

Encouraging all woodworkers in self-expression, craftsmanship and knowledge

Colorado Woodworkers Guild June 10, 2019



President's Message

In my April & May 2019 message I talked about my upgrades to my shop dust collector. This month fellow member Mark Klosky wants to share his experience on this matter.

Disclaimer:

The following represent Mark Klosky OPINION not Colorado Woodworkers Guild. Please be aware that local codes, state air regulations, etc. may affect your shop, *especially if it is runs as a business*.

May you have a safe and happy journey!

Dale Bowlin President

My Experiences Regarding Proper Dust Collection And Ongoing Health Concerns

After reading what all Dale had to say about collecting wood dust and how this affects our health, I felt that I had some significant knowledge to share on this subject. Some of this is based upon my extensive research on the subject, and some of it is experience-based knowledge. I am not by any stretch of the imagination an expert on this subject, but I do know a lot, and my experiences have taught me more.

I have been earning my keep as a licensed carpenter and general contractor for about 22 years, but probably for most of the last 12 or so years have been doing it as a shop rat, i.e. a woodworker; building custom cabinets and an assortment of other wood projects as well. My primary care physician has been listening to my lungs with an increased sense of concern for the last several years now. Because of that, and because I have noticed the effects of some reduced lung capacity while riding my road bike, I have gotten more serious about trying to not breathe in so much superfine dust. But probably the damage that has been done is going to be somewhat permanent. And that sucks.

Anyone who has been to my shop knows that I have an excellent main dust collector, an Oneida Pro 2000 with a HEPA-grade cartridge filter, and a full spiral pipe and welded fittings duct system that connects all of my shop machinery. This is a great first line of defense, but it is not enough.

When my doc started to get more concerned about things, I started to ask more questions about what could I do better? People kept telling me to read what Bill Pentz has to say about all of this. Well, I did. And then I spoke with Bill over the phone to pick his brains some. Bill seems to be a pretty bright, and I actually learned a couple of things talking to him. But when he asked me what kind of systemI have in my shop, I was proud to state that I had installed the Oneida system, and had built the duct system myself. Bill told me that I really needed to talk to his friend, Dick Wynn, at Wynn Environmental. So I called Dick, and we spoke a bit. He asked why I was concerned about dust collection so I explained about the doctor getting more concerned about what

he was hearing in my chest and dust and junk accumulation. Dick had some harsh views about Oneida's filter and their claims about it being HEPA grade and their claim of being able to blow it out for continued use. Dick talked me into buying 2 of his company's filters to replace mine along with some other hardware for installing them. He told me about improved airflow and reduced back pressure, and how his filters were as good as Oneida's. \$465.00 later I get 3 boxes from Dick; 2 filter cartridges and 6 small double draw clamps that were "modified". I felt like he ripped me off on those little clamps, but what the hell.

So a couple of weekends later I did install the new filters on my dust collector, and quickly figured out that the original Dwyer back pressure gauge would not work with this set up, so I sat down at the PC and located a more sensitive gauge that measured back pressure in 100'ths of an inch, plus the tubing and fittings to hook it up. So I go back to work, building kitchen cabinets and whatever. But after about 3 months I think that I am starting to see a fine layer of superfine sawdust collect, everywhere. At first I thought that it must just be me, but this coating of dust is starting to get thicker. Back to the computer I went, more research, what is going on now? I do have some suspicions, but nothing actionable as of then. After asking some questions in a forum or two, someone asked me if I had a dust particulate counter? At that point I did not, so they told me to look at this company called Dylos. I did my research, then went to Carole to talk all of this over with her, and we ordered one.

Now a word of advice for any other woodworkers who might be thinking about doing the same. You want to spend the extra \$28.00 and order the model DC 1100 Pro, instead of the DC 1100. The DC 1100 Pro is calibrated for measuring 0.5/2.5um (micron) sawdust, which is more appropriate for use in the wood shop. It is the very smallest wood dust particles that you need to keep an eye on (like we might ever see something that small). The DC 1100 is calibrated to measure 1/5um particles. The Dylos is very simple and straight forward to use, you can have it up and running in just a few minutes. What my Dylos taught me a lot about sawdust and air quality, was how just coming in first thing in the morning and moving around can stir up invisible sawdust into the air.

