March 20th meeting opens at 6:00 p.m.:

**Geode Night**
presented by Jeff Smith
“The Geode Guy”

*Our March meeting will be held Wednesday the 20th in the lobby and room 114 auditorium of Earth & Engineering Sciences Building on the west side of the Penn State campus in State College, PA. Maps are available through our web site.*

6:00 to 7:10 p.m.: Purchasing & opening geodes in lobby about 7:15 p.m.: featured program on Mexican geodes

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

NMS is very happy to welcome back Jeff Smith, “the Geode Guy,” to present Geode Night to our club. Starting at 6:00 p.m. in the lobby, various sizes of whole geodes will be available for purchase at $5 and up. After you buy, Jeff will crack them open for you and you’ll be the first person ever to see the crystals inside. If yours turns out to be solid, you can pick another at no charge. Halves of opened geodes and nodules (some sawn and polished) from Mexico and Indiana will be $3 and up.

Jeff will have Mexican geodes from locations such as Las Choyas and Trancas. In addition, there will be polished halves and larger opened geodes, including some from Jeff’s

An unusual geode with both solid and hollow sections.  
*Photo courtesy of Jeff Smith.*

No Junior Rockhounds Meeting - All Are Invited to GEODE NIGHT

We won’t have a separate Juniors meeting in March, but families are welcome at our regular meeting on March 20th, Geode Night, and should enjoy it (see announcement at left). And don’t miss Minerals Junior Ed. Day (see below)!

Juniors should also enjoy our booth on lapidary and earthquakes at Exploration-U: State College on March 19 (see article on page 3).

- Editor

NMS will demonstrate lapidary (gemstone carving) and earthquake science at the EXPLORATION-U Event for the community on March 19 - see p. 3

Our annual event for kids:

**Minerals Junior Education Day April 6**

Advance registration required
Please register by April 3 - $5 per child

Sprad the word!

Our annual Minerals Junior Education Day is fun and rewarding for kids and parents who attend, as well as NMS volunteers who present the event. We can always use a few more volunteers (see page 3). The event will be held at a new location this year: Boalsburg Fire Hall, 103 E. Pine St., Boalsburg PA 16827. Please register in advance for the time (between 9:30 a.m. and 1:00 p.m.) that you will arrive (see below)

Students in grades 1-8 and their parents are invited to come and learn about minerals, crystals, gemstones, and fossils. 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 or fossils. They learn about the topic from a demonstration or discussion, and receive a properly labeled specimen related to the topic, so they gather a whole collection in their egg carton. The following stations are planned:

- Gold panning
- Iron Minerals & Ironmaking
- Fluorescence
- Sphere grinding machine
- Fossil shells
- Cleavage
- and others

- plus a sales table at kid-friendly prices.

PLEASE tell your friends and relatives and their kids!

Continued with

REGISTRATION INFORMATION on page 2
Geode Night	Continued from page 1

trips to the state of Indiana. The Las Choyas geode deposit was described in Jeff’s extensive, illustrated article in the March-April 2010 issue of Rocks & Minerals magazine. This NMS Bulletin (available on our web site, www.nittanymineral.org) carried articles about geodes in the December 2011 and January 2012 issues, and Rock & Gem magazine’s February 2012 issue included “The Hector Carrillo Family: the human story behind Mexican lapidary treasures,” by Brad Cross.

At about 7:15 p.m., after the geode cracking has been completed, Jeff Smith will present a program on geodes in the auditorium, room 114. He and his family have visited the geode mine in Mexico, and he has slides, good stories and video of the long trip out to the mine and then going underground to mine a few geodes themselves. It’s fascinating! The program is family friendly and very interesting!

Volunteers Needed April 6

Plus Other News

by David Glick, NMS President

Even more than usual, we need volunteers for our April 6th Minerals Junior Education Day. The people for two of our regular stations won’t be available this year, so we need some filling in! Please contact me (see p. 8) if you might be able to help.

We haven’t had a Junior Rockhounds meeting yet in 2013; if you might be able to lead a meeting in the late afternoon or evening, please contact me or Dr. Andrew Sicree (see p. 8). Dr. Sicree can provide materials, ideas and plans for the meetings.

We are still searching for a door prize coordinator and a refreshments coordinator for our monthly meetings on campus. Since we don’t generally have either of those activities at Geode Night in March, the duties would start with the April 17th meeting. Please contact me (see p. 8) if you might be able to help.

