Nittany Mineralogical Society Bulletin

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

September, 2007 **www.ems.psu.edu/nms/** *Editor: David C. Glick (see p. 4)*

September 19th meeting:

The Iron Ores of Greenwood Furnace

presented by Paul T. Fagley

Our September meeting will be held Wednesday the 19th at 7:30 p.m., in the room 116 auditorium of Earth & Engineering Sciences Building on the west side of the Penn State campus in State College, PA.

6:30 to 7:30 p.m.: Social hour with refreshments in the lobby
7:30 to about 8:00 p.m.: NMS Meeting, announcements, door prize drawings
about 8:00 p.m.: featured program

The event has free admission, free parking, free door prize drawings and free refreshments, and is open to all – please come and share an enjoyable evening!

Greenwood Furnace State Park, a 35-mile drive southeast of State College in northern Huntingdon County, has many activities including historical ones. Paul Fagley's last presentation to NMS in 1998 was very well received, and we're pleased to have him return. - - Editor

Local ironmaking in the 19th century utilized ores found in the vicinity of the furnaces. Greenwood Furnace used ores from two principal deposits, one near Belleville, Mifflin County, and ores located near the furnace. These latter ores are interesting in that the beds contain numerous fossils. In this program, Greenwood Furnace Cultural Educator Paul T. Fagley will talk about the process of ironmaking, the local iron ores, and exhibit the park's iron ore fossil collection. T

ATTENDING THE SEPTEMBER MEETING?
This event is free and open to all - bring a friend!
Donations of door prize specimens are invited.
Your additional snacks will be welcomed.

DUES DO MANY JOBS

Please bring your dues payment and form to the September meeting or send them to the P.O. Box as listed on the form. Your dues are used for Bulletins and mailing expenses, insurance, Federation dues, programs, educational activities, refreshments, and operating costs. If you pay this month, we won't have to send another form next month. Thank you! T

JUNIOR ROCKHOUNDS

PROGRAMS SCHEDULED

We've just had the first Junior Rockhounds program for the season, and three more are scheduled: October 9, November 13, and December 11. All of those dates are Tuesdays, and all of those meetings are planned for the room 116 auditorium (to the left of 114) in the Earth & Engineering Sciences Building. Please watch the web site and the Bulletin for announcement of program topics. Parents are encouraged to attend the meetings with their children.

Juniors who attend should be NMS members (on their own for $7 per year, or as part of a family membership for $30 per year) in order to cover materials purchased for the programs, our insurance, and mailing costs. . - - *Editor*

Annual Meeting on October 17

by David Glick, NMS Secretary

The Annual Meeting of Nittany Mineralogical Society, Inc., will be held at 7:30 p.m., October 17, 2007, in room 116 Earth & Engineering Sciences Building on Penn State's University Park campus in State College, PA. Election of officers, a vote on new bylaws, and other business will be conducted. To have an item placed on the agenda, members are requested to contact the President (see page 4).

Nominations in September, Elections in October

The Nominating Committee has provided the following slate of candidates for the election on October 17th:

President: David Glick
Vice-President Robert Altamura
Treasurer: John Passaneau
Secretary: position open, CANDIDATES NEEDED.

Nominations may be made from the floor at the September 19th meeting.

Current Treasurer Duff Gold, who has served on the Board for the entire 13-year history of the NMS, stated that he would prefer not to be a candidate, and "We need new blood." Volunteers and nominations are welcome, and in particular people with experience in bookkeeping and administering a non-profit organization would be valuable.

The Secretary's principal duties will be to serve as a member of the Board of Directors, and to record and distribute the minutes of their meetings, about once a month. The Secretary ensures that *(Continued on page 2)*

Annual Meeting / Nominations, *continued*
the Bulletin gets done, but is not required to do it personally at this time, as the current Bulletin Editor is willing to continue.

Non-elected positions which need to be filled include Program Chair, Publicity Chair, and Refreshments Coordinator. There are other opportunities to volunteer, including coordinating exhibits, photographing club activities, and more. Please contact one of the officers if you can help or want more information.

