

Nittany Mineralogical Society Bulletin

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

May, 2024

Visit our web site: www.nittanymineral.org

Editor (see back page):

David C. Glick

May 15th meeting:
IN PERSON at BOAL HALL

Pennsylvania Iron Slag: From Trash to (Potential) Treasure

by Dr. Maureen Feineman, Dr. Isabel Fendley, and
Dr. Joshua Garber

Penn State Department of Geosciences

Our May meeting will be held Wednesday the 15th in Boal Hall (Boalsburg Fire Hall), 113 East Pine St., Boalsburg, PA 16827. Maps can be found on our web site.

7:00 to 7:45 p.m.: Social "hour." We will serve some refreshments - snacks and beverages - or feel free to bring your own non-alcoholic beverage.

*7:45 to 8:00 p.m.: Announcements, door prizes.
about 8:00 p.m.: featured program*

*The event has free admission and free parking (lot just east of Fire Hall along East Pine St.), and is open to all; **parents/guardians must provide supervision of minors.** Bring your friends and share an interesting evening. We expect to record the presentation for our web site.*

Slag is a waste product from iron and steel production, and is frequently found around historical iron furnaces in Pennsylvania. Though there are several potential uses of slag after its formation, including as a construction aggregate or cement additive, it also contains numerous elements of use to humans, including rare-earth elements (REE). Our current research at Penn State is investigating the fertility and economic potential of historical Pennsylvania iron slag as a source of REE, as well as the potential pitfalls of its use. In this talk, we will briefly discuss the history and technology of iron production in Pennsylvania; present pieces of slag and iron ore; present some of our preliminary data; and discuss the benefits, drawbacks, and future work necessary to utilize slag as an REE resource for the new economy.

See a related story on page 3 -Ed.



Centre Furnace, State College, PA. Marker, furnace stack.
M. Feineman photos.



Junior Rockhounds Meetings start Tuesday, May 21, 2024

We're very pleased to announce that Junior Rockhounds meetings for kids, sponsored by Nittany Mineralogical Society and Junior Museum, will resume this month. Weekly meetings are planned for 6:15 p.m.-6:55 p.m. on Tuesdays: May 21, May 28, June 4, June 11, June 18, June 25, (no meeting July 2), July 9, and July 16.

The meetings have a different topic each week, such as minerals, fossils, gemstones, geology, and dinosaurs. They include fun hands-on activities and discussions with an expert. Parents stay with their children, and may get a lot out of the meetings too! You don't have to be a member to attend; please come out and see what it's all about.

WHO: You! Best for students in 3rd through 8th grades, WITH their parents.

WHAT: Junior Rockhounds Science Club – Rocks and Minerals Programs.

WHERE:

BOALSBURG FIRE HALL

113 E Pine St.

Boalsburg PA 16827

Google Map: <https://goo.gl/maps/gtHjdzUgXbN9b5J8A>

Cost: Free! (plus students get free mineral samples)

Parents: Please accompany your student! All materials provided free of cost. Students get specimens to add to their personal collection. Hands-on, messy, fun! Science, learning, and family fun!

Contact for any questions is:

Andrew A. Sicree, Ph.D.

aas132@psu.edu

814-867-6263

NMS SCHEDULE

No regular NMS meetings June or July

Alexander Caverns Tour may be very late May
- watch for email announcement

Show & Tell meeting planned for August 21

NMS web site migration complete

Our web site host completed the migration to a different server on May 3. All seems to be well. -Editor

2024 EFMLS Convention & Hotel Information

from EFMLS web site, <https://efmls.org/annual-convention/>

The 2024 EFMLS Convention is scheduled for Saturday, June 8, at the Sterling Hill Mining Museum, Ogdensburg, New Jersey, just down the road from Franklin.

The discount hotel price deadline has passed. See the web site <https://efmls.org/annual-convention/> for convention details. Sterling Hill Mining Museum tours will be available.

See also <https://www.sterlinghillminingmuseum.org/>

Geo-Sudoku

by David Glick

The puzzle below contains the letters AHINOPRSY. One row or column spells a genus of trilobites. If you've read this issue, you've seen it. Each block of 9 squares, each row, and each column must contain each of the nine letters exactly once. The solution is on page 8.