Your help will be greatly appreciated!

Junior Education Day	Continued from p. 1

Register in advance, starting March 21, by April 3:

BY E-MAIL

Please register by e-mail if possible, as described on the web site www.nittanymineral.org - that’s the easy way for us to get your information correctly. We will have a PayPal payment option there.

OR BY TELEPHONE

Call Bob Altamura at (814) 234-5011 between 10 a.m. and 5 p.m. to reserve a starting time slot of your choice at the event (each half-hour from 9:30 a.m. to 1:00 p.m. on April 6, so that we can spread the crowd out through the day). He will ask for names and addresses of the students so that checking in on-site will go quickly (we will also enter them in our door prize drawing and send them an announcement next year).

THEN send $5.00 per student (check payable to “Nittany Mineral. Soc.” or simply NMS) to:

Nittany Mineral. Soc.
2231 W. Whitehall Rd.
State College PA 16801

Registration is limited so that we may provide a collection of specimens for each student. Parents come along for free, but don’t get the specimens.

We are seeking volunteers to help to present the stations; contact Dave Glick (see page 8). We welcome advance donations of identified minerals, tumbled material or fossils which can be sold at child-friendly prices. As always, we are grateful to our co-sponsors who provide crucial support in various ways: Bald Eagle Chapter of the Gold Prospectors Association of America, Junior Museum of Central Pennsylvania, and the Penn State Earth & Mineral Sciences Museum.

For updates, directions and maps, see www.nittanymineral.org

PUBLICITY NOTE: We appreciate your helping us publicize this event - PLEASE be sure to include “advance registration required” and our web site, www.nittanymineral.org Thank you!
NMS at Exploration-U, March 19:
A Science, Technology, Engineering & Math
Event for the Community
by Bob Altamura

NMS members Bob Altamura and John Passaneau will offer an exhibit titled “Lapidary (Gemstone Carving) and Earthquakes” on Tuesday, March 19, 2013 at 6:00 p.m. to 8:00 p.m. at the State College Area High School South Building cafeteria. The exhibit will be part of Exploration-U which is billed as a science, technology, engineering and math event (STEM) for the community (formerly Exploration Day). The event offers free parking and free admission. Exploration-U is a presentation of the State College Area School District (SCASD) in collaboration with The Penn State Eberly College of Science Outreach and Science Engagement office. Activities from SCASD students & faculty and Penn State are advertised. Activities include topics in astronomy, chemistry, fossils, minerals & rocks, physics, telescopes, and much more. NMS was invited to participate by Patricia Kenney of the Penn State Eberly College of Science Outreach and Science Engagement office.

We will offer discussion of ‘Lapidary’ and will exhibit various types rough rock used for lapidary, as well as rock slabs, partially prepared rock ready for grinding and polishing, and finished cabochons (as shown in the photo below). Tools for slabbing will be exhibited and periodic brief demonstrations of gemstone carving and rock tumbling will be held. The ‘Earthquake’ portion of the station will cover earthquakes and their causes, as well as the action and response of a seismometer. Duff Gold will be available to assist during the event.

‘Secondary Minerals & Volcanic Rocks’
Exhibit by NMS Opens at the
Penn State Earth & Mineral Sciences Museum
By Bob Altamura

As a part of our collaboration with the Earth & Mineral Sciences Museum, the Nittany Mineral Society has prepared a new museum exhibit for the Penn State community. The new exhibit is titled Secondary Minerals & Volcanic Rocks and is one of a series of museum exhibits that NMS has presented. This exhibit was prepared by NMS members John Passaneau and Bob Altamura. Julianne Snider, Assistant Director of the EMS Museum, assisted with the graphic presentation of a map, photographs and text.

The exhibit comprises a table-top display case filled with selected minerals and rocks from volcanic deposits from various places around the world. Showcased are specimens from famous traprock (basalt) mineral-collecting localities including the Deccan Traps of India, Parana Traps of Brazil, the New Jersey Traps, and the Connecticut Traps. Included are specimens of common volcanic rocks including volcanic glass and geodes from both rhyolitic and basaltic lava flows. Samples of obsidian and perlite are featured and noted as lapidary materials. A snowflake obsidian pendant necklace and tumble polished Apache tears are displayed.

