Nittany Mineralogical Society Bulletin

Nittany Mineralogical Society, Inc., meeting in State College / Boalsburg, Pennsylvania
Contact information on back page

Editor (see back page):
David C. Glick

February, 2026 **Visit our web site: www.nittanymineral.org**

February 18th meeting:
IN PERSON at BOAL HALL

How to look at a mineral

by Dr. Andrew Sicree, Penn State

Our February meeting will be held Wednesday the 18th in Boal Hall (Boalsburg Fire Hall), 113 East Pine St., Boalsburg, PA 16827. Maps can be found on our web site.

7:00 to 7:45 p.m.: Social "hour," refreshments
7:45 to 8:00 p.m.: Announcements, door prizes, sales
about 8:00 p.m.: featured program

The event has free admission and free parking (lot just east of Fire Hall along East Pine St.), and is open to all; ***parents/guardians must provide supervision of minors.*** ***Bring your friends and share an interesting evening.***

The modern screen-driven electronic world tends to decrease our abilities to focus on a subject for more than five- to ten- seconds at a time. Many rockhounds approach minerals with this handicap.

Our February program will focus on the simple and easy procedures for appreciating and identifying minerals. Using simple tools and simple procedures, a mineral collector can observe common properties of minerals and, with a little luck, identify them!

Science involves the weighing, counting, and measuring of time, space, matter, and energy in order to understand aspects of the Universe. As mineralogists, we mostly focus on matter and use a wide variety of techniques and equipment to measure the material aspects of minerals. But an amateur mineralogist or a collector does not need a lot of expensive machinery to begin. Simple tools such as a streak plate, a hammer, a glass plate, an acid bottle, a magnet, and a hand lens can be acquired for a modest sum.

We will discuss common properties such as streak, hardness, luster, and cleavage, as well as some chemical, electrical, and optical properties of minerals.

Dr. Sicree earned his Ph.D. from Penn State University and serves as a lecturer at Penn State University, where he teaches courses in Earth sciences, energy and the environment, and astronomy.

Junior Rockhounds

Weekly Meetings Start Feb. 25
Most Wednesdays through May 13
6:00 - 6:40 p.m.
See page 2

Minerals Junior Education Day Set for March 28, 2026

Minerals Junior Education Day is set to return on Saturday, March 28, 2026! We'll need about eight stations where students in grades 1-8 learn about some aspect of minerals, earth sciences or lapidary, and get specimens to take home. It's time to plan for what station you might present, or to volunteer to help at an existing station (we'll have more information about that coming soon). We have several batches of possible giveaway specimens around which stations could be organized. Donations of minerals, books, etc., to sell at child-friendly prices at the sales table are also welcomed - please make arrangements in advance, so that we can get them organized and priced. See the web page at <www.nittanymineral.org/juniored.htm>. Contact: Dave Glick (see p. 8). *- Editor*

Drawing for Scholarship to May WILDACRES Workshop

See page 4

ATTENDING THE FEBRUARY MEETING?
Donations of **one or two high quality, labeled door prize specimens** are invited.
Larger quantities can go in a giveaway box.
Bring a friend!

FEDERATION NEWS

Nittany Mineralogical Society, Inc., is a member of EFMLS, the Eastern Federation of Mineralogical and Lapidary Societies, and therefore an affiliate of AFMS, the American Federation of Mineralogical Societies. We encourage our readers to read their monthly newsletters, which are linked from the left sidebar of our web site, <http://www.nittanymineral.org>.

The AFMS newsletter (now digital only) for the month of February is available at <https://www.amfed.org/newsletter>. President Ronna Watkins discusses the Tieton Andesite flow near her Washington state home, winter activities and the various awards available through AFMS. The Club Rockhound of the Year program is described and several awardees are introduced. For the AFMS Endowment Fund, tickets are available ($5 or 5/$20, to raise funds for AFMS special projects) for prize drawings, and several prizes are illustrated and described. The latest edition of Crack the News, the AFMS newsletter written by kids and teens for kids and teens is now available at <https://www.juniors.amfed.org/juniors-newsletter>. A recent Zoom roundtable on Exploring Public Relations through Community Involvement is reviewed. Jennifer Haley writes on the history of bolo ties (reprinted on page 5 of this Bulletin), and Mississippi snail fossils from the Loess Bluff Region are described.

