

# ***Nittany Mineralogical Society Bulletin***

Nittany Mineralogical Society, Inc.  
P.O. Box 10664  
State College PA 16805  
[www.ems.psu.edu/nms/](http://www.ems.psu.edu/nms/)

March, 2008

Editor: David C. Glick (see p. 8)

**March 19th meeting, 6:00 p.m.:**

## ***GEODE NIGHT! - 6:00 p.m.***

### **WITH AN UPDATE ON GEODE MINING AT LAS CHOYAS, MEXICO**

presented by Jeff Smith 'The Geode Guy'

*Our March meeting will be held Wednesday the 19th starting at 6:00 p.m., in the lobby of Earth & Engineering Sciences Building on the west side of Penn State's University Park campus in State College, PA.*

*Approximate schedule:*

*6:00 to 7:30 p.m.: Buying and opening of geodes*

*7:30 to 8:00 p.m.: Program on the source of these geodes in Mexico, with slides and video*

*The event has free admission, free parking, and is open to all – please come and share an enjoyable evening! Sorry, no door prize drawings this month. - - Editor*

We're pleased to once again welcome the ever-popular Jeff Smith "The Geode Guy" for our March meeting. Jeff cracks open geodes so that the buyer is the first person to ever see what's inside. It's an eye-opening treat for kids and everyone else. Doors open at **6:00 p.m.**; purchasing and opening of geodes start immediately (prices are \$3, \$5, \$8, or \$10, plus some larger cut and polished geodes priced separately).

An interesting and educational program on the deposit at Las Choyas, Mexico, source of many of Jeff's geodes, will follow at about **7:30 p.m.** in the Room 114 auditorium. Jeff reports that he will give an update of the activities at the Carrillo's ranch and at the geode mine. There have been a lot of interesting changes. He will show a short video clip, and a slide program.

NMS is grateful to Jeff Smith and his family for providing this exciting program each year, and for donating a portion of the proceeds to NMS. Bring your kids and their friends, and your friends too, for a fun program. ❄

#### **ATTENDING THE MARCH MEETING?**

This event is free and open to all - bring a friend!

**Show set for June 28 - 29 See p. 3**

**The next NMS event:**

## **Minerals Junior Education Day Saturday, April 5**

Co-sponsored by  
Bald Eagle Chapter of GPAA  
Junior Museum of Central Pennsylvania  
Penn State Earth & Mineral Sciences Museum  
Earth & Engineering Sciences Building  
at Penn State (White Course Dr., west of Atherton St.)  
Starting times every half-hour 9 a.m to 1:30 p.m.  
Pre-registered students \$4 (see below)

Our annual Minerals Junior Education Day is fun and rewarding for kids and parents who attend, as well as NMS participants. Volunteers are needed!

Grade-school age students and their parents are invited to come and learn about minerals, crystals, metals, and fossils. At this event, kids get an empty egg carton when they come in, then go to a series of stations, each concerning a different aspect of mineral properties 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. Current plans include:

Crystal growth                      Metals and metalworking  
Gold panning - Gold Prospectors Association of America  
Fossils - shells and bones  
Magnetism                              Electrical properties  
– plus a sales table at kid-friendly prices.

Tell your friends and relatives and their kids!

Penn State's Earth & Mineral Sciences Museum on the ground floor of Deike Building will be open special Saturday hours (to be announced), for visits when attending this event. Walk over from the EES parking lot and enjoy!

**Please pre-register by March 31:** Call (814) 237-1094 between 2 and 8 pm to reserve a time slot, then send \$4 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 specimens for each student. If there are spots open after March 31 (there might not be any!), the price will be \$6.

*For updates see [www.ems.psu.edu/nms/](http://www.ems.psu.edu/nms/)*

**Volunteers Needed:** A few hours of your volunteered time are needed on Saturday April 5th to ensure that this year's program is a success for interested and enthusiastic youngsters. You can help with activity stations, rock and mineral sales, admissions, clean-up, and more. See Dave Glick at the March meeting, or call (814) 237-1094.

