

Nittany Mineralogical Society Bulletin

Nittany Mineralogical Society, Inc.

P.O. Box 10664

State College PA 16805

Editor (see page 8):

David C. Glick

August, 2010

Visit our web site: www.nittanymineral.org

August 18th meeting:

Show and Tell

presented by
our members and guests

Our August meeting will be held Wednesday the 18th in the 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.

6:30 to 7:30 p.m.: Social hour, refreshments in the lobby

*7:30 to 8:00 p.m.: announcements, questions, answers;
door prize drawings*

about 8:00 p.m.: featured program

*The event has free admission, free parking, and free refreshments, and is open to all – **Bring your friends and share an enjoyable evening.** -Editor*

The program topic for August will be **Show and Tell**, presented by anyone and everyone who would like to “show and tell” for 5 or 10 minutes or so. This is a great chance to bring in lapidary work, new specimens, books, photos, equipment, projects in progress, interesting contrasts and comparisons, **anything you like** which represents some area of interest in our hobby or science, and share it with others. You can speak about it as informally or formally as you’d like. Stories on their own are fine, too. Connect with other members who have similar interests, or awaken an interest or spark an idea in someone else. We’ve had many fun and interesting presentations in the past, and look forward to more this time around.
-- Editor

New web site

By David Glick, NMS webmaster

NMS is moving its web site to www.nittanymineral.org. We are very grateful to Penn State’s College of Earth and Mineral Sciences for hosting our site for its entire history, January 2001 to the present. We’ll continue to have a site at the old address (www.ems.psu.edu/nms) and use it to automatically forward users to the new site. The new site on a commercial host should allow us more complete control of the site and more choices in what we can do with it. Please bear with us as we make these changes.

ATTENDING THE AUGUST MEETING?

Donations of door prize specimens are invited.

NMS will provide ice, soft drinks, and water;
your donated snacks will be welcomed.

Saturday, August 21st:

Annual NMS Picnic

NMS members Ellen and Stu Bingham will host the annual NMS picnic at their house, 145 Goddard Circle, Penna. Furnace PA 16865. Please see the insert enclosed with this Bulletin (p. 9 & 10 of the PDF), and RSVP (emb22@psu.edu, text/cell 814.360.3464) by August 20. The Bingham and NMS will supply grill, chairs, tables, place settings, utensils, cups, napkins, meats (burgers, hot dogs), buns, condiments, corn on the cob, iced tea, lemonade, and koolaid. Those attending are asked to bring a side dish, or dessert, or chips/dip, and any other beverages they desire.
-- Editor

Junior Rockhounds

We expect to resume Junior Rockhounds meetings in September. Please watch the web site and the September Bulletin for news.

Elections in October - Nominations start now

All members: please consider volunteering to run for an elected position on the Board of Directors, or volunteering for an appointed position. We need new blood and fresh thinking! Members are invited to attend Board meetings (generally held on the first Wednesday of the month at 7:30 p.m.), to see how we operate. Elected positions are described in the bylaws which are available via the left sidebar of the web site. Those descriptions include some responsibilities which are not currently active; the actual responsibilities of each office are fairly straightforward. The president keeps track of what’s going on, prepares a suggested agenda for the Board meetings and runs the meetings. The vice-president fills in or takes over for the president as needed. The secretary records minutes of the Board meetings, sends out drafts for comment and records the final versions (editor is currently a separate person, so the secretary does not have to work on the Bulletin). The treasurer handles the money (payments, bank deposits, withdrawals, etc.) and the financial records, and reports to the Board about finances.

In addition to those specific duties, each elected officer and each standing committee chair is a Board member, responsible for attending Board meetings and participating

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Continued from page 1

in decisions concerning the operation of NMS. Because we don't have very many other volunteers, each of the Board members also tends to take on other responsibilities, but those are optional.

In addition to candidates for Board positions, we are currently looking for members to coordinate refreshments, door prizes (see below), and publicity. If you can help with any of this, or want to nominate someone, please notify a Board member or volunteer at the August or September meeting.

