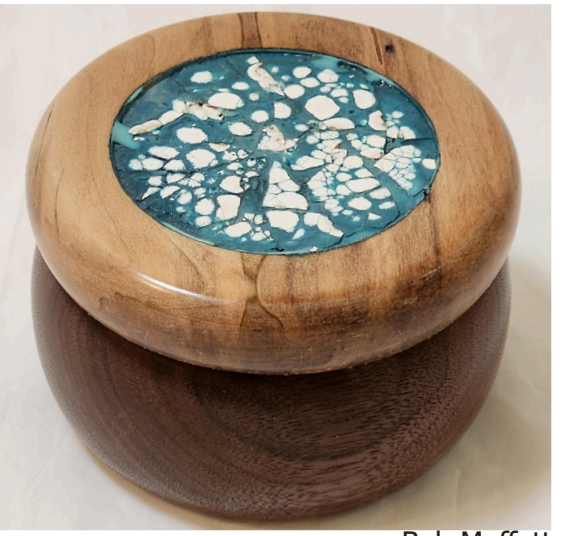
Wood Turners Worldwide

worldwidewoodturners.org and the art of making shavings

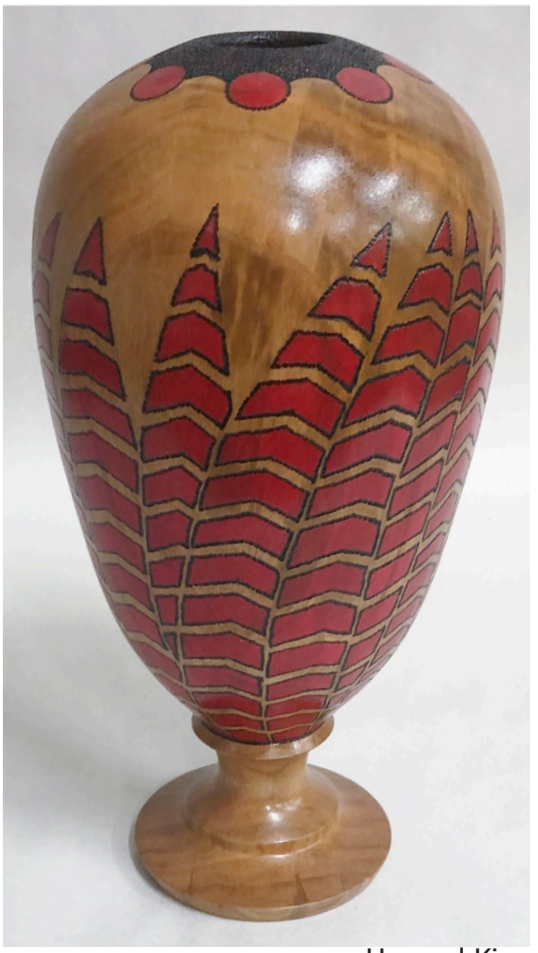
Newsletter

April 23, 2025 Volume 2 Number 9

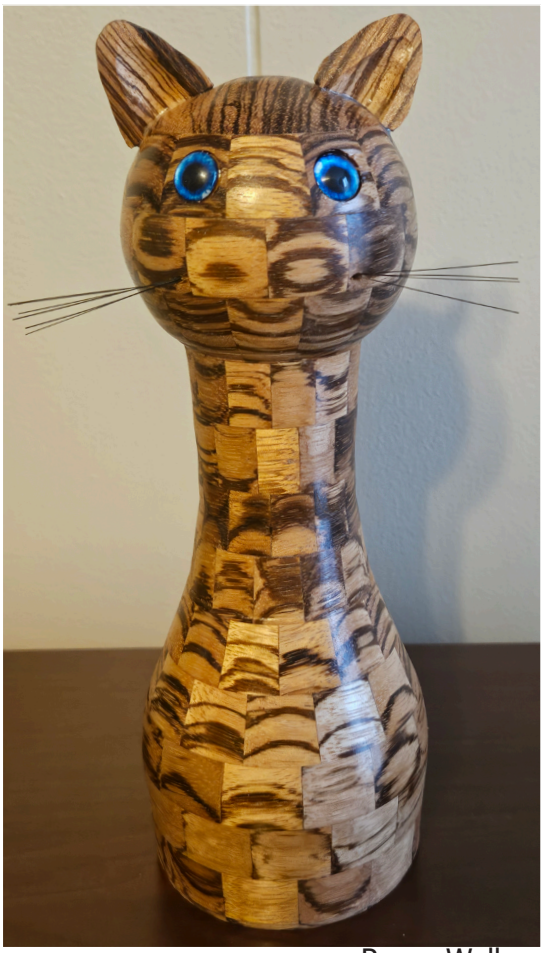
David Swain



Bob Moffett

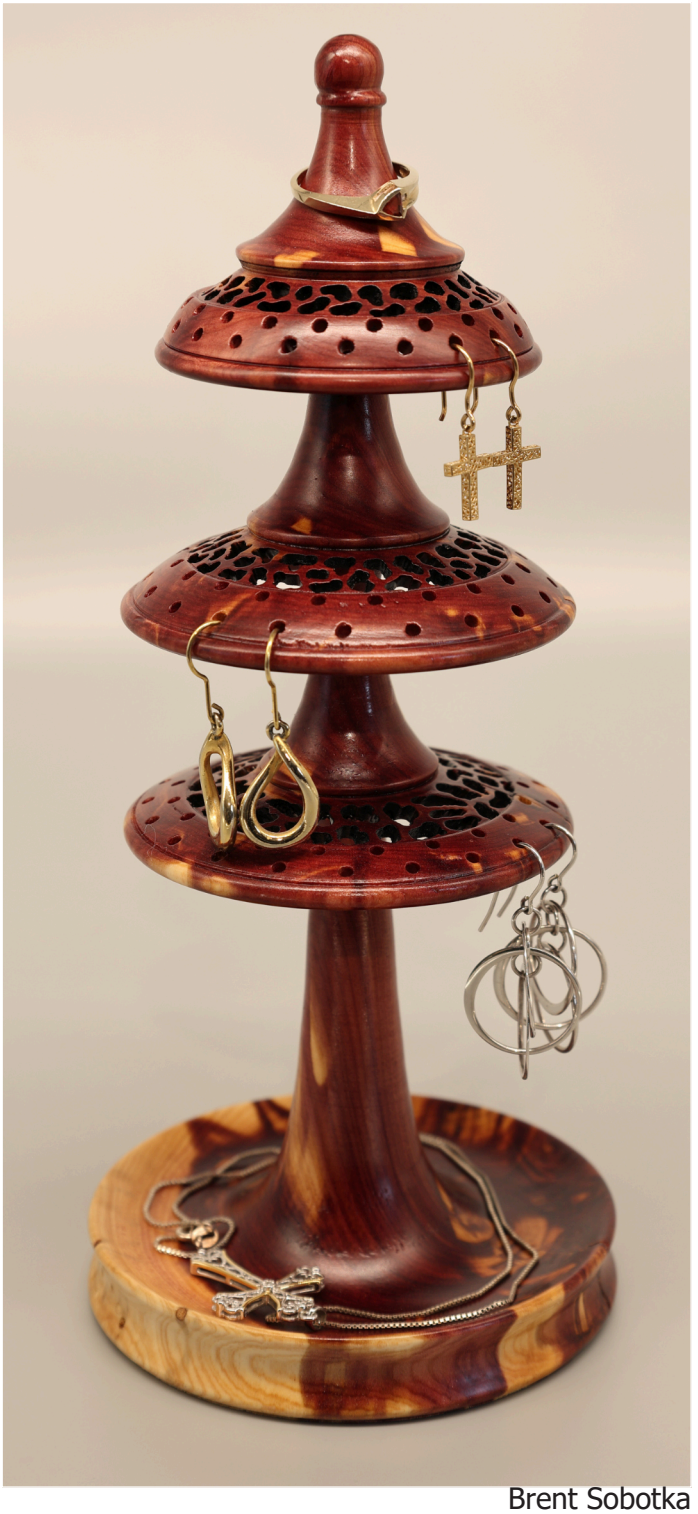


Howard King