**Donations requested for Junior Ed Day Sales! See p. 2.**

## ...And Donations Requested for Junior Ed Day Sales

by David Glick

Our Minerals Junior Education Day will be here in just two weeks! Donations of items which can be sold at kid-friendly prices will provide additional interest for those attending and will help us raise funds. Mineral specimens, tumbled or polished stones, fossils, books, tools, etc., are all welcomed. If you have items to donate, please bring them to the March 19th meeting, or contact Dave Glick at 814-237-1094 or xidg@verizon.net after March 19. One emphasis at Junior Ed Day is having specimens labeled, so if your material isn't labeled, Dave will be glad to make labels if you give him the information. ✨

## JUNIOR ROCKHOUNDS

by Dr. Andrew Sicree

### Next Meeting: Monday, March 24

Junior Rockhounds meet in room 117 Earth & Engineering Sciences Building on the following Monday evenings at 7:00 p.m.: March 24 and April 21. A **volunteer is needed** to present the program in May, on a date of your choice, perhaps Monday May 19, or at 6:30 p.m. on our regular meeting night, Wednesday May 21. We can provide materials and ideas. The **March 24th** program will be:

### Color and streak in minerals

We will show how minerals, like goethite and malachite, can be used as pigments to make Indian war paint. Join us as we use a streak plate to find the color of a mineral when it is powdered instead of a solid chunk, and find other fascinating facts about colors of minerals.

**Adults: Can you help with Juniors programs?** Please come to one of the meetings, and we will take it from there. ✨



## PENNSYLVANIA SHOWS: A BIG WEEKEND

The spring mineral show season kicks off in a big way, with three Pennsylvania shows coming up on the weekend of March 29: Chambersburg, Sayre, and Plymouth Meeting (Philadelphia). Please see the listings on page 8. NMS members will recognize dealers and participants at Chambersburg and Sayre, and perhaps Philadelphia too.

The Franklin County Rock & Mineral Club will host its 30<sup>th</sup> Anniversary Show at the Quality Inn & Suites, Interstate 81 at Exit 14, in Chambersburg. They will have 16 dealers from four states, a club table, plus the Pa. Geologic Survey and demonstrations such as micromounts.

The Che-Hanna Rock and Mineral Club will have their 39<sup>th</sup> show at the Athens Township Volunteer Fire Hall, Sayre, PA. In addition to dealers, geode sawing, and kids' activities, a program on fluorescent minerals will be presented three times on Saturday and twice on Sunday.

At Plymouth Meeting, near the Turnpike in the Philadelphia area, the Delaware Valley Paleontological Society and the Philadelphia Mineralogical Society get together to present the Philadelphia Mineral Treasures and Fossil Fair. They have fossil and mineral exhibits and demonstrations, and lots of dealers. Their kids' activities include a free fossil dig, kids corner with free mineral specimens, and Scouting merit badge information. - *Editor*

## Donald T. Hoff 1930 - 2007

The memorial article (mentioned in a previous issue) on Don Hoff has just been received; please watch for it here next month, and remember that memorial contributions may be sent in Donald's memory to: Field Conference of Pennsylvania Geologists, 3240 Schoolhouse Road, Middletown PA 17050-2721 where they will be used to subsidize registration fees for students attending the Conference. - *Editor*

## IN THE NEWS?

NMS members Andrew Sicree and John Passaneau are providing a series of articles and photographs on central Pennsylvania minerals and geology to the Centre Daily Times newspaper in State College. They appear in the monthly Family Pages magazine supplement. The photo at left was the first in the series.

Quartz, calcite and dolomite. Oak Hall Quarry, Oak Hall, Centre County, PA. Light smoky quartz crystal (about 4 cm, or 1.5" long) on calcite and dolomite matrix. These quartz crystals are common in the soil around Lemont and Oak Hall and are locally called "Lemont diamonds." J. Passaneau photo.

## Big Events Coming Soon

President's message from Dave Glick

It's about time your president wrote a column for the Bulletin, isn't it? Things have been busy. Following the members' approval of thoroughly updated bylaws last fall, the Board of Directors completed our non-profit corporation's Form 1023 application for recognition of tax-exempt status by the IRS. That means our status is now "501(c)(3) applied for" and we await a response from the government, which will take several months. That work took quite a chunk of time, and we are now scrambling to catch up with preparations for Minerals Junior Education Day (April 5) and the third annual Nittany Gem and Mineral Show (June 28-29).