		I	O				H	
A	O				I			P
Y	H						N	
					P			R
			S	A		H	Y	I
			R	O	H	P	A	N
			P					
O				R				H
H			N	I	A	S		Y

FEDERATION NEWS

Nittany Mineralogical Society, Inc., is a member of EFMLS, the Eastern Federation of Mineralogical and Lapidary Societies, and therefore an affiliate of AFMS, the American Federation of Mineralogical Societies. We encourage our readers to read their monthly newsletters, which are linked from our web site, <<http://www.nittanymineral.org>>.

The Eastern Federation's May Newsletter has all of the information for the Annual Convention, coming right up on June 8. President Bill Stephens covers the changes in office candidates in the wake of Larry Huffman's untimely passing, and other items in the status of EFMLS; see his Message on pages 6-7 of this NMS Bulletin.

In the AFMS May Newsletter, President Roger Burford discusses more about National Monuments and their allowed uses, noting that "rockhounds are not miners." The final installment of mermaid sightings leading up to the May 24-26 convention in Ventura, CA is presented; see continuing updates at <www.2024cfms-afms.com>. Social media, AFMS Scholarships, Rockhounds of the Year, and the Endowment Fund are discussed. AFMS Historian Jennifer Haley provides an article on The First National Convention of the AFMS in 1948. Links for pages on AFMS's new web site <www.amfed.org> are available at <<https://www.amfed.org/Old-New-Xref>>. The safety article (reprinted on page 4 of this NMS Bulletin) is of interest to those of us who are getting older. *-Editor*

Northern Alleghenies Geological Society

NAGS Dinner at the Outcrop, New Paris Quarry

Sunday, June 9, 2024

from

<https://www.facebook.com/people/Northern-Alleghenies-Geological-Society/100069113495667/>

After an extended hiatus, we are back with quality geologic programs for the community. We are excited to announce the 2024 Dinner at the Outcrop event. The event will be held at the New Paris quarry in Bedford County on Sunday, June 9th. In addition to networking and dinner, the event will include discussions on the stratigraphy of the quarry, minerals and fossils, geochemistry of the ash layers interbedded in the limestone, and collecting samples.

Reprinted from *NMS Bulletin* October 2018:

Stories professors told me:

a series by
Charles E. Miller, Jr.
State College, PA

6. The discovery

The South Mountain Physiographic Province is the easternmost part of the Appalachian Ridge and Valley. In Pennsylvania, this province is located in parts of Franklin, Cumberland, Adams, and York Counties. One natural resource in South Mountain is iron ore, consisting mostly of hydrous iron oxides called goethite and limonite. Especially in the early to mid-1800s, iron ore was smelted at iron furnaces such as at Pine Grove and Caledonia. A waste product of iron ore smelting is slag, a vitreous (glassy) material. Impurities impart a variety of colors, including red, blue, green, brown, and white. These colors are attributed to a mixture of metal oxides and silicon dioxide. The latter is also the composition of quartz. Commonly, vesicles or small cavities can be seen in slag samples, formed when volatile gases escape from a melt during smelting. Slag is analogous to obsidian, a natural glass associated with some volcanic flows.

Although attractive as it sometimes is, slag is basically worthless to collectors. It is common at old charcoal iron furnaces that were scattered across Pennsylvania. Some mineral enthusiasts use slag in tumblers, for which it is suitable because of its hardness.

Several decades ago, a former earth science professor at Shippensburg University told the following story to this writer. A colleague of his – from a different department – showed what he thought was a valuable mineral found over the weekend in nearby South Mountain. The mineral was red and vitreous. In his mind, it was a rare discovery. Upon inspection, the earth science professor gently informed the colleague it was slag, not a rare mineral, and it was common in a variety of colors, a waste product from iron ore smelting, and essentially

worthless. The colleague was so sure of his discovery that he pointedly told the earth science professor – trained in geology – he did not know what he was talking about. Decades have passed since this conversation occurred. It is possible, today, that this worthless, common piece of slag is still considered a prize in that colleague's collection. The moral of the story is that some people do not want to know the truth.

Editor's note:

“What's this rock I found that looks like blue-green obsidian?” (or similar wording) may be the most common question we receive from the public here in the Ridge and Valley of central Pennsylvania. For more information on the plethora of iron furnaces which would have created this slag, see:

<https://www.mindat.org/article.php/1931/>

(That Mindat article is 22.+Iron+and+The+Old+Stone+Furnaces+of+Western+Pennsylvania)

unfortunately another good article http://www.oldindustry.org/PA_HTML/Palron.html seems to be no longer available.

