



MWF News

Midwest Federation
of Mineralogical and Geological Societies

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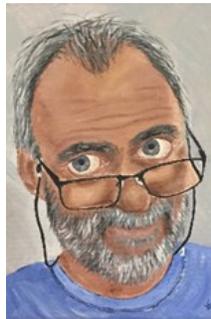


PRESIDENT'S MESSAGE

Kevin Ponzio, MWF President

Many thanks to everyone in the Cedar Valley Rocks & Minerals Society for all their hard work on the convention. There will be more details on this in next month's newsletter.

Don't feel bad if you missed this one. There is good news! The next MWF convention is going to be held in Howell, Michigan, in September of 2020. You will have plenty of time to plan ahead.



Speaking of missing shows, take a look at the MWF Directory and you won't miss a thing. Check the April show section. There are great shows and events happening near you. In fact, there are great shows and events happening throughout the year. Stop in to a show to find a superb specimen that would fit on the open space in your display case.

I HEARD THAT! You don't have any more room or you already have one of those. Just think what

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EDITORS, NOW IS THE TIME TO PREPARE!

Sharon Marburger, Chair,
Bulletin Editors Aids Committee

So you are thinking about entering the 2020 Bulletin Editors' Competition. Great! Now is the time to prepare. The simplest thing you can do to improve your publication is to go to www.amfed.org/editor/BEAC/Forms/FillableBulletins.pdf and download the form for reference.

This document is your guideline for putting together a good publication. It not only contains the scoring criteria for the competition, but includes some simple items you may not have considered necessary for your publication.

As for articles and written features, YOU are the editor. Should you notice grammar, spelling, or punctuation errors, talk with your contributor about ways their writing could be improved. Be gentle; we don't want to hurt anyone's feelings. Ask if you can make corrections. Give them a corrected draft for their approval. It has been my experience as an editor that the contributor is appreciative of suggested changes.

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PRESIDENT'S MESSAGE, CONTINUED

(Continued from page 1)

good company the new specimen would be in. Or, think vertical. Very funny, don't pile them on top of each other. I meant more shelves. You can always donate the earlier specimens to the club and make room for the new ones. In any event, (no pun intended), support your local club shows by going!

Finally, I would like to thank all the nameless individuals who have contributed to the MWF Newsletter recently. Oh wait, they aren't nameless! (Ellery Borow, Marge Collins, Bill Cordua, Dave Fanger, Sandy Fuller, Alan Goldstein, Shirley Leeson, Sharon Marburger, Valerie Meyers, Donna Moore, J.C. Moore, Brandon Poy, Paul Schmidt, Susan Stanforth, Dean Stone, Kreigh Tomaszewski, Jay Vavra.)

Imagine how wonderful it would be if you could be added to this prestigious group. Please share your stories and knowledge with the rest of the membership. Thanks in advance! (Smiley face)

See you all next month!

BENEFITS OF MWF MEMBERSHIP

Valerie J. Meyers, Editor

Recently, the newly elected president of a club wrote me about the convention: "Please tell me more about this Convention. What does the Delegate do? Why do we have to attend? What is the benefit of being involved in this Federation?" Although most of you know the answers to these questions, I'd like to pass along my response.

Let's start with the most basic question: What is the benefit of being involved in the Federation? There are several. To begin with, as you know, if your club puts on a show each year, you can obtain the needed insurance through the Midwest Federation. I've never bought insurance for a show before, but I have to believe that getting insurance along with a pool of more than 100 other clubs is less expensive than getting it on your own.

The Midwest Federation posts an online events calendar of rock and mineral shows being put on by clubs in the 12-state MWF area; this is not only useful for members who might want to see out-of-town rock

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EDITORS, NOW IS THE TIME! (CONT.)

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This is probably a good time to review other rules and suggestions for competition. Other scoresheets and articles can be found at <http://www.amfed.org/editor/BEAC/contest.htm>. Following these criteria will ensure a higher score in competition.

Best of luck to you all.

[Editors' note: Winners of the 2019 MWF and AFMS Bulletin Editors' Contest will be announced in the next edition of this august publication.]

May Issue Submission Deadline Is April 3rd!