You may have noticed the unofficial theme of this issue from its appearance in bold print in several places:

### **VOLUNTEERS ARE NEEDED...**

Our **Junior Ed Day** is a great event; it was begun just after NMS's first year, and we've only missed two years of presenting it since then. It's fun and it's a great way to pass on our enthusiasm for our hobby or career. It's described on page 1, in case you're not familiar with it, but the bottom line is that lots of kids have a good time, learn some things about minerals and fossils, and take home a properly labeled collection of specimens to remind them of what they learned. Best of all, if they weren't already "rockhounds," they may realize the possibilities of a fun hobby which can help them relate to their lessons in the all of the sciences and give them enjoyment through their lives.

We need some more volunteers so that we can spread the work load out a bit, let others take occasional breaks, and make it enjoyable for everyone. It doesn't require great expertise; you can sit in for a while at a station and learn the short lesson that's being presented, so that you can present it yourself. We can also use help at registration, sales, directing "traffic" among the stations, driving out to pick up lunches for the volunteers, and packing up and cleaning up at 3:00 p.m.

I like to think of our annual **Nittany Gem and Mineral Show** as providing some of the same fun and understanding as Junior Ed Day, but for those who don't happen to be in grades 1-8. It's our big opportunity to introduce NMS and the various aspects of our hobby to the public, and invite them to join us; I think we've done that quite well at our first two shows. It also brings in some cash so that we can accomplish various projects without raising dues to fund them.

Volunteers are needed to prepare for and present the Show as well. If we are to have a members' consignment table again this year, we need a volunteer to organize it. The silent auction, which is an important fund-raiser for NMS's various projects, will also need a coordinator. Many other volunteers will be needed for kids' activities, food service, admissions, and sales during the show, as well as preparation, set-up, transportation and tear-down.

Somehow I've ended up coordinating both Junior Ed Day and the Show, so your one-stop contact to volunteer for one or both is: Dave Glick at (814) 237-1094 or [xidg@verizon.net](mailto:xidg@verizon.net) Thank you! ❁

## NITTANY GEM AND MINERAL SHOW

JUNE 28 - 29, 2008

NEW LOCATION

PARK FOREST MIDDLE SCHOOL

By David Glick

Our third annual show is set for June 28-29, with set-up all day on Friday the 27<sup>th</sup>. Please mark your calendars and tell your friends! The location this year is Park Forest Middle School, on the north-west edge of State College, once again not hard to find from the 4-lane US Route 322 (future I-99). We have a bit more room, so we expect a couple more dealers than last year. We're planning once again for food, silent auction including a kids' section, other activities for kids, displays, demonstrations, and classes, but it all depends on volunteers to organize and present them. Please see the President's message to the left. ❁

## NEWS FROM THE FEDERATIONS

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.

The EFMLS Newsletter is available through the link on our web site [www.ems.psu.edu/nms/](http://www.ems.psu.edu/nms/) or remind Dave Glick to bring a printed copy to a meeting for you to see.

The dates for the 35<sup>th</sup> year of EFMLS workshops at **Wildacres** will be April 18-24 and Sept. 8-18, 2008. In April, the speaker in residence will be Alfredo Petrov, who will speak on his travels in search of mineral specimens, including Bolivia and Japan. The choices for 4-day classes (one class for the entire week) will be :

Exhibiting & Judging	Faceting
Silver Casting	

The choices for 2-day classes (you take 2 if you select these) will be:

Cabochons	Cabochon Intarsia
Chain Making (Intro)	Chain Making (Adv.)
Geology I	Geology II
Fused Glass (Basic)	Fused Glass (Adv.)
Gem Trees (Basic)	Gem Trees (Adv)
Photog. of Small Minerals	Photog. of Gems & Jewelry
Soapstone Carving (Basic)	Soapstone Carving (Adv.)

