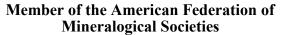


# **MWF** News

# Midwest Federation of Mineralogical and Geological Societies

March 2021 - Issue No. 600

Web Site - www.amfed.org/mwf





#### PRESIDENT'S MESSAGE

Susan Stanforth, MWF President

#### **IDEAS! IDEAS! IDEAS!**

Dear Members – I need your ideas! I seriously do.

If any of you have the inclination to help me (and I'm NOT talking about those horrible scams that ask you to send me gift cards), my most difficult assignment at the moment is to find a Missouri State Director. I'm ready to bribe you. Find me a Missouri State Director



and I will send you a stained glass agate piece that I sell for \$140. Deal?

I'll share a few ideas of mine now. First up, "sham-rocks" – what a fun topic for March! My buddy Dave dons a green wig and dyes his beard orange and presents his collection of fake rocks. You've all heard of dyed howlite and others that unscrupulous vendors try to sell. They make for an interesting program.

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#### WHO GETS PRINTED NEWSLETTERS?

Donna Moore, MWF Secretary

Every year after the clubs turn in the form for dues, insurance and club contact information (and pay their dues), MWF officers get questions about who receives the printed newsletter and why.

Each club with a newsletter editor is entitled to a printed newsletter for the editor, the treasurer and one other officer. The editor and the third officer receive this printed copy to share the MWF News with the rest of the club members. It is especially appropriate for the liaison to receive the third copy, since he or she is the link between the club and the MWF. The treasurer receives the second copy in order to remind him or her to pay the dues on time.

Any officer may receive the newsletter by email. If an officer prefers to receive the newsletter by please Valerie J. Meyers email. let (vjmwriter@yahoo.com) Moore Donna or (mwfsecretary@gmail.com) know, so Donna can take you off the list for printed newsletters. It is also possible for an officer who receives the newsletter by email to share it by email with every member of your club.

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#### MEET THE STATE DIRECTOR: IOWA

Questions by MWF President Susan Stanforth; answers by MWF Iowa State Director Tim Hill.

1. When did you first get the rockhounding bug?

On a field trip to Geode State Park in 1969. I remember seeing that geode section in the creek bed, and still have it somewhere.

Being blessed to live less than 10 miles from New London, Iowa, I had easy access to Geode Industries, the family that was instrumental in naming the geode as the State Rock of Iowa. I used to hang out in their store on Saturdays from opening to closing. There was this frame of polished Montana agate slabs hanging on the wall that just demanded my attention. I caught the bug, it stuck, and stayed all these years now.

#### 2. Which clubs have you joined?

I joined the Chicauqua Rockhound Society as a junior member. They changed their bylaws so I could join. Each member would take a turn inviting me to their homes and teaching me the various types of lapidary arts. I was taught everything from gem trees, to cabochons, to slab saws. A new mineral specimen or slab always seemed to find its way into my pocket. It was a different world back then.

In 1980, I was one of the founding members of the Geodeland Earth Science Clubs in Illinois. 2020 was our 40th Annual Show.

## 3. Why did you volunteer to be the Iowa State Director?

It seems to me that the simple hands-on hobbies once so popular now take a back seat to the computer. It is unfortunate. I however will not cave to that box. As I grow older I see the importance of involvement in the preservation of rockhounding and all that goes with it. We need more (and younger) people who will say, "yes" to volunteering.



Photo courtesy of Tim Hill.

#### 4. What's your dream collecting site?

Hunting for Montana Agate! The next would be collecting with no restrictions because of crazy laws.

I remember collecting at Pint's Quarry in Raymond, Iowa while they were working. Those were the days! Still have my finds of beautiful quartz and calcite specimens. It's now flooded. Went back a few years ago, found it, and took a few pictures. The "good ol' days" really were just that.

# 5. What are your favorite minerals/fossils to collect?

Really not much of a collector anymore. Geodes are about the only thing. When I discovered lapidary, collecting for minerals became less important. Cutting rough is another story. I slab, cab, tumble, and facet now. Really want to try commesso [art made by piecing together precisely cut slices of stone] soon.

Thank you for asking me to share. I look forward to meeting many of you in the future.



