



In this Issue:

President's Message – 2
Treasurer's Report – 7
Chapter Meeting Minutes – 8
Hard Hat Article – 12
Event Calendar – 14



Midwest Chapter President – Ken Bladh

Greetings. I hope that those of you able to join the FM collecting trips have had good success. Sorry that I have not been able to participate this year because of injuries to my ankles that make me too unsteady for safe collecting. Rehab is going well and I will be in the field again before too long. One benefit of this challenge is that I am looking through 40 years of collected rough material that I had not given adequate time under the microscope or hand lens. Several pleasant surprises, so far!

Mystery mineral in the photo (previous newsletter)

The skeletal cube-octahedral, gray metallic crystal from Woodville Lime & Chemical Co. quarry pictured in my previous column is galena. The crystal group is 3 mm across (a true micro specimen).

For your calendar

FM Midwest will have a table on the floor at the 75th **Greater Detroit Gem, Mineral, & Fossil Show** October 11-13, 2019. The show theme is "Oh those Amazing Agates". This is one of the largest shows in our region and has public lectures on minerals and fossils. Please stop by our table and say hello.

For your calendar

FM Midwest will hold our **final business meeting** of the year at the **Cleveland Micromineral Symposium** at the Natural History Museum, November 2, 2019 (Saturday). V.P. Randy Marsh is working on social activities for that day and will distribute details closer to the meeting date. This is the meeting when officers are elected and dues determined for 2020. Other business items will be shared closer to the meeting date. Please contact Randy if you have suggestions for social activities that day. He is very interested in identifying a place "near" the CMNH to meet for a tailgate "rock" swap with refreshments. Any suggestions?

Recent Show and FM Meeting in Mansfield

Members of FM Midwest who live near Mansfield, Ohio invited the chapter officers and other members to hold a meeting on the Saturday (June 8) of the **Richland Lithic & Lapidary Society Show** at the Richland County Fairgrounds. We did so in the afternoon in the outdoor Nature Center. It was a beautiful day!



On behalf of the officers present, I want to thank our hosts and the FM members at the meeting for an engaging conversation led by Randy on ideas for social and new collecting activities that would be of interest as standalone or concurrent activities on the same day as FM business meetings. The minutes of that meeting and a summary of the good suggestions from the membership are located on page 9. All members present received FM Midwest decals to display proudly.

The Show theme was *Fabulous Fluorites* and attendees were treated to several displays of spectacular Ohio and world fluorite specimens. Tom Kottyan had a wonderful case of Ohio (mainly Clay Center) fluorites and two others with spectacular fluorite from around the world. The following three photos can only give a hint of the quality and comprehensiveness of this collection.













John and Jay Medici had a case of self-collected calcite and fluorite specimens from Auglaize quarry. The famous purple center-phantom cubes are front and center.

Recent Cincinnati GeoFair

FM Midwest had an active presence at the **Cincinnati GeoFair** (54th Annual Gem, Mineral, Fossil and Jewelry show – May 4-5) with a swap table organized by Randy Marsh and staffed by Randy and volunteers from our membership. Next year, I hope some more of the membership can support the swap table with contributions or a short stint at the table talking with mineral collectors of all ages. The kids are particularly excited to handle the specimens on the tables and pick one for their collection! All proceeds go to the chapter treasury for support of our activities. Other FM members worked at the mineral ID table in the main hallway.

Again this year, FM Midwest encouraged educational exhibits at regional shows by awarding a prize for the best display designed to inform the public about some aspect of mineralogy. This year the FM educational award went to Carl and Diane Francis for their display – "Swiss Alpine Quartz: Three Things to Know." The spectacular quartz crystals illustrated the three concepts very well. The two faden quartz specimens on the right-most riser were particularly impressive.





The Midwest Chapter also had a display of specimens owned by members. The case was organized by Randy Marsh and Jeff Spencer. A banner above the case advertised the chapter and our mission in this very public forum for mineral enthusiasts of all ages.