The AFMS Newsletter is available by the same methods. Please see the web sites for the rest of these articles and many others in both Newsletters. There's a lot there! - *Editor*

# ***POPULAR MINERALOGY***

*Mineralogy and earth science for the amateur mineralogist and serious collector - #10*

## **Anomalous Diamonds in the Eastern United States**

*by Andrew A. Sicree*

### **Sources of diamonds**

The great diamond fields of the world are well known. South Africa, India, Botswana, Namibia, Siberia, northern Canada, Australia, Brazil, – we all know that these areas produce diamonds. And most of us are aware that diamonds are found in Arkansas at the Crater of Diamonds State Park near Murfreesboro. Diamonds were even produced commercially for a short while from the Kelsey Lake deposit in northern Colorado near the Wyoming state line. But few are aware that states east of the Mississippi have also been the site of diamond finds.

During the 1800s and the early 1900s, a few diamonds were found in Ohio, Indiana, and Michigan. Stones were also reported from states such as Tennessee, Kentucky, Alabama, Georgia, South and North Carolina, and Virginia and West Virginia.

Why were most of these eastern diamonds found more than 100 years ago rather than more recently? Many of the finds appear to have been the result of the search for gold. People were optimistic that gold might be found anywhere so they sampled and panned their way across the country. After all, the first strike of gold in the United States was at the Reed Mine in North Carolina. Also, a century ago, people were closer to the soil. Most digging was done by hand not by steam shovel or backhoe. If a diamond is to be found in a stream or a field, a farmer with a shovel will most likely be the one to find it.

In South Africa, or northern Canada, many diamonds come from kimberlite pipes. Kimberlites and lamproites the principal source rocks for diamonds. In Brazil or Namibia, diamonds are sifted out of gravels and sands. The diamonds found among the beach sands of Namibia's coast were washed down the Orange River from the diamond fields of South Africa. But from where do the eastern U.S. diamonds come? Where are their source rocks?

### **Continental glaciation**

In states north of the Ohio River, such as Michigan, Indiana, and Ohio, the occasional diamond is explained by continental glaciation. Dragged out of Canada by Ice Age glaciers, these diamonds were deposited in beds of gravel and sand when the glaciers retreated. The sources of these diamonds are thought to be as yet undiscovered diamond pipes hidden under lakes in Canada.

Glaciation may explain Midwest diamonds but it cannot account for stones found in the South. This region was never glaciated. Diamonds found in southeastern states must have more local sources. This is where, as Sherlock Holmes might say, "the game is afoot." No one has yet discovered a diamond-bearing source rock in this region.

### **Kimberlites**

Kimberlites are known to occur in the eastern United States. Two dozen or so kimberlites have been reported from Kentucky, at least three have been found in Pennsylvania, and others are known in New York. At least one kimberlite has been reported to be a possible source for diamonds. This is the Mount Horeb kimberlite in Rockbridge County, Virginia. Other kimberlites, such as the peridotite dike in Front Royal, Warren County, Virginia, are also candidates. And lamproites, which can also be diamond sources, have been reported from near Charlotte, North Carolina. But none of these has yet been confirmed to be diamondiferous.

One should note that a kimberlite dike can be quite narrow. The dike found in the Tanoma Coal Mine in Indiana County Pennsylvania, for instance, is only about one foot wide where it cuts through shale. Such a thin dike can be very difficult to detect. Although the Tanoma dike could be easily found underground where it cut through the coal, it has not yet been located on the surface, only a few hundred feet above the coal. This is because kimberlites tend to weather quite rapidly. Thus, a thin dike could easily be lost in the soil horizon.

*EASTERN DIAMONDS (cont'd)***Healthy skepticism**

Any report of a diamond find should be approached with caution. Diamonds are rare enough that even most geologists have never seen an uncut stone. Many a “diamond” turns out to be quartz, a “Herkimer Diamond,” or even glass.

Documentation is also a problem. Exactly where was a diamond found, how big was it, and what happened to it? The fact that some of these reported diamonds have faded in the mists of time, with no record of them having been cut or sold, leads the skeptic to suspect that they weren't really diamonds after all. However, there have been verified diamonds found in Georgia, Tennessee, West Virginia, and Virginia. One criterion for verification is cost. If an expert in gems is willing to put up a significant amount of money to purchase a stone, you can be confident that the stone is a real diamond.

