BAY AREA WOODTURNERS ASSOCIATION
A CALIFORNIA NONPROFIT CORPORATION
LOCAL CHAPTER AAW

December 2022 **Volume 26 Issue 12**

Jim Rodgers

December Demonstrator

Adding Homemade Tools to Our Arsenal

December 10th

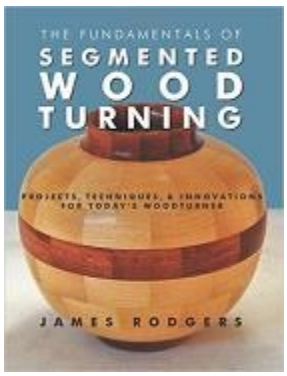
Our December demonstrator is none other than our very own Jim Rodgers. Jim is such a well accomplished turner, who has produced books and videos to help us all be safer and better turners. Jim is incredibly talented at simplifying complex techniques in a manner where the average turner can learn and try new ways of turning.

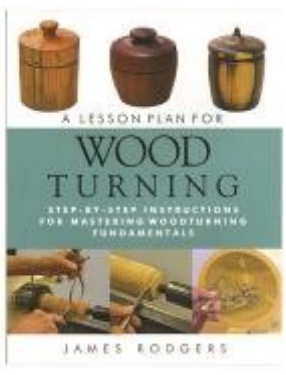
Jim will be showing us some of the tools he has made to make turning easier. These will be tools we can make, using items readily available. Jim will be using videos and discussion to teach members how to re-create these tools for their use. Jim will discuss the negative rake scrapper, and show us how to make one.

The product from the demonstration will be a decorated lidded box, but the real take-away will be the opportunity to learn how to make tools, and, to enjoy the wit, humor, and expertise, of a very accomplished turner. One of our own members, Jim Rodgers.

AND…….Jim says their will be a drawing, for those in attendance, for prizes at the end! You don't want to miss this demonstration.

See you there.





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Club Meetings

Club Meetings-

Meetings are held on the 2nd Saturday on each month. We meet in person with attendance simultaneously available via zoom. Meetings are held at the PHEC Woodturning Center at 1 Santa Barbara Road, Pleasant Hill, CA. The doors open and the simultaneous zoom session starts at 8:30am. The meeting start time is 9:00am. See our website at bayareawoodturners.org for more information.

Guests are welcome to attend in person or via zoom by request to: membership@bayareawoodturners.org.

See bayareawoodturners.org/ for club information.

BAWA Officers Meeting -
The Association's officer meetings are held each month. Contact Steve Griswold at: president@bayareawoodturners.org for more information.

2022-2023 Event Schedule

December 10th	Jim Rodgers 8:30-12:00
January 19th 2023	Annual BAWA Party 11:00-2:00

The Bay Area Woodturners Association is a local chapter of the American Association of Woodturners. Our purpose is to provide a meeting place for local turners to share ideas and techniques and to educate the general public regarding the art of turning. The Association usually meets the second Saturday of each month. The Association periodically sponsors exhibitions and demonstrations by local and internationally known turners.

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Holiday Party in January

As you probably know, our annual Holiday Party will be held on January 14th, 2023 at the Elks Lodge in Walnut Creek. We're excited about this year's event, and we're doing everything we can to make it live up to the expectations you have based on the great parties of past years. There will be more information to follow on how to get your tickets, but for now, we need your help!

At past parties, some of the events that have been most attractive to members have been the silent auction and the raffle. We're soliciting donations from the businesses that we as woodturners frequent, but we also need your help. If you have anything that you can donate such as wood, tools, project materials, wine, gift certificates…use your imagination, we would appreciate any and all contributions.

You can either drop these items off at the December meeting, or contact me, Larry Batti, at larrybattiwoodturning@gmail.com or call me at (925) 997-9548, and we can figure out a handoff that's mutually convenient for both of us.

We hope that you'll come to the party and bring your loved ones, and again, any contributions you can make to the success of the party would be greatly appreciated!
See you then, and thank you!

Larry Batti
BAWA, Member at Large
larrybattiwoodturning@gmail.com
(925) 997-9548





BAWA Classified Ads

We want members and others with items to sell or trade, services to render or if you're just looking to find a specific item from fellow BAWA members.

Please send ads to Louie Silva at:
newslettereditor@bayareawoodturners.org

You can't beat the price...FREE!!