Refreshments Coordinator

We envision this position as coordinating various members to bring ice, beverages, snacks, and cups/plates/napkins to the social hour before our monthly meetings. The coordinator could work out a procedure (it was done a few years ago by passing around a sign-up sheet at meetings) and then check with the volunteers prior to the monthly meeting which they signed up for. NMS can provide reimbursement if requested. We need someone to coordinate this, as August will be the last meeting for which the president will bring drinks, ice, and supplies. Please contact the president or another Board member to volunteer or find out more. -- *Editor*

Door Prize Coordinator

A volunteer is needed to be in charge of bringing some of our grand door prizes and door prize tickets to each meeting, distributing the tickets and running the drawing. We sincerely thank Tim Holtz for filling this position over the last year. -- *Editor*

CPRMC SHOW IN HARRISBURG SEPTEMBER 18 - 19

Central Pennsylvania Rock & Mineral Club's annual show returns to the Zembo Temple (2801 N 3rd St.) in Harrisburg this year. It is expected to feature 29 vendors, plus other displays, activities and educational booths. Geologist Jeri Jones will present half-hour programs throughout both days. See details on all of this on the show web site, www.rockandmineral.org/annualshow.htm. A one-dollar-off coupon may be printed from that web site (or Dave Glick has a few to distribute at the NMS August meeting and NMS picnic). -- *Editor*

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. We present brief summaries here in order to encourage readers to see the entire newsletters.

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 June-July issue reports that there are still openings for the Fall (Sept. 6-12) session at Wildacres. A registration form is on page 8 of that issue, and the full list of classes is on page 6. President Loren Patterson reports on his good experiences at Spring Wildacres this year. The Minutes and Reports of the annual Board of Directors Meeting at that convention are included. Cathy Patterson provides guides for reporting publications and publicity in her step-by-step series on compiling an All American Club yearbook for the 2010 competition. Jim Doran's safety article points out that you should never collect alone, but if you do, tell someone where you are going and take a cell phone. The summer and fall Maine Mineral Symposium Association field trips are announced. The Scholarship Foundation update lists the donation which NMS made in memory of our long-time member Annie Passaneau.

The **AFMS Newsletter** is available by the same methods. In the June issue, President Emerson Tucker reports on his home club's show in Lubbock, Texas, and the people, socializing, fundraisers and display cases involved. Fran Sick, Public Relations Chair, offers to help people write their articles for regional and American Federation newsletters. Jim Brace-Thompson, Junior Activities Chair, continues his discussion of starting a youth group within a club. John Martin and John Wright summarize the current legal status of collecting on US Forest Service land. Phyllis George reports on the judging and awards for the 2010 web site contest.

Please see the web sites for the complete Newsletters. There's a lot there! -- *Editor*

Bulletin News

Please be sure to submit any material for the **September** Bulletin by September 1.

If your Bulletin ever comes through damaged, you'd like an extra copy, or a replacement for one that wasn't printed well by my super-low-budget printing operation, just let me know. -- *Editor*

Peter B. Nalle 1923 - 2010

We recently learned that former NMS member, mineral collector & mining industry executive Peter Nagle died February 26, 2010. To read his obituary, which includes WWII submarine service, a career in mining engineering and leadership in the minerals industry, technical author, ocean yacht racing, volunteering with archaeology in Jordan and Mystic Seaport in Connecticut, and more, google "Peter Borie Nagle SME" to find the obituary on the **findarticles** web site. -- Editor

GigaPan photo shows Lewistown Roadcut

NMS member Bill Bemis provided information on a GigaPan image of the folded rocks in the new US 322 road cut east of Lewistown Narrows www.gigapan.org/gigapans/24530/. It was created from 360 overlapping images taken by a standard digital camera, resulting in a 1.85 gigapixel image 75 degrees wide and 15.8 degrees high. More information on the GigaPan process can be found through the links on that page. -- Editor

Marcellus Shale and more in Pennsylvania Geology online

A new issue (v. 40, no. 1) of Pennsylvania Geology is available on the Pennsylvania Geologic Survey web site at www.dcnr.state.pa.us/topogeo/pub/pageolmag/pageolonline.aspx. It includes an illustrated article on Geochemistry of the Marcellus Shale - A Primer on Organic Geochemistry, and several others. -- Editor

Samples for Teachers

NMS has received many donations recently and some may be suitable for classroom teaching, either big chunks for the front of the classroom or smaller ones for students to work on. Teachers may contact Dave Glick (see page 8) with specifics (size, number, type) of what they could use, and we'll see what we can do. -- Editor

NMS 10 Years Ago

In August, 2000, our meeting program was mining videos projected on the big screen in Steidle Building. *

NMS Now! Facebook!