After having the Dylos a couple of weeks and getting used to interpreting what it was reporting I placed it over near the dust collector, where I could see it easily. And the Dylos showed me that when I turned on the dust collector that the particulate count would jump up dramatically, and keep climbing while the DC was on. Now I am getting somewhere. So I checked everything for air tightness, especially around the gasket seals for the new filters (using incense sticks) since that is all that I have changed in quite a while. A vacuum or pressure leak anywhere in a 2 stage dust collector really wreaks havoc with how they are designed to operate. Nothing was leaking, so I called Dick Wynn to ask him what was going on? Dick asked me a few basic questions, like were the i-bolts tight? Were the connections to the collection drums air tight? Trying to find something that I might have done wrong or missed. Finally I said "Dick, the only change that I have made was to replace the original filter with your 2 filters, and you told me that your filters were as good as Oneida's." Then Dick asks me if I have cleaned the filters yet, and I said no because there has not been any increase in back pressure behind the filters to indicate that they were ready vet. And Dick tells me that his filters will be as good as Oneida's filters after they have seasoned, that they needed to be cleaned 5 times to build up the necessary dust cake to reach that level of filtration to match what Oneida claims that their filter will do. So I guess that meanwhile they are supposed to leak and blow superfine sawdust all over the shop for me to breathe in, until they become "seasoned". And at this point I have been using the filters hard for nearly 6 months and the entire shop has a pretty good layer of superfine sawdust everywhere. So how long will this "seasoning" take? And more importantly, how long am I supposed to continue to have to breathe this superfine sawdust that these filters are supposed to be catching? I explained all of this to Dick and he told me that I didn't know what I was talking about and he hung up on me. Now that I am thinking back on things, Dick Wynn had stated that he had never heard of a HEPA filter that could be blown out and reused, and yet except for increased airflow from more filter surface area, he was selling the very same thing as what Oneida sold me, except that the Oneida filter produces these results right out of the box, without seasoning.

I tried to call Wynn Environmental back, but his son answered, and all he would say was that he was told to tell me that Dick would not talk to me that and that I should quit harassing him. Harassing him? Where did that come from? If that is what Dick considers "great customer service" and "providing the finest products available", I am not interested. And knowing that Bill Pentz is so hot about what his friend Dick Wynn is

selling, well that makes me question some of what Mr. Pentz is pushing as well. Like Dale said in his article last month, some folks just want to sell you something. (Or as I like to refer to that, some folks will say anything to try and separate you from your money.)

For the record, I was able to locate an independent lab that has tested both the Oneida HEPA grade filter and the comparable Wynn filter. Both reports are available online, but they are a little hard to find. The Wynn filter, even after "seasoning" as prescribed by Dick Wynn, was not quite as good as Oneida's filter was right out of the box.

Now for some good news. I had been on the fence about getting 1 or 2 passive air cleaners to hang in my shop, (there are a lot of pros and cons about this one) but had decided about a year ago to get a couple of mid-sized JDS Air Techs to hang in my shop. I called a buddy of mine who is an HVAC whizzbang to ask a couple of questions. And Mike told me that he had just come upon a used but fully functional Trane Clean Effects filtration system. This is a high level filtration system for installation into a residential furnace/AC system for someone with allergies, and might I be interested in trying that out? For just the cost of a few parts? Well of course I said yes. Mike cut down a furnace cabinet that he had laying around, installed a multi-speed blower (also a spare part hanging around) and made a control box for it. He was having trouble finding a 4 or 5 position rotary switch to control the blower, but I found that on eBay. Now the Trane Clean Effects is not meant to be used in a commercial setting, let alone in a wood shop. But all of the evidence, including the Dylos, says that this setup is working wonderfully. In fact, it is working so well that I am planning on adding a 12" spiral pipe duct with 6 angled outlets hung along the center of the ceiling to improve the clean air flow throughout the shop. And the best part is that this system has cost me less than \$45.00 so far. I wonder if Trane would have a cow if they knew about this?

