



THE STREAKPLATE

NORTHERN BERKSHIRE MINERAL CLUB North Adams, Massachusetts VOLUME 52 NUMBER 7 December 2010

Visit us on the web at http://nbmclub.webs.com

Meeting Place and Time

DATE: Thursday, December 16, 2010 TIME: 6:30PM

LOCATION: Coyote Flaco Restaurant

Cold Spring Rd. Route 7, Williamstown

PROGRAM: Annual Christmas Party!

There is no program scheduled but elections will be held and with

any luck maybe even Santa will stop by to visit



An intricate Clay Stone

Christmas Party Details



We're trying something new for our annual Christmas party this year. It will be held at an excellent Mexican restaurant, Coyote Flaco in Williamstown. It will be buffet style with a wide selection of foods to choose from and the price is just \$20 per person. Don't send money as you will just pay the restaurant that evening. There is a full bar and their margaritas are the best! Be sure to bring a wrapped gift with a rockhounding theme for the gift exchange. The restaurant is right on Route 7 in Williamstown about a mile south of the Williams Inn.

Please email me at lmichon@rcn.com if you are planning to attend.

Farewell to Dan Washburn

Our president for the past year, Dan Washburn has sold his home and moved to Florida with his wife Nancy. Dan presided over a year filled with change for the club and we all appreciate his efforts. He will be missed and we wish him well in his retirement in sunny Florida. Maybe we should do a rockhounding field trip there this winter!

<u>Dues</u>

Club dues are due by December 31st. The annual cost is \$12 for a family membership and \$10 for an individual. Attached to the newsletter is a form to fill out and send in with your dues. You can either bring it with you to the next meeting or mail it to Larry Michon, P.O. Box 297, North Adams, MA 01247.

Ken Carlson gives fabulous talk

Ken Carlson gave a fantastic presentation at our November meeting. This past year he acquired the mineral stamp collection of the club's former president Jim Groves. During the presentation we were treated to a wide array of quality mineral specimens similar to what was on the stamps. Ken's enthusiasm for minerals was contagious and his extensive knowledge of minerals was impressive. He shared many interesting observations about the minerals and the stamps in a whirlwind fashion. We really could have used another hour or two to properly appreciate all the specimens and stamps that he brought to show the club. Thank you Ken for a very memorable and informative evening.



Ken Carlson and his mineral collection

Field Trips - Field Trips - Field Trips

Reserve your space to join us at the American Museum of Natural History-Saturday, January 15, 2011

The deadline for reserving your spot on the bus to New York City is December 16th. The total cost is \$34 for adults and \$28.50 per child under 12. Please bring your money with you to the party or mail it to me at P.O. Box 297, North Adams, MA 01247. We want to be sure all members who wish to go have a seat before opening it up to the general public.

The museums website is http://www.amnh.org/

President:

Dan Washburn
P.O. Box 144
Sand Lake, NY 12153 518-495-2070

Vice-President:

P.O. Box 297 North Adams, MA 01247 413-663-8430

Treasurer:

Larry Michon

Cindy Hancock 45 Spring St., Apt. 103 North Adams, MA 01247 413-664-4115

Co-Secretaries:

Sherry Melendy 1306 Potash Brook Road

Chester, VT 05143 802-875-4868

Amy Feld

6 Morgan Manor, #4

Lenox, MA 01240 413-637-8237

COMMITTEES

Programs:

Larry Michon

Vice President, 413-663-8430

Annual Show Committee:

Cheryl Gasperetti, Cheryl LeClaire, and Larry Michon

Field Trips:

Bob Michaels,

Chairman 413-664-0750 email: percibul@aol.com

Streakplate Editor:

Larry Michon, 413-663-8430 lmichon@rcn.com

"The Club" was founded in 1959. The purpose of the club is to develop and educate students, the community, and our members in the field of mineralogy, including the formation of rocks and minerals, the collection of minerals, their identification and display, and in the lapidary art of cutting, polishing and faceting; and to serve the educational needs of the communities in which club members live

...from the Constitution of The Northern Berkshire Mineral Club



Field Trip Reports

Clay Concretion collecting in Royalton, Vermont

On Sunday, November 14th Bruce Henderson and I spent the day collecting Clay concretions in Vermont. Rob LaPorte had given us directions to site known for clay concretion plates. Up to this point the clay concretions I

had collected were small so the idea of finding some larger plates really interested me. The site was located right beside Vt Route 107 in a large area used by construction vehicles. The hillside was steep and required careful maneuvering but in just a short while we were finding clay concretions of various sizes, some of which were very ornate. I always find the different permutations of the concretions to be so interesting.

