MWF News

Midwest Federation of Mineralogical and Geological Societies

September 2020 - Issue No. 594

Web Site - www.amfed.org/mwf

Member of the American Federation of Mineralogical Societies

A Plea From the Editor

Valerie J. Meyers, Editor

PLEASE let me know if your upcoming event has been cancelled! The Calendar of Events in this newsletter is even more important now than it usually is. We need to keep track of cancellations so that people won't leave their homes for nothing. But it takes a lot of time to look up club websites and/or Facebook pages, then look for the right page or the exact post that announces a cancellation.

This month's calendar has been checked to the best of my ability. If you have or had an upcoming event from mid-October on, PLEASE notify vjmwriter@yahoo.com if it has been cancelled or is still on. Thank you so much to people who have already told me about their cancellations; I really appreciate it.

When Pat Fellner of the Racine Geological Society wrote me about their show being cancelled, she added, "It is a sad year for our societies." We've all felt that way. But I like the optimism of the Steele County Free Fair in Minnesota, whose home page begins, "Postponing the Fun Until 2021"! We'll have our shows, meetings, and conventions back someday. But until that day, let me know the status of your show!

(The President's message will be back next month!)

Give Real Honor to Honorary Members

Marge Collins, MWF Chair
AFMS Scholarship Foundation

Does your club have honorary members? Why not give them additional recognition by making a donation to the AFMS Scholarship in their names? The MWF accepts Living Memorial donations. A brief article will be published in the MWF News, and the person or couple's name(s) will be added to the Memorial List in the MWF annual directory. In addition, the honoree(s) will receive a note from the AFMS Scholarship Treasurer. And of course, you can have some sort of celebration at a club meeting in the future! Don't put off honoring your living members.

I will need the honoree name(s), a paragraph or two about them, the club's name, your own name and address, and a check payable to AFMS Scholarship. Please send these to:

AFMS Scholarship
c/o Marge Collins, MWF Chair
3017 Niles-Buchanan Road
Buchanan, MI 49107

There is no time limit on this, and you can recognize deceased members or make an outright donation at any time, as well.

What's Inside?

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Are You Interested in a Club Website?

Sandy Fuller, MWF Treasurer

Just over half of our Midwest Federation clubs have a website (59%), but almost all have a Facebook account (82%). Some of the Facebook sites are heavily subscribed and generally post at least daily or more. Others rarely post and basically just serve existing members.

Websites also vary greatly, from simple one-page sites to multiple pages. Many of the smaller sites are rarely updated, so potential new members can't get the information they need.

The American Federation of Mineralogical Societies, the national group of which MWF is one chapter, is investigating a system that will allow member societies to create a simple website (setup requires less than one hour) that is easy to maintain, by simply entering currently scheduled events.

While the proposed system will not replace the more sophisticated sites maintained by some of our larger clubs, it would allow small clubs to afford and maintain a web presence.

No, we are not ready to do this yet. But we would like to hear from clubs that might be interested in getting a website, if the site is affordable and easy to use. Please email me (mwftreas@rock-biz.com) with your comments.

Keep Members Engaged While Distanced

Mark Nelson, President of SCRIBE
(Special Congress Representing
Involved Bulletin Editors)

The importance of a club's editor in keeping members engaged and interested has always been #1 in any rock and mineral club! During this COVID-19 pandemic, I encourage our editors to take the lead in the effort to maintain engagement during times when many clubs have reduced in-person meetings, projects, or social events. The following are ideas or strategies for club leaders to consider. Editors and other club leaders are encouraged to consult with their boards to determine which strategies will be useful in your club.

Interim Virtual Meetings

Consider the creative use of technology to host virtual meeting experiences for your members until you can resume in-person meetings and events. Below are a few ideas and favorite tools for virtual meetings.

Highly Interactive Tools: There are many options, free and paid, for hosting virtual meetings. Chances are that someone in your club already has a pro version of one of these for his or her business, but there are also lots of great no-cost options that include basic features. Many of these programs are offering reduced fees and no-cost extended trials during this time. Check out Zoom Basic Free, Go to Meeting Free, or Google Hangout Free for starters.

Less Interactive Tools: There are other tools that are still incredibly useful and may be the perfect fit, but don't require that everyone log in at a specific time, which could be the right level of flexibility for your club. These suggestions range from social media tools to project management and communication tools: Facebook Live, Instagram TV, Basecamp, Slack.

