

ROCK TRAILS



Opal. October's gemstone. Photo courtesy of amazon.com

**VOLUME 61
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October 2023**

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2022 Officers and Directors

President: Edmund Jarzembksi, 419 237-2000
Vice President: Charlene Hacker, 517 270-8061
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Treasurer: Doris Brzezicki, 269 267-1123
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Second Year Director: Sherman Kardatzke
Third Year Director: Jan Hauter
Show Chairman: Sherman Kardatzke, 517 673-5487
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Sunshine and Membership: Judy Snyder, Kathy Boyers
Library: Curt and Linda Miller
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Meetings are held the first Sunday of each month
at 2:00 PM, at
201 W. Main St. Morenci, MI 49256

President's Letter

It's Good to Get Around

I was invited as guest speaker to the Mid-Michigan Lapidary Society Annual Picnic on September 16. Mike and Stacey Harper hosted this event at their farmette near Belleville, Michigan. Mike And Stacey live in the home once owned by world famous, automotive designer from California, Howard "Dutch" Darrin who was chief automotive stylist for Kaiser Frazer Corporation at Willow Run, Michigan. Mike bought a "Darrin styled" '51 Kaiser that hadn't run in 30 years. The car came from Kansas. He brought it to my shop and we made it worthy of the road again. Stacey is editor of the mid-Michigan lapidary society newsletter, an accomplished artist and avid gardener. Mr. Darrin would be proud of the Harper's personal touch to his old homestead. A couple days before the picnic, I received a call from the Harpers asking if I could bring Bill Barr who is a member of both our clubs and lives in Adrian. Of course I would. Bill was quite surprise when I pulled up with my '51 Kaiser and off we went with a Michigan roadmap on the seat. What a great day for a drive in an old car taking the scenic route and enjoying the company of fellow rock hounds at a wonderfully hosted picnic.

Best regards,
Eddie



Photo submitted by Ed Jarzemski

Secretary's report

The September 10, 2023 meeting was called to order at 2:15 with Richard Brzezicki leading with the invocation and Pledge of Allegiance. There were four members present and one visitor. Mike Padois, long time friend of Bill Schultz, was visiting from the state of Oregon. Thanks for visiting with us, Mike. The secretary report was approved as written in Rock Trails. The treasurer report was given by Richard Brzezicki on behalf of his wife, Doris, who was absent, and was approved.

Richard shared our successes at the Fulton County Fair: geode sales were as good as last year and grab bag sales were up considerably. A special thanks was expressed to all who volunteered at the fair.

New business included an invitation by the Morenci Fall Festival Committee to participate at their event, October 7, 2023, between 4-7 cracking geodes. There is no fee for non-profits and demonstrators. It was voted to attend and give a \$50 sponsorship.

It was suggested that the club order a Short Wave U.V. light. Bill Schultz said he would look into it and give a report at a later meeting.

Our participation at the Art-A-Licious and the Clinton Fall Festival was discussed. Bill organized the volunteer times as best he could using phone calls to fill all the slots because of the limited membership in attendance at the meeting. Although he had extra responsibilities those weekends he set up and tore down at both events. The club also ordered \$2300 worth of geodes with an emphasis on the Trancas geodes from Mexico. They have a pistachio green glow under UV light due to a uranium activator in the rock. They are quite a hot seller.

The meeting adjourned at 3:15 PM. The next meeting is scheduled for October 1 at the club house.

Respectfully submitted,
Edmund Jarzembki



Our booth at the Fulton County Fair. Submitted by Doris Brzezicki

New Member

A big welcome goes out to

George H. Stuckey

112 Washington St.

Wauseon, OH 43567-1625

(419) 335-0202

How To Cut Rocks With a Tile Saw (Tips and Techniques)

by JEREMY HALL; Rockseeker.com



Not everyone has access to a lapidary saw, but most budding lapidarists have seen people recommend using a tile saw. The question that remains, then, is how to use the saw to cut slabs or trim down preforms using one of these tools.

Let's get to it, and we'll cover the ins-and-outs of how to cut rocks with a tile saw.

What Kind of Tile Saw Do I Need For Cutting Rocks?

A cheap one.