The Eastern Federation's <https://efmls.org/> February Newsletter includes president Andrew "Rockhound's" column, reprinted on page 3. Information on the May 11-17 **Wildacres Workshop** session can be found in past newsletters and on the web site at <https://efmls.org/wildacres/>; the registration form is in the current issue, and Speaker-in-Residence Robert Weldon's six talks on mineral photography and other topics are listed. We are reminded of the Carolyn Weinberger Scholarship for a Wildacres student which was recently announced (see page 4 of this Bulletin).

- Editor

Fossil collector seeks use of slabbing saw

A local collector has several chunks of "fossil hash" rock and would like to have them sawn open to expose the detail in the shells. An 18" or 24" slabbing saw would be needed for some, but a 14" or 12" would work for others. Please contact Dave Glick (see p. 8) if you can help and we'll get you connected. Thank you! *- Editor*

JUNIOR ROCKHOUNDS MEETINGS

Start Wednesday, February 25th

by Dr. Andrew Sicree,
Junior Rockhounds Chair

You are invited! Please tell your friends too!
Junior Rockhounds meetings start Wednesday. Feb. 25th, 2026: 6:00 - 6:40 p.m, at Boal Hall (Boalsburg Fire Hall), 113 E Pine St, Boalsburg PA 16827.

Meeting dates -Wednesdays, 6:00-6:40 p.m. :

February 25th,

March 4th, 18th, 25th,

April 8th, 15th, 22nd, 29th,

May 6th, 13th.

These are FREE meetings for kids, best for students in 3rd - 8th grades, WITH their parents.

The meetings have a different topic each week, such as minerals, fossils, gemstones, geology, and dinosaurs. They include fun hands-on activities and discussions with an expert.

Parents stay with their children and may get a lot out of the meetings too!

Free collection organizer box to each student.

You don't have to be a member to attend; please come out and see what it's all about.

See http://www.nittanymineral.org/juniors.htm for updates and more information including weather cancellations.

Sponsored by Junior Museum and Nittany Mineralogical Society.

Contact Dr. Andrew Sicree at 814-867-6263 or aas132@psu.edu for info.

Newsletters for Juniors

Our national umbrella organization, the American Federation of Mineralogical Societies, sponsors the "Crack the News" newsletter by and for juniors. See it at https://www.juniors.amfed.org/juniors-newsletter

Our regional Eastern Federation of Mineralogical and Lapidary Societies provides Diamond Dan's "Mini Miners Monthly" juniors newsletter to club members at https://efmls.org/members-area/ Contact Dave Glick (see p. 8) about the password. *- Editor*

EFMLS President's Message

from Andrew Rockhound

EFMLS News v. 73 no. 2 February 2026

Happy February everyone, as I write this next to a warm fireplace in a snowstorm, I know what's on everyone's mind - "How can I help at the EFMLS?" Ok, everyone's probably more thinking "I am sick of winter already and want to dig!" I don't blame you, hopefully that groundhog brings good news, but during these winter months please consider some of the areas where we could use some more committee members or chairs. We have already welcomed new and great people to the EFMLS committees over the last year, and would like to continue that energy in 2026! Here are some areas to consider -

BEAC (Bulletin Editors Awards Competition) – I am personally chairing this year, but will need a new chair going forward. This year we only had 3 clubs enter; we'd like to boost that.

Other Awards chairs (All American, Each One Teach One)

We have many committees that need members, check out the last pages of this newsletter and see if a chair or committee would be something you would be interested in. Reach out to me to find out more and we'll see what we can do!