Tips for Hosting a Virtual Meeting:

1. Consider shortening the length of the virtual meeting to make it more feasible for members to tune in.
2. Keep your fellowship activities, if they can easily migrate online – for example, "new member getting to know you," planned field trips, activities, interesting speakers, and "rock of the month" presentation.

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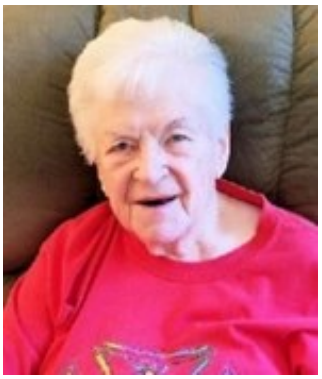
In Memoriam Kathryn Starbuck, Past President and Endowment Fund Promoter

Donna Moore, MWF Secretary

The MWF has lost the Grand Dame, if you will, of the organization for many years. Kathryn ("Kitty") Starbuck passed away from COVID-19 on June 27, 2020. She and her husband Marvin gave much time and energy to our hobby, especially to the MWF. Kitty served in many capacities, including MWF President in 2002-03. But perhaps the most lasting impact she and Marve made on the MWF is that they were instrumental in starting the MWF Endowment Fund.



"Before spending the last six years of her life in assisted living, Kitty lived her entire life on the family farm east of Vicksburg, Michigan," according to her obituary in the Kalamazoo Gazette. "Her claim to crafting fame. . . was the manufacture of toy dinosaurs for the Field Museum in Chicago. Joining the Kalamazoo Geological and Mineral Society in 1960 began a lifelong devotion to the rock hobby. Kitty and Marve were active leaders in the local club and went on to serve in high positions in regional and national rock hounding organizations. Kitty served as editor-publisher of two monthly rock publications for 40 years. The couple received an award for exceptional service and achievement from the Midwest Federation of Mineralogical and Geological Societies in 2000."

"I first met Kitty Starbuck at my very first MWF meeting in Houghton, Michigan," MWF Treasurer Sandy Fuller wrote in memory. "She encouraged me to get involved in our federation, even though I was still trying to figure out what this group did.

"Over the years, Kitty served as our newsletter editor, able assistant to Michigan State Director Marve Starbuck, and our directory publisher. She and Joyce Hanschu updated and standardized the federation's Operating Procedures. She was also one of the instigators for establishing our Endowment Fund to support special projects and help to keep affiliates' cost down. Kitty served as our federation President and stepped up to take on additional responsibilities when needed.

"She will be missed," Sandy concluded. "Thank you, Kitty (and Marve), for all your hard work."

Marve is living with their son Dennis' family. His mailing address is 3198 Bryn Mawr, Portage, Michigan 49024.

The family requested memorials to the church in which Kitty and Marve were active for decades, Vicksburg United Methodist Church in Michigan. But since Kitty was so instrumental in starting the MWF Endowment Fund, we are suggesting memorials might be sent there. Donations in her memory can be sent to the MWF Endowment Fund, c/o Alan Hukill, 15785 Park Lake Road, East Lansing, MI 48823.

Ballots Are Being Sent to Clubs and Executive Committee Members

Donna Moore, MWF Secretary

Ballots have been sent out for the election of MWF officers for 2020-21, who will take office on November 1, 2020.

MWF officers' elections are held by mail in order to include participation from more clubs than can normally come to conventions. Each club is allowed one vote. Each member of the Executive Committee – all state directors, all executive committee chairmen, all past presidents and honorary members – is also allowed one vote. Each person should only vote once, no matter how many positions he or she holds.

If you are an Executive Committee member, and also the person who receives MWF mailings for your club, please be sure that the club's copy of the ballot gets to the right people! Club choices should be discussed with the membership, or at least the board or officers.

Short biographies of the nominees are included with the ballot..

Ballots should be returned in the included envelope, postmarked by September 30th. If anyone has questions, don't hesitate to send me an email at mwfsecretary@gmail.com.

KEEP MEMBERS ENGAGED WHILE SOCIAL DISTANCING, CONTINUED

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3. Avoid taking up video time with elements of your meeting that would be better shared in writing, such as basic announcements or upcoming dates to note. Consider sending those in a follow-up email once the virtual meeting concludes.

Engagement Through Social Media Tools

Social media are great tools for engaging members and the general community every day. Clubs can optimize and concentrate their social media channels as a resource to bolster engagement during the hiatus from in-person contact. Many of these strategies can be used once you return to business as usual, so this may prove to be a pilot program for your club.