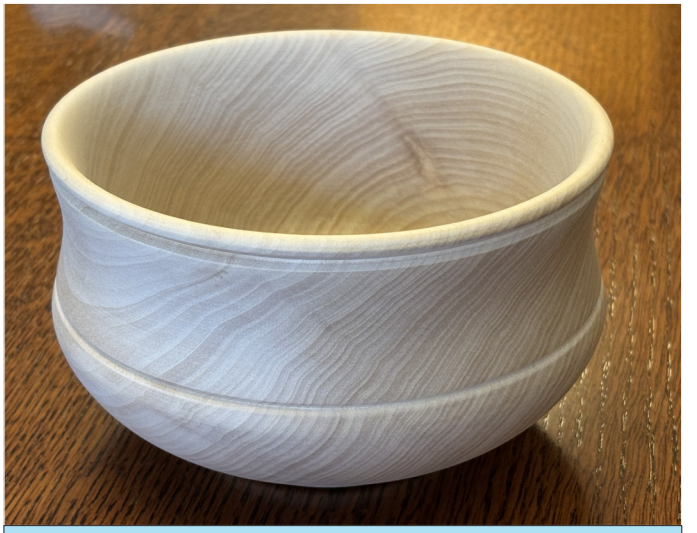


Roger Wollam

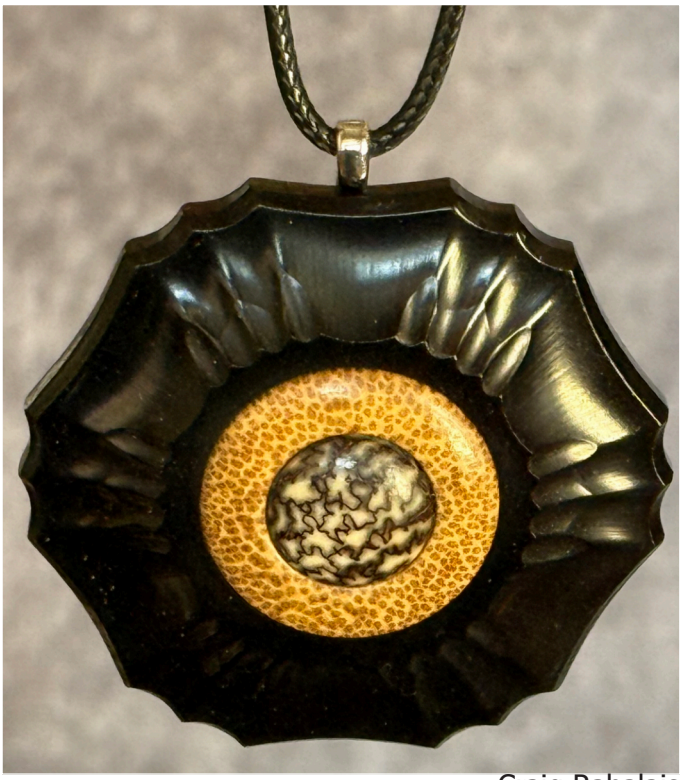
Clockwise from top left: Reproduction of an Incan drinking cup; Walnut box with maple lid inlaid with modeling paste and eggshells; Zebrawood segmented cat; Pyro Opus 23 - cherry elevated hollowform with pyrography and India ink color.



