzle creator. Keith figured it would be nice idea to make a Noah's ark set for the new arrival, and he went to work with the only thing he had available, a coping saw. Discovering that wasn't going to work, he borrowed a saber saw, sat in a chair, turned the saw upside down and squeezed it between his legs while he tried so make a pair of giraffes. Quickly he realized that this wasn't the safest thing he had ever done and started looking for a better alternative. An acquaintance with a band saw not only helped Keith to complete the immediate project, but also got him thinking about using his newly found power tool expertise to create puzzles. Before long, 2D puzzles led to 3D puzzles, some serendipitous mistakes led to more complex puzzles, and soon his friends and co-workers became both recipients of his latest work and guinea pigs for his next concept.

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Some of the puzzles he creates form a cube of wood when assembled, and in fact they start out as a solid cube. Disassembled, they break down into 4, 8 16, 27 or 64 pieces. The later of those was made on a challenge from a co-worker and Keith described it as basically impossible to solve. He also makes puzzles with hidden compartments, puzzles that can be taken apart only if held in a certain orientation, puzzles that need to have steps followed in a certain order, and one that requires a hidden spring to be compressed by inserting a particular puzzle piece in a specific orientation - that's the diabolical one.

Keith's work is held in such high regard that he is one of fewer than one hundred people in the world invited to the International Puzzle Party. This event is for puzzle aficionados to meet and exchange puzzles and related books and items.

Keith's puzzle making shop is 750 square feet. It includes a pretty complete set of woodworking machines - two band saws, a table saw, planer, jointer, sanders, and drill presses among others. The pictures of his shop looked like a lot of other in-home shops, perhaps with fewer hand tools and clamps than someone who makes furniture might have.

Somehow in this shop Keith filled his largest ever order - 3,500 four piece 3D puzzles. The puzzle looks really easy, until you try it. The buyer was using the puzzles as a promotional item, sending his clients one piece per week until they had the complete set. It was quite a surprise to this buyer that each puzzle, being handmade, was unique and would only work if the original four parts were kept together. He thought perhaps that these were mass produced items with interchangeable parts.

Keith brought in some of the jigs he uses to facilitate the cutting of his puzzles. Fancy is not his concern when making a jig. Take a scrap of plywood, glue on a block of pine and another of walnut with the proper notches in it and he has a jig that will hold a puzzle in the correct orientation while he cuts it on the band saw. Another type of jig Keith showed us was his "arrow squisher" (see photo below) that allows him to compress a wooden arrow head long enough to pass it through a hole in a bottle, after which it expands back to its original size when soaked in water.



Sometimes Keith's vocation and avocation mix together. He has been known to write computer programs that might help to solve a puzzle, or at least to determine how many wrong ways there are to assemble the puzzle pieces.

The puzzles Keith makes have anywhere from four to many dozens of pieces, and they have a wide variety of shapes. Unlike most 2D picture puzzles, which require the user to match a shape and a picture, many of Keith's puzzles require matching a shape and twisting the pieces in some unexpected direction to assemble or disassemble them. In fact oftentimes the hardest part of his puzzles is taking them apart.

Keith only sells his puzzles at three venues, the International Puzzle Party, at a craft show in Little Falls in September and at another craft show (coming up soon!) held at Centennial Middle School; 399 Elm St. Lino Lake, MN on October 30th from 9:00 to 3:00

After the presentation the attendees jumped at the chance to try their hand at the puzzles and look at other interesting carved items that Keith brought along, such as a nine foot chain (carved from an eight foot board) and working pliers made from a (still) single piece of wood.



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What's on Your Bench?

Story and photos by Carole Magnuson

Several years ago, I took a little time off from Corporate America. I needed to do something different. I enrolled at Dakota Technical College in their furniture restoration program and worked very hard to learn to repair and restore furniture. It's great fun for me besides serving a terrific purpose. It puts otherwise unserviceable pieces back to good use. It's the "trash to treasures" factor in play.