Fellowship: Use social media to mimic the fellowship your members enjoy during your meetings. You can start online conversations on various topics. Here are a few examples:

1. What are you reading?
2. Picture contest: Rocks, minerals, sunrises, or other earth science topics.
3. New member background.
4. Junior members' achieved and planned activities.

Social Media Takeovers: Allow various members to take the reins on your social channels and let them use pictures and stories to share how they're dealing with the changes to daily living brought on by the pandemic. Here's a useful guide: https://blog.hootsuite.com/social-media-takeovers.

Migrating Meeting Activities to Social Media: These can be recorded simply, using a cell phone. Try to limit video recordings to five or six minutes maximum. Remember to write engaging posts that encourage members and guests to interact with the content:

1. Member profiles, planned field trips, activities, interesting speakers, and "rock of the month" presentations.
2. Video presentations to promote through social channels. These can be how-to tips for rock tumbling, sawing, cabbing, and the like.
3. Have members who are passionate about particular community service projects? Ask them to share a self-recorded video!

Facebook Live is a great tool for short presentations featuring your members with interesting hobbies, because the audience can ask questions in real time that the presenter can answer on the spot.

Spread Good Will

One of the categories in the All American Club Award program of the AFMS is community service.

1. Choose a local charity and ask all members to highlight it using their social channels. Choose a new charity each week!
2. Coordinate with local hospitals or nursing homes for members to send cards or letters to combat loneliness from isolation in facilities that have limited visitors.
3. Ask members to make blankets for My Very Own Blanket or similar organizations.
4. Challenge members to look through their homes and sort items that can be donated to charity.
5. Once it is safe to do so, hold a group donation day to a local charity thrift store. Remember to take pictures!
6. Ask members to record themselves reading children's books and post those through your club's social channels for parents to share with their children for "alt-TV time" during school closures.

None of these strategies is a replacement for timely, transparent and regular communication with your members about your plans to continue modified operations throughout this time. Be sure that all committee leaders and officers in your club provide consistent messaging, to minimize confusion among members and to streamline communications about changes as they arise. Consider sending brief weekly updates to your members, or provide a timeline for when decisions will be reviewed and modified if necessary.

My thanks to Rotary and Rotarians for their contributions to this article!

UV Light Examination Helps to Identify a Mystery Mineral

Calvin Harris, South Suburban
Earth Science Club (Illinois)

Introduction

The intent of this paper is to describe a method used to identify a mineral suspected to be selenite that exhibits fluorescence and phosphorescence. The determination is based on observing luminescent qualities produced by ultraviolet lamps, using a binocular microscope along with a photographic enlarging lens, and reviewing mineralogy references.

In an ongoing pursuit to obtain fluorescent minerals, I acquired a specimen of sulfur associated with a white mineral presumed to be selenite. This mineral was collected from the El Desierto mine located in the Daniel Campos Province near Potosi, Bolivia. The specimen's previous owner could not identify with certainty that the mineral was gypsum (selenite) and he mentioned that it could be aragonite.

Geological Setting

The El Desierto mine is a sulfur quarry situated among a series of volcanoes that form the Western Andes in Bolivia. The host rock is volcanic ash that was deposited during the Pliocene Epoch of the Tertiary Period. Such ash contains ionic species to form calcium sulfate (gypsum), sodium chloride, calcium fluoride and other inorganic salts.

Mineral Descriptions

The obverse side of the specimen largely consists of sulfur with a lesser amount of gypsum. The gypsum is the variety selenium, based on its white coloration. The selenite is massive with poorly formed crystals.

Obverse side of the specimen by daylight. Photo by Calvin Harris.

The reverse side is a symmetric, layered pattern consisting of yellow and amber-colored sulfur, followed by massive selenite, and an unidentified gray mineral. The amber coloration of the sulfur is likely due to small quantities of selenium. The specimen measures 10cm × 6.75cm × 3.75cm.

Reverse side of the specimen by daylight. Photo by Calvin Harris.

Test Procedures and Results

The method used to identify this mineral involve using two different wavelengths of ultraviolet light to observe the luminescent characteristics and compare the findings with related publications. An additional source of ultraviolet light employed was a photographic flash unit used at its maximum output setting. Examination using a microscope and photographic enlarger lens also proved helpful.

I began identifying this mineral by examining its crystalline form and hardness. Determining the crystal form without visual aid was challenging because of the poorly developed crystal forms. Also, hardness was difficult to ascertain because of the irregular surface of the mineral.