There are too many interesting displays at a show of this size to cover fully in this newsletter. I hope that you can see the next show for yourself next May. I will highlight the award-winning mineral displays. The judges chose the case of beautiful apatite specimens presented by Dr. John Rakovan (Miami U.) as the best mineral exhibit. All the specimens from around the world in the case were fluorapatite (the most common type of apatite) except for the one in the upper right corner that was hydroxylapatite.





The best display on the show theme was "The Many Colors of Calcite" presented by Terry Huizing. (Sorry about the reflections from the dealer booths).



Speaking of dealers – Weinrich Minerals had an exceptional display of calcite specimens that was not eligible for the competitive awards. Experienced collectors will identify Missouri lead mines as the source of these specimens.



Recent visit with Columbus members

I had the honor of greeting a group of high-energy mineral enthusiasts and a few FM members among their ranks at the May 21st meeting of the **Columbus Rock and Mineral Society** where I also gave an illustrated talk about "*Classic Minerals from Arizona*". All FM members present received an FM Midwest decal.



Enjoy the remainder of the 2019 collecting and show season. Stay safe. Please contact one of your officers with your thoughts about the social activities and collecting sites mentioned in the minutes from Mansfield. Also share other ideas you might have on either of these topics.

Treasurer's Report

Treasurer@fommidwest.org

As of June 15th, 2019, the Chapter treasury had a total of \$7,726.50. We have 100 members registered for 2019. \$451.00 was raised at the GeoFair swap table. Thanks to those who donated time and specimens. We also awarded \$100.00 for the best educational exhibit. Frank Konieczki has agreed to do the 2018 audit and I will be sending him the required records.

Jeff Spencer – Treasurer Friends of Mineralogy Midwest Chapter



A view from the quarry floor during our recent Auglaize quarry field trip - 34 members were in attendance



Friends of Mineralogy, Inc. Midwest Chapter Meeting Minutes- May 4, 2019 Sharonville Convention Center Sharonville, Ohio

<u>Called to order</u> by President Kenneth Bladh at 4:33 PM, after declaring a quorum. The following officers were present: Kenneth Bladh, President; Randy Marsh, Vice President Programs; Jeff Spencer, Treasurer; Clyde Spencer, Liaison; Frank Konieczki, Secretary. Vice President Field Trips Reggie Rose was unable to attend. The meeting was held in conjunction with the Cincinnati GeoFair, the Cincinnati Mineral Society's annual show. Nine members and two guests were present for the meeting.

President Bladh greeted all present and introduced the officers.

The following items/topics were presented and discussed:

Approval of Previous Meeting Minutes:

President Bladh asked if any corrections to the March 9, 2019 meeting minutes were necessary. No changes to the minutes were proposed or adopted by the attendees. A motion was requested and made to accept the minutes as published, and the motion was unanimously carried. (CSpencer/Maertens/P).

Officer Reports:

<u>Treasurer's Report:</u> Treasurer Jeff Spencer reported he has filed the chapter's 2018 federal and state returns. The chapter has gained two new members, which brings the total to 96. This is noticeably lower than last year's membership total. Treasurer Spencer mentioned that having a family membership discount might attract additional members, and since the organization's financial stability is good, any financial impact on the organization would be minor. Jeff indicated that someone is needed to conduct the 2018 financial audit. Secretary Frank Konieczki volunteered to conduct it.

<u>Vice President Programs Report</u>: Randy Marsh reported that the swap table had yielded about \$400 in sales, and he noted that there is still material available for sale. Vice President Marsh also provided a field trip update on behalf of Vice President Reggie Rose, who could not attend the meeting. Plant Manager Todd is no longer at Auglaize, and owing to the change in management, the proposed May date for the trip has been postponed to a possible date of June 15, 2019. The next confirmed field trip is to South Rockwood in July.

<u>Liaison Officer Report</u>: Clyde Spencer reported that he is exploring Woodville as a possible collecting site. Clyde indicated that a small group did prospecting at quarries north of Lima, and the manager said the company had bought a quarry near Ottawa, Ohio, so Clyde is going to try organizing a small scouting expedition. He also indicated that he will be making a motion at the November business meeting to reduce membership dues to \$15.



Old Business:

President Bladh inquired about updates to the field trip guidelines. Treasurer Jeff Spencer indicated that revised guidelines were on the website. No further, substantial discussion regarding proposed guidelines was made during the course of the meeting.