Club renewals are being received both by mail and our new electronic payment system, and we thank all of our member clubs for being part of the EFMLS! Let us know if you have any issues, or need forms/passwords or anything else, we're here to help.

Make sure your club gets in on the Carolyn Weinberger Memorial Wildacres Scholarship and submits a member from your club by March 10, 2026! One lucky member will be selected from the club entries to win a scholarship to cover the $525 Wildacres 2026 registration! This is a great opportunity, we hope all clubs enter...

Every year the EFMLS president is responsible for selecting a Scholarship Grant Awardee who chooses two post-grad students in the geological field to receive a $4,000 scholarship each from the AFMS Scholarship Foundation. This year, to honor our EFMLS convention host club Kanawha Rock and Gem Club in West Virginia, I have selected Dr. Amy Weislogel at West Virginia University who has two very deserving students! We will hear more about them in the coming months...

Stay safe and warm out there in February everyone!

Geo-Sudoku

by David Glick

The puzzle below contains the letters BCILMPOSY. One row or column includes an event in the Dolomites (there's the geo-connection), taken this time from current events rather than the pages of this Bulletin. Each block of 9 squares, each row, and each column must contain each of the nine letters exactly once. The solution is on page 8.

P			L					Y
		I	C			O		
		M	S		P			
L						C	I	B
		B	M					
O		Y	B					S
		O		P	L	S		I
I			O			Y		P
Y		P			S			

GPAA gold panning station at a past NMS Minerals Junior Education Day. *D. Glick photo*

EFMLS Wildacres Scholarship

from EFMLS News v. 73 no. 1, January 2026

NMS MEMBERS: Enter to Win this Scholarship

Current, paid NMS members may enter the drawing for the scholarship to attend the Wildacres Workshop May 11-17 in North Carolina. Please note that no expenses other than basic tuition for classes and room & board are covered (see article below) and see https://efmls.org/wildacres/ for all information on Wildacres. To enter, submit your name and whether you would be a first-time Wildacres attendee, to NMS President David Glick (see p. 8) by **Tuesday, February 24.** EFMLS prefers those who have not attended before, so we'll only consider repeat attendees if there are no first-timers. If we have more than one candidate remaining, the NMS Board will do a random drawing to get one name to submit to EFMLS / Wildacres for their final drawing.

It is with great pleasure to announce that the EFMLS Board has just voted for a Carolyn Weinberger Memorial Wildacres Scholarship to be awarded to one individual for the upcoming EFMLS Wildacres Workshop held in May 11-17, 2026. This scholarship was made possible due to previous donations to that fund.

This scholarship will cover one individual's tuition for classes and room-and-board, which for 2026 is set at $525. It will **not cover** any additional class material fees, transportation, hotel, or other travel expenses.

All clubs within the Eastern Federation can submit one participant's name, a club member, who preferably has never attended Wildacres before. It is up to the clubs how they select that individual. All names will be put in a hat, and the Wildacres Committee staff will draw one lucky participant.

Registration for the May 2026 EFMLS Wildacres Workshop session opens on January 1, 2026. Should the participant awarded this scholarship already have sent in the application, their deposit will be refunded.

Going forward in the future, we would like to keep the Carolyn Weinberger Memorial Wildacres Scholarship alive, and we'll be asking for contributions during the upcoming years. Whenever we reach another full scholarship amount (be it in one year or five) we will award again another full scholarship.

We look forward to receiving your nominations. Please submit them to me via email at helen@gemartcenter.com no later than March 10, 2026. I will bring them to the rest of the Wildacres Committee staff for the drawing by March 15, 2026.

Best Regards,
Helen Serras-Herman, EFMLS Wildacres Committee Chairman

Bolo Ties are Here to Stay

Jennifer Haley,
AFMS Historian

from AFMS Newsletter
Vol 79, No 1 February 2026

The first time I saw a bolo tie was when I joined my first AFMS rock and gem club. Many of the men would wear one to the club's monthly meetings, and for more formal rockhound events. The club presidents if they were men, always wore one. They made their bolo ties with the esteemed silversmithing skills which they learned from members in the club, and with the rock they had collected in the field, along with cutting and polishing the stone to their liking. During the breaks for refreshments and at potlucks, were the good times to ask about the personal story behind each piece. And of course, everyone likes to listen in to a good rockhounding story when they're all sitting around at the tables.