NMS Bylaws Revisions

Following work by the Board and input from members at the August meeting, revised Bylaws (to substitute for the existing Constitution *and* Bylaws) will be presented for vote at the Annual Meeting on October 17. The Minutes of the September 5 Board meeting state, "A petition to substitute this draft for the existing bylaws was signed by four adult members and delivered to President Altamura." Complete Minutes are available from the Secretary.

The proposed Bylaws (as well as the current ones) are available from the web site, will be distributed in print at the September 19 meeting, and are available on request from Secretary David Glick (see p. 4). T

Meckley's Quarry Annual Open House

Collector-friendly Meckley's Quarry will have their annual open house on Sunday, September 23, from noon to 5 p.m. No advance sign-up is required. Take safety gear, sign in, make a cash donation, and have fun collecting. Children are allowed if accompanied by a responsible adult at all times. Meckley's is known for celestine, but there are also calcite, strontianite, and possible fossils. The quarry is south of Mandata, PA, on the east side of Route 225. T

Rocky Word Play

by Daniel Bontempo

Well, I asked the netcitizens of RockTumblingHobby.com to play the MENSA word game, only to do it with a rock theme. Instructions were to take any word from the dictionary, alter it by adding, subtracting, or changing of one letter, and supply a new definition. Only the old word or the definition has to have a rock theme.

There were lots of great responses, but some of my favorites were:

Ametryst: When you sneak out to the garage at 3 a.m. to paw over your newly purchased batch of amethyst.

Darnet: What you say when you open the package of those "big" garnet chunks you saw on ebay, only to discover that in reality they are so darn tiny!

Gagate: What you do sometimes after licking rocks.

Cobsidian: Rocks found in corn fields.

Wolfenite: Petrified wolf poo

Phalcedony: Looks like it's agate but it's not.

Latis Lazuli: An open framework made of strips of blue stone with golden shining pyrite inclusions.

Gasper: What you do when you find a whole bunch of jasper.

Appatite: What you have after a long day of rockhounding.

Barsalt: For use with tequila drinks. T

Fluorite, Cave-in-Rock, Illinois. 2.5" (62 mm) across.

Wavellite, Lime Ridge, Perry County, PA. Individual balls of crystal aggregates are approx. 1/8" (3 mm) across.

Grand Door Prizes: The two specimens pictured above, and several others, will be available in the grand door prize drawing for all attending the September meeting. *D. Glick photos.*

NEWS FROM THE FEDERATIONS

Nittany Mineralogical Society 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.

The EFMLS Newsletter is available through the link on our web site **www.ems.psu.edu/nms/** or remind Dave Glick to bring a printed copy to a meeting for you to see. The September issue covered the final plans for the October **EFMLS convention.** It's in Newark, New York, October 5, 6 and 7, 2007 (prime fall foliage time), and is hosted by the Wayne County Gem and Mineral Club. The feature article by Andrea Kords, Show Coordinator, covers details of convention speakers:

"We'll also have guest speakers Chuck Hiler from the Rochester Academy of Sciences Mineral Section speaking on the minerals of the Penfield and Walworth Quarries and Darrell Powell talking about exciting childrens programs that you can use with your junior rockhounds with special guest speakers."

"We're also thrilled to announce that during the Saturday evening banquet, Dr. Peter J. Heaney from Penn State University will give a talk on the research work he was involved with on the Hope Diamond. Dr. Heaney is the EFMLS Honorary Scholarship Awardee."

Please see the Newsletter for more! There's also a web site; go to the EFMLS site at www.amfed.org/efmls/ and click the "EFMLS Convention" button.

The AFMS Newsletter is available by the same methods. The September issue starts with coverage of the AFMS Recognition Award which was presented to Marge Collins, Programs Competition Chair since 1994. Her committee judges the slide, videotape and digital programs which we can later borrow from our Federation library. The August AFMS Convention in Roswell, NM, is reviewed, and the many award winners and prize drawing winners are listed. The gemstone auction raised over $9000. for the AFMS Scholarship Foundation.