My sister has had these four pressed back chairs in her attic for years...and I've been trying to get them from her for years. She just gave them to me as a "retirement gift". They're oak, heavily coated with dirty old shellac. The cane is broken out. Stretchers are missing, one of the legs is developing a crack and one of the seats was broken off along the caning holes.

I set up a little stripping station to clean up the chairs. That's what I'm doing now. Shellac is sticky, but you can get through it. It cleans up well after the stripping with denatured alcohol.

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After they dry, I will go through and test all the joints for stability and re-glue where necessary. I already repaired the break along the caning line on the one chair. It wasn't hard because the clamping process is straightforward. I did, though, be sure to clean out the excess glue in the holes before it dried and created more work. Q tips work great for that.



After I sand, I will see what the color of the wood really is, and will probably stain it some light pleasant color that provides some uniformity to them. I will mix my own color using high quality stains that I buy from a professional source. I will topcoat them with sprayed lacquer to provide functionality. Then, I will re-cane the seats. Yes... they will be hand caned, one weave at a time.

My intention is to return these chairs to serviceability. They are not "antiques". They were unusable as is. They will be returned to full functionality and fit into a plan somewhere. I may donate them, sell them or pass them on to family. I don't know yet, but in any case, they will work well.

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Tout the Guild and Your Membership!

We now have a web-ready copy of the Minnesota Woodworkers Guild logo available for use on your personal and social media websites. The graphic is in jpeg format and is already sized to approximately 2 inches square overall including the white space around the logo. The logo itself is approixmately a 1 1/4" circle. Below the logo is the notation "Proud Member". The graphic is best used on a white background but will work on top of any background since the white space creates an adequate "window" for the logo.

You can save the graphic displayed below or send an email request for the graphic to MNWoodworkersGuild@gmail.com and have it sent to you.



Proud Member

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President's Notes

by Charlie Kocourek

As I write this I am preparing for a one week Furniture Design class at the Marc Adams School of Woodworking. The class incorporates Sketchup, a rendering plug-in for Sketchup, and Photoshop. I am very excited about my trip – expecting to develop my knowledge and skills, and have some fun at the same time.

I am a true believer in education. We are very fortunate to have so many great woodworking schools to choose from. Not just the ones that are out of state but great local schools, too. I encourage you to check the offerings at Mike Siemsen's School of Woodworking, and George Vondriska's Wild Earth School in Hudson. Woodcraft and Rockler offer outstanding classes as well.

But wait, there's more!

One of the great things about the Guild is the numerous educational opportunities. I have learned so much more through my involvement with the Guild than I ever imagined possible. The monthly meetings are great, and this year's Fall Seminar is right around the corner - November 5, 6, & 7. This year's speaker is Thomas Stangeland. Thomas specializes in the Green and Green style of Arts and Crafts furniture. The Minnesota Woodworkers' Guild Fall Seminar is one of the best woodworking bargains around. I encourage anyone to attend the seminar, but I especially encourage those of you who haven't been able to attend any of the past seminars.

A final note about the seminar that you might not know is that students can attend for free! Please contact Dick Schultz about student admissions, and bring your son, daughter, or your grandchild.

Sincerely, Charlie Kocourek NEWSLETTER HOME

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Emerald Ash Borer

Story by Ronald Corradin

On August 17-20, 2010 crews from the St. Paul Department of Parks and Recreation cut down over 40 boulevard ash trees on my 2-block section of Watson Avenue in St. Paul. It was a preemptive strike against emerald ash borer, an invasive insect species that kills ash trees.

The ash tree in front of my house would have been a perfect saw log. With a diameter of 26.5 inches at chest height and a length of 14 feet to the first crotch, it would have yielded over 500 board feet of wood. Ash is retailing for \$2.86/bf at Youngblood Lumber. Do the math. I didn't get to keep any of it. All the trees went to be burned at the District Energy plant in St. Paul.