See our public Facebook page at <http://www.facebook.com/group.php?gid=293993550756> *

Welcome to a New Season

by David Glick, NMS President

We are looking forward to a new season of meetings and activities, kicked off by our traditional "Show and Tell" meeting on August 18 and our picnic on August 21. Show and Tell has also been called Open Mike Night and Open Demo Night, and it's always fun and informative. Bring a specimen, photo, project, book, or just a story, and tell the rest of the club what you've been up to. Bring your friends to this and other meetings, too - we want to spread the word about what we do, and would be happy to connect with folks who share our interests and might join NMS.

The annual picnic, to be held at Ellen and Stu Bingham's for the first time, should also be a great time. Please come! Last year's turnout was low, let's not have a repeat! RSVP (see page 1 or the insert) and come at 6:00 p.m. on Saturday the 21st, after the heat of the day is done.

Monthly meetings, field trips, juniors' monthly meetings, a holiday event, a booth at Spring Creek Day, a 2010 installment in our photographic poster series, donation of books to libraries, and probably some things I'm forgetting, are all being planned. There are many places for members to help in all this, and Board members and others who are organizing these things now would be very grateful for the help. Please contact me or any of the Board members and we'll find something you can do. *

Autumn Mineralfest Show

October 2 at Macungie

The Pennsylvania Earth Sciences Association will hold its Mineralfest Mineral, Fossil and Gem Show at Macungie on Saturday, October 2. The show is indoors at the Macungie Memorial Park, 8 miles southwest of Allentown, PA; from I-78 at Fogelsville, take Route 100 south 6 miles to Macungie, turn left onto Poplar Street across from the Bear Swamp Diner. Hours are 8:30 a.m. - 3:00 p.m.

As usual, there will be over 100 tables of minerals, fossils, gems, geodes, and crystals, plus fluorescent displays, gold panning, food, and free specimens and special activities for children. See their illustrated web site at www.mineralfest.com -Editor

110 years ago in The Mineral Collector

The August 1900 issue of The Mineral Collector starts with an article on the origins and history of museums, followed by John Manley reporting on some interesting specimens from New York and New Jersey, but the eye-catching article is on "Oil Wells Under the Sea." A writer in Los Angeles reports "Drilling wells in the sea is the latest and most remarkable feature of the great crude oil industry. This new and radical departure has been successfully carried out in Summerland, Cal., the only place where it has ever been attempted..." -Editor

POPULAR MINERALOGY

Fascinating mineralogy and earth science for the amateur mineralogist and serious collector - #35

Household Mineralogy

by Andrew A. Sicree

Minerals and rocks in the home

We live in a world of plastic and steel. Apart from those household items that have their origin in plants (wood and cotton) or animals (wool), most of the things we use every day originate from a hole in the ground. Plastics come from petroleum, steel from iron ore, wallboard from gypsum from the burning of coal, and computer chips come from quartz sand. The list goes on. All of these items are derived from highly processed minerals.

Our ancestors lived in a world of stone and wood - they were perhaps more familiar with the raw minerals and rocks that they used in everyday life. But still today, we have minerals around the home, minerals and rocks that are used with a minimal amount of processing - typically little more than cutting or crushing and mixing with other materials. Let's go on a geological field trip around the typical home.

Scoria

The "lava rock" sold for use in gas barbecue grills is typically a basaltic scoria. Heated stone evens out the grill's heat and the vesicles in the basalt help to catch grease falling from grilled food.

Pumice

Pumice is a volcanic rock - it really is a volcanic glass. Pumice makes a good abrasive and blocks of the stone are used to scour dead skin from calloused feet. Pumice is also found in Lava brand soap - this soap is a good hand cleaner precisely because it takes off skin as you use it. It is definitely not a beauty soap!

Graphite

Pencil lead is made of the mineral graphite, admixed with some clay minerals. And, as pencils are common household items, so graphite is, too. But another household use for graphite is as a dry lubricant for locks. We use a small tube of graphite powder to lubricate the wheels of our sons' Cub Scout Pinewood Derby cars.

Chalk

Chalk is a calcium carbonate rock formed from deposits of the carbonate scales of marine phytoplankton.

Blackboard chalk is a big use for this soft white rock. Around the home it can be found in children's sidewalk chalk and in toothpaste, where it serves as a mild abrasive (chalk has Mohs hardness of 4, your teeth have a hardness of about 5, so it won't scratch your teeth.)