Brent Sobotka

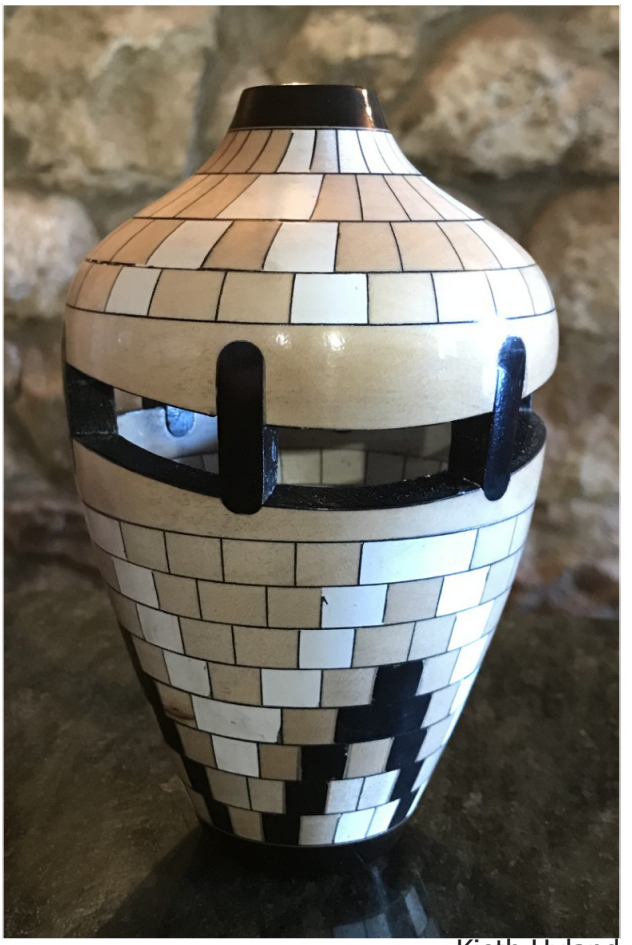


Correction: This bowl was incorrectly attributed in Volume 2, Issue 4. This is, in fact, the first bowl ever turned by Hugh Corbett. Apologies for the error!

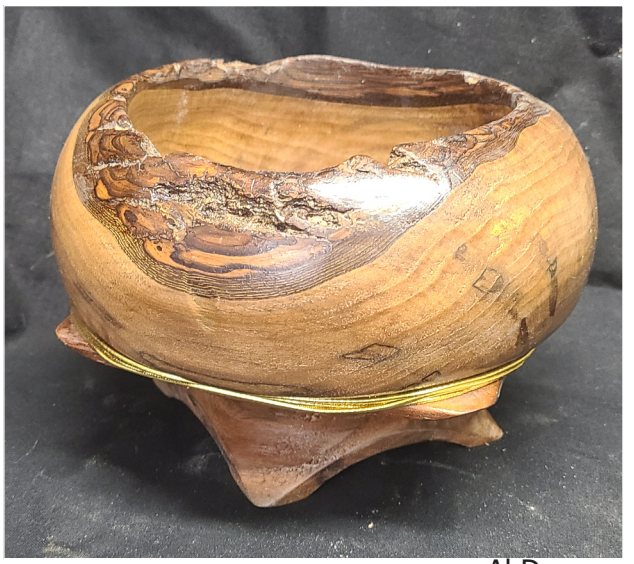


Craig Rabalais

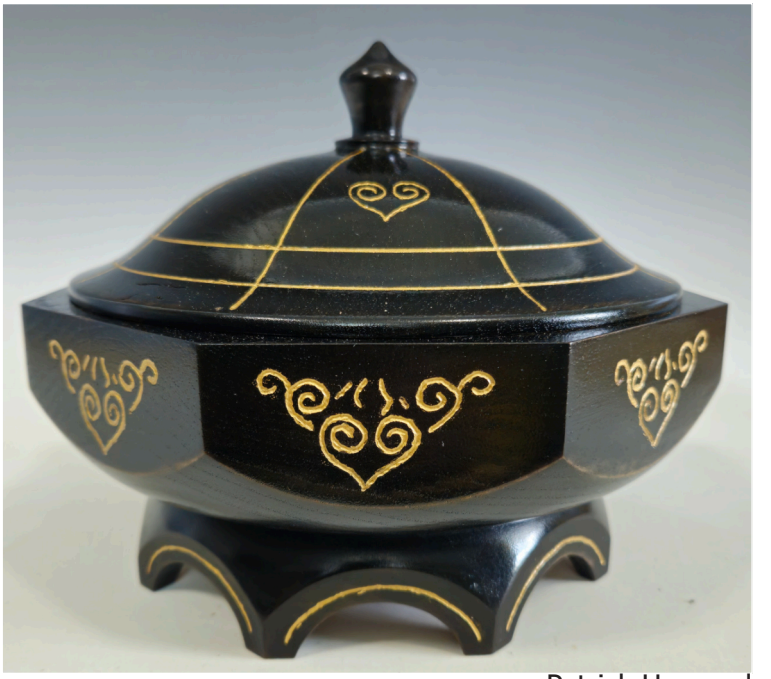
Your art belongs in our newsletter! Email hi-res images to editor@worldwidewoodturners.org. Include a brief description and make sure you identify yourself so I can give you credit!