A continuing program requests the U.S. Postal Service to issue a set of stamps illustrating gemstones. AFMS has begun a new program to promote and schedule inter-regional field trips. The safety article covers water - heavy rains, flooding, and drowning dangers as well as thirst, dehydration and safe drinking water in the wilderness. The Future Rockhounds article describes a poster contest with the theme "Gemstones of the World." - *Editor*

Autumn Mineralfest at Macungie

from promotional mailing

The Pennsylvania Earth Sciences Association will hold its 49th semi-annual show at Macungie, PA, on Saturday, October 6, 2007. The Autumn Mineralfest Mineral, Fossil, and Gem Show will be open from 8:30 a.m. to 3:00 p.m. at Macungie Memorial Park; it's an indoor show, held rain or shine. There will be over 100 tables of a wide variety of specimens for sale or trade, and free specimens and special activities for children. Another special treat is a darkroom for fluorescent minerals. The location is southeast of Allentown, PA; for maps, directions and further information, see www.mineralfest.com – *Editor*

Mineral Etymologies

by Andrew A. Sicree

Etymology is the study of word origins. From where do some common minerals' names come?

Amethyst: Ancient Greeks believed that the wearer of a wine-colored (i.e. clear purple) stone could drink wine without fear of becoming drunk. They named this purple charm stone, *amethystos*, meaning "not drunken" from *methy* meaning wine, plus *a-*, the prefix for a negative. Today this ancient belief lives on in the preference some men have for *amethyst* jewelry.

***Quarry*:** *Quarry* meaning something chased does not have the same root as the term used to designate an open pit mine. The mining term *quarry* comes from the Latin word *quadratus*, or square. Early stone quarries were operated mainly for the production of square stone blocks for construction of buildings.

***Ultramarine (Lapis Lazuli)* :** Ultramarine is a deep blue pigment originally obtained from *lapis lazuli*. The name *lapis lazuli*, meaning "azure stone," is derived from the Arabic *lazward*, "azure," and the Latin, *lapis*, or "stone." *Lapis lazuli* was rare and quite valuable in ancient times. It was imported into the Mediterranean world from "over the sea" – probably from Persia or beyond. The term for the pigment, *azurrum ultramarinum*, meaning "azure (blue) from over the sea" was rendered into English as *ultramarine* ("over the sea").

Ref.: *Thereby Hangs a Tale*: *Stories of Curious Word Origins*, by Charles Earle Funk (Harper & Row, New York, 1950).

Popular Mineralogy
Mineralogy and earth science for the amateur mineralogist and serious collector

Night of the Saber-Tooth

by Andrew A. Sicree

The mammalian Tyrannosaurus rex

Favorite among fossils is the saber-toothed cat. We've all seen him recreated in science books: a tiger-sized cat with jutting sword-like teeth and a mean disposition to match. He's the mammalian *Tyrannosaurus rex*, the terror of the ancient prairie, gobbling up the smaller herbivores, even taking out the occasional mammoth or mastodon.

A variety of "saber-tooths" can be found in the fossil record. The most famous, the North American species *Smilodon*, known to every school child as a "saber-toothed tiger," was not really a tiger at all. Nor was every animal with saber-teeth a true cat.

Cats belong to the family *Felidae* in the order *Carnivora*. Cat-like animals with saber-tooths have been found and are classified among the carnivore families of the *Nimravidae* (the "false saber-toothed cats") and the *Barbourofelidae* (don't you just love these far-out scientific names?). Examples of saber-teeth can even be found among the marsupials. The leopard-sized predator *Thylacosmilus* was a saber-toothed *marsupial* (order *Marsupialia* – think of a giant opossum with fangs and a mean temper) rather than a feline. *Thylacosmilus* lived in South America during the late Miocene and Pliocene.

What is a saber-tooth?

A saber-tooth is not simply an over-long tooth. If it were, we'd have to call the walrus a "saber-toothed seal." The true saber-tooth is flattened rather than round, and the width of the tooth from front to back is usually more than twice the thickness from side to side.

This thinned cross-section leaves the tooth susceptible to damage: fossils have been found with saber-teeth that were broken off. The remaining stubs were then worn down by continued use, indicating that the animal survived the loss of one of its primary weapons. This implies that the animal didn't absolutely need its saber-teeth to survive. Perhaps the saber-toothed cats hunted together as a pride of lions does today? The pride would provide a better chance of survival for an injured saber-tooth.