New Business:

President Ken Bladh announced that the winners of the Best Educational Display Award sponsored by FoM Midwest were Carl & Diane Francis for their case that featured the differences between ordinary and alpine quartz. They will receive \$100 and a certificate. Ken stated Terry Huizing also assembled an impressive display.

There was discussion about the location of the November annual business meeting. President Bladh indicated he would be attending the Cleveland Micromineral Symposium, so that is one possible site. Liaison Clyde Spencer initiated a motion to designate Cleveland the site of the November business meeting, but the motion was not seconded, so no vote was taken. Changing the section of the Bylaws that outline the number of required meetings was discussed, but only in general terms. Suggestions were made regarding the frequency of FoM Midwest meetings, the location of the annual business meeting, and also ways to bolster attendance at the meetings. Randy Marsh suggested that perhaps the November meeting could be held at Wittenberg, perhaps in concert with a program/event that would attract more attendees. Randy also indicated that there had been contact with the Mansfield club about having a FoM meeting at their annual show in June, but the details had not been finalized. Johan Maertens suggested holding meetings in conjunction with field trips might be a way to increase attendance. Further discussion ensued, but no clear consensus regarding meeting scheduling was reached.

<u>For the Good of the Order:</u> President Bladh indicated that two issues would be tabled for further discussion, specifically further revisions to field trip guidelines, and possible changes regarding the frequency and location(s) of chapter meetings.

A motion to adjourn was made and carried without opposition (Konieczki/RMarsh/P).

Meeting adjourned: 5:23 PM. Respectfully submitted by Frank Konieczki, Secretary

Friends of Mineralogy, Inc. Midwest Chapter
Meeting Minutes- June 8, 2019
Richland County Fairgrounds
Mansfield, Ohio

<u>Called to order</u> by President Kenneth Bladh at 3:23 PM, after declaring a quorum. Fifteen members and two guests were present at the meeting. The following officers were present: Kenneth Bladh, President; Randy Marsh, Vice President Programs; Jeff Spencer, Treasurer; Frank Konieczki, Secretary. Vice President Field Trips Reggie Rose and Liaison Clyde Spencer were unable to attend. The meeting was held in conjunction with the Richland Lithic & Lapidary Society's annual show.



President Bladh welcomed all who were present and introduced the officers who attended the meeting.

The following items/topics were presented and discussed:

Approval of Previous Meeting Minutes:

President Bladh asked if any corrections to the May 4, 2019 meeting minutes were necessary. No changes to the minutes were proposed or adopted by those present. A motion was requested and made to accept the minutes as published, and the motion was unanimously carried. (LHull/Kottyan/P).

Informal Open Discussion:

President Bladh stated there was no formal agenda for this meeting, although the location of the November business meeting still needs to be determined. Rather, this meeting was intended to be informal, because its primary goal was to elicit discussion about FoM meetings. He noted that there is usually only enough business for about two formal business meetings per year, and past attendance has typically been low, so perhaps holding meetings in conjunction with other events may be of interest to the members. President Bladh invited everyone to provide feedback regarding meetings. Vice President Programs Randy Marsh noted that business meetings can be boring, especially if only business is discussed. He indicated that we may be able to limit the number of formal business meetings and have more informal, socially focused meetings after a swap, a show, etc. Randy also observed that FoM Midwest's average annual membership is around 110, and that about 80% of the members live in Ohio, with major clusters around Cincinnati, Dayton, and Cleveland, and smaller concentrations around Toledo and in southern Michigan. He added this year's number of members is less. Treasurer Jeff Spencer indicated the current total is 99.

President Bladh asked the members if they thought continuing to have a swap table at the Cincinnati GeoFair was a good idea, and comments and nodding heads indicated strong support for continuation of that annual event. Suggestions for other socially focused activities were discussed. Having a "tailgate swap" at the Cincinnati GeoFair was a suggestion that was popular among those present, and the idea was supported by the officers. President Bladh stated that we could check to see if the GeoFair organizers would permit it, and he also suggested that we could have a similar event at another large mineral show in the region. Another site that was mentioned was Mohican State Park, as the staff would likely be receptive to having a gathering, and there are picnic facilities available.