See the May and October, 2017, issues of the Nittany Mineralogical Society Bulletin for earlier installments in the 'Stories professors told me' series.



Iron furnace slag from central Pennsylvania, found by Jim Garthe. Note the gas bubbles in the specimen at top left, swirls of color at top right, and conchoidal fracture at bottom right. *D. Glick photo*

NMS at Rhoneymeade Arbor Day Festival

NMS was pleased to accept an invitation to participate in an Arbor Day Festival for those interested in nature topics, held at Rhoneymeade Arboretum & Sculpture Garden on April 27. Dave Glick and Bob Altamura staffed the tables on a cold damp day, and were grateful to Jim Adams who appeared at the end of the day to help pack everything back to the vehicles.

We had about 60 adults and 7 children stop by the table, and the great majority stayed to talk and were very interested. We handed out cards with our meeting information and web site, recent Bulletins, Pennsylvania Geological Survey Educational Series booklets, as well as tumbled stones and necklace parts left from Minerals Junior Education Day. A new poster on NMS interests and activities was displayed, as shown (reduced) on page 5.

See <https://www.rhoneymeade.org> for more about Rhoneymeade. -Editor



NMS table at Rhoneymeade on April 27; Dave Glick, Bob Altamura, and an interested visitor.

Rhoneymeade volunteer photo for NMS.

Safety:

Being Safe, Staying Safe

Ellery Borow,
AFMS Safety Chair
from AFMS Newsletter
v.77 no.4, May 2024



There is a price to pay, as the years go by, for our increased wisdom. As time marches on people often face some combination of decreasing bone density, macular degeneration, thinner skin, some hearing loss, stiffer joints, and concerns with cognitive capacity. It is a long list. While all this is not new news, health issues tend to help keep one on their toes and, hopefully, help one remain aware of their increased wisdom, their precious wisdom.

There is an additional pressing matter that rock, gem and mineral collectors of advancing years also face. That is the need for sufficient sleep. In point of fact, the lack of sufficient sleep is a big issue just about everywhere in today's society. By now most people are aware that lack of enough sleep affects one's cognitive skills and one's ability to focus. Attitudes often shift, as might one's creativity. With lack of sleep there can be impairment of digestive processes and blood pressure. Lack of sleep affects one's judgement. It can make one feel drowsy, which is a huge concern when behind the car's steering wheel. Lack of sleep affects people in many ways that are not conducive to being and staying safe.

Lack of sleep interferes with one's enjoyment of cutting and polishing a stone. It interferes with judgement when trying to have a hammer connect with the head of the chisel one is holding. Lack of sleep interferes with one's conversations with friends at a club meeting. It affects one's capacity to remember

what is heard during a webinar. One's visual acuity appears to decrease when tired. Reaction time suffers when one is tired. Judgement suffers when one is tired. Lack of sleep is not good for anyone trying to participate in any mineral hobby activity.

So now, let us put the parts together. Advancing years often dictate accommodation to health issues, and advancing wisdom helps one keep on top of one's changing limits with what they can and cannot do while safely accommodating those issues. Suffering from lack of sleep affects everything.

Passions run high in the hobby – about to open up a vug or pocket of crystals? Putting the polish on a grand faceted stone? Driving up to that mountaintop quarry you have long dreamed to dig? About to put on a program of one's favorite stone carving technique? Passions run high and it is easy to push oneself hard. Sometimes one pushes so hard that getting enough sleep the night before can suffer.

The wise and safety-minded will try to get enough sleep. The wise and safety-minded will mind when they start feeling tired. The wise and safety-minded hobbyist will take breaks before they become too tired. The wise and safety-minded hobbyist will mind how their body is responding to feeling tired. Sometimes one just cannot get enough sleep before a big day. If that is the case, please consider taking advantage of a quick nap, or several short breaks as one can, or delegating to someone else the tasks requiring careful focus, or listening to the respectful comments of others who are suggesting one might be too tired to go on without first taking break. Having sufficient sleep and rest makes a world of difference in enjoying and being safe in this grand hobby of ours. Actually, having sufficient sleep is great for everyone. So, please be safe, be good to oneself and maybe go to bed a bit early. One's safety may depend on it. All in all, your safety matters.