I counted the rings on the stump. My house, the first on the block, was built in 1925, so I expected about 85 rings. I counted about 100, which implies that the streets in my neighborhood were platted, and the boulevard trees planted, ten years or more before the first houses were built. These were old trees. My tree showed no signs of EAB.

There are tens of thousands of ash trees in the Twin Cities metro area, containing millions of board feet of lumber. We could lose all of them. If you have an ash tree now is the time to protect it if you can or plan to cut it down and replace it if you cannot. The spread of emerald ash borer is hard to predict. But for a program of insecticide treatment of any ash trees you own contact your local Parks & Rec or Forestry Department or go to: www.extension.umn.edu/issues/eab/ or <a href="https://ww

Presently it looks like the pattern of losing our ash trees and not getting to keep the wood will continue. As woodworkers we have a good understanding of the problem and its results while being largely powerless to fix it. For a start do not transport ash firewood. That is how the insects have spread, and local governments are strict about allowing further spreading of EAB through infected wood.. But perhaps some of these trees can be salvaged for lumber, even though it does not look likely. There are portable sawmills, but no portable de-barking machines.

In 1925 it was chestnut blight. In 1975 it was Dutch elm disease. Now this. The new trees the city will plant on my street (maples and disease resistant elms) will someday grow to maturity. But I will never live to see it.

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Upcoming Meetings:

Oct 19 - Tuesday 7:00 PM

MATERIALS FOR WOODEN MUSICAL INSTRUMENTS

Lisbeth Nelson Butler is a graduate of the Violin Making School of America, has owned her own violin shop and has been teaching since 1990. Lisbeth will discuss violin construction, tools used, the secrets of the varnish used for finishes along with the selection of woods for instruments then and now. Woven into all this will be interesting facts about Stradivarius politics, power, and the Renaissance. Lisbeth gave a talk to the Guild several years ago and is back by to popular demand. You don't want to miss this.

Location: Dakota County Technical College - Room 1-520B, 1300 145th St. E.County Road 42 Rosemount, MN 55068

Directions: From The Northwest: I-35W South to County Rd 42; 11 miles East on County Rd 42; DCTC is on the right side of the road. From The Northeast: I-494 to Hyw52; South on Hwy52/55 to County Rd 42; 2 miles West on County Rd 42; DCTC is on the south side of the road. Park on the West side of the building. Room 1-520B is on the first floor near the west entrance.

2010 FALL SEMINAR WITH THOMAS STANGELAND -- GREENE & GREENE

Friday, November 5 - Sunday, November 7 Dunwoody Institute

Thomas Stangeland's work has appeared in many magazines, including Fine Woodworking, Home Furniture, American Bungalow, Style 1900, Art & Antiques, Woodshop News, and Cottages and Bungalows. His furniture has also appeared in a variety of books on the Arts & Crafts style, and he was chosen to design and build the furniture for the Presidential and Vice-Presidential suites of Disney's Grand Californian Hotel in Anaheim, CA.

Tom Stangeland and his small group of craftsmen have been building fine furniture in the Arts & Crafts tradition for the past 25 years. Inspired by Greene & Greene, the furniture is built from the finest materials with impeccable craftsmanship. Everything is built by hand in Seattle , WA.

See the Guild's website for details and registration: http://www.mnwwg.org/fallseminar_2010.html NEWSLETTER HOME

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Welcome to these new Members:

Bradley Carlson Douglas Cohen Karl Dennis Joe Mamer

Tim Payne

Jon Perko

Greg Hall Milton Lenz

Charles McCarty

Mac Davs

Juan-Castellanos Santos

Kenneth While Kevin J Doyle

Josiah Newsom

Derek Roek

John Osen

Ronald Antos

Michael Kremer

Matthew A. LaBo

Richard Steege John Fjellanger

Mike Hadler

Terel Letcher

Leo Ikeda

Rob Crawford

Troy Passe

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August Meeting: Design Concepts with Angie Kopacek Story by David Mitchell Photos by Paul Schalekamp



The August Woodworkers Guild meeting featured a presentation by Angie Kopacek on design concepts. The creation of a beautiful piece of furniture requires not just quality materials and craftsmanship, but also creative and thoughtful design.