Clay stone glacial concretions are known by many names around the world. For example, they are called "Imatra Stones" in Finland, "Fairy Stones" in Scotland, Ireland and Quebec, and "Mud-babies" or "Clay Dogs" in Connecticut. The Algonquins called them "Fairy Stones" and often carried them as luck charms when they went on fishing or hunting expedition. The lovers offered the most beautiful "Fairy Stones" to their loved ones. The biggest specimens occupied a place of honor in their homes, or according to the legend, these stones assured a protection against the bad spirits. They also brought good health and prosperity to the occupants of the premises.



Bruce on the steep hillside.

These concretions were formed at the bottom of Glacial Lake Hitchcock. About 18,000 years ago the glaciers started to recede and a lake was formed behind a mass of sediments deposited by the glacier at Rocky Hill, Connecticut and stretched some 200 miles north to St. Johnsbury, Vt. Within Glacial Lake Hitchcock, and many other glacial lakes, conditions were right to allow annual layering of the lake sediments. During the summer, abundant meltwater and sediments were transported into the lake and deposited as a layer of silt and sand on the lake bottom. In the winter the surface of Glacial Lake Hitchcock froze, allowing for fine clay-sized particles to settle out of the calm water. This clay formed a continuous layer that draped over the silt and sand deposited during the summer. Each couplet of a summer (silt and sand) and winter (clay) layer constitutes one varve and represents one year of deposition. Exposures of varves can be seen throughout the valley in river and stream cuts. In the past, the varves were mined from clay pits to create the traditional red bricks seen in many of the historic buildings in the valley. It is in these varves that the clay stones formed.



After we had been collecting for a while a man pulled up in a dump truck and struck up a conversation with us. He told us he was the owner of Quimby Mt. Quarry and he knew where to find some different clay concretions on his property and he invited us to follow him. As we began heading up the winding road towards the quarry Bruce nearly jumped out of the car while it was moving as he spotted clay concretion plates falling out of the road cut. Well needless to say we found all the plates we could handle.

The proud quarry owner gave us a tour of his operation. They mine large blocks of shiny silver hematite (iron ore) that is used in construction. The look of the material is unique and is shipped all over the United States. He invited us back and both Bruce and I think this would be a great place for a future club trip.

Graphite mine in Bennington

On Saturday, November 20th Bruce Henderson brought Rob LaPorte and I to an old graphite mine on the northwest slope of Mt. Anthony in Bennigton, Vt. Bruce knew the general location but it had been many years

since he had been there so we ended up spending a couple of hours scouting the woods before stumbling upon the mine. In a ravine there appeared a hole leading down into the earth. The mine entrance had been collapsed but access was still possible if you were determined to get in there. Rob and I took a look at it and said hmm, what an awfully tight, steep and muddy hole in the ground. Bruce said it looked like fun to him and a couple minutes later he slipped down the rabbit hole out of sight. When he emerged 10 minutes later he had some nice jet black samples of graphite in his hands for us to take home.

Above this entrance and maybe 50 feet back we found a large mine shaft measuring perhaps 30 feet across and 40 feet deep. This is where the adit Bruce had entered led to at one time. An adit is an almost horizontal entrance to a mine. It was an interesting sight to see out in the middle of the woods like it was.

Graphite usually occurs in flakes in metamorphosed rocks rich in carbon, but it can also be found in veins and in pegmatites. Where large deposits are found it is mined and used as an industrial lubricant and for 'lead' in pencils. It's very soft with a hardness of 1-2 on the Moh's scale.



Rob peers into mine shaft.

It's a little known fact that there is no lead in pencils. Graphite came into widespread use following the discovery of a large graphite deposit in Borrowdale, England in 1564. As the story goes, a passerby found bits of a shiny, black substance clinging to the roots of a fallen tree. The whole countryside was abuzz with talk



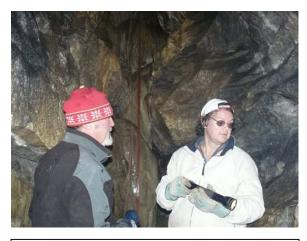
Bruce in collapsed adit

about this mysterious mineral, which eventually came to be known as "plumbagoi" or, more commonly, "Blacklead." They found it left a dark mark, making it ideal for writing and drawing, but so soft and brittle, some type of holder was required. Initially, they wrapped graphite with string. Later, the graphite was inserted into hollowed out wooden sticks. The woodcased pencil was born.