### PRESIDENT'S MESSAGE, CONTINUED

(Continued from page 1)

Next, those of us in the Midwest hunt for our regional rocks and fossils. In my local club, Rock River Valley Gem & Mineral Society in Illinois, we exchange items with a friend out west. It's so exciting to receive different specimens to do research and make minipresentations.

If you are a smallish club and you do not put on a show, I would suggest an Open House alternative. Members choose a geology topic and do a "science fair" project (yes, adults can do exhibits with tri-fold poster board!). Libraries would love to host you. What a learning experience for the public!! And you might find new members.

Lastly, what about the juniors? Wanna guess how many clubs don't have activities for the kiddos? MWF has an excellent Junior Activities Chair, Linda Plowman (who comes from Missouri. Hey, Linda why haven't you found me a Missouri State Director?). 417-315-6971 Please contact her at lgplowman@yahoo.com.

AFMS, the national federation, has Junior Program expert Jim Brace-Thompson, who can be reached at 805-659-3577 or jbraceth@roadrunner.com.

I enjoy the Pre-K kids. I bring in safe hands-on specimens to discuss. They each go home with a polished rock or two.



Little kids plus little rocks equal big smiles especially if they have a great presenter. Photo by Patti Weise, a teacher at Shepherd of the Valley Pre-School in Rockford, Illinois.

#### **EDITORS' CONTEST RAKES IN ENTRIES!**

Sharon Marburger, MWF Bulletin Editors Aids Chair

A whopping (and record-breaking during my time as Chair) 24 entries have been received for this year's MWF Bulletin Editors' Contest. Unfortunately, two of the entries had to be disqualified. Still, 22 entries is awesome!! Thanks to the editors that submitted.

All of the submissions have been judged, and will soon be on their way to the AFMS for competition on the national level. Stay tuned for contest results.

#### WEBSITE SHARING GROUP CONSIDERED

Brad Zylman MWF Website Contest Chair

Please let me know if you want to participate in creating a rockhound website sharing group. The goal would be to start conversations among webmasters for the MWF sites that want to learn from each other. We have a mix of different skills, but together we can help improve how the web is used by each club. We can easily hold meetings over video conference to share knowledge and ideas.

If this sounds interesting to you, contact me at brad.zylman@mrm.com. I look forward to hearing from you!

#### DEADLINE CALENDAR

Entries for the MWF Website Contest are due Feb. 24, 2021. For more information, contact the Website Contest Chair, Brad Zylman, brad.zylman@mrm.com.

Entries for the National Youth Poster Contest sponsored by the North Lakes Academy Rockhounds (Minnesota) are due May 1, 2021. For more information. contact Michelle mcauley@northlakesacademy.org.

Rockhound of the Year Awards may be submitted at any time for certificates and a mention in the MWF News. Contact Steve Shimatzki. sis132@gmail.com.



#### Is There a Perfect Cut for Diamonds?

Daniel Hogan GIA/DCA, VP, Three Rivers Gem & Mineral Society (IN) From the January, 2021 Strata Data

This year is the Diamond Anniversary of the Three Rivers Gem and Mineral Society. So, to start off the celebration, I would like to share with you the beautiful world of diamonds.

How is a diamond's value determined? I'm sure that many of you are well aware of the four Cs: Color, Clarity, Carat Weight, and Cut. So here is my question: Which quality is most important? So many people talk about Flawless and Colorless diamonds and say, "It has to be (fill in blank) or I won't even look at it!" Then they walk out with a less than admirable stone because they believe they have the best, which may be far from the truth.

The real answer is that 60% of a diamond's value is determined by the cut. Why? You ask. Well, that's an easy answer. If a diamond doesn't sparkle, it's not worth wearing. How a diamond reflects light is the most important aspect to any diamond. This is broken down into two categories: Brilliance, the amount of light returned; and Scintillation, the spectrum of colors (aka fire) a diamond has.

So now we address the question, "Is there a perfect cut for diamonds?" The answer is yes! (Kinda.)

Around 1900, improvements in diamond cutting tools such as diamond saws and lathes made it possible for diamond cutters to take the next step in modern diamond cutting. In 1919, Marcel Tolkowsky used mathematical calculations to derive cut proportions to optimize brilliance and fire.