**Verified diamond finds**

One example is the “Dewey Diamond” or “Manchester Diamond” which was found in 1854 by a workman named Benjamin Moore. The location is what is now the southwest corner of Ninth and Perry Streets in the Manchester section of the city of Richmond, Virginia. The diamond was a 23.75-carat lightly greenish-white octahedron with rounded faces and a large flaw on one side. Moore sold the diamond for \$1500 to Samuel W. Dewey, a mineralogist from Philadelphia. Dewey had the stone cut to produce an 11.15-carat gem. Although the stone was far from perfect, it was later sold for \$6000. The present location of the gem is unknown.

A jeweler purchased two diamonds found in 1899 at Luttrell, near Knoxville, Tennessee; he had them cut and reported that good-quality stones resulted.

In 1901, a boy found a diamond in a rocky farm field near Columbus, Georgia. The stone was sent to New York City for the famous gem expert, George F. Kunz, to examine. Kunz declared the stone legitimate and paid the owner, B. F. Hudson, \$80 for it. News of the find kicked off a minor diamond rush the Columbus area but in spite of a great deal of digging, no other stones were discovered.

Other authenticated diamonds include a four-and-one-half-carat stone from Dysartville, North Carolina, and a four-carat stone from Shelby County, Alabama. Both of these stones were sent to New York and verified by gem experts.

The most famous eastern diamond is the “Punch” Jones Diamond found along Rich Creek, in Peterstown, West Virginia, immediately adjacent to the Virginia state line. The story behind this diamond is that William P. “Punch” Jones and his father, Grover Jones, found it in 1928 while they were playing horseshoes. Punch Jones noticed the stone in the sandpit when a horseshoe struck it. He joked that he'd found a diamond, but he saved the stone. In 1943, he sent it to Dr. Roy J. Holden, a geology professor at Virginia Polytechnic Institute. Holden confirmed that the 12-sided, greenish-gray 34.46-carat stone was a diamond. The stone was sent to the Smithsonian for safekeeping. Unfortunately, Jones was killed during World War II; ownership of the stone passed to his father. In 1964, the Jones family retrieved the stone from the Smithsonian and, in 1984, it sold at a Sotheby's auction for \$74,250!

Thus, we can see that there is indeed hard evidence that diamonds can be found in the eastern United States. In spite of their rarity, perhaps one day someone will find their source.

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## MINERAL EXPRESSIONS

On the meanings of some terms with mineralogical connections:

***Of the first water:*** Probably, it was Arab gem traders who originally used “water” to describe the brilliancy of diamonds. Until the mid-1800s diamonds were graded as being of the first water, second water, or third water, with the first water stones being the highest quality, but this system is no longer used. The phrase “of the first water” lives on, however, and is used to describe anything with the highest degree of perfection.

***To carry coals to Newcastle:*** I grew up thinking this phrase referred to the town of New Castle, in western Pennsylvania, but it really refers to Newcastle upon Tyne in England. Certainly, though, I still understood the phrase correctly: it means to do something foolishly unnecessary. Coal was mined in both New Castle, Pennsylvania, and in the original Newcastle. Only a fool would bring coal to an area where coal was plentiful, hence the phrase's meaning.

Ref.: *Hog on Ice & Other Curious Expressions*, Charles Earle Funk (Harper & Row, New York, 1948).

From Popular Mineralogy #1

## Some of the Dangers of Abandoned Underground Mines

Every mineral collector has looked wistfully into the dark entrance of an old, abandoned underground mine and wondered what mineralogical masterpieces awaited him if he could only screw up the courage to go in. Are the minerals worth the risk? The real question is “What dangers are there down below?”

First, you must realize that unlike caves, abandoned underground mines are unstable. All underground mines are unstable to a degree, but constant care and monitoring by miners makes them safe enough for mining. Once the mine closes, however, it begins to decay rapidly. Just walking through an old mine can create enough vibration to cause a roof collapse. But the whole tunnel doesn't have to collapse to kill you. All it takes is one fist-sized piece of rock falling from high enough above your head.

A mine shaft is a vertical opening. The term “adit” is used for a horizontal opening. Shafts are particularly dangerous; they can be hundreds of feet deep and be filled with water at the bottom. The “collar” around the top of the shaft can be loose. If you stand too close to look into the shaft, it may collapse, pitching you into the shaft.