The secondary minerals on exhibit formed primarily for hydrothermal fluids that precipitated in vugs and fractures within solidified volcanic rock. Examples on exhibit include apophyllite, barite, datolite, malachite, prehnite, and quartz. Some secondary minerals associated with volcanic rocks belong to the zeolite group. Zeolites are a special group of hydrothermal minerals composed of hydrous aluminosilicates; they share similarities in crystal structure characterized by an open framework structure of interconnected silica tetrathedra with cations and water molecules that can interchange. Zeolites commonly occur as well-formed crystals in cavities in basalt. Zeolites on exhibit include natrolite, stilbite, thompsonite, and clinoptilolite. The exhibit also includes a couple of unusual secondary minerals that sublimated directly from volcanic fumes to solids either within a volcanic crater or side vents. Specimens of volcanic rocks and minerals are from the collections of John and Bob.

Graphics for the exhibit include a location map and photographs of the Deccan Traps, the active Poas volcano and Arenal volcano (Costa Rica). Text about volcanic rocks and associated secondary minerals, including zeolites, is also included.

The EMS Museum is on the ground floor of Deike Building on Penn State’s University Park campus. The NMS exhibit is located in the Gallery Room of the museum. The Museum hours are Monday through Friday, 9:30 a.m. to 5:00 p.m. (Closed weekends and legal holidays, including University recess between Christmas and New Years).
Collecting at Franklin / Sterling Hill Events?

Events for collecting fluorescent minerals are coming up at Franklin and Sterling Hill, New Jersey. The Sterling Hill Super Dig, with special extras this year, is April 27; see page 5 and http://sterlinghillminingmuseum.org/superdig/index.php http://sterlinghillminingmuseum.org/superdig/schedule.php The Super Dig will be an official event of Nittany Mineralogical Society, so paid NMS members will be covered by NMS insurance, and can take advantage of early registration at 8:00 a.m. The Buckwheat Dump Night Dig at Franklin is on June 2 http://www.franklinmineralmuseum.com/activities.htm.

If you are going or are interested in going, please contact NMS member Steve Grazier at <triviasteve@yahoo.com>, who will check on possibilities for coordinating travel to the events. Do you want to get a ride? Give a ride? Leave central Pennsylvania early in the morning? Get there the previous evening? Let Steve know.

- Editor

Geo-Sudoku

by David Glick

This puzzle contains the letters ACDENORSY, and one row or column spells out the category of minerals that form some time after the rock containing them is deposited (see p. 3). 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.

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### Schedule of Events

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| 7:00 am | **Gates Open**  
Everyone remains in the parking lot, check-in area until 9am. Snack bar, Museum Shop, etc. will be open. |
| 8:00 am | **Early Birds**  
Those who pre-registered AND have their club ID or proof of insurance: can check in, sign papers, get wrist band, maps, etc. |
| 9:00 am | **SUPER DIG begins. Don’t get trampled going into the pits!**                                                                                     |
| 10:00 am| **New Glowhound orientation.**  
Meet across from the Registration Area, by the walkway up to the museum.                                                                            |
| 11:00 am| **Official Tour of the Lower Mine and Museums.**  
Tour given by Sterling Hill Staff.  
You MUST have a ticket. Go to the counter in the Museum Shop and show your wristband to get your Ticket! (Do this BEFORE 11 a.m.)  
Meet with tour leader in Main Building, by the eating area.  
Note: ONE TOUR per person at either 11am OR 1pm.                                                                 |
| 11:00 am| **Guided tour of the newly opened Trotter Tunnel.**  
You MUST have a hard-hat, strong flashlight and safety goggles to participate.  
Meet with tour leader in front of registration tent.  
A very limited number of hard hats will be available for loan for the tour.                                                                 |
| 1:00 pm| **Official Tour of the Lower Mine and Museums.**  
Tour given by Sterling Hill Staff.  
You MUST have a ticket. Go to the counter in the Museum Shop and show your wristband to get your Ticket! (Do this BEFORE 1 p.m.)  
Meet with tour leader in Main Building, by the eating area.  
Note: ONE TOUR per person at either 11am OR 1pm.                                                                 |
| 1:00 pm| **Guided tour of the newly opened Trotter Tunnel.**  
You MUST have a hard-hat, strong flashlight and safety goggles to participate.  
Meet with tour leader in front of registration tent.  
A very limited number of hard hats will be available for loan for the tour.                                                                 |
| 1:15 pm| **Upper Mine and Mill Tour**  
Get your “Last Day Of Mine Operation” Specimen.  
(See photo on our web page!)  
Meet across from the Registration Area, near the walk up to the Museum.  
Note: you may attend both Upper Mine tours, but only ONE specimen per person.                                                                 |
| 3:15 pm| **Upper Mine and Mill Tour**  
Get your “Last Day Of Mine Operation” Specimen.  
Meet across from the Registration Area, near the walk up to the Museum.                                                                 |
| 4:45 pm| **Evening Meeting**  
UV Lamp give away and more. MUST ATTEND TO WIN.  
Meet across from the Registration Area (see instructions for 10am orientation, above).                                                                 |
| 6:30 pm| **World Famous Black-Out Tour of Mine!**  
Must bring UV Safety Glasses. Bring Your own Lamp!  
Meet across from Registration Area (the usual place!). (See our website for photos from last year’s tour).                                                                 |
| 8:30 pm| **Illumination of “The Fluorescent Wall” out in the pit area!!**  
We have to wait for the sun to go to sleep, so the UV floodlights can light up the gigantic mineral wall of colors. Also, night digging begins using your own UV lamps. |
| 11:00 pm| **Super Dig concludes.**  
All GlowHounds MUST leave Pit Area. Checkout will continue until everyone is checked out. Drive carefully and have a safe trip home, and don’t get a flat tire from all the rocks in the trunk. |
AFMS/SFMS 2013 Annual Meeting
September 18th-22nd
Sponsored by the Jacksonville Gem and Mineral Society, Inc
http://www.jaxgemandmineral.org/  A 501(c)(3) not for profit organization