Using a tile saw is usually a move to save money, and you can get a used lapidary saw for the price of a professional-quality tile saw.

You just need a reasonable blade kerf and some sort of cooling system. The majority of tile saws will have a wider blade than you really need. They'll work fine, but they often eliminate a lot of material along the way.

Cheaper saws will have a simple cooling system: the blade sits in the water in a tray and gets wet as it spins. Keeping your work piece wet is important for both safety and practical reasons.

Wet rock becomes mud, instead of dangerous dust. **Never dry-cut stone.** It's not worth the possibility of respiratory issues down the line.

I'd suggest the following two saws if you're going down this road:

QEP 22400Q 4-inch Tile Saw– Dirt cheap and highly effective for the task. I've personally used one of these as a trim saw and slab saw for small agate nodules in the past. The blade is quite small and may not be suitable for what you're doing, anything over 2" requires multiple passes.

QEP 22400Q 4-inch Tile Saw



SKIL 3540-02 7-inch Wet Tile Saw– For bigger work, this is a good choice. SKIL is consumer-grade, keeping the price cheap, and the saw is built well enough to last for some time.

Any tile saw will work, but the two above are at the right price point for amateurs and those new to the lapidary arts.

SKIL 7-inch Wet Tile Saw



Let's Talk Safety

Tile saws aren't exceptionally dangerous... until they are.

The blade *won't* cut your skin if you contact the edge. Tile saws use an abrasive to cut through hard materials, rather than relying on teeth as a wood saw. Prolonged contact will cause a scrape, and possibly a minor burn, but the blade is relatively safe.

There are other concerns, so let's go over them before we get to the meat of the matter.

Required PPE

What you do need is a pair of goggles or safety glasses. The wide blades on tile saws like to chip stones, and those chips can be thrown back at your face. It's not rare, and if you're cutting anything that exhibits a conchoidal fracture those chips can be *sharp*.

My own personal workshop is comprised almost entirely of situations tailored to give OSHA inspectors a heart attack. And even I wear glasses when I'm cutting stones.

There's no need to get tricky with them, you don't need a ballistic rating. DeWalt sells cheap safety glasses that are ANSI-rated and will last a long time.

Invest in a set of safety glasses, a stone shard to the eye can be a life-changing event.

If you *do* manage to get a piece of stone in your eye and it doesn't do damage immediately, **don't touch your eye.** You can use the old flintknapper's trick in some cases, where you carefully pry your lid open and dislodge the flake by smacking the back of your head.

Take it from me: using that trick is not fun, it's not comfortable, and it's a best-case scenario for that kind of injury.

Just wear safety glasses.

Electricity Concerns

Anytime you mix water and electricity you're looking at a potentially deadly situation.

Your tile saw isn't just operating wet: it also contains water. A running blade will *throw* the water as well, which complicates the matter.

Use the following guidelines to avoid problems:

- **Keep the saw at least 6' from the outlet.**
- **Never allow the saw blade to line up directly with the outlet, or it may throw water into it.**
- **Keep a towel on hand in case you need to disconnect quickly. A simple wipe with a shop rag can prevent a shock.**
- **Use a drip loop whenever possible. This is possibly the *best thing you can learn if you're using electrical tools around water.***

If you follow the above guidelines you'll have no worries.

Mask Up

Rock dust ranges from very irritating to downright dangerous. Silica-based minerals make up a lot of the rocks used in the lapidary arts and are among the worst compounds to cut. That includes agates, jasper, opals, and many others.

If you're cutting outdoors, and I strongly suggest it, I recommend using an N95 mask to keep out particulate matter. Indoors a proper respirator fitted with filters designed to remove particulate matter may be required.

Opinions vary on whether the mask is needed outdoors, especially when cutting wet.

I suggest you look at the symptoms of silicosis and decide for yourself if it's worth the risk. Silica exposure is *cumulative* and not something to mess around with. There is no cure if your lungs reach that point and it will be fatal.



How to Use a Tile Saw to Cut Stones

Now that you've got your goggles on and have placed the saw somewhere that you won't get shocked... it's time to start cutting.

If you've never cut with an abrasive blade, you're in for a bit of a learning curve. That said, most people shouldn't take more than three or four passes to get the basics down.