President Bladh asked about having meetings in conjunction with field trips. He noted that Reggie Rose does an excellent job organizing formal trips, and several scouting trips to identify other sites for large groups have been done by officers/individual members. Treasurer Spencer indicated that field trips are closed to the public, but our business meetings must be open to the public. Ken suggested that if field trip-related, socially focused meetings were informal, but included suggestions for business items, they might fall within the boundaries of our Chapter Bylaws. Lively discussion ensued, and members suggested several field trip/event possibilities that could include social components (cookouts, tailgates, etc.), including the following:

1) An expedition on the Huron River to extract minerals from concretions, and also obtaining micro mount specimens of fire minerals. Mike Royal indicated that such trips can take longer than our usual events. He advised those present that a recent Huron River trip using canoes and kayaks lasted 9 hours.



- 2) Trips to Fossil Park (Sylvania, OH) and/or Paulding County Community Garden (Cecil, OH) for fossil hunting.
- 3) Gold panning near Bellville, OH, while also holding a concurrent, onsite picnic for family members. Garnets, and even diamonds, can also be collected at the site. Randy Goudy of the Gold Panning Association of America (GPAA) was at the Richland show, and he would be a good contact for arranging such an event.
- 4) A panel discussion at a show on how to begin mineral and/or fossil collecting as a hobby, because many people who come to shows want to know where minerals they see are found and how collectors find and gather them.
- 5) Supplementing a social gathering with a PowerPoint summary of images showing the year's collecting successes.

Vice President Programs Randy Marsh stated it was not too soon to start thinking about the 2020 FoM Symposium, and he asked "What might prevent people from attending?" The location and unpredictable March weather were mentioned by members as two contributing factors. Another member commented that the last symposium he attended had a central theme, namely fluorite, but the recent program material was not as attractive to him. Jeff Spencer suggested more balance in subject material could boost attendance, and several comments that having more collector-oriented presentations might attract additional people. President Bladh noted that the symposium audience tends to be a bit different from people who attend local shows. He suggested having collector-oriented talks at this (Mansfield) show next year, and someone mentioned that having talks aimed at beginning collectors might be well received.

Youth outreach was also briefly discussed, and President Bladh indicated that Richfield is very oriented toward youth programs, as is the GPAA. He noted FoM also participated in a youth program last year. Youth programs could be a means to get younger people interested in mineralogy.

<u>New Business</u>: President Bladh noted last year's November business meeting was held at the Cleveland Natural History Meeting during the annual Cleveland Micromineral Symposium, and that site is a possible location for this year's meeting. He opened the floor to the attendees for suggestions and discussion. Ultimately, no specific site or date was chosen.

President Bladh concluded by thanking the organizers of the Richland show for allowing FoM to conduct the meeting, thanking all FoM Midwest attendees for their input, and indicating that he hopes FoM Midwest will be back at this event next year.

Meeting adjourned: 3:58 PM.

Respectfully submitted by Frank Konieczki, Secretary



HARD HATS: A FALSE SENSE OF SECURITY? Reggie Rose

Introducing Herkimer Hardhead

Howdy y'all. I'd like you to meet my collecting friend Herkimer Hardhead. Herkimer is a second generation collector. I was a classmate of his Dad, Blockhead Hardhead. We were honors students and graduated crash test dummy school together back in the seventies. Considering our fragmented thinking over the years, Herkimer decided not to follow in his Dad's footsteps and crash cars, but instead he thought a healthier career would be modeling hard hats and their accessory features. Herkimer has been collecting minerals and fossils for many years, and though he has bunged up a few fingers with his 4 pound sledge, he has never had a head injury in a quarry, because he always wears his hardhat. On several occasions Herkimer has stumbled and fallen on field trips, but has never lost his hard hat during a fall because Herkimer wears his hard hat and uses his chin strap.



Herkimer knows that during a fall, the chances of his hard hat staying on his head are minimal if he does not use a chin strap. Although Herkimer comes from a long line of Hardheads, he realizes that his head is not harder than a boulder and that hard hats are not intended to withstand the impact of a boulder off a 50 foot high wall. Let's look at a short background story in the Amazon region to see how this led to telling Herkimer's story.