I have to get back to the Dylos for one other thing. It has taught me that sweeping your shop is perhaps the worst thing that you can do for shop air quality. It is far better to vacuum your shop's floors with a high quality shop vac (Festool) or a vac with a good dust separator, like an Oneida Dust Deputy. And of course, nothing beats the regular use of your leaf blower for a good clean out when needed.

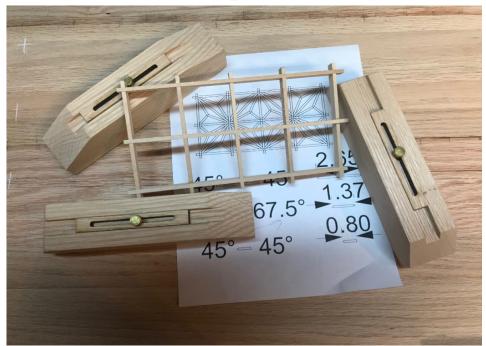
I think that in any woodshop, if you are concerned about your air quality and also your personal health, then you really should have a Dylos Particulate Counter. If your woodshop is attached to your home, then you should be concerned about the health of your family, and you need to have a Dylos to monitor the air quality in the shop space, in my opinion.

An afterthought about my experience with the Wynn filters. It is entirely possible that there was a defect in the filtration media in one, or more likely, both of the filters that I was sold. At this point we will never know. My experience showed that they performed horribly, and his total lack of customer support is not acceptable regardless of the cause. But I stand behind what I have said about Dick Wynn's misleading claims about filtering efficiency since he does not explain the qualifiers that are a part of his claim up front. Without advance knowledge that his filters would require a break in period to reach their potential, why wouldn't I expect anything less than advertised performance straight out of the box? Add to that the fact that there are too many variables that can affect how well his filters may actually function even after the requisite 5 cleanings. I know that I will never recommend filters from Wynn Environmental to anyone.

If anyone has any dust collection questions, or is just starting to consider building their DC system, I would be happy to try and answer your questions. Be safe, take care of your lungs, and happy woodworking.

Mark Klosky

Tuesday, June 18, 2019 at 6:30 pm in the basement of Rocklers



You will not want to miss this one, Ralph Kolva, Artist/Craftsman of Kolva Fine Woodworking, LLC will demonstrate Kumiko. I only caught part of his demonstration at the Kez Colorado last month and I am looking forward to seeing the whole presentation.

Presentation: Building a Bow Saw

The evening's featured presentation consisted of the Guild's esteemed treasurer, Chuck Hix, demonstrating how to build one of the oldest tools out there, a traditional bow saw.





Traditional bow saws can be used for straight or curved cuts, with blades ranging from about 1/4 inch to an inch or more in depth, with the blade tensioned by the frame. Thus, it's also often described as a frame saw as well as a bow saw. "Bow saw" comes from the fact that more modern versions are made with a one-piece metal frame in a bowed shape. Chuck made the traditional wood-framed saw for us this evening.

The essence of a traditional bow saw is the frame, which serves to keep the blade in tension and serves as the handle. If we think of the frame as a letter H, with the blade tensioned between one open end of the H and the tensioning mechanism between the other open end of the H, it's easy to understand not only how the saw came about but also how simple a mechanism it really is. Chuck's use of one bow saw to make another for the presentation demonstrated just how straightforward a tool this can be to construct from scratch.

