

Nittany Mineralogical Society Bulletin

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

April, 2026

Visit our web site: www.nittanymineral.org

Editor (see back page):

David C. Glick

April 15th meeting:

IN PERSON at **BOAL HALL**

My Sinkhole Story

by David Glick

Our April meeting will be held Wednesday the 15th 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.

This month's program will tell the story of sinkhole remediation from the point of view of a homeowner / geologist. In 2010 I bought some property in the country, with known sinkholes. I had a geophysical survey done for the house site, and house building concluded in 2020. The big move was in February 2021, and exactly one week later my driveway snow plowing contractor came to the door and said, "You'd better watch out for that sinkhole next to your driveway." Fortunately it was a long way from the house, and next to a field, so it was easy to drive around it while plans were made and remediation was performed. The program will touch on all of those topics, concluding with the professional remediation procedures.



Three mixer truck loads of cement flowable fill go into the excavated sinkhole.
D. Glick photo

May Meeting:

Watch for announcement of date

(it will **not** be our usual Third Wednesday due to Firemen's Carnival at Boal Hall)

Junior Rockhounds Meet Weekly

See page 3

Minerals Junior Education Day

A Recent Attendance Record -See p. 3

Pennsylvanian Ron Sloto Wins Carnegie Mineralogical Award

Ronald A. Sloto, author of 'Mines and Minerals' of Pennsylvania counties book series and many reports in Friends of Mineralogy - Pennsylvania Chapter Newsletter, is recognized. See <https://carnegiemnh.org/ronald-a-sloto-wins-2025-carnegie-mineralogical-award/> -Editor

Bellefonte Art Museum hosts

From the Ground Up: Centre County Works

Art works from the Penn State Earth & Mineral Sciences Museum and Art Gallery's Steidle collection portraying industry and mining are on display at the Bellefonte Art Museum, 133 North Allegheny Street, Bellefonte PA 16823. This exhibit, curated by Dr. Julianne Snider, specifically depicts activity in the history of Centre County. The Bellefonte Art Museum is open Friday, Saturday, Sunday 12:00-4:30 p.m., with a reception during those hours on the first Sunday of the month (except this month, when it will be on the 12th because of Easter). The Museum and the reception have free admission, and this exhibit will run until April 26. See the web site:

<https://bellefontemuseum.org/events/2025/from-the-ground-up-centre-county-works> -Editor

ATTENDING THE APRIL 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!

28th Minerals Junior Education Day Held March 28, 2026

by David Glick, NMS President
photos by the author

Our 2026 Minerals Junior Education Day took place on Saturday, March 28, at the CPI vo-tech school in Pleasant Gap, PA. There were 144 students attending (the most since our three-year break for the Covid pandemic), plus a similar number of parents, and about 35 volunteers.

Among those volunteers were groups from The Bald Eagle Chapter of Gold Prospectors Association of America, The Penn State Earth and Mineral Sciences Museum and Art Gallery and the MANTLE student group, Bald Eagle Archaeological Society, Lincoln Caverns, students of Bishop McDevitt High School, as well as individual NMS members, families and friends, and non-members. NMS is extremely grateful to all the volunteers for their time and effort, and for communicating both knowledge and their passion for various aspects of science and our hobbies. Likewise we are grateful for many donations of materials for sales, and specimen handouts at the stations. The stations were:

- Gem cutting & polishing (lapidary)
- Gold panning
- Iron ores & furnaces
- Rainbows in gemstones (iridescence)
- Minerals make rocks
- Fluorescence with ultraviolet light
- Caves and karst
- Native Americans used rocks
- Vertebrate fossils
- Invertebrate (shell) fossils
- and Sales tables



Rainbows in gemstones station



Native Americans and rocks station



Caves & karst station



Lapidary station



Iron ore & iron furnaces station



Iron ore & iron furnaces station



Lapidary station



Invertebrate fossil station



Vertebrate fossil station



Gold panning station



Minerals make rocks station

JUNIOR ROCKHOUNDS MEETINGS

Wednesdays through May 13

6:00 - 6:40 p.m.

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.

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 April is available at <<https://www.amfed.org/newsletter>>.