Nittany Mineralogical Society

your local mineral, fossil, lapidary, and earth science club

Mineral Collecting



Quartz on dolomite, Oak Hall, PA



Fluorite on calcite, Lancaster County, PA

Fossil Collecting



Brachiopods, Morocco



Pyritized gastropods



Brachiopod, Perry County, PA



Fern fossil, St. Clair, PA

Lapidary: Gemstones & Jewelry

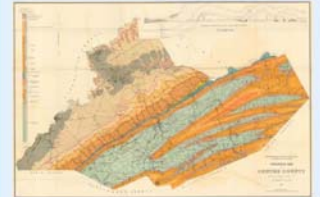


Oolitic chert pendant



Lapidary machine

Earth Science



Nittany Mineralogical Society is a member of Eastern Federation of Mineralogical and Lapidary Societies (EFMLS) - almost 100 clubs with 9,000 members in eastern states - and American Federation of Mineralogical Societies (AFMS), which includes EFMLS and six other regional federations. We are a 501(c)(3) nonprofit.



Visit our web site:

www.nittanymineral.org

Monthly Bulletin, Monthly Educational Meetings



VISITORS WELCOME!

Junior Rockhounds Meetings and other children's events In seasons when we are able to schedule



Field Collecting Trips



Minerals Junior Education Day



Field Tours, Bus Trips



Landscapes & Geology - Seven Mountains



Carnegie Museum of Natural History

Picnics & Dinners





EFMLS President's Message

Bill Stephens, PG

From EFMLS News 71:5, May 2024

The EFMLS Board met March 24 and we had a quorum (minutes pending), and we met April 28 for discussion only as we were one short of a quorum. In between we had to deal with filling vacancies created by the passing of 1st VP and longtime Executive Board member and member of the Catawba club, Larry Huffman. He will be sorely missed, and it was sudden. Such a kind, calm and knowledgeable member of our Board, his loss is a personal one for me as a stalwart supporter of our initiatives post-Nock.

For the time being, Andrew has moved up from 2nd VP to 1st VP and will likely be your President next year. I appointed Brittany Martin, also of CPRMC, to Region 3 RVP, and then she agreed, upon my request, to fill the position of 2nd VP until she becomes official at the convention this year. She hit the ground running with her RVP duties and had already begun a campaign to engage the 25 or so clubs in Region 3. She will remain in the position of 2nd VP for the 2-year term and Matt Charsky has agreed to step in as 1st VP for 2024-2025 fiscal year to give us time to find a volunteer to fill the position longer term. Thank you, Brittany and Matt, for stepping up.

We have the particulars of the upcoming convention to be held June 8 at the Sterling Hill Museum in New Jersey worked out. Cheryl Neary, Secretary and Convention Chair, will be submitting forms which will be available online on the website as soon as she gets it to our web folks. There's a lot going on in the background that will have to wait for future newsletters.

The EFMLS is in sound financial condition. Kudos to new treasurer Sylvia Eppig for saving us nearly \$3,000 by filing the 990EZ tax form electronically for \$80! According to our Treasurer's report (04-28-2024), we currently have 82 clubs with 8,616 adults and 1,124 juniors totaling 9,740 members in all, with 3 additional clubs having their dues in the mail. We have 72 clubs with 7,288 adults and 977 juniors totaling 8,265 total participants in our insured group. Looking at the stats, we seem to have fewer clubs, and we know several simply quit/closed out, we have one new club, The East Coast Gem & Mineral Society, that is brand new and Larry, Andrew, and I worked to get them through the process. Smart and organized they are, already have several field trips scheduled and one, Graves Mountain, in the rear view. It seems even though we have fewer

clubs overall, we have more members in the 82 clubs and net more than all the lost clubs' members, so it indicates continued net growth in people interested in the hobby. I think we might be the largest of the seven Regional Federations but don't quote me on that.

In the matter of insurance, we recognize that we will never get a quote from the insurance company in advance of needing to get the forms on the website and out via email to the clubs, or so I thought. Seems when you inform them that they are being shopped, they are more responsive to our schedule. Because we could not wait this past year, we used the statistics from the past two years to forecast what the costs will likely be this year as the broker said they did not expect a change. Costs went up several cents per person and we also incurred over \$800 in taxes, something we have not seen in the past. My corporate insurance broker says that is because the carrier is not a State of New York backed carrier. We are shopping for better terms and lower costs. Stay tuned.