Angie started the meeting with a series of pictures of the Chevrolet Corvette from 1953 to the present. After presenting the sleek lines and artful form of all six major models of the Corvette (all graceful and sexy) she told the story of the Pontiac Aztec.

The Pontiac Aztec was a state-of-the-art cross-over automobile. It had a large cargo capacity, four wheel drive, comfortable seating, and an instrument panel designed by NASA designers. But the auto critics criticized the exterior styling and called the Aztec the worst car of all time. The car never sold more than 28,000 units per year in its four year life span. Nearly the only buyers of the Aztec were GM executives and fleet vehicle services. The intangible aspects of pleasing form are just as important in furniture design as they are in any other product design.

Concept or Function

Above all, remember the basic utility that your project is intended to provide. A 52-inch high definition television in a 10 by 14 room is out of proportion to the available space. A dining table needs to be sized to seat the number of people that your space and your requirements demand. There are existing standards for table heights for coffee tables, dining tables, kitchen counters, and sofa tables, for example.

Esthetics

Highly successful furniture styles are works of art as well as functional. The form, lines, details, and styles provide the "canvas." The details and finish are the painting. There are a number of highly successful furniture and architectural styles in history and created by contemporary designers that demonstrate this concept: Queen Anne, early American, Craftsman, Arts and Crafts, Greene and Greene, Shaker, South Western Country, Art Deco, Oriental, and others. Angie elaborated on the design concepts of Shaker, Greene and Greene, and Krenov style furniture.

Shaker typically has inset doors and drawers, knobs that are mushroom shaped, frame and panel construction, flat panels, and is typically made from cherry wood.

Krenov style furniture often has long slender legs with an emphasis on grain matching, grain patterns, and contrasting woods.

Greene and Greene furniture is rich in design details. Often these pieces have such subtle design features that you need to study the piece for some time to spot them.

Visual Vocabulary

Angie recommended that you study the furniture styles that you find attractive and notice the design elements that appeal to you. You may take only a few concepts from any one particular style. She suggests that you start your design in an existing style and slowly add or modify the

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design with your own embellishments.

Get and keep a sketch book. Explore ideas and design concepts in drawings. Don't be afraid to explore ideas even when they seem impracticable. Take your sketch book with you. Angie shared her sketch book and said that she often finds inspiration while walking in woods or nature.

Review your sketch book periodically. Angie told us of instances where after successfully finishing a project she later found design aspects of the project drawn in abandoned and forgotten sketches in her sketch book.

Explore differing ratios. By changing table stretcher or apron widths you can emphasize or deemphasize the base or table top. A stronger base will make the piece look more stable and rooted. Slender legs and stretchers will create a more delicate or floating appearance.

Think in positive and negative spaces. The table top, aprons, and stretchers define positive spaces. The empty spaces framed by these elements define the negative spaces. Large negative spaces in a table design create a more inviting and spacious appearance. Large positive spaces will make a table look more utilitarian or stronger.

Remember to include directionality in your design concepts. Leaning the table legs out creates a more stable look. Leaning them in can de-emphasize the supporting structure. Shapes and shape interaction are a powerful design element. Everything does not have to have straight lines

Composition and proportion are important on more complex projects. Think about where to have doors, drawers, and shelves in a bureau, hutch, or cabinet. Where do you want these to be symmetrical or asymmetrical?

Make extensive use of drawings to model your design. Also create design mock-ups or scale models with poster board or cardboard. These visualization exercises will greatly increase your design success.