Dirks vs. Scimitars

True aficionados of saber-tooth animals distinguish between the scimitar-toothed cats and the dirk-toothed cats. A scimitar is a curved sword and a dirk is a straight knife, thus the scimitar-toothed cats possess substantially curved teeth and the dirk-toothed cats have less-curved teeth. *Smilodon* was dirk-toothed and possessed upper canines up to 11 inches in length.

To use such long teeth, a saber-tooth cat had to open its mouth wide. *Smilodon* could open his jaws up to a 120/ angle, freeing his saber-teeth like a pair of assassin's daggers. Smilodon was a robust strong animal, not a fast runner but capable of knocking over even large prey. Once his prey was down, *Smilodon's* saber-teeth would rip open its throat or belly and soon it was dinnertime.

The tar pits of California

The best fossils of *Smilodon* have been recovered from the famous tar pits at Rancho La Brea in Los Angeles, California. Many paleontology texts include the typical scene from Rancho La Brea's Pleistocene past: an herbivore helplessly stuck in the tar attracts carnivores such as dire wolves and saber-toothed cats. The carnivores leap into the tar

Saber-tooths *(cont'd)*

pit to attack their prey only to become entrapped themselves. More than one *Smilodon* met its end mired in the tar pits and the tar did a wonderful job of preserving their skeletons.

A side note for those wondering how a tar pit forms: the tar comes from petroleum. Petroleum (or oil) sometimes seeps out of the ground, forming pools. Over time oxidation and *biodegradation* occurs (a fancy way of saying that bacteria attack the oil) and the lighter, more volatile fraction of the oil evaporates away. These processes convert the liquid oil into the heavy *asphaltum* of the tar pits. It is a natural version of the asphalt we use for road-building.

The last of the saber-tooths

Although saber-toothed animals are all now extinct, their reign of terror lasted from the early Eocene (54.8 to 33.7 million years ago), through the Oligocene (33.7-23.8 mil yrs), Miocene (23.8-5.3 mil yrs), Pliocene (5.3-1.8 mil yrs), and into the Pleistocene (starting 1.8 million years ago). The first saber-tooth mammal made its appearance in North America in the early Middle Miocene. This cat-sized creature is called *Machaeroides*. The last of the saber-tooths, *Smilodon* and *Homotherium*, went extinct only about 10,000 years ago. It is quite possible that the earliest settlers of North America met and fought *Smilodon*. Definitely they competed with *Smilodon* for prey. Either way, humans survived and the last of the saber-tooths passed into extinction.

Ref: Lars W. van den Hoek Ostende, Michael Morlo, and Doris Nagel "Fossils Explained 52, Majestic killers: the sabre-toothed cats" *Geology Today*, v. 22, no. 4 July/August 2006, p. 150-157.

A Different Type of Tiger

Shimmering tiger's-eye is a popular semi-precious gemstone. Almost all mineral collectors are familiar with the fibrous, golden-brown material. Most systematic collectors typically have a piece or two with the label "quartz, variety tiger's-eye" in their collections. Museum displays label it with the chemical formula of silica, SiO_2.

In antiquity, lapidaries prized this stone. Although discovery of abundant sources of tiger's-eye in South Africa in the 1870's sent prices for good material plummeting, it is still highly popular with stone-cutters and kids.

Until recently, tiger's-eye was labeled as a pseudomorph after asbestos. After all, with its fibrous appearance, it does look like asbestos. In the standard explanation crocidolite (a variety of the mineral riebeckite which occurs as asbestos, and is found as veins in rocks) was replaced by silica on an atom-for-atom basis so that the original fibrous habit was preserved.

But Peter Heaney and Donald Fisher, geoscientists at Pennsylvania State University in State College, PA, re-examined the tiger's-eye story. Using the optical microscope and the transmission electron microscope, they discovered that tiger's-eye is made up of quartz encasing minute crocidolite fibers. In other words, the crocidolite is still present.

Observations by Heaney and Fisher indicate that, as cracks in the host rocks opened and widened due to tectonic stresses on the rocks, both quartz and crocidolite were deposited in the veins. Crocidolite and quartz nucleated (i.e., the crystals started to grow) on opposite sides of the fractures and grew toward each other, sealing the fractures and creating the intergrown quartz/crocidolite mixture we call tiger's-eye.