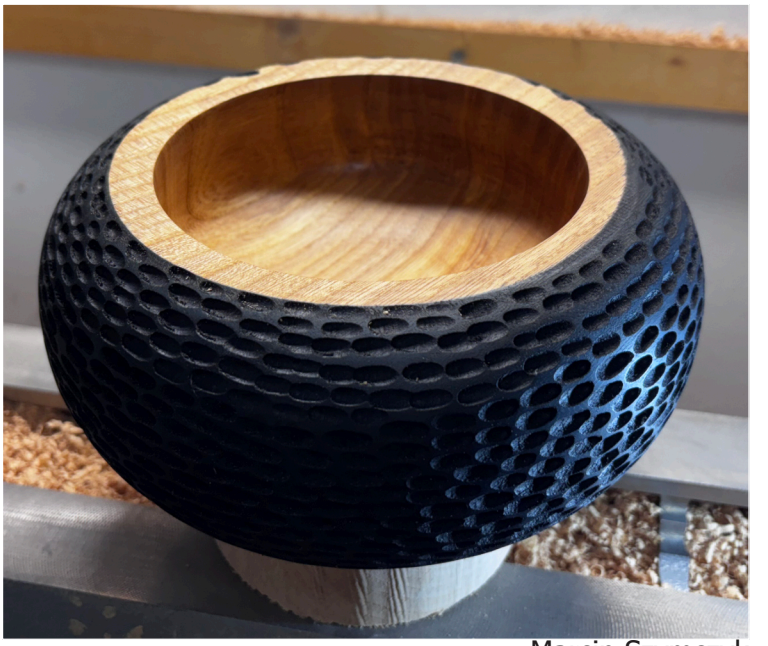
Kieth Hyland



Al Dawson

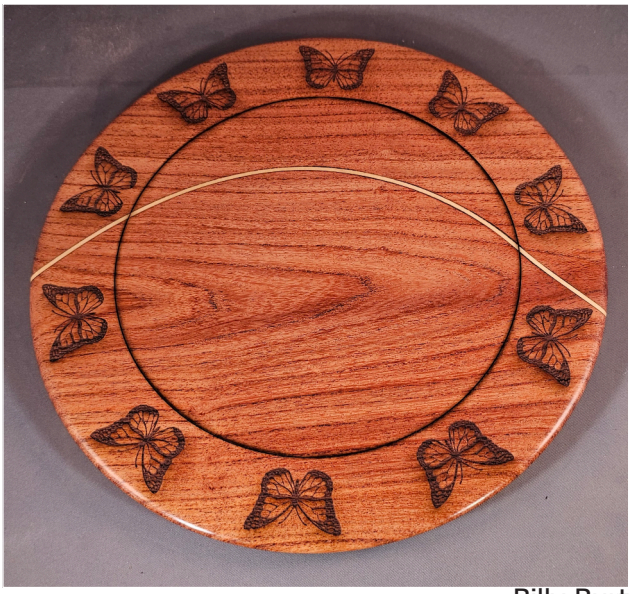


Patrick Hoggard

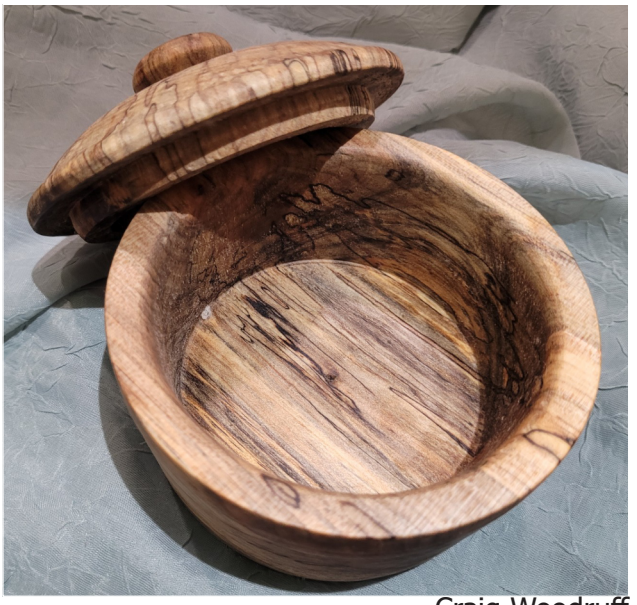


Marcin Szymczyk

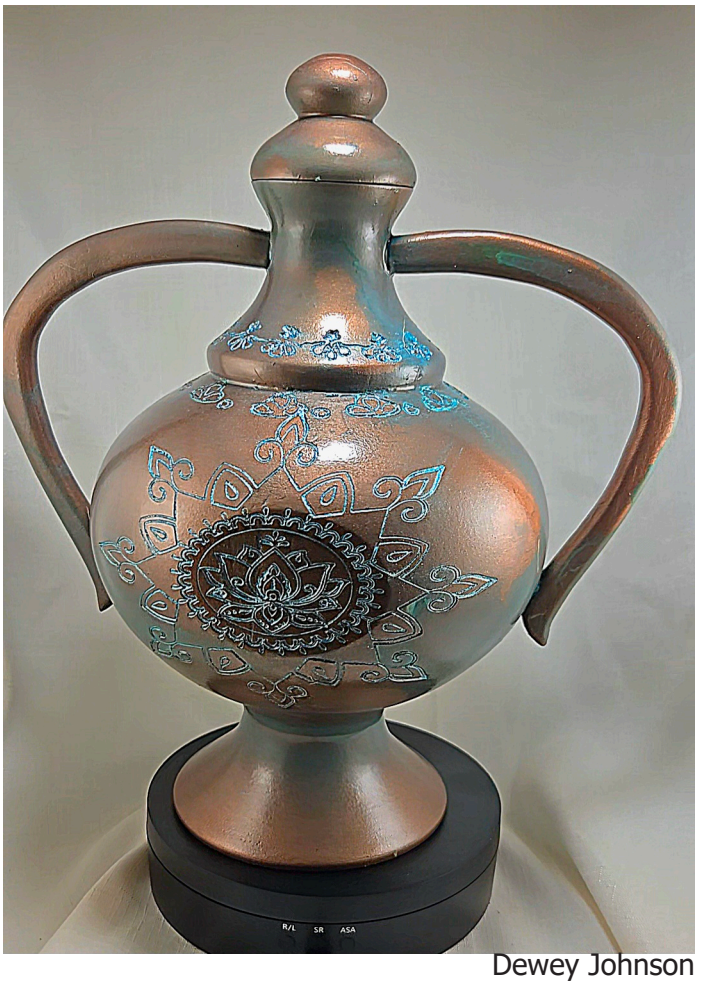
Facing page, left: Juniper jewelry tree; **Right:** African Blackwood, Bamboo and Betel Nut carved using a Lindow White Rose Engine lathe. **This page, clockwise from top left:** Maple, ebony, and Miliput segmented vase; Persimmon octagonal laquered box; Beech bowl, carved and dyed; Walnut bowl with an octopod base.