President Ronna Watkins notes several free National Parks Days coming up on various holidays. The AFMS/Midwest Federation Show and Convention is in St. Charles, Illinois, on May 22-24; registration deadline is April 24, including for the Lizzadro Museum of Lapidary Art bus trip. She writes about clubs maintaining membership; “For me, the most important factor in growing and sustaining a club is maintaining a fun and exciting environment.” There will be a Round Table Discussion on Maximizing Public Relations at the convention, and PR Chair Jim Brace-Thompson has an article in this newsletter as well.

For the AFMS Endowment Fund, tickets are available (\$5 or 5/\$20, to raise funds for AFMS special projects) for prize drawings. One new prize, a sterling silver and dichroic glass necklace and pendant, is illustrated. Historian Jennifer Haley seeks information on club members “who, over the years, have made significant discoveries and contributions to science as amateur geologists. These categories include Mineralogy and Paleontology in the discovery and documented identification of new minerals and fossils.” Jennifer also provides “A Craft from the Past” project, a sterling silver & stone paperweight & pencil holder. Cheryl Neary writes on Illinois, its geology, mineral collecting, and places to visit on one’s trip to the Convention.

The Eastern Federation’s <<https://efmls.org/>> March Newsletter includes president Andrew “Rockhound’s” column, reprinted at right. Two Carolyn Weinberger Memorial Scholarships to Wildacres Workshops were awarded in the inaugural drawing, to Mari Ito from Monongahela Rockhounds in Pittsburgh and Alvaro Ortiz-Vazquez from New York Mineralogical Club. A theft of very large (2-foot) quartz crystals in Rye, NY, is reported; be on the lookout! Various club shows are listed or advertised. - *Editor*



EFMLS President’s Message

from
Andrew Rockhound

**EFMLS News v. 73 no. 4
April 2026**

It's April, spring is arriving and club activities are ramping up! This month I have a few important things for club presidents, VP's and leaders across the EFMLS to consider. First, the AFMS convention is in May, during which we honor those who have passed during the year since the last convention. If your club has someone who should be honored, please submit their name and a brief description so that they can be part of the ceremony. Email submissions to 1st VP Matt Charsky matt2430@comcast.net.

Second, there is no better way to highlight your club across the EFMLS and beyond, than hosting an EFMLS convention! This year West Virginia's Kanawha Rock and Gem Club is hosting the convention and I am personally looking forward to it! Hosting a convention will give your club show a boost, and promote to the rest of our federation how great your club is! Please discuss it with your board, and email me if you are interested! president@efmls.org

Third, hopefully your club's youth program is taking advantage of the AFMS Future Rockhounds of America resources? If you aren't receiving “Crack the News”, the youth newsletter published “By Youth, For Youth” your members are missing out! Make sure you are on the distribution list, by emailing Lora Hall at youth@amfed.org

Fourth, while you message Lora Hall about “Crack the News” also sign up for the Future Rockhounds of America Badge program! EFMLS youth chair Renee Kowalchik has been writing newsletter articles featuring these great badges for both Central PA Rock & Mineral club and the EFMLS, and if you haven't read them, do it! I just had the opportunity to dive into the Badge program with Geology Club, and it was easy, and amazing for the youth who participated in earning their “Fossil” badge during our “Fossils & Hot Chocolate” field trip on March 15th. It was a great opportunity to teach our youth about the fossils they were collecting

while also instilling the basic principles of the AFMS Code of Ethics during their day in the fossil pit. One youth who was very focused on gold panning, started the day unsure of collecting fossils, by the end of the day he told me “I want to be a Geologist”. Isn't that what it's all about? The youth is our future, and this youth got the message!

Presidents and leadership across the EFMLS, please consider all this and let us know if you have any questions. Of course, as always, we would love for you to join the EFMLS team, we have many positions you can make a difference with! Stay safe out there!

Geo-Sudoku

by David Glick

The puzzle below contains the letters ACFGLOSTU. One row or column includes the root of a geographic division name. If you've read this issue, you've seen it. 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.