Rockler Helps BAWA Members

BAWA members receive a 10% discount when purchasing directly at the Concord Rockler Store at:

http://www.rockler.com/retail/stores/ca/concord-store.

Mention your BAWA membership when checking out, to receive your discount. Rockler also donates part of the proceeds back to the club which help support our Holiday Party raffle.

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Turn-A-Thon

In November BAWA hosted its first Turn-A-Thon. It wasn't the largest turnout BAWA has seen but everyone stayed busy getting ready for the Holiday Art and Craft Sale. Fueled by coffee and donuts, the twenty attendees made Room 108 a hive of activity with people prepping, finishing, appraising, pricing, labeling, and, of course, turning. There was no wood raffle but there was a huge cache of wood available to all. The store and the library were also open for business.

Jim Rodgers and David Bentley spent most of the morning fine-tuning the latest iteration of AV equipment. John Langen spent the morning upgrading the latest lathe acquisition to variable speed and installing a new circuit board on a drill press.

Various members stopped in to donate products they had made at home. Stacks of bowls, ornaments, utensils, and more were socked away for the show and sale. It was a very satisfying and productive morning. Thanks to all who attended.

Thanks to all the hard work and contributions from so many of our members, the MDAE Show and Sale on December 3 was a huge success. Attendance was high despite the rain, and sales were excellent, benefiting the Diablo Woodturning Center where so many of us have taken classes to learn this great craft of woodturning. A huge thanks goes out to every one who helped with the Turn-A-Thon or who contributed items for sale.


Cindy Navarro inspects her blank


Dave Bentley multitasks


Pamela Kapoor picks a blank


Rick Kalish mans the store


Items for sale


Vern Stovall shows good technique


Anna Duncan cuts blanks


Roberta Zorzynski's bowl


Larry Batti watches Joel Albert


Appraising some bowls


Some of the sale items


Bowls by the stack


Rick Kalish roughs a blank


Joel Albert shapes a handle


So many bowls, so little time


A sampling of sale items


Beginning a box


Carl Mercer's parting


John Langen upgrades a Nova


Roberta cleans up

President's Letter

December 2022

Our BAWA Website

Greetings everybody - I hope you had a great Thanksgiving and are looking forward to the holidays!

As we near the end of the year I've been looking back at all we have done in BAWA this year and I see that it's time to give everyone a little update on the state of our website. Over the months I have received comments and suggestions from BAWA members and have implemented most of those, including typos and other tweaks to improve the site. Keep the suggestions coming!

At this point, the one change I would like to point out is that we have added a new videos page to the site. As you know, many of our members and officers teach at the Diablo Woodturning Center in the same room in which we hold our BAWA meetings every month. The "cross pollination" between BAWA and Diablo Woodturning Center is unique in the nation and provides tremendous added benefits to all of us. As part of that, we have been adding more and more videos that are designed specifically as teaching tools for the classes at the Diablo Woodturning Center. Up until recently those were all done by Jim Rogers, so those videos could be found in the Jim Rodgers videos section of the website. We are now initiating a move to include videos by some of the other instructors so for ease of use we have now moved all of those videos into their own page. I invite you to check it out in the Resources section of the site under Videos/ Woodturning Classes.

I think this is a great resource not only for folks taking classes but for any of us who want to watch a demo in an area of interest. There are a lot of woodturning videos on the Internet, and they range from excellent to confusing to downright dangerous. I like watching our BAWA website videos as I know that I will be receiving sound advice both for skills and safety. I hope you find these valuable too!

Reminder: if you ordered a Vicmark chuck through John Cobb, remember that John plans to have the chucks available for pick-up at the December 10 meeting.

Stay safe and keep on turning,
Steve Griswold

BAWA NEWS & NOTES

Greetings family, friends and neighbors,
I would love to invite you to an open studio event and show in our backyard. Come check out what I've been working on over the last year and possibly leave with your new favorite piece! Just walk up the driveway and in through the side gate, we look forward to seeing you.
Thanks,
Michael Hackett

2927 Deakin Street, Berkeley
10-3pm Saturday and Sunday Dec. 10th and 11th

OREGON WOODTURNING SYMPOSIUM

The 2023 Oregon Woodturning Symposium is now open for Registration.
https://www.oregonwoodturningsymposium.com/Register/Registration-Store

March 17th - 19th, 2023 at the Albany Fair and Expo Center see world renowned demonstrators: Eric Lofstrom, Keith Gotschall, Trent Bosch, Mike Mahoney, Stuart Batty, Nick Cook, Nick Agar, Cynthia Carden, Rebecca DeGroot, and Sally Ault. Also be inspired by the Instant Gallery, enjoy the company of turners from all over and spend time and money at the vendor booths.