Slate

Slate is a very fine-grained metamorphic rock that lends itself to being cut into flat plates. Schoolhouse chalkboards were classically made of slate (although artificial "blackboard" materials have taken over in many schools). Household uses of slate included slate roofs. A properly installed and maintained slate roof can last 100 years, compared with a 20-year life span for asphalt roofs. Because it is non-conductive, slate was formerly used as backboards for household circuit breakers. Slate circuit boards will have been replaced in any house with modern wiring, but the old slate circuit boards may still be hanging on the basement walls.

Slate is used in the bed of better-quality billiards and pool tables. It makes the pool table very heavy, but gives a very flat and stable surface that will not warp with changing humidity.

Vermiculite

Vermiculite, an expandable mica, finds a variety of uses in the home. Vermiculite is a sheet silicate mineral with water molecules between its layers. Upon heating, the interplanar water boils to a vapor and puffs up the vermiculite crystals in much the same manner as popcorn pops.

In many old houses, expanded vermiculite has been used as a thermal insulation material. Typically, single crystal flakes about 0.25 inches across are expanded and the puffed up granules are poured or blown into spaces between the walls. Expanded vermiculite is inexpensive, nonconductive, and fireproof - an ideal insulating material. Unfortunately, vermiculite insulation got a bad rep when it was discovered that vermiculite from a major producer - W. R. Grace's mine in Libby, Montana - contained very unhealthy levels of asbestos. Although many homes have been remediated, houses still have asbestos-containing Libby vermiculite

hidden in their walls. It is important to recognize that vermiculite itself isn't a health hazard.

Vermiculite can be spotted around the home in plant potting mixes (as those silvery or golden flakes), in kitty litter, and in gasoline spill clean-up kits.

Coal

Coal, of course, has been popular for home heating for more than 150 years. Many houses still heat with coal, although the advent of automatic coalers make shoveling coal into the furnace a thing of the past for most householders. Many automatic coalers require "pea" (13/16" - 9/16") or "buckwheat" (9/16" - 5/16") sizes, so the coal cellar full of baseball-sized rocks is also a thing of the past. Although coal produces about 50% of our country's electricity, Americans are becoming less and less familiar with coal. Each year, I'm amazed at the fact that few of my geology students recognize coal, even though I teach geology in Pennsylvania, a major coal-producing state.

Even if an older house is now heated with gas or electricity, one can still sometimes spot the metal hatches over the coal chute through which the deliveryman poured his load of coal. An overlooked chunk might still lurk in a dark, unswept corner of your basement.

Both anthracite (hard coal) and bituminous (soft) coal are used for home heating. Coal can also be found in some aquarium filters and water filters.

Kitchen countertops

Stone countertops for kitchens and bathrooms crop up in expensively-appointed homes. The custom stone industry sells a variety of "granites" and "marbles" but these are trade names, not geological terms. In general, the "granites" are silicate rocks while the "marbles" are carbonate rocks. Some stone, such as "Missouri Red Granite," really is granite. Other stones, such as "black granites," might really be gabbros, diorites, anorthosites, or even larvikites. Some stones sold as "granites," especially those with swirled patterns, are metamorphic gneisses. One can even find pegmatite veins running across some people's kitchen counters.

Countertop marbles can be true marble. Snow-white marbles are often preferred for bathrooms, for instance. Other stones sold as "marbles" include travertines and limestones. Green marbles may be serpentinites. Travertines are hot-spring deposits and often are very porous - usually these rocks must be coated with a plastic sealant before use. Fossiliferous limestones display interesting patterns from the cut-through brachiopods and gastropods that are commonly found in such stones. Fossil-bearing limestones from Pakistan are popular for use in stone bathroom sinks and stone urns and pillars. Clearly, any rock displaying well-preserved fossils cannot be a true marble.

Talc

Formerly, most baby powder was made from talc, the softest mineral. Often the bottle read "talcum powder." Concerns over exposing infants to trace asbestos and other mineral dusts resulted in the replacement of talc with powdered corn starch in most baby powders in use today.

Soapstone (massive talc) is used for side panels in some modern wood burning stoves manufactured in Vermont. The soapstone absorbs heat and radiates it more steadily than iron stove sides. For a similar reason one may find soapstone used to make boot warmers.

Hand-carved gemstone boxes, made of soapstone and sometimes inlaid with mother-of-pearl flowers, are popular gift items. Many of these are carved in India, Pakistan, or China.