Although Chuck's saw uses about six loops of cotton twine and a wooden toggle to apply the tension, it's common to see threaded rods with a turnbuckle as a tensioner. Similarly, Chuck's bow saw uses simple wood screws through the legs of the H (the "cheeks") to secure the blade ends in slots cut in the ends of the cheeks. Commercially available bow saws commonly use turned handles through holes bored in the ends of the cheeks, enabling the blade angle to be adjusted from parallel to the main axis of the frame.



Where Chuck got into a bit of woodworking elegance in this otherwise basic and mundane construction involved how he

connected the horizontal part of the H (the spreader) to the cheeks. Although it's common to use a mortise and tenon joint at each end of the spreader, Chuck added the refinement of a curved shoulder on one end of the spreader mating with a matching curved recess in the cheek to allow for some angular displacement from 90 degrees between the two pieces.



And with that, we now knew that we could all venture to our off-the-grid retreats carrying little but a saw blade, some twine, and a knife or chisel, confident that we'd be able to cut firewood and build a lean-to. We could even forego the twine for the likelihood of finding some suitable vines. In any event, the entire bow saw can be quickly disassembled into a compact tubular package that easily fits in or on a corner of a backpack. And you can leave your hatchet at home.

By Bob Kleinfeldt

About Wood





In this month, June 2019, we consider **African Mahogany** (**Khaya ivorensis**). **African Mahogany** is actually a group of species including K. anthotheca, K. grandifoliola, K. ivorensis, K. nyassica, and K. senegalensis with ivorensis being the species most often exported. These **African Mahogany** species are mostly from West Africa and belong to the Meliaceae, the mahogany family. These African Mahogany species of the genus Khaya are often used as a substitute for the genuine mahogany of the genus Swietenia. They are all from the same Meliaceae family. Also known as Benin wood, Lagos wood, acajou, khaya, Ivory Coast mahogany, Nigerian mahogany, Gold Coast mahogany, degema, and grand bassam.

Recall that in previous columns, we have defined the Modulus of Rupture (MOR), the Modulus of Elasticity (MOE), Crush Strength, and Janka Hardness. We will continue to use those terms. Most of the other terms are generally well understood and will not be defined further. If you have questions about other terms or questions about a specific wood, contact wood@coloradowoodworkersguild.org.

African Mahogany (K. ivorensis considered here)



Here is a summary of the characteristics of **African Mahogany**:

Distribution: From the West Africa

Tree size: 100-130 ft (30-40 m) tall; 3-5 ft (1-1.5 m) trunk diameter

Average Dried Weight: 40 lbs/ft3 (640 kg/m3) Specific Gravity: (Basic, 12% MC): .52, .64

Modulus of Rupture (MOR): 13,190 lb_t/in² (91.0 MPa) Modulus of Elasticity (MOE): 1,537,000 lb_t/in² (10.60 GPa)

Crush Strength: 7,100 lb_f/in² (49.0 MPa) Janka Hardness: 1,070 lb_f (4,760 N)

Shrinkage: Radial, 4.2%; Tangential, 5.7%; Volumetric, 10.0%; T/R Ratio, 1.4

Appearance: heartwood is variable, from very pale pink to deeper reddish brown, sometime with streaks of medium to dark reddish brown. Color tends to darken with age. Quartersawn surfaces can also exhibit a ribbon-stripe appearance

Grain/Texture: grain straight to interlocked with medium to coarse texture; good natural luster

with a light-refracting optical phenomenon known as chatoyancy

Stability: retains shape well after seasoning; only small movement in use Relative strength: medium crushing and bending strength; density fairly high Decay Resistance: moderately durable; moderate to poor insect/borer resistance

Workability: overall easy to work, glue and finish; if grain is interlocked, tear out may occur

Odor: no characteristic odor Toxicity: reported as a sensitizer

Potency: moderate

Toxicity Source: wood oils and wood dust

Reaction: severe reactions uncommon; mild eye and skin irritations possible Sustainability: readily available as lumber, plywood, and veneer; not listed in the CITES Appendices but is on the IUCN Red List.