However, using a binocular microscope at low magnification coupled with a photographic enlarging lens was advantageous. While low-powered microscopes are frequently used by mineral collectors, using a photographic enlarging lens or a 50-55mm camera lens is not generally practiced. These lenses approximate normal human vision, possess high quality optics with adjustable apertures, and can render objects with exceptional sharpness and clarity. Examining an object while peering through the front end of the lens provides the best results.

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UV Light Examination Helps to Identify a Mystery Mineral, continued

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The photographic enlarging lens used was a Voss brand lens with a 50mm focal length. Aperture settings for this lens range from f/3.5 to f/16. Using the widest possible setting, f/3.5, provides the greatest amount of light and widest field of view for observation. Using these visual aids, the crystal form and hardness were determined.

The luminescent characteristics of both sides of the sample were evaluated to ensure positive identification. These features include color, response intensity and phosphorescent duration.

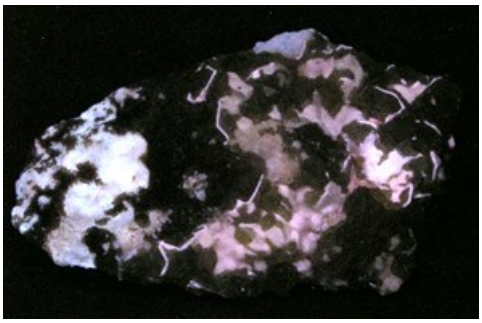
A Vivitar 283 photographic flash unit was used as a screening tool to determine if trace quantities of manganese with lead caused *flash* or phosphorescence of brief duration. These chemicals in trace quantities are known to cause fluorescence and *flash* in certain aragonite and other carbonate samples.

The effects of UV light wavelengths on specimens were:

Obverse, under shortwave (254nm) UV light:
Fluorescence – White with blue-green tint, moderate intensity. Left side brighter than right side.
Phosphorescence – Lime green, bright intensity, 14 second duration.

Obverse, under longwave (370nm) UV light:
Fluorescence – Left side white w/blue tint, right side pink, various saturation. Overall bright intensity.
Phosphorescence – Lime-green, low intensity, 8 second duration.

Obverse, *flash*: None. Weak phosphorescence, 3 second duration.

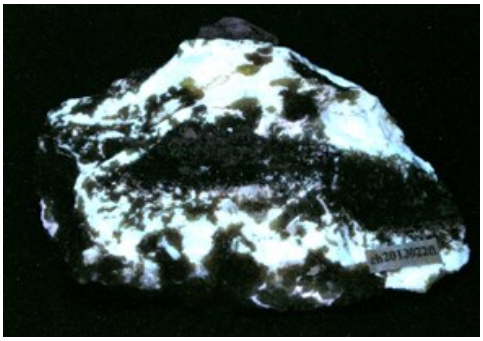


Obverse side of the specimen under longwave UV light. Photo by Calvin Harris.

Reverse, under shortwave (254nm) UV light:
Fluorescence – White w/blue-green tint, bright intensity.
Phosphorescence – Lime-green, bright intensity, 13 second duration.

Reverse, under longwave (370nm) UV light:
Fluorescence – Similar to shortwave response.
Phosphorescence – Similar to shortwave response, except slightly diminished intensity; 11 second duration.

Reverse, flash: None. Bright phosphorescence, 6 second duration.



Reverse side of the specimen under longwave UV light. Photo by Calvin Harris.

Discussion

Although the specimen had poorly formed crystals, the binocular microscope made it possible to locate and identify a group of small, distorted, partially formed crystals that were comparable to crystallographic illustrations of selenite. The crystals were transparent with a vitreous luster, typical of selenite. Additionally, the photographic enlarging lens was highly effective to clearly observe abrasion caused by a fingernail to determine the mineral's hardness.

The color of the fluorescence and phosphorescence from testing compared well with the published data regarding selenite. It's important to note that the shortwave wavelength used for this paper was the same as at least one of the references. The longwave radiation was slightly longer than the 365nm referenced, but no variation between the responses were noted.

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Upcoming Events

NOTICE! The shows in this calendar are still being held, TO THE BEST OF OUR KNOWLEDGE. Some shows may have cancelled without giving notice to the MWF News. Before going to any rock show that requires you to travel, please call ahead to be sure that the show is still being held.

AUGUST EVENTS KNOWN TO BE CANCELLED: Flint Rock & Gem Club rock swap in Clio, Michigan; Racine Geological Society rock swap; Peoria Academy of Sciences Geology Section show in East Peoria, Illinois.