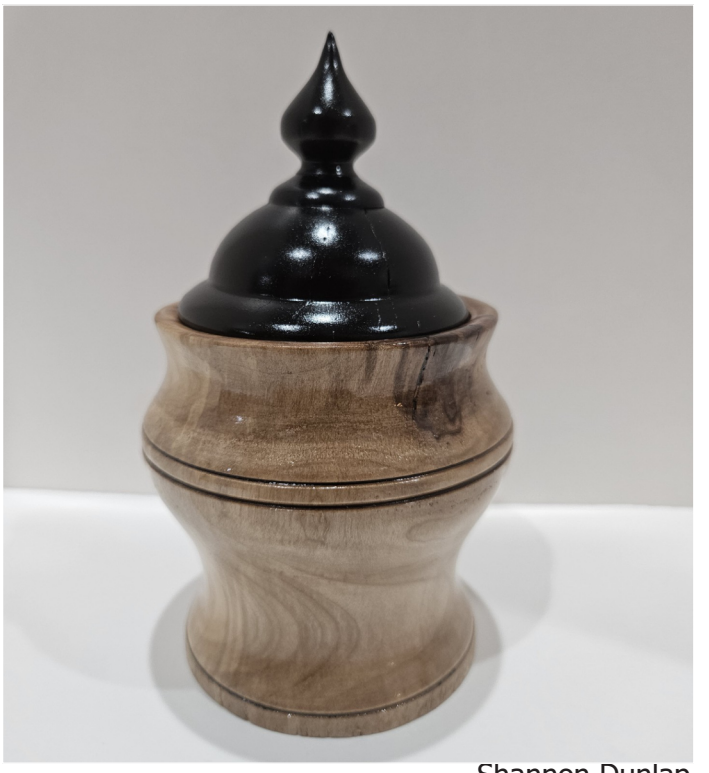
Billy Burt



Craig Woodruff

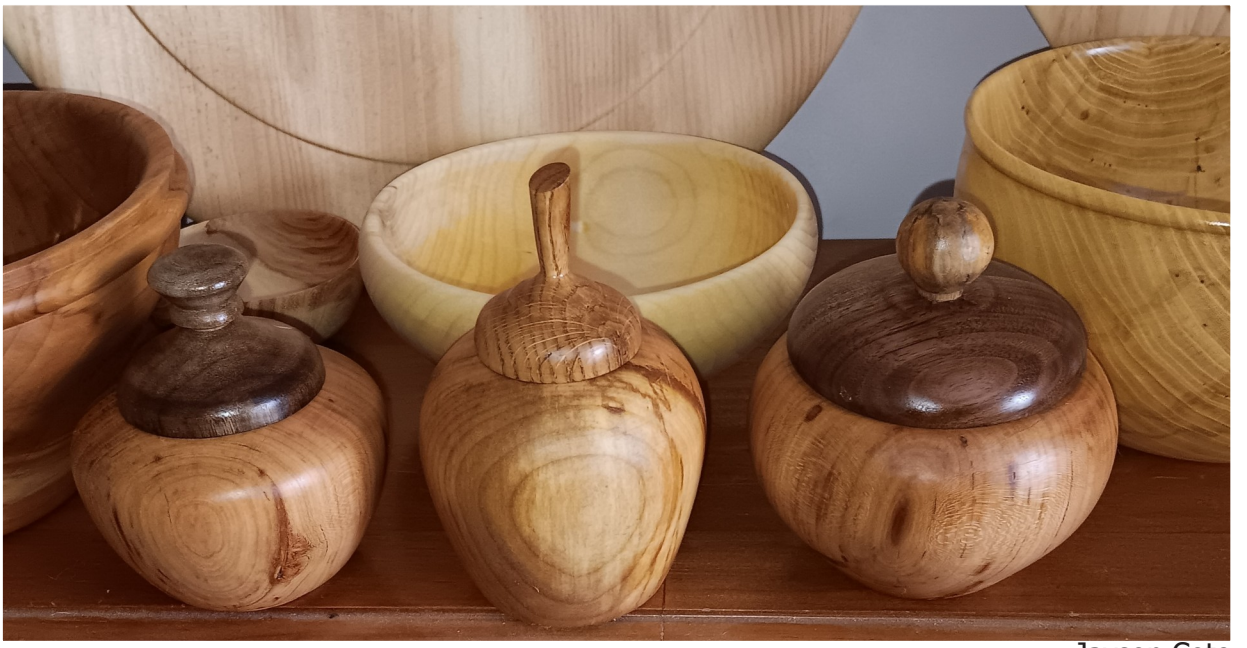


Dewey Johnson

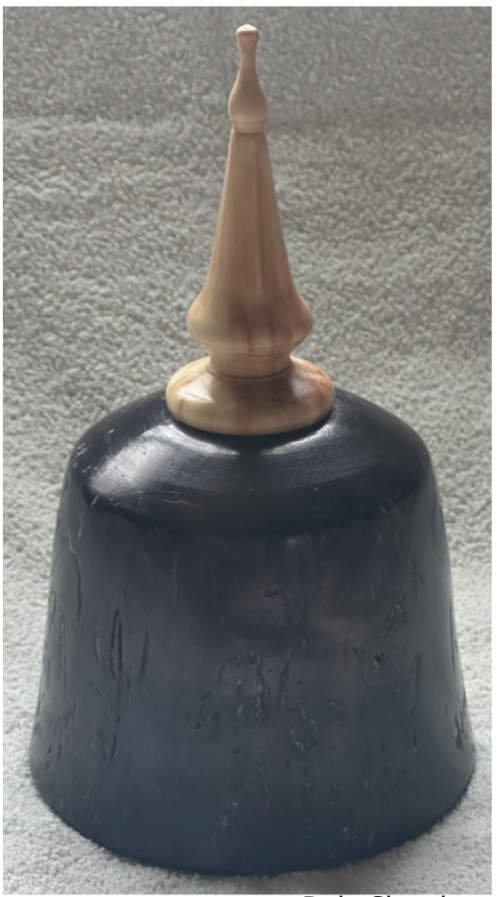


Shannon Dunlap

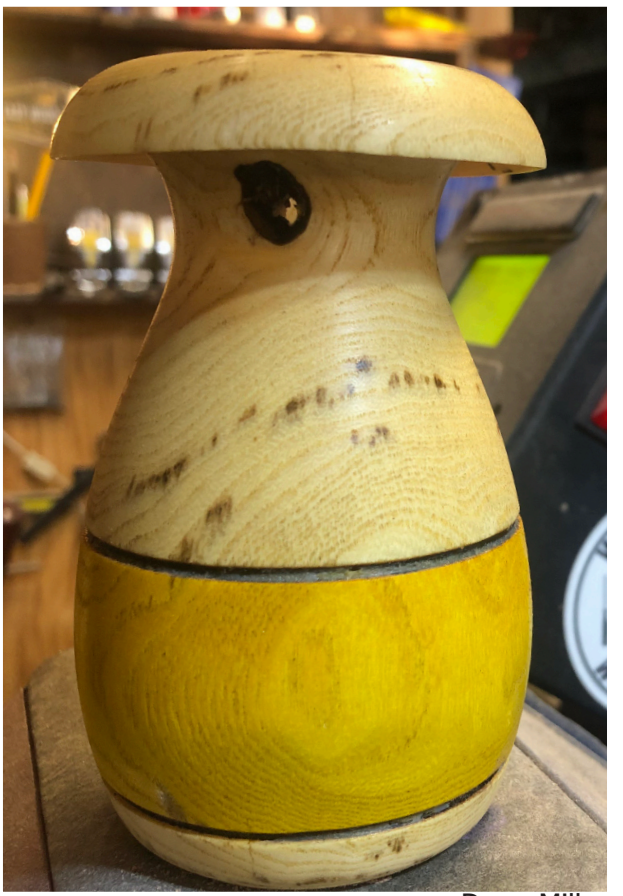
This page, clockwise from top left: Mesquite platter with maple arc. Embellished using a laser array technique you can learn at LevelUp! Hard maple, wive jug. Copper coated, carved and laser engraved, turquoise wax inlay, patina, lacquer finish; Birch lidded vessel. Lid is cherry painted black; Spalted maple box. **Facing page, top:** Cherry boxes with walnut and white oak (center) lids. **Bottom left:** Maple hollowform dyed with RIT Dye; **Bottom right:** Hackberry vase with yellow paint.



Jayson Cote



Dale Slaughter



Doug Miller

Laser Engraving for Wood Turners Pt. 4

… Continued from Volume 2, Issue 8

Additional Considerations for Engraving Wood

While the woods listed above provide excellent engraving results, keep these factors in mind to get the best outcome:

- Moisture Content – Always use dry, seasoned wood to prevent uneven burns, excess smoke, or warping.
- Grain Density – Fine-grained woods like maple engrave with more precision and clarity than coarse-grained woods like oak.
- Resin & Oil Content – Some woods, like pine, contain high levels of sap and resin, which can cause uneven burns and sticky residue buildup on the laser lens.

By choosing the right wood and adjusting your laser settings accordingly, you can achieve sharp, detailed, and professional-quality engravings every time.

Woods & Materials to Avoid

While laser engraving opens up a world of creative possibilities, not all materials are safe to use. Some woods and synthetic materials contain chemicals, adhesives, or oils that, when burned, release toxic fumes, corrosive gases, or excessive smoke. These can not only damage your health but also reduce the lifespan of your engraver by contaminating the lens, mirrors, and ventilation system.

Below are the woods and materials you should avoid engraving at all costs:

MDF (Medium-Density Fiberboard) & Plywood – Hidden Toxins in Adhesives: MDF and many types of plywood are made from wood fibers compressed with resins and adhesives, some of which contain formaldehyde and other volatile organic compounds (VOCs). When burned, these materials produce:

- Thick, sticky smoke that coats the laser lens and reduces engraving efficiency.
- Toxic fumes that can cause respiratory irritation, headaches, and long-term health risks.
- Uneven engraving results due to the different layers of glue and compressed wood.

  Alternative: If you must engrave plywood, use laser-safe, formaldehyde-free plywood with minimal adhesives.