Uses: fine furniture, turnings; veneer, interior trim, boat building, turnings Typical Cost: prices are low to moderate for an imported hardwood

Comments: considered a valid substitute for Honduran Mahogany (Swietenia Macrophylla), otherwise known as "Genuine Mahogany."

Sources: Woodworkers Source; The Wood Database; American Hardwoods Information Center; Flynn, James H. and

Charles D. Holder, Editors. *A Guide to Useful Woods of the World, Second Edition*. Forest Products Society, Madison,

Wisconsin, 2001.

If you have questions about a specific wood, don't hesitate to send a note to wood@coloradowoodworkersguild.org.



Lindy Baer

Sponsor's Corner

Frank Paxton Lumber Wood of the Month

The featured Wood of the Month for June 2019 from Frank Paxton Lumber is F1F 4Q S3S White Oak in random widths and random lengths up to 12 feet.

As always, call 303-399-6047 for pricing.

As always, call 303-399-6047 for pricing.

Sponsor: Profile Mile High Tree Care Inc.

Mile high Tree Care Inc. has been a Guild Sponsor since 2015 when they discovered that the wood, they acquired from tree removal and trimming had value as cut lumber. They began offering to woodworker's slabs flitches, and milled lumber from the urban forest. They purchased and set up the latest mills and kilns to prepare these products. They were able to reduce the amount of wood that they chipped for mulch.

In 2017 under the leadership of Steve Elder, Master Arborist, Mile high Tree Care constructed a showroom to be able to display some of their amazing slabs in practical settings. This show room is used as a retail area that offers their clients a place to come examine wood available as well as finished pieces.

Mile High is constantly adding to their inventory for the varies wood species they obtain from their activities in the Front Range including Maple, Elm, Hackberry and Walnut. Mile High maintains a website that shows much of their stock and can be used to view and select wood for purchase.

Mile High also is current with logs and wood of various species that are available to purchase and can be prepared in their facilities for purchase by woodworkers in Colorado.

Mile High encourages Guild members to view their website and stop by their showroom to check out some of the amazing slab materials, burls, and boards at terrific prices for members. Seeing is believing, your special project source is right there at Mile High's facility.

Mile High thanks Guild members for continuing interest and use of their primary services as tree arborists, tree trimmers, and removal services. They always strive toward their mission of being a "zero waste company".

Company Location: 6010 West 56th Ave

Arvada, CO 80002

Telephone: 303 292-9393

Website : <u>www.milehightreecare.com</u>

Guild Liaison for Mile High Tree Care Inc. is Fred Schmidt

Email address: <u>liaison-milehightreecare@coloradowoodworkersguild.org</u>

New Sponsor Suzuki-ya

Like the carefully selected handful of toolmakers we represent, Suzuki-ya is dedicated to bringing fine handmade Japanese tools to those who require a higher standard of quality for their professional and personal use.

Originally from the island of Honshu, Japan, we have been based in Berkeley, California for the past 23 years.

Once a year, we travel to Japan in order to start and maintain relationships with our tool makers, tour their small factories and shops, and, of course, look for new, high quality Japanese hand tools and materials to sell at Suzuki-ya.

Our Toolmakers

Our carefully selected toolmakers, while hailing from various parts of Japan, all have one thing in common: their dedication to craftsmanship and quality. These are some of their stories...

Yamamoto Planes: A Father-to-Son Tradition

The Yamamoto plane crafting story began in Miki-Shi, on the island of Honshu, in 1903. There, a young man named Kiichi Yamamoto entered into an apprenticeship with the well-known master blacksmith Utaro Kurokawa. Over the next 16 intensive years the student himself became a master, and in 1919 the Yamamoto Plane Company was born.

Kiichi's reputation as a maker of fine steel tools had been well established when, in 1945, he took on as an apprentice his own son Katsuzo (later to become master blacksmith Katsusaburo). This father-to-son tradition continues today with Yoshihiro Yamamoto (or, third generation master blacksmith Tetsushinsai Horaku, as he became in 2010 when he passed the prestigious "Miki Dentoukogeishi" test) and his son Kensaku. Together, they carry on the Yamamoto legacy by respectfully adding their considerable experience upon centuries of accumulated blacksmithing science.