By now many of you are aware that, along with my partner Tommy Greene and with documentary assistance from our social media director and then 2nd VP, now 1st VP Andrew Rockhound, I conducted a week-long machine dig at the wavellite locality, National Limestone Quarry at Mount Pleasant Mills, PA (both pits). This locale is a Mecca for PA and surrounding states and one of the few quarries that actually has both something interesting and valuable to collect, and a quarry owner that likes rockhounds. I have cultivated a strong relationship with Eric as have other club officers. We dug out the "Lemon Drop" trend (see photo below for one of my exceptional specimens) which produced some fine and exceptionally large yellow balls during my 2022 machine dig, most notably



Ryan Klockner's 1-inch killer ball on matrix he had professionally cleaned and valued at \$1,200 by some experts at Tucson last year. We dug down 20 feet below the road level and 35 feet east along the mineralized zone, placing spoils in the mined-out area behind us. Toward the end we were in some mint to pistachio green smaller balls, both flat and raised, mainly in the breccia zone that has continued to produce some of the most exceptional, variously pigmented wavellite. As the upper wall began to slide in and make conditions unsafe, we took 3 or 4 last scoops (20 tons +/-) directly along the breccia vein and mineralized zone and placed it to the side along the road for the clubs. We missed a lot in the spoils.

We kept this activity secret until it was completed to prevent trespassing in our temporarily leased area. It was my intent to have Friends of Mineralogy - Pennsylvania Chapter (FM-PA) be the first club in as its President and because members have conducted lab research and published on this site, and because Andrew took a whole week off and videoed almost everything, we invited the Central PA club as well for our April 6th first post-machine-dig trip. The Franklin County club was scheduled for the afternoon already and we coordinated with them as well. Invites went out to our two clubs, and we had nearly 100 respondents and new members signed up for both our organizations! [Clubs come all the time and once word got out, they began scheduling their trips.] When the day came, we had about 100 attendees show up (photo below) in our two clubs, several of whom heard about the adventure and joined either FM-PA or CPRMC. Another 25 or so came from the Franklin County club. Our group was the largest ever to attend. See Andrew's Dirtman Report on the field trip on YouTube. I will be giving a presentation at the FM-PA Symposium and conducting a field trip



FM-PA / CPRMC Field Trip to National Limestone Quarry, Mount Pleasant Mills, PA, on April 6th for wavellite.

there Nov 9 & 10 this year, and at the Tucson Symposium next February. Both symposia are hybrid if you cannot attend in person.

I should note everyone was happy, no one left empty-handed, and some recovered specimens very much similar to some of the top pieces we collected during the machine dig. And I found the first trilobite ever reported, and lost it minutes after photographing it (Oy vey!). Steve Lindberg had it identified as *Synphoria stemmata*. It's still on the dumps if you can find it! Look for an article later this year and a display case at Tucson next February. More YouTube and Facebook posts are coming.

I do want to put in a plug for the Young Mineral Collectors (YMC), a relatively new organization that consists of mostly serious mineralists and avid collectors under the age of 40 globally. It's a new 501(c)(3) and it's open to anyone but is designed for those under 40 who are serious about minerals. I had a collaboration strategy meeting with them Wednesday evening, April 24th, that was very productive. As President of EFMLS, FM-PA and FM-National, I see this group (1700 FB members, 300-400 active members) as a source of real talent, knowledge and commitment, and knowing they organized as a Facebook group in 2018, it's clear they have created something quite different from the conventional club, yet they represent the exact demographic we should be courting. We'll see what comes from our collaboration going forward.

Instructions on how to download the Mini-Miners Monthly will go out shortly and may be in this issue of EFMLS News. We have received some inquiries from clubs having difficulty with the download, so if you are having trouble, email the webmaster and get some help.

I presume registration for Wildacres is going well but have not heard in time for this issue. Last year the registration filled up early with a big waiting list.

If your club is having difficulties staying afloat or is considering leaving EFMLS, please contact me directly and let's discuss how the EFMLS can help your organization out. I continue to hear comments from some folks who are completely unaware of all the improvements and benefits we provide and are hung up on the problems of that rogue administration during the COVID years. Call me, email me, but reach out before it's too late. Even healthy thriving clubs should ask me to give a message at a meeting so your executives and loyal members can hear what we have to offer other than just insurance. It's a lot!