The brown color of tiger's-eye appears to be due to the later addition of small crystals of iron oxide minerals (goethite, hematite, etc.?). The zig-zag growth patterns seen in tiger's-eye are due to the reopening of the cracks as the host rocks shifted under tectonic stresses. Shifts in the host rock's orientation lead to a change in the growth direction of the tiger's-eye mixture, thus the kinks or bends seen in most specimens.

Atomic Bombs and the Mineral Collector

The scientist heading up the top-secret World War II "Manhattan Project" that built the atomic bomb got an early start in science collecting minerals. J. Robert Oppenheimer (1904-1967) progressed from minerals to chemistry and physics. Described by some as the "American Prometheus," Oppenheimer became a world-renowned theoretical physicist and was tapped to lead the atomic bomb project.

Started collecting minerals

Born in New York City in 1904, Oppenheimer began collecting minerals at the age of five when his grandfather, in Germany, presented him with a "starter" mineral collection, complete with labels in German. Oppenheimer credits the collection with inspiring his interest in science. Toward the end of his life he remembered taking up mineralogy with a "collector's interest" at first. He then developed a "fascination with crystals, their structure, birefringence, what you saw in polarized light" and his growing passion for minerals blossomed into what he described as a "scientist's interest."

Mineral collectors helped Oppenheimer along the way. The curator of minerals at New York's American Museum of Natural History tutored the brilliant young boy in mineralogy. Oppenheimer built a respectable collection and studied minerals and crystals, trying to understand their underlying structures.

With Kunz and the New York Club

In 1920, Dr. George F. Kunz (for whom "kunzite" is named) was president of the New York Mineralogical Club and the teen-age Robert Oppenheimer was proposed for membership. He had joined the famous society as an honorary member at age eleven and one year later he made his scientific debut delivering a paper on minerals at a club meeting to the amazement of the members.

Uranium from Joachimsthal

Before heading to Harvard to study chemistry, seventeen year-old Oppenheimer spent a summer in Europe and collected minerals in the famous Joachimsthal ("St. Joachim's Dale") region in Bohemia (now in the Czech Republic). Interestingly, given Oppenheimer's later leadership of the atomic bomb project, Joachimsthal is the location from which uranium was first discovered.

In 1789, Martin Heinrich Klaproth, a German apothecary, took pitchblende from Joachimsthal and extracted a dense grayish metal. He named the new element "uranium" in honor of astronomer William Herschel's discovery of the planet Uranus. Pitchblende is a massive (meaning that it occurs as agglomerations of mineral grains – not as discrete crystals with well-formed faces) variety of the mineral uraninite (UO_2). In 1898, Marie and Pierre Curie isolated the elements radium and polonium from pitchblende as well.

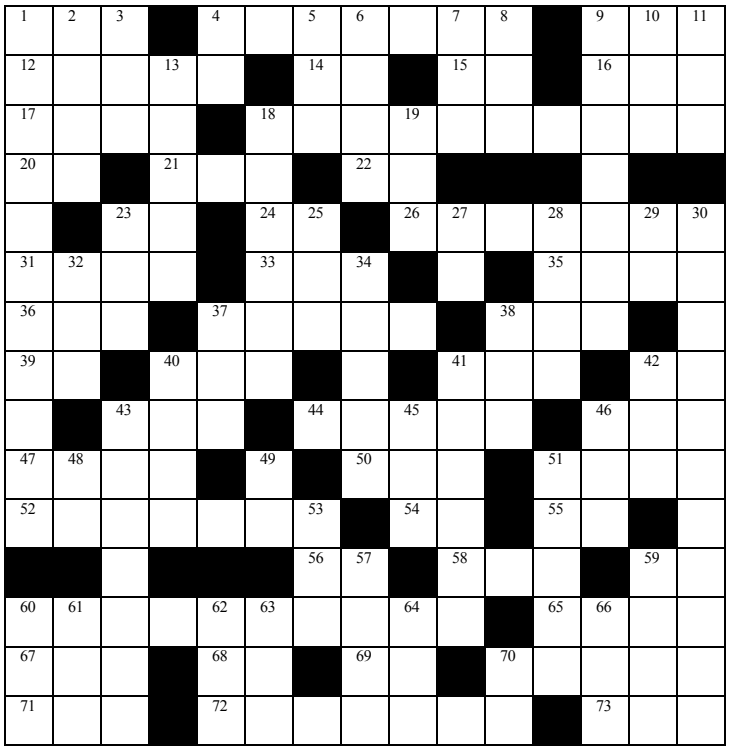
Where is his collection today?