DO YOU REALLY WANT TO HANDLE THAT BRUSHITE CRUST?

Dr. William Cordua, Chair, MWF Geology Committee
From the November 2018 Rock Rustler's News
of the Minnesota Mineral Club

A while ago I was doing geologic mapping on the Wisconsin side of Interstate Park, near St. Croix Falls, Wisconsin. Although my study focused on basaltic lava flows, I often found outcrops of Cambrian sandstone, conglomerate and shale that had been deposited on the basalt. They formed as the Cambrian sea came in and slowly submerged outcrops of eroded basalts, making them into islands. On one of the sandstone outcrops I found an odd crust made of tiny blue-green crystals.



Sandstone outcrop in Interstate Park on the Wisconsin side, near Eagle Peak. Photo by Dr. Bill Cordua.

I took a few samples, as I had written permission to collect in the state park. The only restrictions were that I leave no obvious signs of my sampling and did my sampling where and when I couldn't be seen by other park visitors.

Recently I had the material X-rayed. It was brushite, a calcium-bearing phosphate mineral – $\text{Ca}(\text{HPO}_4) \cdot 2\text{H}_2\text{O}$.

Brushite is found in sedimentary phosphate deposits, and in caves associated with bat guano. Brushite is also a component of your teeth, bones, and, painfully, certain kidney and other urinary tract “stones.”



Tiny blue-green crystals of brushite as a crust on sandstone. Field of view is about 1 cm (1/2 inch) across. Photo by Dr. Bill Cordua.

There was obviously an interesting story here in terms of the mineral's formation. What was the source of the phosphorus? The sandstone is mostly made of quartz but it also contained a lot of broken brachiopod shells. These are/were made of apatite.

The apatite group of minerals is the most common group of phosphate-bearing minerals. The little shellfish had discovered the neat trick of extracting the phosphorous dissolved in sea water to build their shells. These shells are less likely to dissolve than those made of calcium carbonate, so can survive long periods of burial in the earth.



Sandstone with many white phosphatic brachiopod shell fragments mixed with quartz sand. The coin for scale is a U.S. quarter. Photo by Dr. Bill Cordua.

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BENEFITS OF MIDWEST FEDERATION MEMBERSHIP, CONTINUED

(Continued from page 2)

shows, but great publicity for any show you may put on yourself. A similar events calendar is posted every month in the MWF News, the federation's newsletter. As the editor, I know that club presidents are always anxious to make sure that their shows get posted in this calendar.

And as the editor, I'm also happy to say that the newsletter is another benefit of Federation membership. It keeps members up to date on MWF programs and decisions, tells about upcoming activities, and includes interesting articles from clubs all around the region.

Children who are involved with MWF clubs get benefits, too. Clubs who pay their dues on time can get a subscription to the juniors' electronic publication Mini Miners Monthly. Because your MWF club is also a member of the American Federation of Mineralogical Societies, the national umbrella group, your young members can take part in the free Future Rockhounds of America program, earning badges in 20 different fields including Communication, Field Trips, Fossils, Rocks and Minerals, and "Rocking on the Computer."



Three of the badges that members under 18 can earn in the future Rockhounds of America program — Field Trips, Leadership, and Earth Processes. Picture from amfed.org.

You may also know that, as an MWF member, your club can nominate one of your members, or just someone who's prominent in earth sciences from your area, to be the MWF's annual Scholarship Honoree. The person who's chosen from the nominations, besides being honored by the federation, gets to choose a college or university and, in cooperation with that

school, select two students in earth science fields to receive a \$4,000 scholarship each.

Then there's the networking advantage, which brings us to the convention. You said that you're new to the presidency of your club. At a convention, you can meet other people who hold or have held similar positions, ask questions, exchange ideas, and make suggestions. The annual Council of Delegates' Meeting – the one that's coming up in Cedar Rapids – makes decisions that will determine policies for the federation, and also includes the annual Awards Banquet, at which awards for MWF contests are presented. (It's a lot of fun.) The conventions are also always held in conjunction with a member club's rock show, so there's always a great show to see, as well.

A delegate from your club doesn't "have to" attend the annual convention, but, as I say, the Council of Delegates' Meeting will determine policies and make decisions that will affect all members of the MWF, so if you have someone who can get there, it's a very good idea to send them.