Hope to see you there.






Faces of BAWA

February 2022. The arrival of the club's new Robust American Beauty lathe.

The Moving Crew (from left to right): John Langen, Verm Stovall, Jim Campbell, Tony Wolcott, Larry Batti, Steve Griswold, Jan Blumer, Louie Silva

Membership News
By Anna Duncan

Our membership has rebounded as we learn to live with Covid. As of October 1st we have 164 members. We can now attend BAWA meetings in person. In person meeting attendance is growing with each monthly meeting and members report enjoying getting back together socially and having access to the library, the store, and the wood raffle.

With in-person meetings and our desire to continue providing 6 professional woodturning demonstrations each year, our expenses are back to what they were before the pandemic. You know where this is going, right? The Board decided in late September that BAWA dues will resume at $60 for 2023 as was the rate before the pandemic. Still a great price for all the value we get from membership, including:

- Demonstrations, member show & tell, wood raffle, woodturning supply store and library at meetings
- Two social events per year
- Website and newsletter full of woodturning information
- Meet ups with friends who share your passion for woodturning.

With that established it is renewal season and now is the time to pay your dues for next year. There are a couple of ways to renew:

- You can use the BAWA website and follow the instructions for renewal using a credit card…same process as previous years
- You can send a check to our treasurer at Rick Nelson, 1548 Webb Lane, Walnut Creek, CA 94595
- You can pay in person at upcoming BAWA meetings

One other membership related item; individuals who join BAWA between now and the end of the year will pay $60 which will cover the remainder of 2022 and all of 2023. Please share this information with anyone you know who may be interested in joining the Club.

We'd really like to be finished with renewals by the end of the year, so I encourage you all to renew ASAP.

If you have any issues with renewal, please contact me at membership@bayareawoodturners.org.

A Better Index-Locking Pin

John Lucas

There are many ways to make use of a good indexing system on your lathe.

I have been using indexing on the lathe for a long time. What is indexing? It is a way to lock the lathe spindle in regularly spaced intervals, allowing you to carve, burn, draw, or route on turned projects with precise spacing, as shown in *Photo 1*.

Available options

I have tried several ways of locking the lathe spindle, but all of my methods have had minor drawbacks. My first, very basic, approach was to use a box to hold the turned spindle and a screw to lock it into position. Some lathes have a built-in indexing system, but often this limits the number of available holes used to lock the spindle in place.

Over the years, there have been aftermarket indexing systems that offer improvements at a low cost, including index wheels with a wide variety of index positions. One example is the Iron Fire index wheel, which is quite inexpensive and offers a huge variety of positions. It comes with a pin that fits the holes. You have to rig up your own way to hold the pin in position, and it can be hard to keep up with that little pin even after putting a knob on it. But this is not difficult to do and it works pretty well. Then came the Alisam index wheel, which is heavy duty, well marked, and comes with a massive index locking system. However, you have to screw the index pin in and out. It's a very positive locking system but slow to use, especially if you need 120 or 144 index positions like the basket illusion turners use. It's pretty annoying just doing twenty-four.

A better pin

I wanted to design a spring-loaded index-locking pin to work with the Alisam and other aftermarket systems. With several designs in mind, I asked for input on the Internet forums. Someone posted a really simple solution and I loved it. I started building one and came up with some modifications that I like even better. My new index-locking pin system comprises a long metal rod fastened to a base (metal or wood) fixed to the bed of the lathe. The rod has a tapered point that fits into the index holes of aftermarket index wheels (*Photos 2, 3*). You can add a little spring tension to the rod by pushing

Precise spacing

A router on an auxiliary table can be used to make repeatable cuts in a workpiece. The index wheel and locking pin ensure consistent spacing.

Simple and effective pin

The author's shopmade locking pin, affixed in a base on the lathe bed, provides a positive hold for accurate indexing.

Continued on following page

the point into a hole, moving the base slightly further in the direction of the hole, and locking the base. This provides enough tension for a very positive lock. I simply pull the pin out against the spring tension, reposition the wheel, and release the pin into a different hole.

One modification I made is to allow the locking pin to be rotated for use in any orientation. The rotation is helpful because I can use the pin not only in a wheel mounted behind a chuck, but also directly in my chucks that have index holes—either on the side or back of the chuck (*Photos 4, 5*).

