

# Nittany Mineralogical Society Bulletin

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

Editor (see back page):

David C. Glick

January, 2018

Visit our web site: [www.nittanymineral.org](http://www.nittanymineral.org)

January 17<sup>th</sup> meeting:

## Selected topics in mineral and fossil collecting

by

Dr. Charles E. Miller, Jr.

*Our January meeting will be held Wednesday the 17th in room 114 (the large auditorium) Earth & Engineering Sciences Building on the west side of the Penn State campus in State College, PA. Maps are available on our web site.*

*6:45 to 7:45 p.m.: Social hour, refreshments in the lobby*

*7:45 to 8:00 p.m.: announcements, questions, answers about 8:00 p.m.: featured program*

*The event has free admission, free parking, and free refreshments, and is open to all; **parents/guardians must provide supervision of minors.** Bring your friends and share an interesting evening!*

This talk showcases selected topics in mineral and fossil collecting. While one objective is to purvey information, another is to share **the excitement of “the find.”** Most people get interested in, even excited about, good discoveries. With that in mind, **numerous videos** supplement other information so as to provide the next best thing to being there. Witness discoveries of selected minerals such as quartz crystals, geodes,

amethyst caves, and tourmaline. Similarly, discoveries of ammonites, shark teeth, Moroccan trilobites, and more are presented.

See the full illustrated article on page 4.



Amethyst “cathedral,” Masters Mineral Gallery, Elizabethtown College. D. Glick photo.

## Minerals Junior Education Day Saturday, April 7, 2018

Frank Kowalczyk will be coordinating NMS’s 23rd Annual Minerals Junior Education Day. It is set for Saturday, April 7, at Central Pennsylvania Institute of Science & Technology at Pleasant Gap, the same location as the last few years. Please save the date and think about how you might help bring this great event to families in our community.

At this event, kids get an empty egg carton when they check in, then go to a series of stations, each concerning a different aspect of mineral properties, rocks, fossils, etc. They learn about the topic from a demonstration or discussion, and receive a properly labeled specimen or educational item related to the topic, so they gather a whole collection in their egg carton. There is also a sales table with kid-friendly prices.

We are starting early to prepare for the 2018 event, seeking **volunteers** to help to present the stations, and ideas for stations which we (or you) might present. We also welcome advance donations of identified minerals, tumble-polished material, fossils, books, etc. which can be sold at child-friendly prices. To volunteer or get more details, **please contact Frank J. Kowalczyk:**

frank.j.kowalczyk@gmail.com  
or 814-238-8874



## Volunteer Needed for Registration Coordinator

A particular need for Minerals Junior Education Day help is for a registration coordinator to organize records of the payments and registration data that are received in the three weeks or so leading up to the event. Almost all registrations are now done online, only a few by phone. If you might be able to help, please e-mail Ellen at <nittanymineral.org@gmail.com>.

### ATTENDING THE JANUARY MEETING?

Donations of a few high quality, labeled door prize specimens are invited.

Your donated snacks will be welcomed.

Bring a friend!

## Holiday Dinner

Our **Holiday Dinner** on December 13<sup>th</sup> at Quaker Steak & Lube Restaurant turned out very well. We filled the Corvette room with members and friends having dinner, and Ruth Park, Bob Altamura, and NMS selling their wares for lots of extra interest.



Part of the Corvette Room at Quaker Steak & Lube Restaurant during the Holiday Dinner.

*D. Glick photo.*

## Weather Cancellation Policy

In case we experience active winter weather on a meeting date, our policy is to cancel the meeting only if evening classes at Penn State have been cancelled. That cancellation is publicized in the usual radio and TV service announcements.

Penn State notes that weather-related cancellation / closing information can be found at WPSU-FM, the news site <<http://news.psu.edu/>>, and <<http://www.facebook.com/pennstate>>

- Editor

## Geologic Guidebooks Database

From American Geosciences Institute's (AGI) web site: "The Geologic Guidebooks of North America Database consists of references to geologic field trip guidebooks of North America (United States, Canada, Mexico)." There are various browsing and search options; advanced search allows filtering by state or region. See <http://guidebooks.americangeosciences.org/vufind/>

## New Articles on Axis online

Mineralogical Record's peer-reviewed, online-only journal Axis has new articles since our last report. See <http://www.minrec.org/journal.asp> for:

Specimens Stolen from the Fallbrook Museum 9/26/2017

The Calumet & Hecla Mining Company  
Semi-Centennial Employee Service Medals of 1916:  
A Personal View by William A. N. Severance  
8/28/2017