Design Methods

The golden ratio is generally considered a visually pleasing ratio. The ancient Greeks used this ratio in their architecture, and the golden ratio is found frequently in nature. The golden ration is 1.618 to one, or approximately eight to five. The golden ratio is also interpreted inversely as five to eight.

The Fibonacci Series starts as a series of integers, that then closely approximates the golden ratio at the 5 to 8 step and there after.

The Hambridge progression is often used to define the spacing of decreasing drawer or shelf sizes. Each succeeding drawer or shelf space is slightly smaller than the preceding size. Some experimentation is required to get a set of drawer spacing to fit a desired cabinet space. You may find it easier to define the drawer sizes, then define the cabinet size to fit these drawers or shelves.

Perhaps the simplest method is simple integer ratios. Whole number ratios may work well when you want to align differing height drawers in side by side cases or carcase halfs. Use these to define panel dimensions or as ratios for drawers or element spacings.

Harmonic ratio is a series of decreasing fractions. Use these for drawer spacing or for visual aspect ratios. Remember you do not necessarily need to start with the beginning of the series. Perhaps a three drawer chest with drawer spacing 1/3, 1/4, and 1/5 is what you'll need..

Conclusion

Furniture design is a form of art. Use the tools discussed in this presentation to assist you, but if one does not work out for you, try another. Remember the underlying goal is to continue to think in terms of developing your own visual vocabulary and evolving a style that is all your own.

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Advertising in the classifieds is provided to members of the Minnesota Woodworkers Guild free of charge. Ads placed should be for goods or services of general interest to the woodworkers who make up the guild community. Ads for services will run until cancelled. Other ads will run for one issue unless renewed. Submit ads to: jebeutel@gmail.com.

Tools

Sawstop 5 hp Table Saw

Sawstop 5 hp table saw with 44" table and 40" extension, Sawstop fence with 84" rail, riving knife, zero clearance insert, extra Sawstop cartridge for dado blade use and teak dado insert. Also have precision equipment for blade truing, etc. which we would include. The saw is a single phase 220 volt, so no special wiring is required. We bought the saw new in 2006. It has been stored in a clean, climate controlled shop environment. Has not been used enough by its hobbyist owners to even require sharpening the original blade. This model is the saw the company refers to now as their "Industrial" model. Asking \$3200. Call John at 612-384-2034 or email at jyhendricks@aol.com.

Oneida 3 hp Cyclone Dust Collector

Oneida 3 hp single phase dust collector cyclone and all the duct work needed to set up a good sized shop (capacity is sufficient to handle table saw, planer, and one or two other machines at the same time). The duct work is sufficient to provide 2 "floor sweep" drops, and 6 or 7 major machine drops, all with shut off gates. The system also has remote control "fobs" for star/stop. Has had minimal use. Worth over \$3500 with duct work. Will sell all for \$1500. Call John at 612-384-2034 or email at jyhendricks@aol.com.

Workbench Plans. Plans now available for Adjustable Height Workbench with a Built in Mobile Base. Email Charlie Kocourek at Charlie@Jack-Bench.com or visit my website www.Jack-Bench.com

Lumber

Quarter sawn white oak for sale. \$3.75 bd. ft. Abrasive planed to 7/8 in. Contact Todd Williams 507-364-5584

Services

Mike Siemsen's School of Woodworking. We have another great line-up of classes this year including some tool sharpening and tuning classes with Mike and a fantastic finishing class with Roland Johnson. We are also highlighting Glen Huey's class Build a 4 drawer Chippendale Chest. Classes are held in my shop on a quiet rural setting 35 miles north of the Twin Cities. The shop is heated and air conditioned for your comfort year around. Reserve your spot now! Website: www.schoolofwood.com e-mail: mike@schoolofwood.com Phone: 651-257-9166

Plane soles milled flat, price ranges from \$12 for a block plane to \$40 for a #8. Sides can be milled square to the sole for \$15-\$20. Contact Chuck Pitschka at 952-935-0660, or by e-mail at cpitschka@mn.rr.com.

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