U		C			L		S	
			S				F	T
				U				
C		O						
S	G		O		F		T	
F			C	G	U		L	
T						A		
O		F		T	C			L
		S	G	F	A		O	

For the AFMS Convention

On the Road Again - To St. Charles, Illinois

by Cheryl Neary, MWF Past President
from AFMS Newsletter v. 79, no. 3, April 2026



Recently, where I live on Long Island (NY), one of the snowstorms that visited the area deposited over two feet of snow. That's how I remember the winters when I was growing up in the 60s and 70s. Some of you may laugh at a measly two feet, but imagine living in

the northern Midwest states during the Pleistocene Epoch of the Cenozoic Era, approximately 1.6 million to 10,000 years ago. The snowfall and accumulation compacted to create thick masses of snow and ice – some 700-2,000 feet thick, which developed into continental glaciers that covered approximately 85% of what is now the state of Illinois.

The first glacier reached the area known as Illinois approximately 300,000 years ago, with the last glaciation in the area around 13,000 years ago. The Illinoian glacier reached into southern Illinois as far as Carbondale. The topography of the area was influenced by the glaciers, except for the southern tip and the northwest corner of the state, which were untouched by glaciers.

During periods of warmer climate the glaciers retreated, and meltwater flooded the area with the release of melting ice carving new valleys, deepening older valleys, and partly filling the valleys with a large quantity of sediments.

As the glaciers retreated, an average 100-foot-thick layer of sediment — known as till or boulder clay — was deposited. Till is unsorted sediment deposited directly by moving ice without reworking by meltwaters, comprised of a mixture of clay, silt, sand, pebbles and boulders. The various-sized rock fragments are typically angular due to minimal water transport, while some display striations from grinding while trapped in the glaciers. There are two



Glacial Till, northern Illinois. Photo courtesy USGS. <https://web.extension.illinois.edu/earth/75.cfm>



Glacial Outwash. CC BY 2.0 via <https://www.flickr.com/photos/jsjgeology/31370991797>

main types of till: basal, which was deposited at the glacier's base, and ablation, which was dropped from the surface as the glacier melted. With the retreat of the glaciers, meltwater formed streams that flowed away from the face of the ice carrying various types of sediments. Gravel or sand were deposited near the edge of the glacier, while lighter sediments, such as silt and clay, were carried a distance downstream. These deposits are known as **outwash**. When the stream beds dried out, the wind would pick up the fine particles and redeposit them.

The silt deposited by the wind is called **loess**. With some depths of loess at 20 feet thick, most of the state of Illinois is covered in loess. It contains no rocks, has uniform texture that retains moisture, and is rich in minerals – allowing for soils that enable farmers to grow and raise many agricultural commodities, including specialty crops, such as buckwheat, pumpkin and horseradish.

Illinois, the 25th largest state in the US, whose nickname is known as the Prairie State due to the abundance of prairie grasses, measures approximately 400 miles from its northern border to its southernmost tip and is over 200 miles wide. The state is bordered in the north by Wisconsin; to the east by Lake Michigan, Indiana and Kentucky; to the south by Kentucky and Missouri; and to the west by Missouri and Iowa. There are 102 counties in Illinois. Illinois has three distinct geographical regions: the Central Plains, the Shawnee Hills region and the Gulf Coastal Plain.

According to <<https://publish.illinois.edu/inheducation/biodiversity/natural-divisions/>>. Illinois has 14 natural divisions. Each division is described by the differences in topography, glacial history, bedrock, soil types and the distribution of native plants and animals found within each division.

Most of the state of Illinois is in the **Central Plains** region. This region is noted for low hills and fertile land. It includes the low flat land of the **Great Lakes Plain** that lies along Lake Michigan, north and west of Chicago; the elevated unglaciated **Wisconsin Driftless Plains** in the northwest with the highest elevation in the state — Charles Mound at 1,235 feet above sea level. The Driftless area has a rugged terrain with deep ravines and valleys but lacks the granite boulders found in most of the Midwest and the Till Plains in the north. The **Till Plains** is the largest section of the Central Plains and home to the central Corn Belt. The Corn Belt primarily includes the states of Iowa, Illinois, Indiana,

Nebraska, Kansas and Missouri. These states are most productive in terms of corn cultivation due to their flat terrain and deep fertile soil with high organic matter content.