The Kay Robertson Collection by Thomas P. Moore  
4/6/2017

### Geo-Sudoku

by David Glick

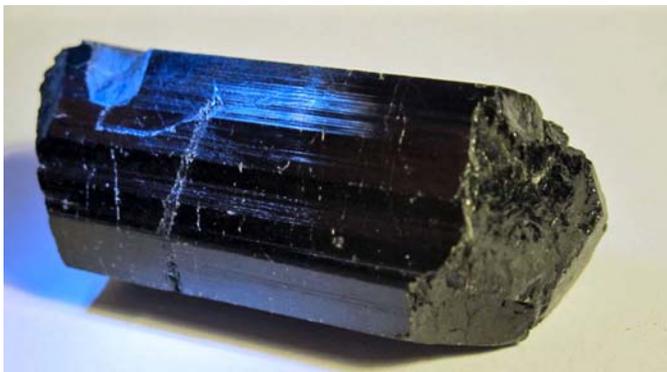
This puzzle contains the letters ACEIGHLNR. One row or column spells the location of the 2018 EFMLS/AFMS Convention and Show. As usual, if you've read this issue, you've seen the word, or a variation of it. Each block of 9 squares, each row, and each column must contain each of the nine letters exactly once. The solution is on page 8.

I	H				C		L	G
			A			R		
		L	E					
C		A					H	
	I		C	E	N		R	A
				H			E	
				G		E	C	
E		R				I		H
H		G				L		R

### JANUARY MEETING DOOR PRIZES!



Quartz geode, Mexico, each half approx. 2.4"



Schorl crystal, terminated, Erongo Mtns., Namibia. 2". Both specimens ex-J. Passaneau. D. Glick photos.

### FEDERATION NEWS

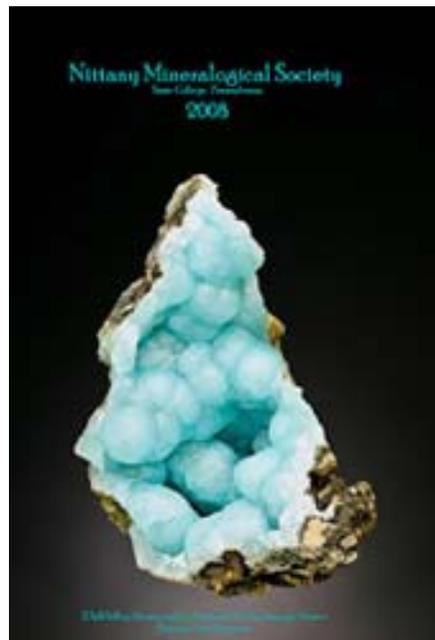
Nittany Mineralogical Society, Inc., is a member of EFMLS, the Eastern Federation of Mineralogical and Lapidary Societies, and therefore an affiliate of AFMS, the American Federation of Mineralogical Societies. We present brief summaries here in order to encourage readers to see the entire newsletters.

The **EFMLS Newsletter** is now being distributed electronically; a link is available on our web site [www.nittanymineral.org](http://www.nittanymineral.org). The January issue begins by noting that registration for EFMLS Wildacres Workshops, Spring (May 21-27) and Fall (Sept. 4-10), has begun. Registration forms and the Spring class list are included in the issue. The EFMLS Annual Convention, which will also be the AFMS Convention this year, will be held in Raleigh, North Carolina, April 6-8, with field trip April 9 (see page 7). Tickets for the AFMS Endowment Fund Drawing are available at \$5 each or 5 for \$20. Minutes of the 2017 EFMLS Annual Meeting are presented.

The **AFMS Newsletter** is available by the same methods. The December - January issue was covered last month.

The Federations encourage everyone to see the web sites for the complete Newsletters. There's a lot there!  
-Editor

### Ten Years Ago in NMS



At our January 2008 meeting, Bob Altamura spoke on Active Volcanoes of Costa Rica. We were starting to prepare for our third annual gem and Mineral Show, to be held in June. John Passaneau photographed a Mexican hemimorphite specimen for the 2008 show poster.

## Selected topics in mineral and fossil collecting

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This talk showcases selected topics in mineral and fossil collecting. While one objective is to purvey information, another is to share the excitement of “the find.” Most people get interested in, even excited about, good discoveries. With that in mind, numerous videos supplement other information so as to provide the next best thing to being there. Witness discoveries of selected minerals such as quartz crystals, geodes, amethyst caves, and tourmaline. Similarly, discoveries of ammonites, shark teeth, Moroccan trilobites, and more are presented.