Another modification I made was to provide fine adjustment of the pin's height above the lathe bed. I did this by threading the bottom of the rod and adding an adjusting wheel, as shown in *Photo 6*. A set screw locks the pin in position after fine adjustment. A key benefit is that if I remove and then remount the turning for any reason and find that the index pin is off a little, I can fine-tune its position to replicate the previous setup perfectly.

Another benefit is that you could add more holes to your indexing wheel. Since the pin can be adjusted precisely, you can position it half-way between two holes and double the number of available positions. Or you can move it a fraction one way or the other to make overlapping index cuts. By changing router bits, altering the orientation of the router, and overlapping cuts, you can simulate ornamental lathe work.

How to make one

The first step in building this indexing pin system is to taper the end of a 5/16"- (5mm-) diameter metal rod. I chucked the rod in my hand drill and slowly rotated it against a grinder wheel to "sharpen" it to a point. Then I ground off the tip until it fit into the various index holes in my chuck and wheel. I heated the rod red hot about ¼" (19mm) from the tip and bent it 90 degrees. I also bent the rod near the bottom to make it fit the larger index wheels.

Works with chucks, too

Aside from the indexing wheel provided on some lathes, you can purchase (or make) an aftermarket version, such as this yellow disk with evenly spaced holes. Some chucks also offer indexing holes on the side or back.

Fine adjustment of pin height

The author's shopmade base, fabricated from metal, allows for fine adjustment of pin height. The end of the pin is threaded and fine-tuned using a threaded adjusting wheel.

Wooden base version

A wooden base is a good option if metalworking is beyond your skillset. The base is made to slide along the bed ways and adjust in or out. This allows for precise placement of the pin in relation to the indexing holes.

The metal base shown in *Photo 6* requires some metalworking knowledge and could require access to a machine shop. But you can make a wooden version that will work very reliably (*Photo 7*). To allow for a rotating pin position in the wood, I started by drilling a hole to fit the rod. Then I inserted the rod with thin cyanoacrylate (CA) glue. Before the glue hardened fully, I rotated the rod, which effectively broke the glue bond but made for a tighter fit. The resulting friction of this fit means it takes a little effort to rotate the rod, but also the rod easily stays in position.

I also added a slot in the locking base so that the pin can be adjusted in or out for the various index wheel and chuck sizes.

I hope you're inspired to build one of these, as I was. You will find it very quick to use with a positive locking position. I also use this system a lot when sanding natural-edge bowls; I can lock it in any position to make it easier to sand each area with the lathe off. I probably use it more for this than I do for its originally intended purpose. ■

John Lucas, a retired photographer, has been working in wood for more than thirty-five years and also dabbles in metalworking. He enjoys modifying machines, making tools, and sharing his knowledge through written articles and videos. He has taught classes at John C. Campbell Folk School, Arrowmont, and The Appalachian Center for Crafts.

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Craft foam protects bowl rim

I recently discovered sticky-back craft foam at my local craft store. It is ⅛" (3mm) thick with a self-adhesive back. I purchased a couple of sheets for future use and have now found a good use for it. I've installed it on the face of my jumbo jaws to protect a bowl's rim when reverse-chucked.

Simply remove the buttons from the jumbo jaws, cut the foam to shape with scissors, stick it on, and reinstall the buttons *(Photos 1, 2)*. You can poke holes through the foam for various button placement as needed. I no longer need to fumble with trying to stick a paper towel between the jaws and my work when I'm concerned about damaging a finished surface *(Photo 3)*.

The foam sticks very well but could be peeled off if necessary. I plan to leave the foam on the jaws indefinitely and replace it when it wears out.

Long ago, I also made my own buttons for my jumbo jaws out of some rubber corks that I purchased at the local hardware store. I drilled a hole through the corks and attached them with longer machine screws (also from the hardware store). I really like this solution. The deep dovetail shape of the corks holds the work securely.

—Carl Ford, Connecticut

Craft foam adhered to jumbo jaws protects bowl rims.

The author's Nick Agar-style bowl, reverse-mounted for finishing its base. In some cases, this method may be preferable to using a vacuum chuck, which could damage the paint on the inside.