Much of the prairie has been lost due to settlements. However, there are remnants and restorations including Goose Lake Prairie State Park, Midewin National Tallgrass Prairie, Allerton Park, and Kennekuk Cove County Park.

The **Shawnee Hills** region lies in southern Illinois. It is a narrow strip of land, ranging from a width of five to 40 miles and approximately 70 miles long with higher elevations ranging from 300 to 1,065 feet (about the height of the Empire State building).

Much of the Shawnee Hills lies within the Shawnee National Forest. The Shawnee Hills is listed as Natural Division 13 and encompasses much of Hardin, Pope, Johnson, and Union Counties, as well as the southern parts of Jackson, Williamson, Saline and Gallatin Counties.

In the Central Plains, the Mississippian and Pennsylvania Age rock layers lie deep beneath the soil surface, yet the landscape is defined by high east-west sandstone cliffs that form the Greater Shawnee Hills. Ferne Clyffe State Park is an example. An example of the Lesser Shawnee Hills is Cave in Rock State Park.

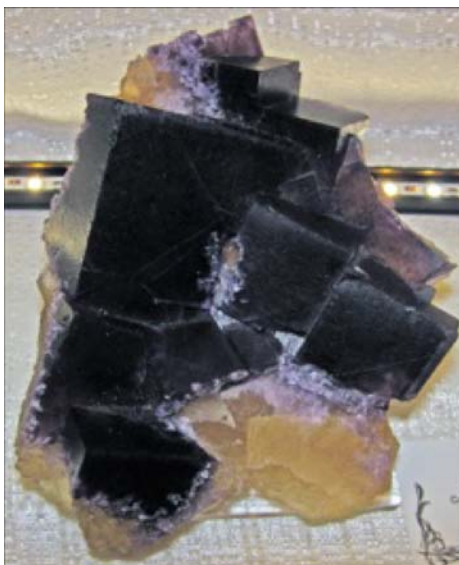
The **Lesser Shawnee Hills** is underlain by limestone and sandstone bluffs and ravines. Although not technically part of the Ozarks, the Shawnee Hills are often referred to as the "Illinois Ozarks."

Limestone is quarried from outcrops in the Shawnee Hills.

To the north and south of the Shawnee Hills coal is mined at both the surface and in the deeper part of the Illinois Basin. Due to tectonic activities, extensive faulting occurred in and around the Shawnee Hills, which formed deposits of fluorite. At one time, 80% of the world's fluorite ore was mined near the towns of Rosiclare and Cave In Rock.

Rosiclare is in the southwest part of Hardin County, located along the Ohio River. At one time, Rosiclare was the "Fluorspar Capital of the World." Mining began in 1842 and lasted until 1996, when it became cheaper to import fluorite from China.

Cave-in-Rock is in the southeast part of Hardin County, located along the Ohio River. The Cave is a 55-foot-wide riverside cave formed by wind and water erosion and by the effects of the 1811-12 New Madrid



Fluorite (Crystal Victory Mine, near Cave-in-Rock, Illinois.) Photo by James St. John, CC BY 2.0. <https://creativecommons.org/licenses/by/2.0> via Wikimedia Commons



Cave-in-Rock State Park, IL. CC BY-SA 4.0

The Cahokia Mounds, located near Collinsville, Illinois across the Mississippi River from St. Louis, Missouri, is the largest archaeological site in North America. The remains of the most sophisticated prehistoric native civilization covers more than 2,000 acres. The ancient civilization was built by the Mound Builders approximately 700 to 1400 AD. In 1965, the site was named a US National Historic Landmark and a UNESCO site in 1982 for its significance in the pre-contact history of North America.

The Chicago metropolitan area, informally known as Chicagoland, is the largest metropolitan statistical area in the Midwest, encompassing 19 Illinois counties and extending into southeast Wisconsin. It is the third largest metropolitan statistical area in the United States, following Los Angeles and New York. .

The **Fox River Valley** is a region centered on the Fox River of Northern Illinois, along the western edges of the Chicago metropolitan area. Native American tribes that historically lived in this region include the Pottawatomie, Sauk, and Meskwaki tribes.