Each bolo did have a good story to tell, especially because there was so much of a person's real-life experience that went into creating such a piece of jewelry. I do think this is one of reasons why we still value the bolo tie today, and why this particular type of jewelry has so much presence.

I never saw women wearing them back then, but one day I bought one from a good friend with the intension of wearing it. Jerry Whitaker was his name, and had been a member of the club for over fifty years when I met him. I loved the story and history of the stone, the color of the stone, and because it was made by him. The stone is called Myrickite, and was from the Manhattan Mine in Napa County, California, where he hand-collected the rock years prior to the mine closing. Combined with his good memories that went into making that bolo tie, and combined with mine from everything he taught me about rockhounding skills, and our wonderful friendship, I will always be fond of that bolo.

When I began looking up the history of bolo ties, I found references with different dates in time for the same aspects of the tie, even to when the state of Arizona named the bolo tie as their, State Neckwear. What we do know is that the bolo tie has its history deeply woven into the Western, Southwestern and Native American jewelry culture for quite some time.

In 1959, a silversmith named Victor Emanuel Cedarstaff patented the slide clasp design for the tie, which is still in use today.

Traditionally men have always been the ones seen wearing the bolo ties, but that doesn't mean women can't enjoy wearing them also. Leather and woven cord companies in the United States now sell all kinds of wonderful colors for bolo tie making, along with different leather weaves that are made exceptionally well. Perhaps, those of you with Kumihimo braiding skills would like to take up the challenge of making your own bolo cording to go with a specific stone, and with certain colors in your wardrobe. I can see a lot of creativity using lost wax casting, metal clay or gorgeous dichroic glass as the tie's focal point.

Share a good story about bolo ties with your Juniors, and they'll want to get involved in making them too. Depending on their individual skills, even the simplest task of gluing a bolo clasp onto the back of a cabochon, and gluing base metal tips to the ends of the cords, will turn a fun project into something they'll want to wear.

When you wear a bolo tie, you will be noticed, or more likely your bolo will be noticed. They are good conversation pieces and can create an assortment of good teaching skills too. ❄

Pineapple Opals

From The Opal Express, The American Opal Society, September 2025

via AFMS Newsletter V 78 no 8 Nov 2025

Pineapple opals are pseudomorphs—minerals that have replaced another mineral while preserving the original crystal shape. In this case, opal replaces ikaite (a hydrated form of calcium carbonate).

-Ikaite forms only under specific conditions—low temperatures, high alkalinity, and elevated pressures—typically in deep marine or cold sedimentary environments.

-Over time, as environmental conditions shift, the unstable ikaite decomposes and is replaced molecule by molecule by silica-rich fluids, forming opal.

-The original crystal habit of ikaite, which features radiating spear-like formations, is preserved — resulting in the iconic spikey "pineapple" shape.

Opal pseudomorphs are created by the deposition of opal in casts (molds) of fossil bone, teeth, shell, belemnoids (ancient relatives of cuttlefish), crinoids (sea lilies), wood, fir cones and even skeletons of large prehistoric animals. Many of these fossilized forms contain exceptional quality noble opal. White Cliffs is the only place where these marvelous (and very rare) pseudomorphic opals have been found.

White Cliffs is a small town in outback New South Wales in Australia, in Central Darling Shire. White Cliffs is around 255km northeast of Broken Hill, 93km north of Wilcannia. At the 2021 census, White Cliffs had a population of 156.

To the objective observer White Cliffs is really a single purpose town. Miners started coming here (the local Aborigines found it far too hot for permanent settlement and occasionally visited the place as they traveled to and from the Darling River) in the 1880's and, apart from its minor function as a service centre for the surrounding properties, it remains a town driven by opals.