During the Cretaceous (145-79 million years ago, mya), North America was bisected when the Arctic Ocean connected to the Gulf of Mexico. To the east was Appalachia and to the west was Laramidia. In between was the Western Interior Seaway that shifted its areal



Figure 1: The writer in 1987 after extricating a Cretaceous ammonite from a large concretion at Kremmling, CO.

extent through time. Sedimentary rocks associated with this sea yield prolific and interesting fossils. For example, the Pierre Shale represents deeper-water sediments of the seaway and a whole host of fossils are found in this formation. Among those are perhaps the largest ammonites, ranging up to 22 inches, in the 48 states (Figure 1). Probably the best-known field location for these is at Kremmling, Colorado. These are found in big concretions that are cracked open to unveil the ammonites within.

Another formation of the Western Interior Seaway is the Niobrara Chalk, especially known in Kansas. Chalk is a limestone formed from accumulations of tests (shells) of microfossils known as coccoliths. The White Cliffs of Dover are a chalk deposit. Extraordinary fossils from this formation include plesiosaurs, mosasaurs, and pterosaurs.

The long shoreline of the Western Interior Seaway provided a setting for dinosaur footprints (Figure 2). One of the best locations to see these is at Dinosaur Ridge outside Denver, Colorado. Of particular note are parallel trackways that are evidence of gregarious behavior of dinosaurs. Prior to such information, it was only speculated that dinosaurs were social animals, moving in coherent groups. This site is significant enough that Penn State Geosciences regularly takes students there.

Popular, albeit much younger, fossil collecting involves shark teeth, including those of the 50-foot Miocene (22-11 mya) shark *Carcharodon megalodon*. One of the best-known sites for these teeth is the Lee Creek Phosphate Mine at Aurora, North Carolina. However, other sites provide excellent collecting. One selected video documents a locality at Summerville, South Carolina. The viewer will be challenged not to appreciate the ease of collecting prolific Miocene shark teeth of all sizes. This rivals when the writer collected at the Lee Creek Mine. After spending hours in the pits, we went to conveyor belts that dumped small rocks. Among those rocks were sharks teeth up to two inches in length. Picking was easy and rewarding.

At many rock and mineral shows, one sees Moroccan trilobites. The Nittany Mineralogical Society sells these at its Junior Education Day. One issue is whether some are fakes. A video takes the viewer to Morocco for digging trilobites. These are real.

In 2001, our Society hosted a symposium on pegmatites. This was a topic of particular interest to collectors because these coarse-grained igneous rocks commonly yield large crystals of many different minerals. The famous large crystals from Minas Gerais, Brazil are from pegmatites. Such crystals are frequently seen in major natural history museums around the world. One crystal in the Etta Mine of South Dakota was 42 feet long, 5 feet in diameter, and yielded 90 tons of spodumene. Pegmatites in Pennsylvania occur in southeastern counties such as Chester, Philadelphia, and Delaware. Although these do not yield crystals as large as those in Brazil, Pennsylvania



Figure 2: Cretaceous dinosaur tracks at Dinosaur Ridge outside Denver, CO. Image by the writer.

pegmatites were important because they provided a variety of minerals such as mica and feldspar for industrial uses. Today, they are inactive (Figure 3). Yielding 20+ minerals, these remain favorite sites for collectors, if accessible. The writer used to take students to pegmatite localities in the aforementioned counties. Then, about 20 years ago, in considering revisiting those localities, it was learned that most – or all – are now inaccessible due to land development. However, the excitement of pegmatite mineral collecting will be seen in two videos.



Figure 3: Abandoned pegmatite at Coatesville, PA. Image by the writer.

For years, Jeff Smith – the Geode Guy – has presented to our Society. His talks involve geodes, both from Mexico and from Indiana. Two videos are an extension of his talks. One depicts using heavy equipment, a departure from the hand picks commonly used. What a way to prospect for geodes.