Lathe bed mat

I often turn green (wet) wood, which has a tendency to rust the lathe bed. I found that by placing a mat down, the wet shavings can't rust the bed, and attaching the mat to either the headstock or tailstock with a magnet allows me to move the tool-rest around without knocking it off. The mat I use is a toolbox liner, which also works well as a protective pad when reverse-mounting a bowl on a vacuum chuck.

—Ric Erkes, North Carolina

Wax paper to the rescue

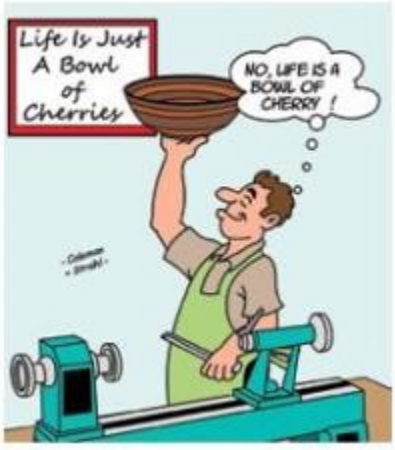
When my banjo begins to stick, or drag, on the lathe bed, instead of stopping what I'm doing to apply and buff off wax, I take a piece of wadded-up kitchen wax paper and give the ways a quick scrub. I can get back to work in seconds, with a noticeable improvement in the banjo's ability to slide. The same method also works well on the tool-rest and along the length of turning tools that grab during cutting. ■

—Terry Quiram, Illinois

Chuck jaw storage

To organize and store the various jaws for my three different chucks, I made custom-sized blocks with handy labels. For each set of jaws, I mounted a piece of scrap lumber on my lathe faceplate and turned a recess the same diameter as the jaws in their closed position. The jaws fit perfectly into their labeled holders, and I also marked the jaw numbers on the wood to keep them in order for changing when needed. ■

—David Zurek, Virginia



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SANDING *with a* LUBRICANT

Mike Peace

You would not wet-shave without soap, would you? And yet, many woodturners are perfectly willing to sand without lubrication. Sanding with a lubricant, or wet-sanding, has been around a while, but many woodturners still have not tried it, despite its advantages. In this article, you'll learn why you should use wet-sanding techniques for some of your woodturning, and how to wet-sand properly. We'll also discuss different sanding lubricants—and how to make your own.

Why wet-sand?

Probably the most significant advantage is that wet-sanding all but eliminates sanding dust. The dust mixes with the lubricant to form a slurry that keeps the dust trapped and out of the air so you do not have to breathe it.

Breathing fine dust is a major long-term health hazard we woodturners want to avoid. Avoiding fine dust is especially critical when sanding rosewoods, many other exotics, and woods known to be irritants or sensitizers that set us up for respiratory problems down the road. We avoid breathing the most dangerous very fine dust particles with a combination of approaches like a dust collection system, air filtration units, dust masks, and powered respirators. Adding wet-sanding to our arsenal can be a major benefit to our lungs.

Another benefit is that the fine dust and lubricant creates a slurry that fills the pores of the wood to provide a smoother surface. If that lubricant is one that hardens, as discussed below, it can help seal the surface. The lubricant also helps keep the abrasive from loading up, or clogging, allowing the abrasive to cut better and thus sand faster.

In addition, the heat caused by conventional sanding can cause heat checks, those small cracks in the wood that go deep and are almost impossible to sand out. Using a lubricant reduces heat from friction in two ways. Because the lubricated abrasive cuts better, one does not have to sand as long, and a lubricant also helps keep the surface cooler.

Adding wet-sanding to our arsenal can be a major benefit to our lungs.

Finally, almost any liquid applied to a wooden surface can help reveal scratches. This is especially true when you focus a concentrated light on the surface at a raking angle. Shining the light at about a 45-degree angle to the wetted surface reveals the highs and lows and shadows of tool marks and scratches.

Tools of the trade

I use the term *abrasive* and not *sandpaper* because typically the backing of sanding products we use for our turnings is not actually paper. Paper backing on common sandpaper just does not hold up for very long when wet. The backing used for many of the abrasives favored by woodturners is typically cloth. Alternatively, the backing for sanding disks may be Mylar®, which provides a very flat and long-lasting support for the abrasive. Then there are open-mesh products like Mirka Abranet and Wonder Weave. These open-mesh abrasives contain aluminum oxide grain resin-bonded to a durable and long-lasting fabric. The open mesh contains thousands of small holes, which allow you to easily wash out the slurry from wet-sanding. Open-mesh abrasives perform great when sanding wet, or green, wood *(Photo 1)*. They simply will not clog like other abrasives.