All AFMS and SFMS meetings will be hosted at the:
Marriott, Jacksonville, 4670 Salisbury Road
Jacksonville, FL 32256, 904-296-2222 or 1-800-962-9786
(Mention AFMS meeting for $82 room rate. Offer Expires August 5, 2013.) (This rate is good from Sep 15th to 25th)

AFMS Uniform Rules - Wednesday 7pm
AFMS Annual Meeting – Thursday 9am
AFMS Scholarship foundation- After Annual Meeting

You are invited Thursday Night to Hanna Park at the beach. Star Gazing with Northeast Florida Astronomy Society members and Telescopes (Saturn will be spectacular!) Cook out provided by Host society JGMS.

JGMS Annual Show and Sale Starts – Friday 1pm
SFMS Cracker Barrel Meeting – Friday 7pm
SFMS Annual Meeting – Saturday 9am
ALAA Meeting – Saturday 2:30pm
Awards Banquet – Saturday 6pm
Editors and Webmasters Breakfast – Sunday 9am

40+ retail dealers, Fantastic exhibits and speakers from around the country. See the NASA Moon Rock, Lectures on near earth bodies, meteorites, demonstrations, workshops, hourly door prizes, silent auctions and more.
Enjoy the Annual Jacksonville Gem Show!!!
Philadelphia Mineral Treasures and Fossil Fair
32nd Annual Show and Sale

LuLu Temple:
5140 Butler Pike,
Plymouth Meeting, PA 19462

Saturday April 6th 10:00 AM – 5:00 PM
Sunday April 7th 10:00 AM – 4:00 PM

Sponsored by the Philadelphia Mineralogical Society and the Delaware Valley Paleontological Society

Admission - Adults $5.00 – Kids under 12 $1.00 - Uniformed Scouts Free.

Fossils, Minerals, Gems, and Jewelry for sale.
Fossil and Mineral Exhibits and Demonstrations.
Learning activities including a free Fossil Dig for children and a Kids corner with free mineral specimens and scouting merit badge information.
Food, Beverages, and Door Prizes!

See “Mineral Show” at http://www.philamineralsociety.org/

Educational Talks and Speakers (Saturday):

Saturday, April 6
11:30 am
“Mineral Mysteries of the Lewis and Clark Expedition”
Doug Klieger, PhD, taught and did research at Villanova for 38 years. He is now the Volunteer Curator for Mineralogy at the Academy of Natural Sciences at Drexel University.

1:00 pm
“History of Micromounting & The Leidy Microscopical Society”
John Ferrante was introduced to micromounting in 1998, joined the Leidy Society and is a member of the Baltimore Micromounting Society. He is now an honorary member of the Leidy Society.

2:30 pm
“New Jersey Fossils and Fossils in the Academy of Natural Sciences”
Ned Gilmore is Collections Manager of Vertebrate Zoology at the Academy of Natural Sciences at Drexel University.