The diamond cut proportions proposed by Tolkowsky are often labeled as being "ideal" and were the industry standard for decades.

While the Tolkowsky cut (also known as the American Standard, American Ideal and Tolkowsky Brilliant) produces beautiful diamonds, the industry has known for years that diamonds cut to other proportions can be just as beautiful. The Tolkowsky parameters were not the only "ideal" cuts. In fact, Tolkowsky himself never used the word "ideal" in his

(Continued on page 7)

#### AND ARE YOU INTERESTED IN FACETING?

Scott W. Kelley, President Midwest Faceters Guild

Greetings from the Midwest Faceters Guild! The Guild has been a member of the MWF for many years. We share in a passion of Federation members who find and collect gemstones and minerals – Guild members make those stones sparkle!



Some of the mission of the Guild is to promote education, develop the art of faceting, and exchange information related to faceting. Some members of the Guild do cabbing along with faceting. We want to invite members of the Federation to consider joining the Guild. Find us on our website, https://midwestfaceters.org.

We used to go to all the gem shows and show off by giving demonstrations of fine gem faceting. Even with the dramatic changes brought about by the pandemic, we have realized that we have something to offer: We can teach via Zoom.

We are offering an introduction to faceting for those who would like to know more about this lapidary skill. If you haven't already, sign up for Zoom, then join us. It will be held Saturday, March 20<sup>th</sup>, at 1:00 p.m. Eastern Time. Join Zoom meeting: https://us02web.zoom.us/j/84867760350? pwd=VHowcHA3V0Nya2F6RVFTMllKZ05Sdz09

See you there!

Be sure to check out the Deadline Calendar on page 3!

#### NEBRASKA LAPIDARIST USES RV-SYSTEM ANTIFREEZE FOR EQUIPMENT

Charles Wooldridge, President Lincoln Gem & Mineral Club (NE) From the February 2021 Pick & Shovel

The year 2021 has started out with a blast. . . a wintery blast! Last week we had the deepest one-day snowfall; January was the snowiest ever; and now we are looking forward to the coldest 10-day stretch so far this winter in Lincoln.

To tumble rocks and flat lap in freezing temperatures, one little trick I have is to use recreational vehicle ("RV") water-system antifreeze in my equipment. I recently discovered that not all RV antifreezes are the same. All are fairly safe and non-toxic, but there are differences. There are two types containing different ingredients.

Type 1 is ethanol (grain alcohol) based. It provides good protection from freezing and is relatively safe. It can, however, affect rubber and corrode metal, and it is flammable. This type is readily available at hardware stores, WalMart, etc.

Type 2 is propylene glycol and is more expensive, usually found at RV-specific stores. It is non-toxic and less harmful to rubber and metal. It also has a lubricating effect.

To determine which type of antifreeze you are buying, look at the label to find the ingredients. Ethanol-based antifreeze will include a warning that it is flammable. I have found both types generally work well. In the future, I will be switching to propylene glycol to save wear and tear on my equipment.

I hope this information is useful; I found it interesting. Remember, any time new substances are used, you should always refer to the Material Data Sheet. These are available online and will list ingredients, hazards, and how to dispose of any product.

Take care, and reach out to someone, even if it's only to say hi. We all are missing human contact these days.

#### WISCONSIN CLUB ASSISTS UNIVERSITY

Jody Rymaszewski, UW-M Liaison Wisconsin Geological Society From the society's Jan. 2021 Trilobite

The Wisconsin Geological Society membership voted last year to approve that endowment funds be used for a rock crusher for the University of Wisconsin-Milwaukee to use in their Geoscience lab. We also requested that the university attach a small plate to the crusher showing that WGS donated the funds for its purchase. The rock crusher arrived in late March while the building was closed due to COVID-19. There are plans to get it set up in the near future.

The Geosciences Department Chair, John Isbell, has sent this note: "Thanks to WGS for your support of the department. Without your help, there are many things that the department and our students wouldn't be able to do. We appreciate your support as a partner in geoscience education in SE Wisconsin."