Inomoto Plane Blocks: No Compromise for Quality

Founded in 1578, the small town Yoita-cho, on the island of Honshu, was primarily home to blacksmiths who specialized in making swords for the Samurai elite. At the end of the Samurai period, however, the talent of the blacksmiths was redirected and the families of Yoita-cho branched out to produce high quality hand forged tools for temple builders throughout Japan. Today, the unbroken legacy of excellence continues to be passed down through the generations, with products from this small town being highly treasured by woodworkers and craftsmen around the globe.

It was in Yoita-cho over 50 years ago that Mr. Inomoto took over his father's small workshop and, using the same traditional tools and ancient machinery, began creating his plane blocks and perfecting the skills he would need to achieve the worldwide recognition he enjoys today.



Mr. Inomoto and the oak wood he carefully selects actually live under the same roof. The upper part of his home houses two floors of four foot high stacks of precut wood blocks separated by small pieces of oak to allow for the natural slow drying of the future plane bodies. It takes at least four years to get the desired moisture content, and under no circumstances will Mr. Inomoto shorten this process. For ten or more hours a day he sits on the floor, expertly working the plane bodies to a perfect finish.

www.suzukitool.com Phone: 510.409.0217

Sponsor: Bridge City Tools orders must be in, by end of this Month.

Show & Tell June 2019

There were four Show and Tell entries at the May meeting.

First up was an electric guitar made by Ethan Brown, grandson of member Horace Brown. The body is made of Spalted Maple with a wood pickguard made of Black Korena Ziricote. This was Ethan's first project and demonstrates that he inherited some of his grandpa's skills. In addition to showing off the guitar, Ethan played some Rock and Roll for us.





Second were some "Stained Glass Cutting Boards" made by a new member, David Howard. David used different woods together to make the boards appear like stained glass (hence the name). Very striking.





Third was a small bench plane (#3 or #4) refurbished by Cliff Whitehouse. Cliff wanted to show us the results of experimenting with sandblasting the metal parts of the plane. The sandblasting gave the metal a uniform

grayish appearance with apparently little effort (assuming you have access to sandblasting equipment). His efforts took the plane from rusted metal to better than new appearance quickly.



Last was the work of another new member Cliff D'Amato. Cliff showed off an end table made of Walnut and Cherry. Cliff built this under the guidance of teachers at Anderson Ranch in Snowmass.





The evenings winner was David Howard.





Thanks to all for bringing in a show and tell. I would encourage all members to participate, it's a lot of fun and everyone (show n'tellers and others) learns.

Cary Goltermann

Library News

The Guilds new Chopsitck Master 2 will be available soon. We have it in our possession and we need to determine procedures for checking it out.

Be sure to check the link on our website for our library catalog. The CWG library accepts donations of books and DVDs only. The library has several magazine archives available in DVD form but does not maintain any hard copy issues. Any member wishing to donate magazines is welcome to bring them and place them on a table for members to take home with them.

The donor is responsible for setting up and clearing up any unclaimed items afterwards.

https://www.librarycat.org/lib/COWoodworkersGuild#

Jim Barry, Librarian

Help Wanted

Vacant- Publicity and PR Chair

We do not have a replacement Chair; we will not be able to support this in the July newsletter. I hope another member will step forward to help out?