Common sanding lubricants

The most common sanding lubricant is water. Water can be especially useful when sanding green wood that already contains water and thus is not likely to readily absorb an oil. I especially like using water when sanding very thin, once-turned bowls from green wood *(Photo 2)*. Using water as your lubricant allows you to use any final finish you want after the wood is dry.

Some turners prefer to use a solvent like citrus degreaser or mineral spirits. Mineral spirits will not interfere with

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Open-mesh abrasives

1

Open-mesh abrasives like Abranet or Wonder Weave work great for wet-sanding. They don't clog as quickly as cloth- or paper-backed abrasives, and they are easy to clean out and reuse.

Sanding lubricants

2

Sanding with water as a lubricant works especially well on green-wood turnings like this once-turned, very thin bowl.

3

Wet-sanding with Antique Oil helps fill the pores of open-grain woods like mahogany for a smooth surface.

DIY Sanding Paste Recipe

Here is recipe for making an inexpensive and effective sanding paste from mineral oil and beeswax *(Photo a)*. Mineral oil is a liquid by-product of refining crude oil to make gasoline and other petroleum products. It is a common ingredient in baby lotions, cold creams, ointments, and cosmetics. It is colorless, odorless, and tasteless. In the U.S., mineral oil is readily available at your pharmacy since it is sold as a laxative. Baby oil is just mineral oil with some perfume added, and it can be used, too. Beeswax is available in bar or pellet form from your local beekeeper, craft stores, or online.

I use a 1:4 ratio of beeswax to mineral oil by weight *(Photo b)*. To make 10 oz (283 g) of sanding paste, melt 2 oz (57 g) of beeswax in an old crock-pot *(Photo c)*. Wax melts faster with a larger surface area, so it is best to grate or shave the beeswax or chop it into smaller pieces if it is in block form. If you don't have a crock-pot to spare, an alternative is a double boiler, easily made by placing a smaller pot on top of a larger one so it is heated by steam. Or place a smaller pot or can inside a larger pot, resting it on something to create a layer of water between the larger pot and the container holding the wax. Beeswax has a relatively low melting point—about 146° F (63° C)—so keep the heat on low and stir occasionally.

For safety, never leave the mixture unattended while heating. Flash point is a descriptor used to distinguish between flammable fuels (any liquid having a flash point below 100° F, or 37.8° C, such as gasoline) and combustible fuels, such as diesel, which burn at a higher temperature. The flash point of beeswax is relatively high, 400° F (204.4° C), so it is a combustible but not flammable liquid. Even though you are unlikely to start it burning, discoloration occurs if you heat the beeswax above 185° F (85° C).

Since mineral oil has a lower density than beeswax, it actually takes 9.5 fluid oz (281 ml) of mineral oil to weigh 8 oz (227 g) for this 1:4 ratio. Therefore, you can either weigh the portion of mineral oil you need or, more conveniently, just pour in 9.5 fluid oz (281 ml). It doesn't matter if the oil is mixed in before or after the wax is melted. A wooden paint stirrer works well for this, or use a wooden spatula from the kitchen that needs a renewed coat of utility finish! Stir occasionally until the mixture is fully blended.

Pour the sanding paste mixture into containers *(Photo d)*. I find a re-purposed plastic butter tub or similar container with a lid works well. You can also use lidded plastic containers from a discount store, short wide-mouth canning jars from a craft store, or round lidded metal containers available online.

If you find the paste is too soft, you can simply re-melt it and add more beeswax. If it feels too hard, soften it up by adding more mineral oil. Because mineral oil does not dry out like most drying oils, your sanding paste should maintain its consistency with a very long shelf life.

a

Melted beeswax and mineral oil make a fine sanding paste that will help keep sanding dust down and create a very smooth surface.

b

Use a scale to weigh the beeswax for the right proportion.

c

An old, dedicated crock-pot makes a good container for heating and mixing, but any makeshift double boiler will also do.

d

When the wax is completely melted and mixed with the mineral oil, carefully pour into an appropriate container.

any finish after it dries but is more toxic than other choices. One of my favorite lubricants for wet-sanding dry wood is a sanding paste you can easily mix yourself from mineral oil and beeswax. (Mineral oil is known as paraffin oil overseas.) It traps the dust well without the use of a solvent. It is compatible with almost any drying oil finish such as tung oil, Danish oil, or Antique Oil. *See DIY Sanding Paste Recipe sidebar.*

Other turners like to use their final oil finish as a sanding lubricant *(Photo 3)*. The friction heat generated using the final finish as the lubricant helps cure the oil slurry mix that is forced down into the pores of the wood.