It is difficult to assess the depth of a shaft because of the darkness. It can be clogged with debris, too. Old ladders descending into shafts can look strong enough, but dry rot can weaken rungs or rust may have corroded the bolts holding the ladder in place. Mine shafts are the number one cause of death and injury in abandoned mines.

Maybe you'll find some old dynamite. Explosives become highly unstable with time and exposure to humidity. Old dynamite contains nitroglycerine, which can explode with the slightest disturbance. Blasting caps can also be dangerous. If rats get into a box of blasting caps, they can scatter them about. If you step on one, it can go off.

Air may not be circulating in an abandoned mine. You may descend into an area where there is little oxygen. Once you pass out due to lack of oxygen, your chances of survival are miniscule. Explosive or poisonous gases are also possible. Pockets of methane may build up and a spark from use of a metal tool or a flashlight can cause a gas explosion.

Supporting structures in an abandoned mine can collapse. What may appear to be a solid rock floor could really be a mud-cover rotten wood roof concealing the top of a winze (a

shaft that doesn't go to the surface). Walk across it and you may fall through. Likewise, pools of water can also conceal drop offs or sharp objects such as old nails.

The minerals aren't worth the risk. Every experienced collector knows that you are probably more likely to find good specimens on the dumps outside anyway. So stay out and stay alive!

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Dr. Andrew A. Sicree is a professional mineralogist and geochemist residing in Boalsburg, PA. *Popular Mineralogy* provides technical answers to your general mineral questions. If you have a question you'd like to have answered, please send email to [sicree@verizon.net](mailto:sicree@verizon.net)

### WHAT IS MOISSANITE?

Moissanite is sold today as a diamond substitute. With a hardness of greater than 9 on the Mohs scale, a specific gravity of 3.22, and refractive indices of 2.691 and 2.648, moissanite makes a better imitation diamond than cubic zirconia or other substitutes.

Moissanite, naturally occurring silicon carbide (SiC), is a mineral that is found only rarely in nature. It is found in some meteorites such as the Canyon Diablo iron meteorites, for instance. Several polytypes (meaning that the basic unit cell of the crystal contains various numbers of SiC units), predominantly hexagonal or rhombohedral, are known.

We know silicon carbide more familiarly by its trade name, Carborundum. Synthetic moissanite or silicon carbide is sold in large quantities as Carborundum for use as an abrasive (in powder form, grinding wheels, and cut-off blades). Synthetic moissanite for abrasive use is always black or dark in color.

Although reported in 1948, early efforts to make clear, colorless moissanite failed. In the 1990s, however, gem-grade moissanite began to appear on the gem markets, typically at prices between 10% and 25% of the cost of same-sized diamonds of comparable appearance.

One interesting problem arose immediately: synthetic moissanite would spoof the thermal conductivity-based diamond testers that most jewelers commonly relied upon. Diamond testers reported that moissanite was “diamond.” Thus, the arrival of large quantities moissanite on the market forced jewelers world-wide to buy new detectors capable of distinguishing between diamonds and moissanite.

- A.A.S.