The summer temperatures, typically over 40°C (104°F), forced the miners underground. The 100 million years old sandstone conglomerate in which the opal seams were buried carried two advantages. It was remarkably stable (no one has ever died from a mine collapse in White Cliffs) and it was relatively easy to dig. By around 1900 miners were burrowing into the hills in an attempt to find opals and escape from the heat. The real way to see White Cliffs is from the air. It appears like a strange moonscape with an estimated 50,000 disused diggings.

Fewer than a few hundred authentic pineapple opals have ever been documented, making them one of the rarest opal types on Earth. Their scarcity, combined with their bizarre and beautiful form, makes them highly coveted by mineral collectors and museums. Top specimens can command very high prices in the collector's market.

Left: Pineapple Opals: Rare Pseudomorphs from White Cliffs, Australia. Photo-Grant Pearson

Middle: Pineapple Opals: Rare Pseudomorphs from White Cliffs, Australia. Photo-RedEarthOpal

Bottom: The Heart of Australia, a 3,510 ct double pseudomorph ikaite-calcite-opal gem specimen, is considered one of the finest ever unearthed. (Pineapple Opal Fossil). Courtesy of Graeme Dowton

Reference Material: www.geologyin.com Wikipedia www.aussietowns.com.au/town/white-cliffs-nsw www.whitecliffsopal.com/

Pictures found at: www.geologyin.com/2016/08/gorgeous-opal-pineapples.html

A Pennsylvania Minerals Gallery

With gratitude to Rob Lavinsky for making so many images available through Creative Commons license on the WWW. The descriptions are his, from Wikimedia.org. *-Editor*

Copper. Locality: Blue Ridge Summit, Adams County, Pennsylvania, USA.
"A DRAMATIC, LARGE CABINET Pennsylvania copper! This sculptural and uncommonly large copper has a boxwork structure and a nice patina. One of the largest Penn coppers I have seen for sale." 1200 grams weight! 22.5 x 12.3 x 4.5 cm
Rob Lavinsky, iRocks.com – CC-BY-SA-3.0
http://www.mindat.org/photo-67793.html

Quartz with chlorite inclusions. Locality: Blue Hill, Media, Upper Providence Township, Delaware County, Pennsylvania, USA. Size: 3.5 x 2.5 x 1.9 cm.
"A beautiful and pristine, FLOATER rosette of lustrous, glassy, green, chlorite-included quartz crystals. This is CLASSIC, OLD-TIME material from a VERY UNCOMMON Pennsylvania locality - Blue Hill, Delaware County. Ex. Harold Arndt and Richard Hauck Quartz Collections."
Rob Lavinsky, iRocks.com – CC-BY-SA-3.0
http://www.mindat.org/photo-154635.html

Calcite. Locality: Roosevelt Avenue Quarry (York Stone Quarry), York, York County, Pennsylvania, USA.
Size: 8.9 x 7.9 x 5.4 cm.
"Big, dramatic calcite crystals with surface inclusions of iron impurities giving them this dazzling bright orange color. This specimen from the classic Orange Pocket at the Delta Carbonate Quarry in York County, where the iron impurities made the crystals in this pocket unlike any others. The crystals are translucent, and measure to a whopping 6 cm. Ex George Feist collection."
Rob Lavinsky, iRocks.com – CC-BY-SA-3.0
http://www.mindat.org/photo-197962.html

UPCOMING EVENTS

Confirm details of events before attending.
https://efmls.org/events/
See other show calendar links on our web site.