#### INDIANA EDITOR LEARNS THE "HARD" WAY

Michele Yamanaka, Editor Three Rivers Gem & Mineral Society (IN) From the January, 2021 Strata Data

On New Year's Day I munched on a cookie while sorting minerals. When I got up, I noticed a cookie crumb on my chair seat. Since the cookie had been very tasty, I snatched up the crumb and popped it into my mouth. After chewing a couple of times, I spit out what was left of the crumb piece, saw bits of yellow, and discovered I had been trying to eat a sulfur crystal.

Never try to eat AND sort minerals at the same time. Always wash your hands before you eat after handling minerals. Unless it is halite (salt), accidentally eating a mineral can be dangerous.

P.S.: No, the sulfur crystal did not taste like "rotten eggs"; it just tasted "hard".



#### **UPCOMING EVENTS**

MARCH CANCELLED EVENTS: Eastern Indiana Gem & Geological Society's show in Richmond; annual show of the Association of Earth Science Clubs of Greater Kansas City in Kansas City, Missouri; Geodeland Earth Science Club's show in Macomb, Illinois; annual show of Earth Science Club of Northern Illinois (ESCONI) in Wheaton, Illinois.

**APRIL CANCELLED EVENTS:** Lincoln Gem & Mineral Club show in Lincoln, Nebraska; Gemboree by Akron Mineral Society and Summit Lapidary Club in Cuyahoga Falls, Ohio; Chippewa Valley Gem & Mineral Society show in Eau Claire, Wisconsin..

Events may be cancelled on short notice due to the COVID-19 pandemic. Be sure to contact the host club before traveling to an event, to be sure that it is still scheduled.

Date and Time	Organization	Place	Contact
Feb. 27-28	The Roamin Club	Schoolcraft Community College, 18600 Haggerty Road, <b>Livonia, MI</b>	Todd Gall, roaminrockhound@ gmail.com
March 6-7 (date tentative) Sat 9-5, Sun 11-4	River Valley Rockhounds	County Fairgrounds, 22770 Old Highway 169, <b>Fort Dodge, IA</b>	Jim Baumer, jbaum@frontiernet.net
March 13-14 Sat 10-5, Sun 10-4	Kettle Moraine Geological Society	County Fair Park & Convention Center, 3000 Highway PV (Pleasant Valley Road), <b>West Bend, WI</b>	John M. Rettler, johnrettler@gmail.com
March 20 Noon-4	Nebraska Gem & Mineral Club rock swap	LaVista Community Center, 8116 Park View Blvd., <b>LaVista</b> , <b>NE</b>	Randy Kessler, randykessler458@ gmail.com
March 26-28 Fri 4-8, Sat 10-7, Sun 10-5	Rock Hobby Club	Machinist Auditorium, 12365 St. Charles Rock Road, <b>Bridgeton</b> , <b>MO</b>	Roy Hurlburt, hurlburt@juno.com
<b>April 8-10</b> Thurs & Fri 9:30-9, Sat 9:30-7	Indian Mounds Rock and Mineral Club	Rogers Plaza Town Center, 972 28 <sup>th</sup> Street SW, <b>Wyoming, MI</b>	Kreigh Tomaszewski, kreigh@gmail.com
<b>April 10-11</b> Sat 10-6, Sun 10-5	Southern Illinois Earth Science Club	Marion City Pavilion, 1602 Sioux Drive, <b>Marion, IL</b>	Mike Chontofalsky, chontofalsky@att.net
<b>April 24-25</b> Sat 10-6, Sun 10-4	Miami County Gem & Mineral Club	County Fairgrounds, 650 N. County Road 25A, <b>Troy, OH</b>	Dewey Buck, deweybuck12@gmail.com
<b>April 25</b> Sun, 11-5	Black Hawk Gem and Mineral Society	Waterloo Center for the Arts, 225 Commercial Street, <b>Waterloo</b> , <b>IA</b>	David Malm, davidmalm@cfu.net

# April Issue Submission Deadline Is March 3rd!



#### IS THERE A PERFECT CUT FOR DIAMONDS? (KINDA), CONTINUED

(Continued from page 4)

"Diamond Design" publication. He used the phrases "best proportions," "well-cut brilliant" and "high-class brilliant." He also acknowledged that there was a much wider range of diamond proportions that yield "the liveliest fire and the greatest brilliance."