# Crystal Matrix Crossword Web version corrected April 9, 2008

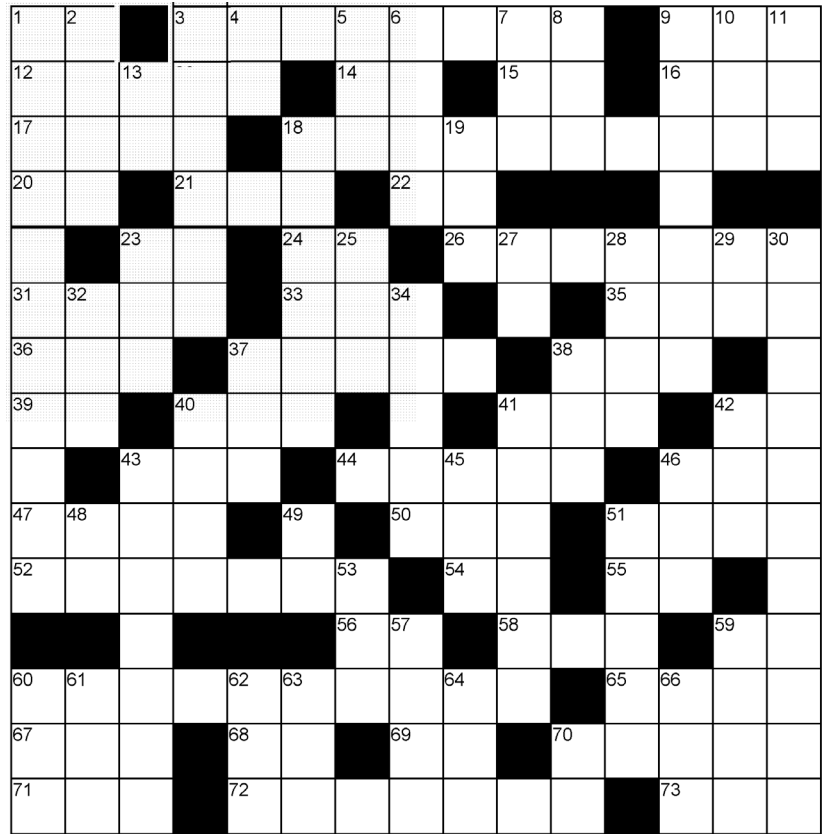
## Ancient Egyptian Minerals

### ACROSS

- 1 underground
- 4 dark pigment mineral
- 9 auto
- 12 out of volcanoes
- 14 flat state
- 15 \_\_\_vey!
- 16 ancient Egypt beer
- 17 what pyramid was
- 18 ancient Egyptian princesses were
- 20 right and left
- 21 snake around the neck
- 22 iridium
- 23 doc
- 24 Roll On!
- 26 lower traces of pyramids made of
- 31 clinic or sauce
- 33 business
- 35 \_\_\_said!
- 36 hairy \_\_\_
- 37 carved stone slab
- 38 source of metal
- 39 rubidium
- 40 \_\_\_ to a Grecian Urn
- 41 standing room only
- 42 common light element
- 43 boys group
- 44 \_\_\_ to get in a pyramid
- 46 King Tut lived long \_\_\_
- 47 ancient sailor
- 50 small business admin.
- 51 to blacken
- 52 natron \_\_\_ a pharaoh
- 54 panhandle state
- 55 Order of the Arrow
- 56 biggest of 48
- 58 experiment (ab.)
- 59 que \_\_\_?
- 60 gm. eye shadow minerals
- 65 where French walk dogs
- 67 Electric Light Orchestra
- 68 Just \_\_\_ it
- 69 built the pyramids?
- 70 color of Egyptian sand
- 71 used to make bronze
- 72 red pigment mineral
- 73 arsenic

### DOWN

- 1 Lapis Lazuli pigment
- 2 a jail
- 3 black rock used for statue
- 4 after Q before T
- 5 want my piece of the \_\_\_



- 6 Moslem name
- 7 to pull
- 8 malachite was used here
- 9 to make calcite into lime
- 10 Egyptians first to make
- 11 color of crushed hematite
- 13 vet med
- 18 heavy mineral
- 19 unit of energy
- 23 to change color of cloth
- 25 less than two
- 27 Egyptian Sun God
- 28 wasn't a Pharaoh
- 29 et \_\_\_ Brutus?
- 30 gypsum in old tomb wall
- 32 all points bulletin
- 34 makes Egyptian pottery
- 37 Students for Dem Amer.
- 38 organization
- 40 safety group
- 41 on Egyptian crowns
- 42 \_\_\_Khan
- 43 other ancient culture
- 45 Nigerian tribe
- 46 gotcha!
- 48 what Swami says
- 49 morning
- 51 metal used to cut granite
- 53 science (ab.)
- 57 monotheistic sun god
- 59 toward
- 60 where Egyptian art is
- 61 Mohammed \_\_\_
- 62 contagious control group
- 63 \_\_\_ polloi
- 64 est. time to get there
- 66 exclamation
- 70 barium

*Last month's solution:  
Copper Minerals*



## 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.

**March 29 and 30, 2008:** Franklin County Rock & Mineral Club 30th Annual Gem & Mineral Show. Quality Inn & Suites, Interstate 81 at Exit 14, Wayne Avenue, Chambersburg, PA. Saturday 10 am to 6 pm, Sunday 10 a.m. to 5 p.m.