All for now. See some of you at the convention in June or in the field! Stay tuned and happy hunting!

Sincerely,
Bill Stephens, PG, President

UPCOMING EVENTS

Confirm details of events before attending.

<https://efmls.org/events/>

See other show calendar links on our web site.

May 13-19, 2024: EFMLS annual Wildacres Workshop.
See <https://efmls.org/wildacres/>

June 1, 2024: Spring Mineralfest, by Penna. Earth Sciences Assoc. Macungie, PA. Sat. only, 8:30 -3:00.
<https://www.mineralfest.com/>

June 8, 2024: EFMLS Convention at Sterling Hill Mining Museum, Ogdensburg, New Jersey. See page 2.

July 27-28, 2024: Gem, Mineral and Fossil Show by Monongahela Rockhounds. West Mifflin Vol. Fire Co. #4, Skyview Hall, 660 Noble Dr., Pittsburgh PA 15122. Sat. 10-6, Sun. 10-4.
<https://www.monongahelarockhounds.org/events-shows>

August 16-18, 2024: Gem Miner’s Jubilee Gem & Jewelry show. Lebanon Valley Fairgrounds and Expo, 80 Rocherty Road in Lebanon PA. Fri & Sat 10-6, Sun. 10-4. <https://www.gem-show.com/summer-show>

October 5, 2024: Fall Mineralfest, by Penna. Earth Sciences Assoc. Macungie, PA. Sat. only, 8:30 -3:00.
<https://www.mineralfest.com/>

Nov. 2- 3, 2024: Gemarama Annual Show, by Tuscarora Lapidary Society. Greater Philadelphia Expo Center, 100 Station Avenue, Oaks, PA. Saturday 10-6 / Sunday 10-5. <https://www.lapidary.org/gemarama/>

Nov. 9-10, 2024: Annual Symposium & Field Trip, by Friends of Mineralogy - Pennsylvania Chapter.

Geo-Sudoku Solution

R	N	I	O	P	Y	A	H	S
A	O	S	H	N	I	Y	R	P
Y	H	P	A	S	R	I	N	O
N	A	H	I	Y	P	O	S	R
P	R	O	S	A	N	H	Y	I
I	S	Y	R	O	H	P	A	N
S	Y	N	P	H	O	R	I	A
O	I	A	Y	R	S	N	P	H
H	P	R	N	I	A	S	O	Y

ATTENDING THE MAY MEETING?

Donations of **one or two high quality, labeled door prize specimens** are invited.

Larger quantities can go in a giveaway box.

Bring a friend!

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 \$25 (regular member), \$10 (student rate), \$18 (seniors), \$35 (family of two or more members, names listed). Those joining in March or later may request pro-rated dues. Your dues are used for programs and speakers, refreshments, educational activities, Bulletins, and mailing expenses. Please fill out a membership form (available at www.nittanymineral.org), make checks payable to “Nittany Mineralogical Society, Inc.” and send them in as directed, or bring your dues to the next meeting.

We want to welcome you!

CONTACT INFORMATION

mailing address:

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

SOCIETY OFFICERS

David Glick (President) 814-810-2116 (h)
e-mail: xidg@verizon.net
Dr. Bob Altamura (Vice-President) 814-234-5011 (h)
e-mail: raltamura@comcast.net
Dr. Barry Scheetz (Secretary) 814-360-8241 (cell)
e-mail: se6@psu.edu
Stuart Bingham (Treasurer)
e-mail: sebing145@comcast.net

OTHER CONTACTS

Field Trips: Dale Kephart
e-mail: beckdale2@comcast.net
Junior Rockhounds: Dr. Andrew Sicree
814-867-6263 (h) e-mail: aas132@psu.edu
Membership Chair: David Glick (see above)
Programs: Dr. Duff Gold 865-7261(o), 238-3377(h)
e-mail: dpgold33@comcast.net, gold@ems.psu.edu
Door Prizes: Dr. Bob Altamura (see above)
Facebook: John Dziak: dziakj1@gmail.com
Publicity:

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
425 Armagast Rd. phone: (814) 810-2116 (h)
Bellefonte, PA 16823-9762

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

Visit us at www.nittanymineral.org