Some of the cities in the Fox River Valley are part of the Rust Belt, also known as both the Steel and Factory Belt. Within this region is Aurora, the second-largest city in the state. Elgin and the nearby cities of Batavia, St. Charles, and Geneva, have been known as the Tri-City area since the early 20th century.

Now that you have traversed one of the geographical or natural division areas on your way to St. Charles, you may want to explore the city and surrounding area.

Pottawatomie Park is located on the east bank of the Fox River, a comfortable walk north of downtown. The park is also the departure point for the St. Charles Paddlewheel Riverboats, which have been running since the 1940s. There are two paddlewheelers in the fleet — the Fox River Queen and the St. Charles Belle II — and there are regular departures, rain or shine, from the start of May to mid-October. Public cruises take place three times a day on weekends throughout the season, and there is one cruise a day Tuesday to Friday, June through August. Check the website [St. Charles Paddlewheel Riverboats | Cruise the Scenic Fox River](#) for more details.

St. Charles History Museum: The St. Charles Historical Society was founded in 1933 and has a museum downtown in the McCornack Oil Company building at 215 East Main St., completed in 1928. The building was home to a gas station from 1928 to 1990. The museum is open Tuesday to Saturday from 11:00am to 4:00pm and closed on Sunday and Monday.

Wonder Lake was created when the Nippersink Creek was dammed in 1928. This recreational lake is located approximately 40 miles north of St. Charles. ❄️

earthquakes. The cave is the main feature of Illinois' Cave-in-Rock State Park.

The **Gulf Coastal** is located south of the Shawnee Hills at the extreme southern tip of Illinois. The Coastal Plain Natural Division (#14) encompasses most of Alexander, Pulaski and Massa counties, with small, finger like portions extending into Union, Jackson and Pope counties.

This natural division has two distinct sections: the **Cretaceous Hills Section** and the **Bottomland Section**. The land flattens within the Coastal Plain Natural Division, the drainage is poor, and frequent flooding occurs.

The **Cretaceous Hills** extend in a narrow band from the Mississippi to the Ohio rivers and are comprised of gravel, sand, and clay. The hills are low and contain many seep springs. The **Bottomland Section** contains southern swamps consisting of bald cypress and water tupelo. This is their northernmost limit, with Heron Pond State Natural Area and Bottomland Swamp places to enjoy in this division. This swampy, southernmost location in Illinois is mild and has the warmest climate within the state.

The name **Illinois** comes from the Native American tribe living on the land when the area was first explored by French explorers Jacques Marched and Louis Joliet in 1673. In 1679, French explorer Robert Cavalier Sieur de La Salle named the river, Illinois. The name comes from "iliniwok," which means "warriors" or "men," and Illinois is the French variation of this Peoria Indian word. In 1717 Illinois became part of the Louisiana territory, and in 1763 was ceded to Britain. After the American Revolution, Illinois became a U.S. territory, and in 1818 it was declared the 21st state.

UPCOMING EVENTS

Confirm details of events before attending.

<https://efmls.org/events/>

See other show calendar links on our web site.

April 11-12, 2026: North Jersey Gem, Mineral & Fossil Show, by North Jersey Mineralogical Society. Midland Park High School, 250 Prospect St, Midland Park, NJ 07432; Sat 10-5; Sun 10-4.

April 25, 2026: Franklin Mineral Museum Mineral Show. Franklin Firehouse Parking Lot, 137 Buckwheat Road, Franklin, New Jersey. Saturday only 9-5.
www.franklinmineralmuseum.org/gem-mineral-show/

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.

Nov. 14-15, 2026: Friends of Mineralogy - Pennsylvania Chapter Symposium & Field Trip, West Chester, PA.

Geo-Sudoku Solution

U	F	C	T	A	L	G	S	O
A	O	L	S	C	G	U	F	T
G	S	T	F	U	O	L	A	C
C	L	O	A	S	T	F	U	G
S	G	U	O	L	F	C	T	A
F	T	A	C	G	U	O	L	S
T	U	G	L	O	S	A	C	F
O	A	F	U	T	C	S	G	L
L	C	S	G	F	A	T	O	U

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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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