**March 29 -30, 2008:** Annual Rock & Mineral Show, by Che-Hanna Rock & Mineral Club. Athens Twp. Volunteer Fire Hall, 211 Herrick Ave., Sayre, PA. Dealers, food, kids activities, lapidary demonstrations, fluorescent mineral programs. Saturday 9 am to 5 pm, Sunday 10 a.m. to 5 p.m.

**March 29 -30, 2008:** Philadelphia Mineral Treasures and Fossil Fair, by Phila. Mineralogical Soc. & Delaware Valley Paleontological Soc. Fossils, minerals, gems, more dealers, exhibits, learning activities incl. fossil dig for children and kid's corner. Food, raffle, door prizes. Lulu Temple, 5140 Butler Pike, Plymouth Meeting, PA. 2 miles from Norristown exit of PA Turnpike; map and more at <http://dvps.essentrix.net/fossilfair.htm> Saturday 10 am to 5 pm, Sunday 10 a.m. to 4 p.m.

**April 11 - 12 - 13:** MAGMA fluorite dig at Clement Museum, Marion, KY.

[www.wncrocks.com/magma/magmaupcomingevents.htm](http://www.wncrocks.com/magma/magmaupcomingevents.htm)

**April 19 - 20, 2008:** Gem, Mineral & Fossil Show, by Monongahela Rockhounds. Sky View Fire Hall, West Mifflin, PA.

**April 26 - 27, 2008:** 36th Annual New Jersey Earth Science Assn. Gem & Mineral Show, by Franklin-Ogdensburg Mineralogical Soc., NJ Earth Science Assoc. & Sterling Hill Mining Museum. Franklin Sch./Washington Av; Franklin, NJ.

**May 3 - 4, 2008:** Annual Show & Sale by The Mineralogical Society of Northeastern Pennsylvania. Oblates of St. Joseph, 1880 Hwy. 315, Pittston, PA 18640. Sat. 10:00 - 5:00, Sun. 10:00 - 4:00.

**May 21 - 26, 2008:** Tri-Federation Rockhound Rendezvous, Texas Springs, Nevada. 4 to 6 different sites: pink limb casts, small limb casts and bogwood, snakeskin agate, jasp/agate limb casts, geodes, and more. Daily collecting trips, potluck dinners, daily Happy Hours, evening campfires, map exchange and tailgate displays. All AFMS members welcome. See Nov. AFMS News, <[www.amfed.org](http://www.amfed.org)> \*

### 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*

**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!**

## For sale / trade: Equipment & Materials

**For Sale: Covington wet belt sander.** Takes a 3"x 24" belt, uses 1/3 HP motor. 8" deep, 10" wide, 13" high. Without motor \$65; with motor (recently cleaned and serviced) \$115. Willard Truckenmiller, 814-625-2531

**TRADE for ROCK/MINERAL SPECIMENS** (or free if you ask nicely ahead of time!): 35 mm film canisters, clear or black and great for storing small stuff. E-mail with the color and quantity you'd like (I've got 3 buckets full) and I'll bring them to the next meeting. Tim Holtz, [stamprockcoin314@hotmail.com](mailto:stamprockcoin314@hotmail.com)

**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.

**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](mailto:dreinhold@suscom.net) \*

## SOCIETY OFFICERS

**David Glick (President)** 237-1094 (h) [xidg@verizon.net](mailto:xidg@verizon.net)

**Dr. Bob Altamura (Vice-President)** 814-234-5011 (h)

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**John Passaneau (Treasurer)** 814-863-4297 (o),

e-mail: [jxp16@psu.edu](mailto:jxp16@psu.edu)

**Frank Kowalcyk (Secretary)** 238-8874 (h, 8-9 p.m.)

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## OTHER CONTACTS

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**Junior Rockhounds:** Dr. Andrew Sicree 867-6263 (h)

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**Membership Chair:** David Glick (see above)

**Programs:** Dr. Duff Gold **865-7261(o), 238-3377(h)**

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**Publicity:** Volunteers needed

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:

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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 the name of the photographer or artist