SEPTEMBER EVENTS KNOWN TO BE CANCELLED: Tulip City Gem & Mineral Club show in Holland, Michigan; Tri -State Gem & Mineral Club show in Joplin, Missouri; Steele County Gem & Mineral Club display at the Steele County Free Fair in Owatonna, Minnesota; 500 Earth Sciences Club of Indianapolis in Greenfield, Indiana; Cedar Valley Rocks & Minerals Society auction in Amana, Iowa; Rock River Valley Gem & Mineral Society rock swap in Rockford, Illinois; Grand Traverse Area Rock & Mineral Club show in Traverse City, Michigan; Oshkosh Earth Science Club show, Oshkosh, Wisconsin.

OCTOBER EVENTS KNOWN TO BE CANCELLED: Lincoln Orbit Earth Science Society show in Springfield, Illinois; Midwest Mineralogical Society SuperSwap, Belleville, Michigan; Michigan Mineralogical Society show, Warren, Michigan; Des Moines Lapidary Society show, Des Moines, Iowa; Ozark Mountain Gem & Mineral Society show, Springfield, Missouri; Minnesota Mineral Club show, Cottage Grove, Minnesota.

NOVEMBER EVENTS KNOWN TO BE CANCELLED: Michigan Mineralogical Society annual auction, Bloomfield Hills, Michigan.

Date and Time	Organization	Place	Contact
Aug. 29-30 Sat & Sun, 8-4	Chippewa Valley Gem & Mineral Society rock swap	Eau Claire Expo Center near concessions, 5530 Fairview Drive, **Eau Claire, WI**	Paul Tubbs, bizpam1@gmail.com
Sept. 11-13 Fri 2-8, Sat 10-6, Sun 11-5	Toledo Gem & Rockhound Club	Stranahan Theater, 4645 Heatherdowns Blvd., **Toledo, OH**	Joanna Toepfer, joanna@cgasolutions.co (NOT ".com")
Sept. 18-20 Fri & Sat 9-5, Sun 9-3	Mozarkite Society of Lincoln	Mike Hare Memorial Field, under the water tower, **Lincoln, MO**	John "Kelly" Blum, 816-835-2044
Sept. 26-27 Sat 10-6, Sun 10-4	Brown County Rock & Mineral Club	Brown County History Center, 90 E. Gould Street, **Nashville, IN**	Rhonda Dunn, BCRMC2010@gmail.com
Sept. 26-27 Sat 9-6, Sun 10-4	Nebraska Mineral & Gem Club	Ramada Inn Convention Center, 3321 S. 72nd Street, **Omaha, NE**	Bruce Sturges, bsturges@yahoo.com
Oct. 10-11 Sat 9-5, Sun 10-4	Loup Valley Gem & Mineral Society	Methodist Outreach Center, 3602 16th Street, **Columbus, NE**	Greg Johnson, loupvalleynew@gmail.com
Oct. 16-18 Fri & Sat 10-6, Sun 10-5	Three Rivers Gem & Mineral Society show	Home & Family Arts Bldg., Allen County Fairgrounds, 2726 Carroll Road, **Fort Wayne, IN.** MASKS MANDATORY; gloves suggested.	Bev Jenkins, 3riversshow@gmail.com
Oct. 17-18 Sat & Sun, 10-5	Flint Rock & Gem Club	Carter Middle School, 300 Rogers Lodge Drive, **Clio, MI**	Bill Wendling, bwrockbarn@centurytel.net

October Issue Submission Deadline Is September 9th!

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UV Light Examination Helps to Identify a Mystery Mineral, continued

(Continued from page 6)

Test results of the obverse side of the specimen indicated no difference in the intensity of the fluorescence evoked by both ultraviolet wavelengths, while one of the references indicated that longwave radiation provided a slighter brighter effect than shortwave light. A pink chromatic response was observed only on this side of the sample, which was restricted to one area. There were some minor differences regarding the fluorescent intensity and phosphorescent duration displayed by the obverse and reverse sides of the specimen. There was no published reference that selenite exhibits *flash*, which was consistent with the test results.

I believe that the mineral associated with the sulfur is selenite, based on observations using optical equipment and the effects generated by ultraviolet radiation. Regrettably, the root cause of luminosity regarding selenite from the El Desierto mine could not be determined with the available references. It appears certain that at least two different activators are involved with fluorescence, evident by the dissimilar colors displayed. It would be interesting to know the identity of these agents and the role they play in the phosphorescent effects observed.

Selected References

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