Illustration via Diamond Source of Virginia.

On June 1, 2005, the American Gemological Society (AGS) implemented a new cut grade system which added Light Performance as a key cut criterion. The new AGS cut grade system rated diamonds on three criteria:

- 1. Light Performance, including Brightness, Fire (dispersion), Leakage and Contrast;
- 2. Proportions, including Girdle Thickness, Culet Size, Size Relative to Weight, Durability and Tilt;
  - 3. Finish, including Polish and Symmetry.

Whereas the old system relied primarily on physical specifications of the diamond, the new system put the emphasis on how the diamond actually handles light.

The polish is also very important. Excellent polish means that every facet is polished to an optical mirrored surface. A fair polish will be hazy and have surface scratches. So, which one will perform better at reflecting light? The answer is obvious.

So why isn't every diamond cut to perfect proportions? Simply put, time and money. It takes more time and effort to cut an ideal stone. In mass

production, many diamond cutters are looking to maximize profit; the more stones they can produce, the better.

Diamond cutters are also paid by weight. Cutting an ideal cut stone creates more waste and less profit. Luckily, today there are more diamond cutters that offer recutting and polishing services. A friend of mine had his 2.5 carat round VS diamond recut to an ideal cut. At the time, it cost him around \$1,500 to have it done. When returned, it was down to 1.75 carats. The Clarity did go up to VVS. The best part? The diamond's value was now over double what it previously was!

So, this year on our diamond anniversary, I look forward to our members coming together to help reshape and polish our club and bring out the biggest shine we have ever seen! As Roger Waters wrote, "Shine On You Crazy Diamond."

#### References:

Diamond Source of Virginia American Gem Society

#### SCANDIUM-CONTAINING MINERALS? SCANT

Kreigh Tomaszewski West Michigan MWF Mineral Study Group

Our current study structure is to look at minerals by elemental composition, working our way through the periodic table. We had been working on calcium, which forced us to take our study of calcium minerals in smaller chunks.

Last month found us looking at minerals containing scandium, of which there are only 31 known minerals, and annual commercial production is around 20 tons annually. We had to add minerals containing titanium to have enough specimens to fill our evening study.

Our habit is to pass our specimens around the table in alphabetical order, one mineral at a time, and share some facts about the mineral. Sometimes it may

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Valerie J. Meyers, Editor Midwest Federation of Mineralogical and Geological Societies vjmwriter@yahoo.com Post Office Box 13456 Overland Park, KS 66282-3456 Non Profit Org U.S. Postage PAID Fiatt, IL Permit No. 1

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#### SCANDIUM-CONTAINING MINERALS ARE SCANT, CONTINUED

(Continued from page 7)

be one specimen, or sometimes everyone there may have brought at least one specimen.

We started this month with the scandium phosphates Kolbeckite and Pretulite. And then it was on to titanium, starting with the oxides Anatase and Betafite (the latter brought out a geiger counter), followed by the phylosilicate Biotite, and the oxide Brookite.

We stopped to discuss how different minerals, such as Anatase and Brookite (and Rutile), can have the same chemical formula, but be different minerals because they have different crystal structures because the atoms in the formula are connected differently.

We continued passing minerals with the oxides Davidite-Y, Fersmite, and Ilmenite, the cyclosilicate Jonesite, the inosilicate Kaersutite, the cyclosilicate Labuntsovite-Mn (we had four specimens!), the sorosilicate Lamprophyllite, the oxide Loparite-Ce, and the inosilicate Neptunite, noting it came from the Benitoite Gem Mine that also produced the specimen of Jonesite we looked at earlier.

Meetings of the West Michigan MWF Mineral Study Group are held monthly, 7 to 8:30 p.m., at the home of Kreigh Tomaszewski, 653 Burton Street SE, in Grand Rapids. Face masks are required. Contact me, kreigh@gmail.com, for date and mineral subject matter of the next meeting. All West Michigan rockhounds are invited to attend.





Anatase crystal. Photo by Robert Lavinsky, via Wikimedia Commons. Brookite crystal on quartz. Photo by Parent Gery, via Wikimedia Commons.