# Rutgers Geology Museum

## 50<sup>th</sup> Annual Open House



SATURDAY, JANUARY 27, 2018

PRESENTATIONS IN SCOTT HALL ROOM 123

10:00 am to 11:00 am	<p><b>“New Jersey Fisheries in a Global Context”</b>  <i>Presented by Dr. Olaf Jensen</i>            Department of Marine and Coastal Sciences, Rutgers University</p>
11:30 am to 12:30 pm	<p><b>“Empire of the Apes: the recent discovery of an ape and human ancestor in Africa”</b>  <i>Presented by Dr. Isaiah Nengo</i>            Turkana Basin Institute and Department of Anthropology,            Stony Brook University</p>
2:00 pm to 3:00 pm	<p><b>“The Appalachians and how they got that way: Structure and dynamics of eastern North America”</b>  <i>Presented by Dr. Maureen Long</i>            Department of Geology and Geophysics, Yale University</p>

### Mineral Sale - Scott Hall Room 135 from 9:00 am to 3:00 pm

*Credit cards, cash and checks now accepted; Sales tax applied to all purchases unless tax-exempt status is provided*

- *Rock and mineral identification* – Scott Hall Room 205 from 11:00am to 2:00 pm
- *Make-and-take stations for kids* (all ages) - Geology Museum from 11:00 am to 2:30 pm

### Hands-on activity sessions for kids (ages 8+) in Scott Hall

10:30 am - 11:30 am	Room 204	Tracking Skulls
	Room 203	Mapping Our World
	Room 202	Tag-A-Fish
12:30 pm – 1:30 pm	Room 204	Tracking Skulls
	Room 203	Mapping Our World
	Room 202	Tag-A-Fish
1:30 pm – 2:30 pm	Room 204	Tracking Skulls
	Room 203	Mapping Our World
	Room 202	Tag-A-Fish



**CART Captioning Services** will be available for all RUGM lectures. Contact the museum at 848-932-7243 or at [geologymuseum@sas.rutgers.edu](mailto:geologymuseum@sas.rutgers.edu) for more information about this event.

Check out our website at <http://geologymuseum.rutgers.edu>

## April 2018 EFMLS / AFMS Convention and Show

Raleigh, North Carolina  
Friday, April 6 Sunday, April 8  
Field trip - Monday, April 9  
Hosted by the Tar Heel Gem & Mineral Club

We're delighted to welcome members of AFMS affiliated and Eastern Federation clubs to Raleigh, NC for the annual convention of both federations. We're planning on an interesting and fun weekend in a beautiful part of the country which many of you may not yet have visited.

The host hotel for the convention is  
The Embassy Suites by Hilton, Raleigh Crabtree  
4700 Creedmoor Rd, Raleigh, NC 27612  
Phone: (919) 881-0000

A block of rooms has been set aside, but you must call the hotel directly to make room reservations. Let the reservations clerk know that you are with the EFMLS Convention (or Tar Heel Gem & Mineral Club) to obtain the group rate. This rate is good for Wednesday, April 4 through Monday, April 9.

Various registration forms will be available on the EFMLS and AFMS **web sites** very soon.

### Schedule of Events:

Thursday, April 5:  
9:00 am - AFMS Uniform Rules Meeting  
10:30 am - AFMS Annual Meeting followed by the AFMS Scholarship Foundation meeting.  
3:00 pm - ALAA annual meeting  
6:30 - 8:30 pm - AFMS Cracker Barrel

Friday, April 6:  
Tar Heel Gem & Mineral Club Show  
Noon - Buffet Lunch at hotel restaurant (fee)  
2:30 pm - Field trip to a local museum (tentative)  
7:00 pm - EFMLS Annual Meeting

Saturday, April 7  
Tar Heel Gem & Mineral Club Show  
6:00 pm - Awards banquet social hour with cash bar  
7:00 pm - Awards Banquet with EFMLS Auction

Sunday, April 8  
Tar Heel Gem & Mineral Club Show  
8:30 am - Breakfast with the Editors and Webmasters

Monday, April 9  
Field trip to Hiddenite, NC. Fee \$20 per person.

## THE TAR HEEL GEM & MINERAL CLUB PRESENTS



### THE FORTY SECOND ANNUAL CAPITAL AREA GEM & MINERAL SHOW

Kerr Scott Building, Fairgrounds, Blue Ridge Road, Raleigh, NC

**April 6, 7 & 8 2018**

*FREE  
PARKING*

**Friday 3:00 – 8:00**

**Saturday 10:00 – 6:00**

**Sunday 10:00 – 5:00**

*FREE  
ADMISSION*

#### CLUB AREAS

Geodes

Hospitality

Silent Auction

Demonstrations

Fossils

Findings

Gemstones

Rough Material

Ring Sizing

Finished Jewelry

Mineral Specimens

Mineral Identification

### Some Upcoming Shows and Meetings

Our web site <http://www.nittanymineral.org> has links to more complete lists and details on mineral shows and meetings around the country. See [www.mineralevents.com](http://www.mineralevents.com) for more/