In 1795, a French chemist named Nicholas Jacques Conté patented a new process for making graphite pencil leads. This method mixed powdered graphite and clay in a water slurry, then formed sticks which hardened in a kiln. These composite graphite-clay "leads" allowed for more efficient use of graphite and revolutionized the pencil industry. Not only did the formula reduce costs, but by adjusting the ratio of clay and graphite powder, the changing hardness allowed more control of the lightness and darkness of the graphite mark left on the paper.

The Everett Cave on Mt. Anthony

After exploring the graphite mine I was treated to an exploration of a local favorite, The Everett Cave in Bennington, Vt. located just a short walk behind Southern Vermont College. The Everett Cave is a marble solution cave that cuts into the side of the mountain. A solution cave is one that is formed when acidic water carves away the stone. The cave features many interesting dripstone formations, which are best known as stalactites and stalagmites. These are formed by accumulating mineral deposits, and their names are derived from the Greek word meaning "that which drips."



Rob & Bruce inside the Everett Cave

The campus of Southern Vermont College and the mansion that sits high above the valley are the former estate of Elliot Everett. Everett made his name in the production of glass Mason jars, and his company ultimately evolved into Corning Glass. Later, the property was a monastery, before becoming the college.

I had heard of this cave but just never got around to it so I was pleased to get a guided tour. I've been in many caves and was impressed with the both the size of it and the formations to be found there. The caves around here just don't get to be as nice as this one. While we only explored the first level on this trip I resolved to return with proper gear to explore the cave more thoroughly.

An excellent slideshow can be viewed by clicking here http://www.necavephotos.org/gallery2/main.php?g2_itemId=14950

And here is a link to other unique natural features to be found in Bennington, Vermont. http://www.transportation-landuse.org/downloads/BenningtonPlanScenic.pdf

Minnesota Pipestone.

By: Phil Yerke

A town called Pipestone, Minnesota is famous among Native Americans nationwide. It it is the source of the stone used to make the ceremonial pipes. I became interested in pipestone while studying with a Lakota Sioux medicine man several years ago.

Catlinite is a metamorphosed shale that is soft and easily carved. It has a hardness of 2.5 on the Moh's scale, about the hardness of a human fingernail. Native Americans Carve it with a utility knife. In 1836 a man Named George Catlin traveled from New York to see this quarry. He sent a sample back to professor C.T. Jackson of Boston, Massachusetts for further study. C.T. Jackson reported that it wasn't steatite. it was new and similar to Agalmatolite. He named the stone Catlinite. At that time it was the only known source of the red stone. It is now mined in other locations such as Devil's Lake, Wisconsin, Rice Lake, Wisconsin and Sioux Falls, South Dakota. If you had interest in carving stones by hand I would recommend pipestone, it is available on Native American supply websites such as this one http://www.authenticpipestone.com/.





Owl in Tree by James Medicine Tree

Buffalo Pipe by B. Bryant

This interesting article sent to me by Bob Michaels and Lisa St.Cyr.

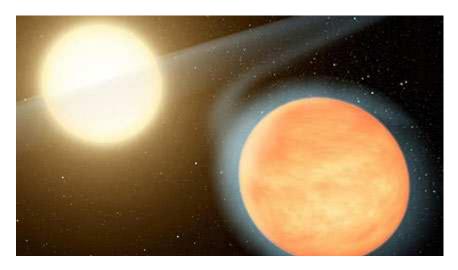
Scientists Say Planet May Have Mountains of Diamonds

By: Hugh Collins

If Earth is the Blue Planet, call this the Bling Planet.

Astronomers say they have spotted a planet that could contain mountains of diamonds.

WASP-12b, a gas giant about 871 light-years from Earth, seems to have an unusually large amount of carbon in its atmosphere. Diamonds form when carbon is compressed at extremely high temperatures.



JPL-Caltech / NASA

This illustration shows the searing-hot gas planet WASP-12b (orange orb) and its star. NASA's Spitzer Space Telescope discovered that the planet has more carbon than oxygen, making it the first carbon-rich planet ever observed. The high amount of carbon in the planet's atmosphere suggests that its solid core could be full of diamonds, rather than the silicon- and oxygen-rich materials on Earth.

"The high carbon-to-oxygen ratio indicates a carbide or diamond interior rather than the silicate geology of the Earth," said Nikku Madhusudhan, a Princeton astrophysicist, according to the Australian Broadcasting Corp..

If there is life on this pimped-out planet, it may depend on carbon-rich substances such as methane -- the main ingredient in natural gas -- rather than oxygen.