Pressure-Treated & Chemically-Treated Wood – Poisonous Fumes: Pressure-treated wood is infused with pesticides, preservatives, and anti-rot chemicals to increase durability for outdoor use. However, burning this wood releases:

- Toxic gases such as arsenic, copper, and chromium compounds.
- Corrosive smoke that can damage both your laser engraver and your lungs.
- Lingering health hazards from inhaling even small amounts of the fumes.

  Alternative: Stick to natural, untreated hardwoods like maple, cherry, or walnut.

Oily & Resinous Exotic Woods – Smoke and Toxicity Risks: Some exotic woods, including cocobolo, rosewood, teak, and ebony, contain natural oils and resins that react unpredictably when burned. These woods are known for:

- Excessive smoke due to high resin content, making engraving difficult to control.
- Toxic fumes—some exotic woods contain natural compounds that can cause allergic reactions or respiratory issues.
- Sticky residue buildup on the laser lens and mirrors, reducing machine efficiency.

  Alternative: If you want a dark, richly colored wood, walnut is a great choice, as it provides natural contrast without the excess smoke.

Painted, Stained, or Varnished Wood – Chemical Hazards

Wood Turners Worldwide

Capt. Eddie Castelin - Founder
Dane Chandler - Administrator
David Rhodes - Webmaster
Joaquin Juatai - Editor

Engraving wood that has been painted, stained, or varnished can lead to poor-quality burns

and dangerous chemical exposure. Many finishes contain:

- Heavy metals or lead in older paints, which become airborne when burned.
- Polyurethane and lacquer fumes, which are hazardous and corrosive.
- Unpredictable burning patterns, making the engraving look messy or inconsistent.

  Alternative: Always engrave raw, unfinished wood. If you want color or protection, engrave first and apply a safe finish afterward.

Plastics & Synthetic Materials – Hidden Dangers

While some plastics are safe for laser cutting (such as cast acrylic), others are extremely dangerous. Common unsafe plastics include:

- PVC (Polyvinyl Chloride) & Vinyl – Releases chlorine gas, which is corrosive to metal parts and deadly when inhaled.
- ABS (Acrylonitrile Butadiene Styrene) – Produces cyanide gas and sticky soot, making it one of the worst plastics to engrave.
- Fiberglass & Carbon Fiber – Generates fine airborne particles that are harmful to the lungs.

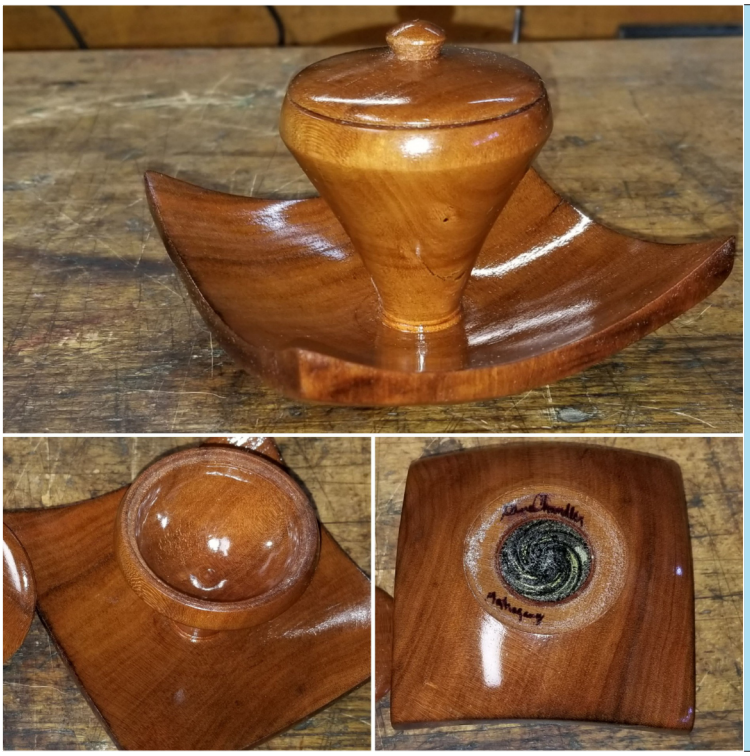
  Alternative: If engraving plastic, use cast acrylic (not extruded acrylic) for the best results.

Final Thoughts on Unsafe Materials

Using the wrong materials in your laser engraver can result in toxic fumes, excessive smoke, and even permanent damage to your machine. Always check material safety guidelines before engraving and test new materials in a well-ventilated area.

Stick to natural hardwoods, laser-safe plywood, and safe synthetics to ensure high-quality, clean engravings without the risks.

To be continued in Volume 2, Issue 10 …



Dane Chandler demonstrated his technique fro making this mahognany jewelry caddy during our April 2nd meeting. You can watch the entire meeting, or just the demonstration segment, on our YouTube channel, https://www.youtube.com/@worldwidewoodturners1.

World Wide Woodturners meets every via Zoom Wednesday at 7:00 PM EST. Meetings feature demonstrations, tips and tricks, member's gallery, and more! Free woodturning demonstrations weekly! Go to worldwidewoodturners.org and click "Go to meeting!"