A Jungle Story:

Back in February, I watched a TV show on Animal Planet which I had never seen before or since. There were several episodes back to back, and I only watched one show of the series titled Animal Fights. During the episode, a jaguar, known to be an ambush hunter was stalking a monkey. The jaguar was ready to attack, but the monkey saw him and scampered up a cliff. The cliff was so steep it reminded me of a quarry high wall. Well, the monkey escaped the jaguar's clutches, but was stranded on a ledge some 50 feet above the jaguar. The jaguar was quite willing to wait out the monkey. One would think that the monkey had an unsolvable conundrum on his hands, but not the monkey in this episode. He had better things to do than be stranded on a ledge, so he began rolling boulders off the ledge that weighed up to 5 lbs. This discouraged the jaguar who left for an easier meal opportunity.

This got me thinking about Herkimer and safe collecting. If a jaguar left amidst a hail of 5 lb. boulders, what effect would a 5 lb. boulder have on a collector who was struck by a falling rock while venturing too close to a high wall? (Depending on density, a 5 pound boulder is about the size of very large grapefruit.) I checked OSHA hard hat standards, what they are designed for, and what impact they can withstand. Hard hats are meant slow down the force when struck by an object and are expected to be worn to by employees, and were not designed to protect collecting guests who are "high wall huggers". Now I am beginning to understand why quarry people get so twitchy about letting the general public (us) roam around their quarry on foot. Consider the following scenario. If two quarry employees are working on a conveyor belt or some other machinery where one employee is above the other, their hard hats are designed to protect the worker at the lower height if the worker at the higher height drops a tool and it hits his coworker below on the head.



With the assistance of a couple of more physics able minds than my own, (FMer and former science teacher Craig Kramer, astrophysicist Don Stevens and former teaching physicist and mathematician John Hank) I was able to compare the two scenarios.

Potential Energy Calculations: Before an object falls, it has potential energy (PE). PE is calculated by the formula: PE = mgh. The units with the monkey - jaguar and boulder - high wall examples are English units. To compare potential energies of those examples, metric units conveniently provide us with Joules as an energy unit. As an object falls, its potential energy is converted to kinetic energy as it impacts its target object.

Hard Hat Standards:

In terms of numbers, hard hats are designed to withstand an impact of 8 lbs. from a vertical distance of 5 ft. To convert to metric units, 8 lbs = 3.6 kg, and 5 ft = 1.52 m. Gravitational acceleration = 9.8m/s x s Doing a calculation of the potential energy released at the point of impact (PE = mgh) a 3.6 kg mass dropped 1.52 m x gravitational acceleration of 9.8 m/s x s would strike with kinetic energy of 53.6 J (Joules)

A Collector Too Close to a High Wall:

Getting back to the monkey-jaguar example, would a collector be OK if he/she were struck in the hard hat by a 5 lb rock would fall off a 50 foot high wall. Let us see. A 5 lb. (2.3 kg) rock falling 50 ft. (15.2 m) would generate (the product would be $2.3 \text{ kg} \times 15.2 \text{ m} \times 9.8 \text{ m/s} \times s$ (gravitational acceleration) and would strike with kinetic energy of 342.6 J (Joules) at the point of impact.

Looking at the ratio: KE of boulder off a highwall = 342.6 J = 6.39

KE max a hard hat withstands 53.6 J

What does this ratio mean? It means that the kinetic energy a 5 pound boulder generates dropping from 50 feet is over 6 times that which a hard hat is designed to withstand. I guess the word here is ouch! However, the word ouch would be incorrect, because dead men can't say ouch. If you get hit in the head with a 5 lb. (2.3 kg) boulder from a 50 ft (15.2 m) high wall, we will not be reporting on what you found on a future field trip. We will be writing your eulogy.