If I left out any of the advantages of belonging to the Midwest Federation in my response to the new club president, please let me know. I'll probably slap my forehead, and then print your response in the next possible edition of MWF News.

"FOSSILS"

Ogden Nash (written 1949, to accompany the "Fossils" movement of Saint-Saens' "Carnival of the Animals")

At midnight in the museum hall
 The fossils gathered for a ball.
 There were no drums or saxophones,
 But just the clatter of their bones,
 Rolling, rattling carefree circus
 Of mammoth polkas and mazurkas.
 Pterodactyls and brontosaurus
 Sang ghostly prehistoric choruses.
 Amid the mastodonic wassail
 I caught the eye of one small fossil.
 "Cheer up, sad world," he said, and winked –
 "It's kind of fun to be extinct."



HONOR SOMEONE WHO'S ALWAYS THERE FOR YOUR CLUB, OR SOMEONE DEEPLY MISSED

Donations and Memorials, payable to AFMS Scholarship, should be mailed to the MWF Scholarship Committee c/o Marge Collins, 3017 Niles-Buchanan Road, Buchanan, Michigan 49107.

AFMS SCHOLARSHIP FOUNDATION DONATION

Contributions to AFMS Scholarship are tax-exempt. You can use the form below or include a note with appropriate information. You receive acknowledgment and when applicable, and upon request, a note is sent to next of kin.

Donor(s) name: _____ Donation: \$ _____

Address:

(street) (apt. #) (city) (state) (ZIP code)

Memorial or Honoring (if applicable): _____

Next of Kin: _____, _____
(if applicable) (name) (relationship)

Address of next of kin:

(street) (apt. #) (city) (state) (ZIP code)

DO YOU REALLY WANT TO HANDLE THAT BRUSHITE CRUST?, CONTINUED

(Continued from page 3)

Did something dissolve these shells locally and cause the phosphorus to be redeposited as brushite crusts? Could somewhat acidic solutions have somehow entered the sand and done the work? Sulfuric acid from weathering of pyrite or other sulfides could do the trick, but there is no evidence of pyrite in the Cambrian rocks.

There is another possible source of the phosphorus. The crust is in a little recession under an overhanging sandstone bed. Could this be a periodic bat roost, with enough phosphatic guano to do the task? If so, I sort of regret touching it, but, hey, it's science! Alternatively, apatite has also been shown to be soluble in acid produced metabolically by microorganisms, which are also capable of depositing other phosphates, like brushite. We know that microorganisms live in pore spaces in rocks to depths of at least several miles below the surface. They are involved in all sort of processes that we used to think of as part of the non-organic mineral world. These deposits are called biominerals, and research on them is a hot topic.

The brushite crust is also associated with crusts rich in iron oxides, another common result of microbial activity. I think a microbial origin is the most likely explanation, but there is still much work to be done to explain this intriguing occurrence. Such crusts have many complex and overlooked stories, but can shed light on the movement of chemicals such as iron and phosphorous through the Earth's surface environment.