Garnet

Garnets can be gemstones, but it is more common to find garnets at home in the form of garnet sandpaper. Some sandpapers were originally covered with grains of quartz sand but synthetic materials like aluminum oxide (the mineral corundum is aluminum oxide) are more commonly used today. Similarly, emery paper and emery boards for sanding fingernails utilize synthetic or natural corundum (emery) as the abrasive. Garnet sandpapers are used for woodworking and have a distinctive orange color.

Mica

Muscovite mica, a silvery sheet silicate mineral, is found in a surprisingly wide range of household products. Crushed mica is used as a glitter in make-up products ranging from lipstick to blush to metallic fingernail polishes. Similarly, crushed mica is used in automobile paints to give a "metallic" flash to a car's paint job.

Boards made of compressed mica fragments are used as insulators in kitchen toasters where they support the electrical heating coils. Mica is ideal for this job because it is a non-conductor and is fireproof.

Sheets of mica called isinglass were used to make fireproof lampshades and employed in windows in wood burning stoves.

Feldspar

Crushed feldspar has been an abrasive ingredient in scouring powders such as Bon Ami - although its tendency to scratch plastic, vinyl, and metal finishes has made it decline in popularity.

Borax

Although many are not aware that it is a natural product, borax makes a good detergent. The borax in Twenty Mule Team Borax, a laundry detergent, is a naturally occurring

mineral. As mined in places such as Death Valley, "borax" is a mixture of the mineral borax and other closely related sodium borate minerals.

Halite or salt

Salt is perhaps the oldest household mineral. It comes from either evaporate deposits near the sea ("sea salt"), or from underground mines as the mineral halite. The salt used in household salt shakers has typically been recrystallized and iodized, and it has some anti-clumping agents (such as sodium silicoaluminate) added to keep it free-flowing even in humid environments.

Rock salt is used to de-ice sidewalks and driveways in winter. This material is usually obtained from underground salt mines and the amount of processing is minimal.

Gemstones

No discussion of household minerals would be complete without mentioning gemstones. Gemstones found in the typical jewelry box range from the rare (diamond, tanzanite) to the common (smoky quartz and amethyst). Gemstones usually come from among the harder minerals like corundum (ruby and sapphire), beryl (aquamarine and emerald), and topaz. Turquoise, opal, and jet are typically the softest and most easily damaged of the common gems. Garnets, lapis lazuli, citrine (yellow quartz), agates, and many other minerals and rocks can be found in jewelry as well.

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*Dr. Andrew A. Sicree is a professional mineralogist and geochemist residing in Boalsburg, PA. This **Popular Mineralogy** newsletter supplement may not be copied in part or full without express permission of Andrew Sicree. **Popular Mineralogy** newsletter supplements are available on a subscription basis to help mineral clubs produce better newsletters. Write to Andrew A. Sicree, Ph.D., P. O. Box 10664, State College PA 16805, or call (814) 867-6263 or email sicree@verizon.net for more info.*

Emery

Emery in the form of emery boards and emery paper is a common enough household item and we are told that emery is just a variety of corundum (hexagonal Al₂O₃). This is true up to a point, but naturally-occurring emery is usually a mixture of minerals. The predominant mineral is corundum, which is quite hard (H = 9). But other minerals occur intimately mixed with the corundum in the emery. Iron-bearing spinel minerals such as magnetite (cubic Fe₃O₄) and hercynite (cubic FeAl₂O₄), and rutile (tetragonal TiO₂) contribute to making emery a dark gray to black material. Because these minerals are softer than corundum, the effective hardness of emery is something less than nine.

Formerly, the Greek island of Naxos was the most important source of this industrial abrasive, but the widespread manufacture of cheaper synthetic abrasives has cut into demand for emery.

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Geo-Sudoku

by David Glick

This puzzle contains the letters AILNORSTU, and one row or column spells out the property of mica that makes it useful in electrical devices. 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.

			A	S	L			
				R		I	L	O
		L			O			N
		T		O	I			
	N					T	O	
		R			S	L		
			L		N		S	
U		O	S	I	R			L
S	L		O		U			I

This puzzle contains the letters CGILMNPRU, and one row or column includes what you don't want happening in your salt shaker. 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.