Hard Hats & Chin Straps:

So you think that a hard hat will protect you? In some cases, a hard hat will not save you from serious injury unless you take an extra precaution. What if you trip on a boulder, fall and hit you head on a rock? Will your hard hat stay on your head? Chances are not good. I only know three collectors in this region who use chin straps, but if you want more protection, you should install a chin strap on your hard hat. They are cheap (\$5.00) and are sold locally at Safety Solutions. Inc. (6161 Shamrock Court • PO Box 8100 • Dublin, OH 43016, Phone: 614.799.9900 • Toll Free: 800.232.7463). If you cannot go there, send them an image of the inside of your hard hat or showing the mounting tabs or from the safety store get an image of the chin strap so you are sure the chin strap can attach to your particular hard hat. Unrelated to foot travel in a quarry, one of the times hard hats come in most handy is when you bend over under an open vehicle hatch to examine what one of your fellow collectors found. If you stand up without stepping back, thank yourself for having your hard hat on. Chin straps do look nerdy, but what's the difference, we're already an organization of nerds anyway. Would you rather be a fashion plate with a gash on your forehead, or look nerdy with a chin strap and save yourself a head injury?

A Moral to This Story:

There is a moral to this story. Be like Herkimer. Always wear your hard hat in a quarry. As a further safety insurance, install and use a chin strap. Herkimer does. But do you know what Herkimer does not do? Herkimer does not monkey around high walls. Herkimer is safe, smart and like a good many of us, a nerd.



Event Calendar

וחרא	TITLE: Great Lake Aggregates – Sylvania Minerals – South Rockwood Field Trip
	DATE/TIME : Sat, Jul 13, 2019 8:30 am – 1:00 pm
	LOCATION: 5690 Ready Road, South Rockwood, MI
	TITLE: Keweenaw Mineral Days
	DATE/TIME : Tue, July 16, 2019 to Sat, July 20, 2019
	LOCATION: Michigan Technical University, Houghton, MI
	HOST: Ted Barnhorst (tjb@mtu.edu)
AUGUST	TITLE: Michiana Annual Jewelry, Gem and Mineral Show and Sale
	DATE/TIME: Fri, August 16, 2019 to Sun, August 18, 2019
	LOCATION: St. Joseph County 4-H Fairgrounds, South Bend, IN
	SPONSORED BY: Michiana Gem and Mineral Society
	TITLE: Dallas Mineral Collecting Symposium
	DATE/TIME: Thu, August 22, 2019 to Sun, August 25, 2019
	LOCATION: Eisemann Performing Arts Center, Dallas, TX
	TITLE: Williamsport Field Trip – TENTATIVE, NOT CONFIRMED, DO NOT SHOW UP
	DATE/TIME: Sat, August 24, 2019
	LOCATION: Williamsport, OH
SEPTEMBER	TITLE: 43 rd Annual Greater Indianapolis Gem, Mineral and Fossil Show
	DATE/TIME : Sep 6, 2019 to Sep 8, 2019
	LOCATION: Hancock County 4-H Fairgrounds, Greenfield, IN
	HOST/COORDINATOR: Cheryl Hamilton (clhamilton1951@gmail.com)
	TITLE: Colorado Mineral and Fossil Show (Fall)
	DATE/TIME: September 6, 2019 to September 14, 2019
	LOCATION: Crowne Plaza Denver Airport Convention Center, 15500 E 40 th Ave,
	Denver, CO
	ACTIVITY : FM National General Membership Meeting may be held during show
	TITLE: 21 st Annual Fall Indianapolis Bead, Gem, Mineral and Jewelry Show
	DATE/TIME : Sep 27, 2019 to Sep 29, 2019
	LOCATION: Indiana State Fairgrounds, Agriculture/Horticulture Building,
	Indianapolis, IN
	HOST/COORDINATOR: Van Wimmer (van@toteshows.com)

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Chapter Website:

www.fommidwest.org

National Website:

www.friendsofmineralogy.org

On the Cover -

Auglaize Quarry - iridescent Fluorite pocket, 3.5"x2"x4" - Paul Scholar

Affiliations:

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Our purpose is to organize and promote interest in and knowledge of mineralogy; to advance mineralogical education; to protect and preserve mineral specimens and promote conservation of mineral localities; to further cooperation between amateur and professional and encourage collection of minerals for educational value; and to support publications about mineralogy and about the programs of kindred organizations.