UPCOMING EVENTS

Date and Time	Organization	Place	Contact
March 22-24 F 4-8, St 10-7, Sn 10-5	Rock Hobby Club	Machinist Auditorium, 12365 St. Charles Rock Road, Bridgeton, MO	Roy Hurlburt, hurlburt@juno.com
March 23 Sat, 10-5	Midwest Mineralogical & Lapidary Society rock swap	St. John's Lutheran Church, 13115 Telegraph Road, Taylor, MI	Lou Talley, ltalley1970@gmail.com
March 23-24 Sat 9-5, Sun 9-4	Badger Lapidary and Geological Society	Craig Center, County Fairgrounds, 1301 Craig Avenue, Janesville, WI	Deb Wehinger, jdrules3@gmail.com
March 23-24 Sat 8:30-6, Sun 9:30-5 <i>The MWF and AFMS conventions are being held in conjunction with this show. For more information, see pages 1-4.</i>	Cedar Valley Rocks & Minerals Society	Hawkeye Downs, 4400 6 th Street SW, Cedar Rapids, IA	Marv Houg, m_houg@yahoo.com
March 23-24 Sat 10-5, Sun 10-4	Earth Science Club of Northern Illinois	DuPage County Fairgrounds, 2015 Manchester Road, Wheaton, IL	Dave Carlson, fossil54@att.net
March 30-31 Sat 9-5, Sun 11-4	River Valley Rockhounds	Webster County Fairgrounds, 22770 Old Highway 169, Fort Dodge, IA	Robert Wolf, midnightwriter@frontiernet.net
March 30-31 Sat 9-5, Sun 10-5	Stark County Gem and Mineral Club	Stark County Fairgrounds, 305 Wertz, Canton, OH	Jeff Storz, jstorz42@gmail.com
April 4-6 Thur & Fri 9:30-9, Sat 9:30-7	Indian Mounds Rock and Mineral Club	Rogers Plaza Town Center, 972 28 th Street SW, Wyoming, MI	Kreigh Tomaszewski, kreigh@gmail.com
April 6 Sat, 10-3	Rock River Valley Gem and Mineral Society open house	North Suburban Library, 6340 N. 2 nd St., Loves Park, IL	Duane Cushing, tdcc@comcast.net
April 6-7 Sat 9:30-5, Sun 10-4	Des Plaines Valley Geological Society	Des Plaines Park District, 2222 Birch St., Des Plaines, IL	Connie Lavin, 815-222-8197
April 6-7 Sat 9-6, Sun 10-5	Lincoln Gem & Mineral Club	Lancaster Event Center, 84 th & Havelock, Lincoln, NE	Jayne Beer, jbeer60070@aol.com
April 6-7 Sat 10-6, Sun 10-5	Southern Illinois Earth Science Club	City of Marion Pavilion, 1602 Sioux Drive, Marion, IL	www.siesclub.org
April 13-14 Sat 9-5, Sun 10-4	Central Illinois Gem and Mineral Club	Lester Building, Progress City, 4140 E. 2 nd Progress Street, Decatur, IL	Tony Kapta, tkapta@comcast.net
April 13-14 Sat 10-6, Sun 11-5	Columbus Rock and Mineral Society	Northland Performing Arts Center, 4411 Tamarack Blvd., Columbus, OH	Craig Kramer, 614-436-4511
April 13-14 Sat 10-5, Sun 10-4	Fulton County Rockhounds	Donnelson Center, Wallace Park, 250 S. Avenue D, Canton, IL	George Coursey, 309-368-2947

The Geology and Environmental Science Department of Wheaton College in Wheaton, Illinois will present a large sale of mineral specimens, fossils, maps, and equipment on April 6, 9 a.m. to 7 p.m. Mineral, rock, and fossil collections will be available at discounted prices to teachers. Lower level, Meyer Science Building at the college. For more information, contact Jeffrey.greenberg@wheaton.edu.