"This is new territory and will motivate researchers to study what the interiors of carbon-rich planets could be made of," Madhusudhan said, according to the Daily Telegraph. Madhusudhan and his team can analyze the chemical composition of the planet because it is so close to its star and has a surface temperature of almost 4,000 degrees Fahrenheit.

"The Spitzer Space Telescope can detect the heat of the planet, and studying this radiation tells us which molecules are in its atmosphere," Coel Hellier of Keele University in Staffordshire, U.K., said, according to the BBC News. Not everyone is convinced by the findings, which were <u>published in the scientific journal Nature</u>. Simon O'Toole from the Australian Astronomical Observatory said the findings are based on limited information.

Letters to the Editor

WHY RECREATE THE WHEEL?

At the November meeting there was discussion regarding re-designing the rack-card that we used to help advertise the last Gem and Mineral Show. This card was just created for our past show and I do not see any reason that it needs to be redone.

The card is printed in black and white on heavy glossy paper and looks professional and "currrent". We should be proud that one of our members took the time to create and update the previous one we were using. (Most of you remember the prior one which was basicically the show information copied on fluorescent paper, and cut up)

I believe that other members feel the same way, and that a vote of the members should be made to determine if the rack-card should stay as it is (other than changing the date and possibly the photo for next year's show) or if we should go forward and have a design contest.

To me it does not make sense to put effort into changing the current card. Instead, maybe effort should be put into developing a club brochure to attract new members. A brochure could be left year-round in the same places that the rack-cards are distributed and could also be sent to the science departments at schools, and left at the Berkshire Museum, and at the library.

Thank you, Lisa A. St. Cyr

Our November meeting was "great". I felt sparks of interest I had not seen before. There were questions from members not previously heard from, suggestions from others, and even volunteers. This is how I remember it being in years gone by. May it take root in our midst and never go away. The finale by Ken Carlson topped off the evening. Mr. Carlson's enthusiasm was inspiring. Everyone was ooing and ahing admiring the stamps and matching specimens. Do you realize that when you hold a specimen of mineral from Russia, you are actually holding a piece of Russia in your hand. It's the same with every mineral. Do you feel the thrill like I do? I came home thinking about what I can do for our club. I'd like to see every one of our members taking part in some way.

I've always said "When you get interested in mineralogy, even a little bit, it's catching. It grabs a hold on you that never goes away." Mineralogy is so vast with so many facets, it would be impossible to learn it all in a lifetime. But the greatest treasure of all is sharing your knowledge with others. What do you want to share with us? How did you get interested in minerals? Can you suggest a field trip or a program for our meeting? Can you volunteer in any way.

Betty Kelley
Original and Lifetime member of
The Northern Berkshire Mineral Club.

Visit A Show

JANUARY 2011:

- 1-31—QUARTZSITE, ARIZONA: Show, "Desert Gardens International Gem & Mineral Show"; Desert Gardens RV Park; 1064 Kuehn St. (I-10 Exit 17, south side); 9-6 daily; free admission; crystals, minerals, rough, polished, jewelry, lapidary equipment; contact Sharon or Sandy, 1064 Kuehn St., Quartzsite, AZ 85346, (928) 927-6361; e-mail: info@desertgardensrvpark.net; Web site: www.desertgardensrvpark.net
- 7-9—DEL MAR, CALIFORNIA: Show; Gem Faire Inc.; Del Mar Fairgrounds/Bing Crosby Hall, 2260 Jimmy Durante Blvd.; Fri. 12-6, Sat. 10-6, Sun. 10-5; \$7 weekend pass; contact Yooy Nelson, (503) 252-8300; e-mail: info@gemfaire.com; Web site: www.gemfaire.com
- 7-9—FORT LAUDERDALE, FLORIDA: Show; ebeadshows.com; El Palacio Hotel, 4900 Powerline Rd.; Fri. 10-5, Sat. 10-5, Sun. 10-5; free admission; contact Bob, 849 Sand Lake Rd., Orlando, FL 32809, (754) 581-6835; e-mail: info@ebeadshows.com; Web site: www.ebeadshows.com
- 14-16—GLOBE, ARIZONA: 54th annual show; Gila Co. Gem & Mineral Society; Gila County Fair Grounds, 3 mi. north of US 60-70 Junction; Fri. 9-5, Sat. 9-5, Sun. 9-4; live demonstrations, door prizes, displays, minerals, jewelry; contact Val Lathem, (602) 466-3060; e-mail: val65@cox.net
- 14-16—LARGO, FLORIDA: 35th annual show and sale; Pinellas Geological Society; Largo Cultural Center, Parkside Room, 105 Central Park Dr., one block east of Seminole Blvd.; Fri. 10-6, Sat. 10-6, Sun. 12-5; free admission; club displays and sales, cut gems, silver and gold jewelry, wire wrapping, beading, cabochons, mineral eggs, rocks, minerals; contact Hugh Sheffield, (727) 894-2440
- 14-16—SANTA ROSA, CALIFORNIA: Show; Gem Faire Inc.; Sonoma County Fairgrounds/Grace Pavilion, 1350 Bennett Valley Rd.; Fri. 12-6, Sat. 10-6, Sun. 10-5; \$7 weekend pass; contact Yooy Nelson, (503) 252-8300; e-mail: info@gemfaire.com; Web site: www.gemfaire.com