			L					P
U	R				P	G		
				N		I		
I			U			L		
	C	L		R	N			G
R	G	U	P				I	C
L	M		R			P		I
	I					M		
			N	M			R	

Crystal Matrix Crossword

Not Quite Rock

ACROSS

- 1 layered types of rocks
- 9 state noted for soapstone
- 11 longer periods of time
- 12 used to identify minerals
- 13 useful for writing specimen labels
- 14 opposite of outa
- 15 time more than 2010 years ago
- 16 "strange rock" found in another rock
- 18 very fast type of jet aircraft
- 19 source of natural halite
- 20 anti-aircraft
- 21 lead and chlorine mineral
- 26 major uranium mine
- 28 International Labour Relations (ab)
- 29 comes before twoer
- 30 not true
- 31 rock group
- 32 temporary license
- 34 Canadian province (ab)
- 35 suite (ab)
- 36 cheer
- 37 for example
- 38 opposite of a watcher
- 39 not quite like an eyelet
- 41 one more than a single
- 42 a better thought
- 44 an ancient Tongan dance
- 45 red variety of corundum
- 46 chalcopyrite habit
- 48 silver
- 49 like a referee
- 51 home of Flint Ridge
- 52 fine layers inside rocks
- 56 radium
- 57 Mineral Information Inst.
- 58 car club
- 59 disease dangerous to collectors
- 61 soft layered silicate
- 62 fluorescent (ab)
- 63 those who study minerals

DOWN

- 1 studying shaking rocks
- 2 more longer times
- 3 found in every cell
- 4 island (ab)
- 5 found stuck in a rock
- 6 National Review (ab)
- 7 unavoidable
- 8 twelve months =
- 9 quartz or calcite lines cutting through rock
- 10 gives miners a blast
- 13 like palladium
- 15 found in beryl
- 17 Egyptian writing
- 19 ___ Paulo in Brazil

1	2	3	4		5	6	7	8				9	10	
11					12							13		
14				15			16							17
18			19											
		20			21	22	23					24		25
26	27				28							29		
30				31						32	33			
34			35							36				37
		38						39	40				41	
42	43						44					45		
46						47						48		
										49	50			51
52	53		54				55			56			57	
		58					59		60			61		
		62			63									

- 20 like beer
- 22 white garment
- 23 found in uraninite
- 24 ancient mariner
- 25 found with gold at Cripple Creek, CO
- 27 kith and ___
- 31 not like an eight
- 32 the guy with the gold
- 33 tit for ___
- 35 done remove dirt from minerals
- 37 motion of tides
- 38 in tenths
- 40 law degree
- 41 how minerals are gotten
- 43 between ti and ra
- 45 strike on the knuckles
- 47 amorphous silica mineral
- 50 like mom
- 51 not quite oiler
- 53 Army Air Force
- 54 each
- 55 an ___ for an ___
- 57 girl's name like May
- 60 state with a cape
- 61 found in thorite

LAST ISSUE'S SOLUTION: More Zeolites

P	H	I	L	L	I	P	S	I	T	E		B	E	
A	U	T	O		M	E	M	O				O	R	E
R	E	E		N	I		E	N	C	A	S	I	N	G
A	S		P	E	T			I				T		O
N		W	I		A	F	I	C	I	O	N	A	D	O
A	D	I	T		T	I	S				Y	I	N	S
T	I	N		P	I	E	R			G	L	E	N	E
R	N		P	R	O		A			E	A	T		P
O		P	E	E	N		E	T	O	N		M	E	R
L	A	I	R				L	A	D		M	I	N	E
I	A	N	T	H	I	N	I	T	E		I	R		E
T		K					U			S	A	L	L	K
E	R	I	O	N	I	T	E			I	N	X	I	I
	A	S	K				T	O	N	S		S	I	L
	P	H					E	D	I	N	G	T	O	N

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.

Aug. 20 - 22, 2010: 13th Annual Show and sale, "Gem Miner's Jubilee" by MAGMA - Mid-Atlantic Gem & Mineral Association. Jewelry, minerals, fossils; 70-plus vendors. Lebanon Expo Center, Rte. 72 and Rocherty Rd., Lebanon, PA. Fri. 10-6, Sat. 10-6, Sun. 10-4; adults \$6, children under 12 free; contact MAGMA, 301-565-0487. www.gem-show.com

Sept. 18 - 19, 2010: Gem, Mineral and Jewelry Show by Central Pennsylvania Rock and Mineral Club. Zembo Shrine, Third and Division Streets, Harrisburg PA. Sat. 10-6, Sun. 10-5. See page 2 and www.rockandmineral.org/annualshow.htm

Oct. 2, 2010: Autumn Mineralfest sponsored by the Pennsylvania Earth Sciences Association. Macungie Memorial Park Building, Macungie, PA. Saturday 8:30-3. www.mineralfest.com

Oct. 30, 2010: South Penn Rock Swap, by CPRMC & Franklin County RMC. South Mountain Fairgrounds, 1.5 miles W of Arendtsville PA on Rt 234, NW of Gettysburg. Sat. 8-3.