Vacant – Newsletter Publisher

Assistance – Community Services Chair



CWG Sponsors

Austin Hardwoods of Denver, Inc. 975 W. Mississippi, Denver, CO 80223 Phone: 303-733-1292

Website: www.austinhardwoods.com

Bear Woods Company 6099 228 Street, Langley, BC V2Y 2L3 Canada Phone: 800 565-5066 Fax: 888 599-

1118 Website: www.bearwood.com

B & B Rare Woods 871 Brickyard Circle, Unit C4, Golden, CO 80403 Phone: 303-986-2585

Website: www.wood-veneers.com

Bridge City Tool Works

Harvey Industries International DBA Harvey Industries, 10830 Ada Ave, Montclair, CA. 91763

Phone: (800) 253-3332

Website: https://www.bridgecitytools.com/default/

Questions or comments to <u>sales@bridgecitytools.com</u>. Please allow up to 2-4 business days for email and phone call responses.

Two orders per year (to be determined) and must be shipped to one address. 10% discount, when ordered directly from Bridge City Tool Works. Discount does not apply when ordered through dealers

Charlie's 2nd Hand Store, Inc. 2227 Larimer Street Denver, CO 80205 Phone: 303-295-1781

Website: www.usedtoolsplus.com

Denver Woodworking Company 2062 S. Bannock Street, Denver, CO 80223 Phone: 303-733-3130 Website: www.denverwoodworking.com

Mile High Tree Care, Inc. 6010 W. 56th Avenue, Arvada, CO 80002 Phone: 303-292-9393

Website: www.milehightreecare.com

Frank Paxton Lumber Company 4837 Jackson Street, Denver, CO 80216 Phone: 303-399-6047

Website: www.paxtonwood.com/denver.aspx

Rockler Woodworking and Hardware 2553 S. Colorado Blvd, Denver, CO 80222 Phone: 303-782-0588

Website: www.rockler.com/retail/denver-colorado-hardware-store.cfm

Sears Trostel 1500 Riverside Ave, Ft Collins, CO 80527 Phone: 970-482-1928

Website: www.sears-trostel.com

Signature Medallions 4218 Ponce De Leon Drive, La Mesa, CA 91941 Phone: 619-303-2876

Website: www.signaturemedallions.com

Suzuki-ya Superior Japanese hand Tools for Woodworking, Gardening & Cutlery I'd like to offer 10% off for your members (they need to mention that they're members of the Colorado Woodworkers Guild).

Website: www.suzukitool.com Phone:510-409-0217

TC Woods 5406 County Road 23 Ft. Lupton, CO 80621 Phone: 3-666-8989

Website: www.tcwoods.com

Tool Zone, Inc. 8651 Grant Street, Unit 1A Thornton, CO 80229 Phone: 303-252-8500

Website: www.toolzone.com

Woodcraft of Denver 6770 S. Peoria Street Centennial, CO 80112 Phone: 303-290-0007

Website: http://www.woodcraft.com/stores/store.aspx?id=305

2019 Board Members & Chairpersons



<u>Dale Bowlin</u> - President

president@coloradowoodworkersguild.org



<u>Tom Mancuso</u> - Vice President

vicepresident@coloradowoodworkersguild.org



Donald Prorak - Secretary

secretary@coloradowoodworkersguild.org



Chuck Hix - Treasurer

treasurer@coloradowoodworkersguild.org



Bob Kleinfeldt Director at Large info@coloradowoodworkersguild.org



Bill Knoll - Audio / Visual Chair

Ed Lawlor – Community Services Chair





Lindy Baer - Contributing Editor wood@coloradowoodworkersguild.org



<u>Michael Cunningham</u> - Classified Ads Moderator <u>classifiedads@coloradowoodworkersguild.org</u>



<u>Dick Dailey</u> - Hospitality & Refreshments Chair hospitality@coloradowoodworkersguild.org



Jim Barry - Librarian

library@colordowoodworkersguild.org

Vacant

newsletter@coloradowoodworkersguild.org



<u>Cary Goltermann</u> - Programs Chair <u>programs@coloradowoodworkersguild.org</u> webmaster@coloradowoodworkersguild.org



Kevin Lloyd - Shows and Exhibits Chair



Christine Benson – Social Media Chair William T. (Travis) Brown, Jr.', Newsletter Editor Stan Wolpert-Class / Training Chair