14-16—SARASOTA, FLORIDA: Show; Frank Cox Productions; Municipal Auditorium, 801 N. Tamiami Tr. (Hwy. 41); Fri. 10-5, Sat. 10-5, Sun. 10-5; gems, jewelry, beads; contact Frank Cox Productions, 755 S. Palm Ave. #203, Sarasota, FL 34236, (941) 954-0202; e-mail: frankcox@comcast.net; Web site: www.frankcoxproductions.com

- 15-16—DELAND, FLORIDA: 40th annual show and sale; Tomoka Gem & Mineral Society; Volusia County Fairgrounds, Tommy Lawrence Bldg., Rte. 44; Sat. 10-6, Sun. 10-5; adults \$4, children 12 and under free; lapidary, jewelry, demonstrations, supplies, fine jewelry, gems, minerals, fossils, drawings; contact Florence Nordquist, (386) 788-5702; e-mail: fndesign@aol.com
- 15-16—FREDERICKSBURG, TEXAS: 42nd annual show, "Hill Country Gem & Mineral Show"; Fredericksburg Rockhounds; Pioneer Pavilion, Lady Bird Johnson Municipal Park; Sat. 9-6, Sun. 10-5; free admission; contact Jeff Smith, 208 Castle Pines Dr., Kerrville, TX 78028, (830) 895-9630; e-mail: jeffbrenda@windstreram.net; Web site: www.fredericksburgrockhounds.org
- 21-23—HILLSBORO, OREGON: Show; Gem Faire Inc.; Washington County Fairgrounds, 873 NE 34th Ave.; Fri. 12-6, Sat. 10-6, Sun. 10-5; \$7 weekend pass; contact Yooy Nelson, (503) 252-8300; e-mail: info@gemfaire.com; Web site: www.gemfaire.com
- 21-23—ST. PETERSBURG, FLORIDA: Show; Frank Cox Productions; Coliseum Ballroom, 535 4th Ave. N; Fri. 10-5, Sat. 10-5, Sun. 10-5; gems, jewelry, beads; contact Frank Cox Productions, 755 S. Palm Ave. #203, Sarasota, FL 34236, (941) 954-0202; e-mail: frankcox@comcast.net; Web site: www.frankcoxproductions.com
- 28-30—REDLANDS, CALIFORNIA: Annual symposium; Mineralogical Society of Southern California Micromounters; San Bernardino County Museum, 2024 Orange Tree; giveaway tables, mineral sales, silent and live auctions, speakers, field trip; contact Eugene Reynolds, (714) 697-4435, or Dr. Robert Housley; e-mail: rhousley@its.caltech.edu; or Gene Reynolds; e-mail: garquartzman@hotmail.com
- 28-30—SAN RAFAEL, CALIFORNIA: Show; Gem Faire Inc.; Marin Center/Exhibit Hall, 10 Avenue of the Flags; Fri. 12-6, Sat. 10-6, Sun. 10-5; \$7 weekend pass; contact Yooy Nelson, (503) 252-8300; e-mail: info@gemfaire.com; Web site: www.gemfaire.com
- 29-30—PANAMA CITY, FLORIDA: 20th annual show, "Panama City Gem, Mineral & Fossil Show"; Panama City Gem & Mineral Society; Bay County Fairgrounds, American Legion Bldg., US Hwy. 98 (15th St.) and Sherman Ave.; Sat. 9-5, Sun. 9-4; free admission; door prizes, gems, minerals, fossils, beads, jewelry, lapidary arts, wire wrapping, exhibits; contact Joseph Schings, 224 Collinfurst Square, Panama City, FL 32404, (850) 871-1846; e-mail: mojo3002@comcast.net