The sequence is pretty easy:

- 1. Mark your stone with a sharpie or brass/aluminum scribe.**
- 2. Wet your stone in a bowl or bucket of water to prevent an initial dry cut.**
- 3. Place the stone on the opposite end of the tile saw from yourself.**
- 4. Pull the stone gently towards you, using the saw blade to cut down your marked line.**
- 5. Allow the saw blade to cut the rock, rather than putting a lot of pressure on it.**

The key here is to go slowly and use little pressure.

The main problem I see with people cutting stones is pushing them through instead of pulling them. It feels more natural to many of us, myself included. You *can* push, but you're going to get even more debris thrown your way.

Pulling the stone through the blade allows you to avoid most debris.

I prefer to grip on either side of the stone, but you can also use glue or shellac to attach the stone to the end of a bit of scrap timber. Keep your thumbs clear as you go into the saw blade.

If you pull too hard you risk overheating the saw and the work piece. It also makes a rougher cut on the stone, creating a lot more chips than you'd create otherwise. Chips have to be worked out later, and depending on your desired result can be a major problem.

Teaching how to "feel" the tool isn't really possible, but the following tips should help you:

- **Plan each cut carefully, whether it's cracking a nodule or taking off the excess for a preform.**
- **Make slabs slightly thicker than normal if you're using a tile blade to account for surface chipping.**
- **Watch out for too much heat being generated, if anything feels hot to the touch it's time to slow down. The diamonds in the saw blade and most stones are all vulnerable to heat.**
- **Never force a stone into the blade. One of the few exceptionally dangerous situations you can create is getting the blade bound in the rock, which can throw the stone with surprising force.**

Tile saws work great for making small slabs and can make decent trim saws in most cases. While not ideal, they're more than enough for an amateur who is just getting their start.

Drain the pan when you're done and dry off the blade to prevent rust. A thin coat of 3-in-1 or mineral oil can help extend the lifespan of both.

Tile Saw for Cutting Rocks FAQ

Q: Can I put a lapidary blade on a tile saw?

A: Yes, but you need to be careful. There are two problems. The first is that some cheap trim saws won't run blades with a thin kerf well. The main issue, however, is RPMs. Tile blades are rated for higher RPMs in most cases, and running a lapidary blade at high speeds will cause it to lose its edge rapidly. It can also cause more dangerous problems if you really mess it up.

Q: Can I use a tile blade as a grinder?

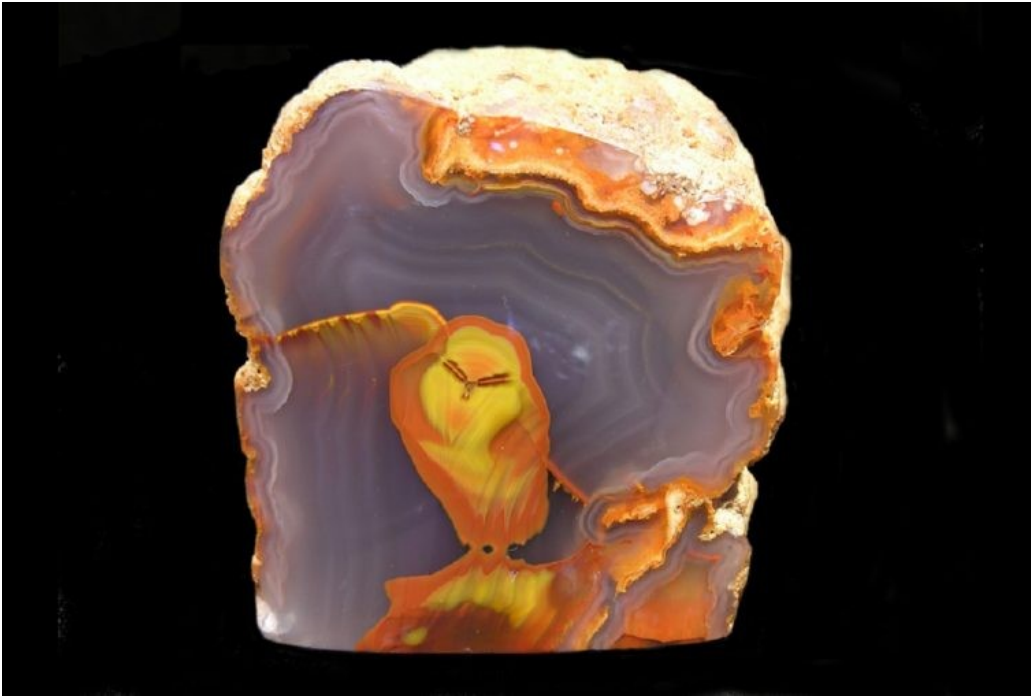
A: You can, and I've often used them to clean up the edges of preforms before moving to the proper tool. It's not ideal for major grinding operations, and you have to be careful not to push on the blade too hard or you can warp it.