I primarily use Antique Oil as a finish and it works well over an oil or oil/wax lubricant. If you use non-oil finishes like lacquer or wipe-on polyurethane, you may want to do a test to ensure they are compatible or wipe off the piece ▸

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Clean, or unclog, your abrasives

Clean sanding disks on a power sander by running them against a sanding belt cleaning stick.

with a solvent like mineral spirits before applying the finish. Another option is to apply a coat of shellac, which sticks to just about anything and is compatible with any finish.

How to wet-sand

Apply the lubricant liberally to the surface of the wood and sand as normal. You can use a non-woven abrasive pad like Scotch-Brite™, a paper towel, or paper shop rag. Do not let the surface get too dry. Apply more lubricant to the abrasive as necessary to keep the surface coated as the slurry develops. Between grit changes, wipe off the surface of the wood to remove the slurry from the coarser abrasive before user a finer-grit abrasive.

If you are using water as the lubricant, you can easily clean the abrasive by washing it in warm water. If using a solvent lubricant, soaking the abrasive in the lubricant should help clean the abrasive. You can clean a sanding disk by holding a sanding belt cleaner stick against the spinning disk on your power sander *(Photo 4)*.

Using an abrasive paste

To achieve a very fine finish after sanding to 320 or 400 grit, consider using an abrasive paste. Apply a liberal amount to the woodturning with a paper towel with the lathe off. Use it as you would any other abrasive by keeping it moving. The abrasive continues to cut as the grit breaks down into smaller silica particles in use, leaving a silky smooth surface. The last step after your final abrasive, whether wet-sanding or using an abrasive paste, is to use a few drops of lubricant to thoroughly clean up the surface with a clean paper towel.

Abrasive pastes are available commercially, but you can make your own easily and inexpensively. Using the abrasive paste recipe offered here is roughly equivalent to taking your last sanding grit and tripling it. For example, if you finish-sand to 320 grit, using an abrasive paste as described in the *DIY Abrasive Paste Recipe sidebar* can give you a surface similar to finishing with 1000 grit or even finer. It will provide a finish similar to using the familiar Tripoli compound on a buffing wheel.

So if you have not yet tried wet-sanding, try it. I think you will like the results, especially when finishing with a sanding paste you can easily make yourself. ■

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DIY Abrasive Paste Recipe

Credit goes to woodturner Daniel Vilarino for the following abrasive paste recipe, which calls for one part beeswax, one part diatomaceous earth, and four parts mineral oil by weight *(Photo a)*. Diatomaceous earth is a naturally occurring, soft sedimentary rock containing fossilized microalgae, which crumbles easily into a fine white to off-white powder that is a very fine abrasive.

Follow the process described in the DIY Sanding Paste sidebar for making the sanding paste. The only difference here is that you will add a quantity of diatomaceous earth equal to the amount of beeswax. Weigh all the proportions for this 1:1:4 recipe, or use the liquid measurement of 9.5 oz instead of weighing out 8 oz of the mineral oil. Because we use mineral oil instead of the harsh solvents found in some commercial abrasive pastes, the final product is more "green" and does not have any harsh odors.

After thoroughly mixing in the diatomaceous earth, remove the mixture from the heat and continue to stir it with a spurtle or paint stick. Because the abrasive needs to stay suspended in the mixture until it cools, keep stirring while the mixture cools and hardens to a soft paste consistency. Be patient, as this may take up to twenty minutes. Then you can spoon it into containers for use *(Photo b)*. Unlike the wooden spoon you may have used for stirring the sanding paste, do not plan to return to the kitchen any utensils used in making the abrasive paste.

This abrasive paste provides a soft, smooth surface similar to that obtained by using a buffing system. This should not be surprising, since Tripoli buffing compound is also made from diatomaceous earth. The surprise is that diatomaceous earth is readily available at your home development stores as a mechanical insecticide. While it is food safe for humans, exercise caution so as not to breathe the abrasive powder while pouring or stirring it.

The secret ingredient in this abrasive paste recipe is diatomaceous earth, commonly sold as a mechanical insecticide.

The final consistency of the abrasive paste is similar to that of heavy cream.

(Articles courtesy of AAW)