Later in life, Oppenheimer gave portions of his mineral collection to Linus Pauling, who went on to win the Nobel Prize twice (Chemistry in 1954; Peace in 1962). Although he himself never won a Nobel Prize, Oppenheimer made significant discoveries in atomic physics that – along with his leadership of the Manhattan Project – rank him among the 20th Century's most important scientists. Some of Oppenheimer's minerals are preserved with the special collections of Linus Pauling's papers at Oregon State University in Corvallis, Oregon.

Ref: Richard Rhodes, *The Making of the Atomic Bomb* (Touchstone, New York, 1986). Pg. 118-119.

Crystal Matrix Crossword

Some Zeolites and More



ACROSS

1 put it on my ___
4 tombstone rock
9 the crystal ___ in plain view
12 uraninite is an _____
14 Rhenium
15 electrical engineer (ab.)
16 winter mineral
17 river in the Congo
18 mineral from Deccan Traps
20 rural delivery
21 way.
22 gives yellow light in lamps
23 what Santa says
24 opposite of HI
26 mica mineral, often iron-rich
31 an incalculable time
33 unavoidable
35 where oil is found
36 some sold by the ____
37 Be aluminum silicate
38 opposite of her
39 indium
40 made the Universe
41 Orphan Annie's dog says
42 electrical engineer again
43 head of mining company
44 two or more eras
46 used in interest calc.
47 money used in France
50 magazine
51 a college (ab.)
52 how dark a mine is
54 fluorescent (ab.)
55 south
56 Solar element
58 near the surface
59 poisonous metal
60 orthorhombic zeolite
65 narcotics agent
67 basketball group
68 fake smart 69 press gang
70 banded silicate
71 phone
72 glassy impact rock
73 a donkey

DOWN

1 gem mineral
2 fired
3 billion (ab.)
4 General Electric
5 part of curve
6 noble gas
7 holds up golf ball
8 makes the Euro
9 found in lepidolite
10 better than a king
11 si
13 Cornwall and _____
18 what he did to gold mine
19 where mineral is tested
23 radioactive
25 important to boat
27 south of Wisconsin
28 Thank God etc.
29 another poisonous metal
30 when acid meets calcite
32 alt. spelling for aeon
34 part of the tree
37 what Caspar says
38 hours (ab.)
40 geography (ab.)
41 what every crystal has
42 near, upon
43 solid with ordered atoms
45 a crude person
46 year
48 mining state
49 element for good bones
51 employing
53 Nat'l Health Insurance
57 state
59 ___ & Sciences
60 natural (ab.)
61 Lincoln
62 what horse eats
63 untrue
64 __thermal ore
66 auto club
70 of age

LAST MONTH'S SOLUTION

C	S	A	■	B	I	S	M	I	T	E	■	B	E	D
A	L	U	M	S	■	A	A	■	E	M	■	R	A	Y
S	A	G	E	■	P	Y	R	O	L	U	S	I	T	E
S	N	■	T	V	A	■	S	R	■	■	■	T	■	■
I	■	E	A	■	T	E	■	B	O	R	A	T	E	S
T	O	O	L	■	I	R	A	■	S	■	F	L	A	T
E	D	S	■	G	N	A	T	S	■	M	A	E	■	I
R	D	■	T	E	A	■	A	■	G	A	R	■	B	B
I	■	E	E	L	■	A	M	B	E	R	■	F	B	I
T	E	X	T	■	T	■	S	A	O	■	T	A	L	C
E	X	T	R	E	M	E	■	G	D	■	U	R	■	O
■	■	I	■	■	■	P	D	■	E	B	B	■	O	N
M	A	N	G	A	N	I	T	E	S	■	A	L	B	I
A	B	C	■	G	O	■	A	T	■	A	S	S	E	T
E	S	T	■	A	N	A	T	A	S	E	■	T	Y	E

Some Upcoming SHOWS AND MEETINGS

Our web site **http://www.ems.psu.edu/nms/** has links to more complete lists and details on mineral shows and meetings around the country.