**Jan. 20, 2018:** Philadelphia Interclub Swap & Sell, by Phila. Mineralogical Society. THIS IS THE NEW LOCATION Lu Lu Temple, 5140 Butler Pike, Plymouth Meeting, PA 19462. Sat. only, 9-noon. <http://www.phillyrocks.org/>

**Jan. 27, 2018:** Rutgers Geology Museum Open House. See p. 6 & <http://geologymuseum.rutgers.edu>

**March 3-4, 2018:** Delaware Mineralogical Society Gem, Mineral & Fossil Show, Theme: "Favorite Finds." Watch for news of Symposium.

**March 24-25, 2018:** Philadelphia Mineral Treasures and Fossil Fair, by Phila. Min. Soc. & Delaware Valley Paleo. Soc. LuLu Temple: 5140 Butler Pike, Plymouth Meeting, PA 19462 <http://www.phillyrocks.org>

**March 24-25, 2018:** 49th Annual Gem and Mineral Show sponsored by the Che-Hanna Rock & Mineral Club. Wysox Vol. Fire Co Social Hall, 111 Lake Rd; Wysox, PA [www.chehannarocks.com](http://www.chehannarocks.com)

**April 6-8, 2018:** EFMLS / AFMS Annual Convention & Show, Raleigh NC. See page 7.

### Classifieds

FOR SALE: I am selling a large percentage of my worldwide collection and thousands of Pennsylvania specimens, many self collected and old classics. There's plenty of variety, and plenty for different levels of collector interest. Anyone interested should call to set up an appointment. Thanks, Skip Colflesh, Hershey, PA phone 717-805-2027

### Geo-Sudoku Solution

I	H	E	R	N	C	A	L	G
N	G	C	A	L	H	R	I	E
R	A	L	E	I	G	H	N	C
C	E	A	G	R	I	N	H	L
L	I	H	C	E	N	G	R	A
G	R	N	L	H	A	C	E	I
A	L	I	H	G	R	E	C	N
E	C	R	N	A	L	I	G	H
H	N	G	I	C	E	L	A	R

### 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 \$20 (regular member), \$7 (student rate), \$15 (seniors), \$30 (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](http://www.nittanymineral.org)), make checks payable to "Nittany Mineralogical Society, Inc." and send them in as directed, or bring your dues to the next meeting.

We want to welcome you!

### CONTACT INFORMATION

mailing address:

Nittany Mineralogical Society, Inc.  
c/o S. Bingham, Treasurer  
145 Goddard Cir.  
Penna. Furnace PA 16865

### SOCIETY OFFICERS

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Dr. Bob Altamura (Vice-President) 814-234-5011 (h)  
e-mail: [raltamura@comcast.net](mailto:raltamura@comcast.net)  
John Dziak (Secretary)  
e-mail: [jjd264@psu.edu](mailto:jjd264@psu.edu)  
Stuart Bingham (Treasurer)  
E-mail: [sebing145@comcast.net](mailto:sebing145@comcast.net)

### OTHER CONTACTS

Field Trips: Ed Echler 814-424-8577 (new 2017)  
e-mail preferred: [eechler@comcast.net](mailto:eechler@comcast.net)  
Junior Rockhounds: Dr. Andrew Sicree  
814-867-6263 (h) e-mail: [aas132@psu.edu](mailto:aas132@psu.edu)  
Membership Chair: David Glick (see above)  
Programs: Dr. Duff Gold 865-7261(o), 238-3377(h)  
e-mail: [gold@ems.psu.edu](mailto:gold@ems.psu.edu)  
Door Prizes: Dr. Bob Altamura (see above)  
Facebook & Publicity: John Dziak: [jjd264@psu.edu](mailto:jjd264@psu.edu)

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](mailto:xidg@verizon.net)  
209 Spring Lea Dr. phone: (814) 237-1094 (h)  
State College, PA 16801-7226

Newsletter submissions are appreciated by the first Wednesday of the month. Photographs or graphics are encouraged, but please do not embed them in word processor files; send them as separate graphics files (TIF, or good to highest quality JPEG files, about 1050 pixels wide, are preferred). Please provide captions and name of photographer or artist.

Visit us at [www.nittanymineral.org](http://www.nittanymineral.org)