Level-up

•3 Full Days of Demonstrations
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Dean Grimes	Jeff Walters
Kade Bolger	Brent Sobotka
Billy Burt	Roger Wollam
Tim Hatch	Dan Smith
Paul Hannaby	Dave Rhodes
Martin Clarkson	Sue Jilek
Gary Hales	Jim Duxbury
Matt Harber	Rita Duxury
Joaquin Juatai	

September 17-20 2026
Wisconsin Rapids Wisconsin

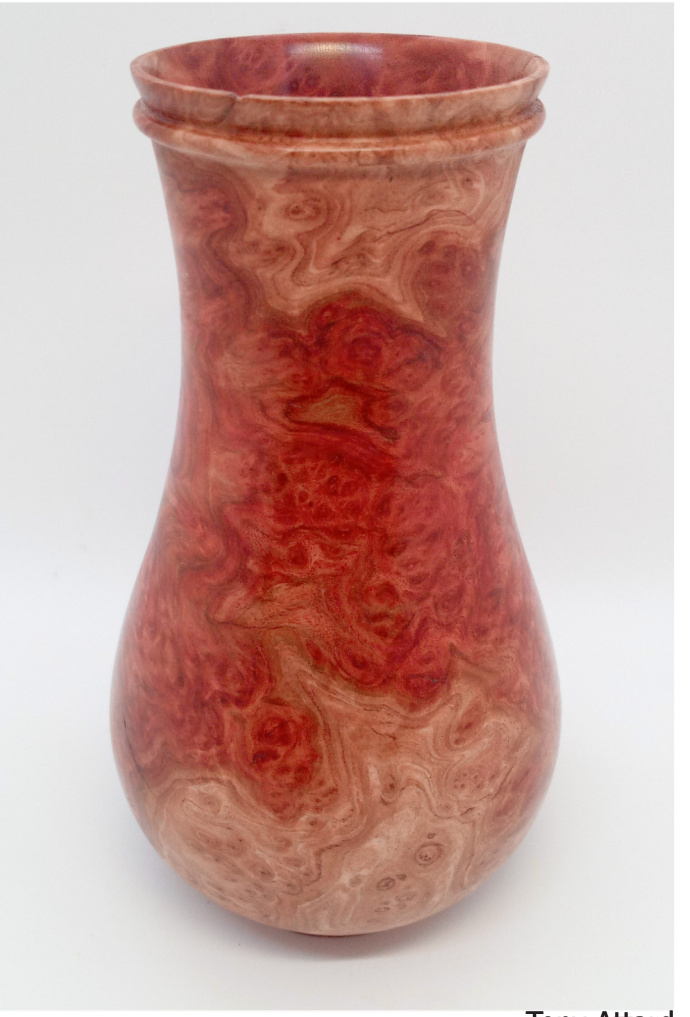
Tuition Cost $160

Includes all training &
Evening Meal
Hotel Accomodations are now available.

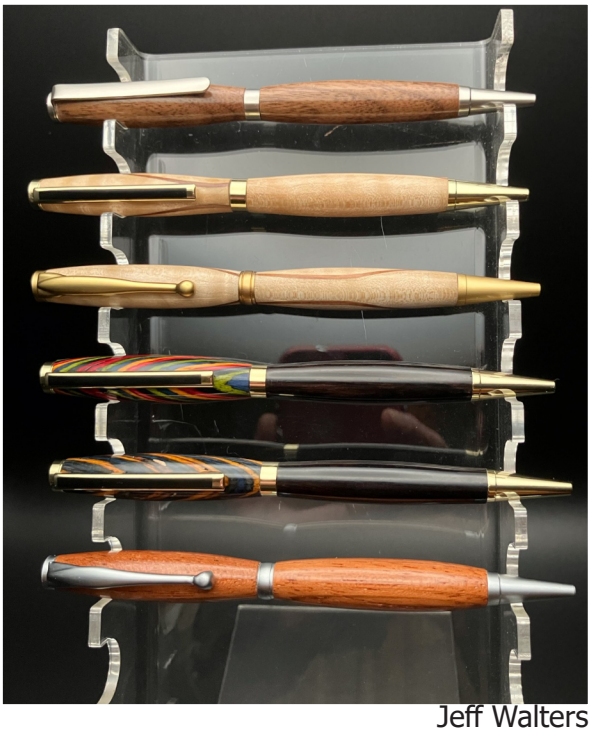
Tools Gallery Friends

levelup@worldwidewoodturners.org

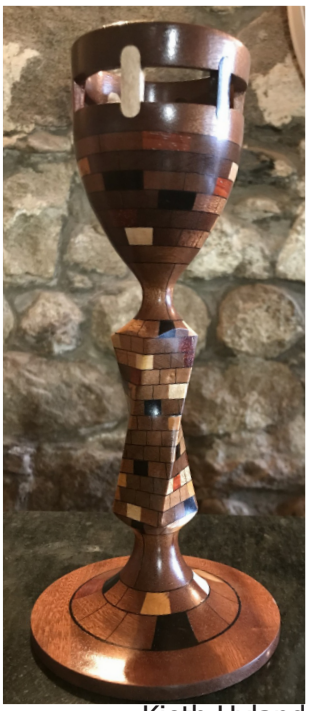
More details to come!!!



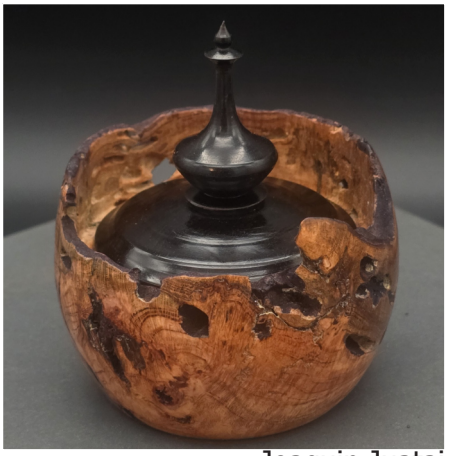
Tony Attard



Jeff Walters



Kieth Hyland



Joaquin Juatai

Above: Red mallee burl vase; **Far left:** A selection of slimline pens in various woods. **Left:** Goblet made with cutoffs from the vase on page 3. **Below:** Cherry burl and African blackwood box.