UPCOMING EVENTS

Date and Time	Organization	Place	Contact
April 20 Sat 9-1	St. Croix Rockhounds	Valley Creek Mall, 1750 Weir Drive, St. Paul, MN	Dave Rusterhaz, 715-760-0479
April 27-28 Sat 10-6, Sun 10-5	“Gemboree” co-sponsored by Akron Mineral Society and Summit Lapidary Club	Emidio & Sons Expo Center, 48 E. Bath, Cuyahoga Falls, OH	Sandy Shorter, sandyshorter25@gmail.com
April 27-28 Sat 9-5, Sun 10-4	Chippewa Valley Gem and Mineral Society	Eau Claire Expo Center, 5530 Fairview, Eau Claire, WI	Paul Tubbs, bizpam1@gmail.com
May 4-5 Sat 10-6, Sun 11-5	Cincinnati Mineral Society	Convention Center, 11355 Chester Road, Sharonville, OH	www.geofair.com
May 4-5 Sat 10-5, Sun 10-4	Heart of Wisconsin Gem & Mineral Society	Fieldhouse, Marshfield High School, 1401 Becker Road, Marshfield, WI	Cynthia Kelman, kelman@tznnet.com
May 11-12 Sat 9-5, Sun 10-4	Cuyuna Rock Gem & Mineral Society	Curling Arena, County Fairgrounds, 2000 SE 13 th Street, Brainerd, MN	Sharon Smith, sharon@agatesrock.com
May 17-19 Fri & Sat 9-5, Sun 9-3	Tri-State Gem & Mineral Society	Joplin Museum, 504 Schifferdecker, Joplin, MO	Chris Wiseman, jmc-cwiseman@sbcglobal.net
May 18-19 Sat 9-6, Sun noon-6	Blossomland Gem and Mineral Society	Lake Michigan Catholic Elementary School, 316 Washington, St. Joseph, MI	Nancy Wolff, nancyswolff@hotmail.com
May 18-19 Sat 10-6, Sun 10-5	Parma Lapidary Club	Soccer Sportsplex, 31515 Lorain Ave., North Olmsted, OH	Holly Zewalk, parmalapidary@yahoo.com
May 18-19 Sat & Sun, 10-5	Wisconsin Geological Society	Muellner Bldg., Hart Park, 72 nd and State Street, Wauwatosa, WI	Paul Schmidt, pvs@wi.rr.com
May 25-26 Sat 10-6, Sun 10-5	Chicagoland Gems & Minerals Association	County Fairgrounds, 525 S. Randall, St. Charles, IL	Debby Ballot, demarrex1@att.net
May 31, June 1-2 Fri noon-6, Sat 10-6, Sun 11-4	State Line Gem & Mineral Society	Junior Fair Bldg., County Fairgrounds, 1814 SR 108, Wauseon, OH	Sherman Kardatzke, sakardatzke@gmail.com
June 1 Sat 10-4	Gem City Rock Club	Boudreaux Visitor Center, Mark Twain Lake, Monroe City, MO	Brad Fanning, bfanning58@yahoo.com
June 1-2 Sat 10-5, Sun 10-4	Ozark Mountain Gem & Mineral Society	Institute of Natural Science, 2327 W. Farm Road 190, Springfield, MO	Larry Lillich, omgms.57@gmail.com
June 8-9 Sat 10-6, Sun 11-5	Richland Lithic and Lapidary Society	County Fairgrounds, Arts & Crafts Bldg., 750 N. Home Road, Mansfield, OH	Tom Kottyan, TheMineralHouse@netzero.net
June 14-16 Fri & Sat 9-6, Sun 9-4	Mineral Area Gem and Mineral Society	Missouri Mines State Historic Site, 4000 State Highway 32, Park Hills, MO	Boneta Hensley, mojellybean63@yahoo.com

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BE PREPARED FOR SAFETY HAZARDS GREAT AND SMALL

Ellery Borow, AFMS Safety Chair
From the October 2018 issue of A.F.M.S. Newsletter

Ticks, chiggers, mosquitoes, fire ants, black flies, scorpions, snakes, poison ivy, earthquakes, volcanos, flash floods, and excessive heat – oh my! Pretty much anywhere a rock collector goes, he or she will find something in the area that needs special attention. That something can be little or big, but still it should, for safety's sake, be addressed and not ignored.

We collectors check maps, monitor tire pressure, bring water, update medical aid kits, research what mineral might be found in the area, and so on. We might be well advised to also check into things which might bug us on our trips . . . things such as bugs and bears and storms and snakes.

Fire ant bites are not fun. Mosquitoes and ticks are transmission vectors for more and more diseases. Weather patterns are changing. About these, and other local conditions of which the well prepared collector should be aware, there are numerous sources of data. NOAA provides weather services, state and local

health services monitor area insect populations, and the USGS even has websites which report on earthquake and volcanic activity.

Knowledge of a flash flood miles away from a rain in the mountains, how long a tick takes to transmit Lyme Disease, how to prepare for a venomous snake on the trail, precautions concerning fresh bear tracks in the area – all these take time to research and understand, but the well prepared collector is a safer collector. It is, in this time of the internet, far easier and less time consuming than yesteryear to be prepared and be safe.

When traveling, most rock collectors bring at least the basics – maps, water, food, medical kit, personal protective equipment, and so on. Besides the basics, it is the wise collector who prepares for any additional hazards the area has to offer. Such additional protections might be as simple as bringing an extra strong mosquito repellent.

Please don't let little flying things bug you. Your safety matters.