Sunday, April 7
1:00 pm
“Paleontology and Stratigraphy of the Atlantic Coastal Plain”
Dr. Lauck Ward is Curator Emeritus of the Virginia Museum of Natural History.

2:30 pm “Silver Mining in Morocco”
Bob Whitmore is a mining expert and owner of the famous Palermo Mine.

Franklin County Show
Chambersburg, PA

35th Annual Gem- Mineral & Jewelry Show

Jewelry - Gemstones - Minerals
Fossils - Displays - Door Prizes

Hamilton Heights Elementary School
1589 Johnson Road
Chambersburg, PA

Directions: Exit 16 off Interstate 81 at Route 30 West. Travel through Chambersburg 2.2 miles to traffic signal at Sollenberger Rd. Turn right on Sollenberger Rd and go 1.0 mile to Johnson Rd on right. The school is .3 mile on the left.

March 23 & 24, 2013

Saturday 10 am- 5 pm  Sunday 10 am- 4 pm
Admission $4.00
Children under 12 free with adult

44nd ANNUAL
GEM & MINERAL SHOW
Presented by
Che-Hanna Rock & Mineral Club, Inc.
A 501c3 not-for-profit organization
MAR. 23, 2013  9 a.m. – 5 p.m.
MAR. 24, 2013  10 a.m. – 4 p.m.

ATHENS TOWNSHIP VOL. FIRE HALL
211 HERRICK AVENUE, SAYRE, PA

Outstanding Geological Exhibits Presented by Carnegie Museum of Natural History and Paleontological Research Institute

Special Exhibit & Silent Auction by Carnegie Museum Fossil Exhibit by Paleontological Research Institute

Demonstrations of Cabochon Making, Geode Cutting And Faceting

Fluorescent Mineral Programs by UV-Bob -- Fossil ID by Bill Klose —

Exhibits of Minerals, Gems, & Indian Artifacts Mini-mine for Kids

Dealers with Minerals, Gemstones, Fossils, Jewelry and Hobby Supplies Door Prizes

Food Available on Premises

Donation Requested: Adults $3.00  * Students $1.00  ** Under 8 Free  *

See http://www.chehannarocks.com/show.html for driving directions and more
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.


May 11, 2013: South Penn Spring Rock Swap, by Central PA and Franklin County R&M Clubs; South Mountain Fairgrounds, 1.5 miles West of Arendtsville, PA on Rte. 234.


June 1, 2013: Spring Mineralfest by Pennsylvania Earth Sciences Association. Macungie Mem. Park, Macungie, PA. Saturday only 8:30 - 3:00. www.mineralfest.com


Sept 14-15, 2013: CPRMC Show, Harrisburg


Oct. 26, 2013: South Penn Fall Rock Swap, by Central PA & Franklin County R&M Clubs; South Mountain Fairgrounds, 1.5 miles West of Arendtsville, PA on Rte. 234.

Geo-Sudoku Solution

E Y S D O R C N A
A D N E S C O Y R
R C O Y A N S D E
S E C O N D A R Y
D A Y R E S N C O
O N R C Y A D E S
C O D S R Y E A S
N R E A C O Y S D
Y S A N D E R O C

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 prorated 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 to

Nittany Mineralogical Society, Inc.
P.O. Box 10664
State College, PA 16805

or bring your dues to the next meeting.

We want to welcome you!

SOCIETY OFFICERS

David Glick (President) 814-237-1094 (h) e-mail: xidg@verizon.net
Dr. Bob Altamura (Vice-President) 814-234-5011 (h) e-mail: raltamur@fscj.edu
John Passaneau (Treasurer) 814-231-0969 (h), e-mail: jxp16@psu.edu
Ellen Bingham (Secretary) e-mail: emb22@psu.edu

OTHER CONTACTS

Field Trips: Ed Echler 814-222-2642 e-mail preferred: eechler@comcast.net
Junior Rockhounds: Dr. Andrew Sicree 814-867-6263 (h) e-mail: sicree@verizon.net
Membership Chair: David Glick (see above)
Programs: Dr. Duff Gold 865-7261(o), 238-3377(h) e-mail: gold@ems.psu.edu
Door Prizes: volunteer needed!
Facebook: Mike Zelazny e-mail: maz166@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
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. If you include photographs or graphics, 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