Mar. 7-8, 2026: 62nd Annual Earth Science, Gem and Mineral Show, by Delaware Mineralogical Society. Doubletree by Hilton, Wilmington, DE 19803. Sat. 10-5, Sun. 11-5. www.DMSrocks.org

Mar. 13-14, 2026: 50th Annual Leidy Microscopical Society Micromount Symposium. Advent Lutheran Church, 45 Worthington Mill Rd., Richboro PA 18954. Silent auctions, give-aways; presentations: "Peru: A Mining Country" by Juan Proano; "It's a Small World After All" by Ron Sloto. Fri 12-6, Sat 9-6. Contact: donmcalarnen@outlook.com

Mar. 21-22, 2026: Franklin County R&M Club Show, Rec Center, 235 S Second St, Chambersburg, PA 17201

Mar. 28-29, 2026: Gem & Mineral Show by Che-Hanna Rock & Mineral Club. Wysox Vol. Fire Co. Social Hall, 111 Lake Rd., Wysox PA 18854. Sat. 9-5, Sun. 10-4. http://chehannarocks.com/show.html

Mar. 28-29, 2026: Mineral Treasures and Fossil Fair, by Philadelphia Mineralogical Society. Lulu Temple, 5140 Butler Pike, Plymouth Meeting, PA 19462 (PA Turnpike, exit 333; or I-476, exit 20). www.phillyrocks.org

Mar. 28, 2026: NMS Minerals Junior Education Day, see p. 1 and <www.nittanymineral.org/juniored.htm>

May 2-3, 2026: 57th Annual World of Gems & Minerals: Gemstones, Jewelry, Rock, Mineral & Fossil Show, by Berks Mineralogical Society. Leesport Farmers Market Banquet Hall, 312 Gernant's Church Rd. Leesport PA 19533. Sat 10-5, Sun 10-4. berksmineralsociety.com

May 11-17, 2026: EFMLS Wildacres Workshop, Little Switzerland NC. www.efmls.org/wildacres and p. 4

May 15-17, 2026: New England Mineral Conference, Newry, Maine. Students get free registration. www.nemineral.org/annual-conference/

Oct 18-20, 2026: EFMLS Convention & Kanawha Rock & Gem Club annual show, Charleston, West Virginia.

Geo-Sudoku Solution

P	**O**	C	L	I	M	B	S	Y
S	**L**	I	C	B	Y	O	P	M
B	**Y**	M	S	O	P	I	L	C
L	**M**	S	P	Y	O	C	I	B
C	**P**	B	M	S	I	L	Y	O
O	**I**	Y	B	L	C	P	M	S
M	**C**	O	Y	P	L	S	B	I
I	**S**	L	O	M	B	Y	C	P
Y	B	P	I	C	S	M	O	L

INVITE A FRIEND TO JOIN THE SOCIETY

The Nittany Mineralogical Society prides itself on having among the finest line-up of speakers of any earth sciences club in the nation. Everyone is welcome at our meetings. If you'd like to be part of our Society, dues are $25 (regular member), $10 (student rate), $18 (seniors), $35 (family of two or more members, names listed). Those joining in March or later may request pro-rated dues. Your dues are used for programs and speakers, refreshments, educational activities, Bulletins, and mailing expenses. Please fill out a membership form (available at www.nittanymineral.org), make checks payable to "Nittany Mineralogical Society, Inc." and send them in as directed, or bring your dues and form to the next meeting.

We want to welcome you!

CONTACT INFORMATION

Come to our meetings on the third Wednesday of the month - see page 1

mailing address:
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c/o S. Bingham, Treasurer
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Penna. Furnace PA 16865

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Membership Chair: David Glick (see above)
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Publicity:

The **Bulletin Editor** will welcome your submissions of articles, photos, drawings, cartoons, etc., on minerals, fossils, collecting, lapidary, and club activity topics of interest to the members. Please contact:

David Glick E-mail: xidg@verizon.net
425 Armagast Rd. phone: 814-810-2116 (h)
Bellefonte, PA 16823-9762

Newsletter submissions are appreciated by the first Wednesday of the month. Photographs or graphics are encouraged; please send them as separate graphics files (high quality JPEG files, about 1050 pixels wide, are preferred). Please provide captions and name of photographer or artist.

Visit us at www.nittanymineral.org