Nov. 6 - 7, 2010: Fall Symposium and Field Trip by Friends of Mineralogy- PA Chapter. Sat.: Symposium at Franklin and Marshall College, Lancaster, PA; Sun.: field trip, to be announced. www.rasloto.com/FM/

Nov. 6 - 7, 2010: Gemarama. Exton, PA

Nov. 20 - 21, 2010: 3rd Annual Show and sale, "Gem Miner's Holiday Festival" by MAGMA - Mid-Atlantic Gem & Mineral Association. Jewelry, minerals, fossils; 40-plus vendors. Lebanon Expo Center, Rte. 72 and Rocherty Rd., Lebanon, PA. Sat. 10-5, Sun. 11-4. www.gem-show.com

Nov. 30, 2010: "ULTRAVIOLATION." Fairless Hills, PA

2011: EFMLS & AFMS July 7-10, Syracuse, NY. Conventions July 7-10, show July 9-10.

2012: EFMLS Sept.16-17, Harrisburg, PA *

For sale / trade: Equipment & Materials

For sale: Large mineral collection; will sell all or part. Tumble polisher with three 12-lb. and one 6-lb. drum plus grits, polishes and pellets. My phone number is (570) 672-2325. Leave a message if I'm not in.

For sale: 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 570 726-8091 after lunch every day, or e-mail: dreinhold1@comcast.net *

GeoSudoku Solutions from page 6

N	O	I	A	S	L	U	R	T
A	S	U	N	R	T	I	L	O
T	R	L	I	U	O	S	A	N
L	A	T	R	O	I	N	U	S
I	N	S	U	L	A	T	O	R
O	U	R	T	N	S	L	I	A
R	I	A	L	T	N	O	S	U
U	T	O	S	I	R	A	N	L
S	L	N	O	A	U	R	T	I

G	N	M	L	I	U	R	C	P
U	R	I	M	C	P	G	L	N
C	L	P	G	N	R	I	U	M
I	P	N	U	G	C	L	M	R
M	C	L	I	R	N	U	P	G
R	G	U	P	L	M	N	I	C
L	M	C	R	U	G	P	N	I
N	I	R	C	P	L	M	G	U
P	U	G	N	M	I	C	R	L

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). Your dues are used for programs and speakers, refreshments, educational activities, Bulletins, and mailing expenses. Please fill out a membership form (available on the web site), 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

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.



Nittany Mineralogical Society invites members and friends of members of all ages and species (kids & pets welcome!) for our food, fun, and season kick-off to the 2010-2011 season of your local non-profit gem, rock, mineral, and lapidary society's

Annual NMS Picnic

www.ems.psu.edu/nms



Saturday, August 21, 2010

6:00 to 9:00 PM

Please R.S.V.P. by August 20 to
Ellen and Stu Bingham:

Email emb22@psu.edu
Phone 234-4532
Text/Cell to 814.360.3464

145 Goddard Circle
Pa. Furnace, PA 16865

5 miles from State
College town central

NMS PICNIC 2010 (Rain or Shine):



Saturday, August 21st at 6:00 PM.
Ellen and Stu Bingham's
(just 3 miles from past picnics at John's place)
145 Goddard Circle, Pa. Furnace, PA 16865
RSVP 814.234.4532 or emb22@psu.edu



Whitehall Road heading towards Fairbrook. Just after the only bend in the road, and just after Kocher horse stables: turn RIGHT onto Ramblewood, LEFT onto Brooklawn, RIGHT onto Goddard Circle. If you go as far as Tadpole Road you have missed Ramblewood II.



Streetside parking is acceptable, our block is used to it and we all do it. Whitehall Road on both sides of College Avenue / PA 26 is a good avenue for getting around PSU traffic.



SUPPLIED:
Grill, chairs, tables, place settings, utensils, cups, napkins, meats, buns, corn on the cob, butter, ice, iced tea, lemonade, and koolaid.



BRING:
Side dish or dessert, chips and dip, or any other desired beverages.