Q: Can I use my tile saw dry?

A: Technically, yes. In practice this is a terrible idea, bordering on downright stupid. Dry cutting, grinding, or sanding rock is a terrible idea in the first place and these saws are designed to be run wet. You're just creating a more dangerous environment for yourself if you try cutting without water in the basin.

Q: Should I use oil in my tile saw when cutting rocks?

A: A tile saw will accept oil as a lubricant, but it's not necessary. It's also not a great idea. Oil will be thrown everywhere along with dust, which means a much more extensive clean-up process. For most tile saws it's overkill, but remember to drain the water in the bottom when you're done.



The "Apache Hooded Owl" agate from Rancho La Vinata, Ejido el Apache, Chihuahua, Mexico

The Apache Hooded Owl Agate: the most famous agate of all time by Rock Seeker

The Hooded Owl Agate, also known as the Apache Agate, is a highly valued and prized specimen in the world of agates. The first recorded appearance of this agate was in an advertisement from Triangle Rock Shop in Lapidary Journal in April of 1958. The stone was reportedly sold to T. B. Williams, the owner of Triangle Rock Shop, by Ramon Pena Munoz, and eventually made its way to Gorin's Gem Art Shop. Currently, the Hooded Owl Agate is in the possession of Mr. Brad Cross.

This agate is considered one of the most exceptional picture agates ever seen, characterized by its intricate and unique design. It features a Hooded Owl pattern that is formed by the combination of vivid yellow and red veils, set against a blue sky. The rarity of the Hooded Owl Agate has only added to its popularity and value among collectors.

The "Apache Hooded Owl" agate from Rancho La Vinata, Ejido el Apache, Chihuahua, Mexico

The Hooded Owl Agate is a remarkable and highly sought after specimen in the world of agates. Its history, rarity, and stunning design make it a must-have for any serious collector of gemstones and minerals.

October 2023

| Sun | Mon | Tue | Wed | Thu | Fri | Sat |
|--|-----------|-----------|-----------|-----------|---|--|
| 1 Gem and Mineral Society Monthly Meeting 2 PM | 2 | 3 | 4 | 5 | 6 Gem and Lapidary show Burton Manor 27777 Schoolcraft, Livonia, MI | 7 Superswap Wayne Co. Fairgrounds 10871 Quirk VanBuren Twp, MI |
| 8 Superswap Wayne Co. Fairgrounds 10871 Quirk WanBuren Twp, MI | 9 | 10 | 11 | 12 | 13 Greater Detroit Gem Show Macomb College 14500 E 12 Mile Rd Warren | 14 Apple-Umpkin Festival Kapnick's Orchards Tecumseh |
| 15 Apple-Umpkin Festival Kapnick's Orchards Tecumseh | 16 | 17 | 18 | 19 | 20 Central Michigan Gem Show 700 E Ash St Mason, MI | 21 Central Michigan Gem Show 700 E Ash St Mason, MI |
| 22 Central Michigan Gem Show 700 E Ash St Mason, MI | 23 | 24 | 25 | 26 | 27 | 28 Gemboree 48 E Bath Rd Cuyahoga Falls, OH |
| 29 Gemboree 48 E Bath Rd Cuyahoga Falls, OH | 30 | 31 | | | | |

Meetings are held on the first Sunday of each month at 2 PM, at 201 West Main St, Morenci, MI 49256