Sept. 29 - 30, 2007: Annual Franklin Mineral Show, Franklin, NJ., Franklin Mineral Museum; show at the Franklin School on Washington Avenue.

Oct. 5-7, 2007: EFMLS Convention, Newark, NY (just east of Rochester). Hosted by Wayne County Gem & Mineral Club. See page 3.

Oct. 6, 2007: Autumn Mineralfest**,** Pennsylvania Earth Sciences Association, Macungie, PA. Over 100 tables of specimens for sale or trade; free specimens and special activities for children; fluorescent minerals darkroom; food available. www.mineralfest.com Sat. only, 8:30 a.m.- 3:00 p.m.

Oct. 20 - 21, 2007: Gem & Mineral Show & Sale, Mid-Hudson Valley Gem & Mineral Soc., Rhinebeck, NY. Amazing World of Agates. Sat 9-6, Sun. 10-5. http://www.geocities.com/nyrockhounds

Oct. 27, 2007: South Penn Rock Swap, by the Central Pennsylvania and Franklin County Rock and Mineral Clubs. South Mountain Fairgrounds, 1.5 miles west of Arendtsville, PA, on Rt. 234. Sat. only, 8:00 a.m. to 3:00 p.m. www.rockandmineral.org

Nov. 3-4, 2007: 38th Gemarama, "Gemstones of the Western USA," Tuscarora Lapidary Society. Founder's Pavilion, The School at Church Farm, Exton, PA. North side of Business Route 30, 1/2 mile west of Frazer- Rt. 30 exit off Route 202. Sat. 10:00 a.m. -6:00 p.m.; Sun. 10:00 a.m. - 5:00 p.m. www.lapidary.org

Nov. 10, 2007: 16th Annual "Rock Swap" for Mineral, Fossil, Shell, Gem and Lapidary enthusiasts, by Richmond Gem and Mineral Society. Meeting Hall of Ridge Baptist Church, 1515 East Ridge Road, near Regency Square Mall and Douglas S. Freeman High School, Henrico County, Virginia, north of Richmond. Indoors, rain or shine; open to the public, free admission; specimen donation requested from swappers to help defray costs. Sat. Only, 9:00 a.m. - 3:00 p.m.

February, 2008: EFMLS Convention, Jackson, Mississippi. T

INVITE A FRIEND TO JOIN THE SOCIETY

The Nittany Mineralogical Society prides itself on having the finest line-up of speakers of any earth sciences club in the nation. 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). Your dues are used for programs and speakers, refreshments, educational activities, Bulletins, and mailing expenses. Please fill out a membership form, make checks payable to "Nittany Mineralogical Society, Inc." and send them to the

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!

The Society's Schedule

We generally meet on the **third Wednesday** of each month, August through May, in the Earth & Engineering Sciences Building on the west end of Penn State's University Park campus, off White Course Drive. Social hour with refreshments starts at 6:30 p.m., and the meeting starts at 7:30 p.m. Everyone is welcome!

Board Meetings are now generally held on the **first** Wednesday of the month at 7:00 p.m. Please contact the President to verify time and location for a particular month. Board meeting minutes may be requested from the Secretary.

For sale: Equipment & Materials

For sale: Very large collection of gemstone material, prefer to sell as one lot; including much jade in various types & colors; mostly rough, plus some slabs; some fine Coober Pedy opal. Also equipment and jewelry making supplies from jewelry studio and production shop. Contact Daniel G. Reinhold in Mill Hall, PA; phone 570 748-3201 after lunch every day, or e-mail: dreinhold@suscom.net

Mineral Business and personal collection for sale (hundreds of specimens plus supplies and equipment included). Call Terry at 570-672-2325 Mon. - Sat. 9:00 a.m. - 11:00 p.m. If I'm not there, leave a message. T

SOCIETY OFFICERS

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OTHER CONTACTS

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e-mail preferred [new]: eechler@comcast.net
Junior Rockhounds: Dr. Andrew Sicree 867-6263 (h)
e-mail: sicree@verizon.net
Membership Chair: John Passaneau (see above)
Publicity: Daniel Bontempo deb193@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 **New 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 the name of the photographer or artist.