

THE BADGER DIGGIN'S

The Badger Lapidary and Geological Society, Inc.

Monroe, Wisconsin

Devoted to the Earth Sciences

Vol. 50, No 8

September 2015

President's Message

Greetings Badgers,

Welcome everyone! I trust that you have had an interesting summer of excursions and breaks. It is time to bring our treasures to the September meeting at the Monroe Public Library. I am looking forward to what you have come up with and to the various adventures you have experienced. I have probably done less and drove more than many of you. My work as a CDL driver gives me lots of windshield time, but I don't often get to do much collecting. I did get to enjoy one afternoon on Lake Michigan's west shore after a delivery near Two Rivers. Lots of water; not many rocks.

Until Saturday,

Marv Hanner

President, Badger Lapidary and Geological Society

*The September Meeting will be held
at the Monroe Public Library on
Saturday September 12th at 10:00
am. The meeting activity will be
our Annual Show & Tell. Hope to
see you there!!*

Laurie Trocke

Newsletter Editor



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BLGS 2015 Calendar of Events

- Sept 12th: Meeting – Monroe Public Library
Annual Show & Tell
- Sept 26th: Field Trip – Fluorite – Cave-in-Rock, IL
- Oct 10th: Meeting – Monroe Public Library
- Oct 24th: Field Trip – Lapidary Day – Trocke's Farm
- Nov 14th: Meeting – Monroe Public Library
Guest Speaker, Jerry Gunderson
- Dec 12: Meeting – Annual Christmas Party

The September Field trip will be to Cave-in-Rock in Southern Illinois for Fluorite. This is a fantastic trip, hope you can make it!



Specimens Needed for Mineral Calendar Photos

By Jordan Marché

Once again, I'm looking for specimens that I may photograph for the 2016 BLGS Mineral Calendar. September is our usual show-and-tell meeting. So, if you could please bring in any rocks/minerals/fossils (recently-acquired or otherwise) that you feel are worthy of inclusion in the mineral calendar, including thumbnail-sized specimens, I'd be happy to photograph and return them to you. I'll need to borrow them after the meeting and will bring them back to you at the October meeting. This timetable should enable us to produce the calendar early this fall and have it ready for sale by the time of the Freeport and Madison club shows in November. Thanks again for your cooperation.

was formed by meteorite impacts. Instead, both features occurred



Fig. 1. Lunar Crater National Natural Landmark (partial view).

when rising magma contacted existing groundwater aquifers and created violent steam-explosion craters (or phreatomagmatic eruptions) known as maars. Lunar Crater is approximately 4,000 feet across, nearly the size of the impact-produced Meteor Crater near Winslow, Arizona. In fact, this erroneous theory of Meteor Crater's origin was proposed and defended in the late nineteenth century by USGS chief geologist Grove K. Gilbert, in spite of the abundance of nickel-iron meteorites found in its vicinity! Such a non-catastrophist (i.e., non-impact related) explanation for Meteor Crater's origin seemingly delayed acceptance of the impact hypothesis for a generation or more (until well into the twentieth century). From a rockhound's point of view, the most significant aspect of the Lunar Crater Volcanic Field is that its eruptions have brought forth volcanic "bombs" containing at least two kinds of igneous minerals that originated as far down as the Earth's upper mantle — pale green-colored olivine and greenish-black pyroxene (technically, a mineral group; the actual mineral present is perhaps augite).

Olivine and Pyroxene from the Lunar Crater Volcanic Field, Nevada

By Jordan Marché

Although I had previously lived and worked in Nevada (1980–83), I was then unaware of, and had not visited, the Lunar Crater Volcanic Field, located roughly midway between Tonopah and Ely, in east-central Nevada (Nye County). This area's superficial resemblance to lunar impact craters evidently led to its naming, and the site was used for NASA astronaut training exercises during the 1960s. But neither Lunar Crater itself, nor nearby Easy Chair Crater (so named for its likeness to a bean-bag chair),



Fig. 2. Olivine (left) and Pyroxene from Easy Chair Crater, Nevada.

These xenocryst inclusions are commonly found within the alkalai basaltic bombs that are scattered around both craters. They may be spotted either partly exposed on the surfaces, or more frequently by breaking apart, such reddish-colored lava bombs.

The volcanic field is located on BLM land but no collecting restrictions are posted on site. Lunar Crater itself, however, was designated a National Natural Landmark in 1973. My interest in visiting this site was piqued by the fine article, "Peridot, Pyroxene and Plagioclase: Mantle Megacrysts from the Lunar Crater Volcanic Field in Nevada," published by Carl F. Brink (Rock & Gem, November 2012, 26-30). While the exact ages of the two craters apparently have not been determined, radiometric dating of the adjoining lava flows and cinder cones ranges from 600,000 to just 38,000 years old. This made the Lunar Crater Volcanic Field one of a number of collecting spots that I hoped to visit in the future. During a western trip this summer, Teri and I were able to visit both Lunar Crater and Easy Chair Crater, which are accessible via lengthy dirt roads just south of U.S. Highway 6. Although well-graded, these loop roads have a 'washboard' quality that demands relatively slow travel. In our opinions, the underappreciated Easy Chair Crater (which is approached first on the left-hand side) offered a much better collecting experience. First seen from its

backside as a rather nondescript 'hill', this structure lives up to its name when finally seen from the 'front'.

Like Mt. St. Helens, Easy Chair Crater's eruption occurred primarily to one side, which produced its characteristic shape. A hiking trail takes one to its summit, and all around the trail, volcanic bombs (containing olivine and pyroxene xenocrysts) are encountered. Small crystals of the whitish mineral, plagioclase feldspar, are also commonly encountered. As noted in Brink's article, the approach to Lunar Crater is somewhat deceptive. The landscape is practically flat, only sloping slightly upwards, and until you are practically at the crater's rim (where the parking area and interpretive sign are found), there is almost nothing to indicate its remarkable presence. Yet, a short hiking trail provides spectacular views of the now-evident crater that looms before you. Here, however, and likely due to much greater public visitation, almost no volcanic bombs or xenocrysts could be found (at least, near the crater's rim). There may yet be some located much further away, as this eruption was nearly vertical.

Lunar Crater, some 400 feet deep, has a lower flattish floor, indicating that material from the walls has slowly washed in and covered the original bottom. Views, to say the least, are impressive.

At the June picnic, I distributed a few extra specimens of pyroxene from Easy Chair Crater, and have likewise sent (or will donate) further samples to Earthaven Museum, the UW Geology Museum, and Highland Community College to enhance their collections. To my knowledge, there is no other place in the continental U.S. where such unusual mantle-derived minerals can be found in this kind of association. I can recommend a similar visit to anyone wishing to see and/or collect at this remote but valuable geologic site.

Last Gasp At The X

I gave a silent gasp because my brain was unable to tell my lungs to inhale, while looking down at the boulder that I had just split in two.

Every year in August, dozens of people make their way to the copper mines in the U. P. Michigan. Rockhounds come from all continents to take part in the Keweenaw Mineral Days collecting experience. Most of the rockhounds that go there are from the Midwest however.

It had been a few years since I had participated in the KMD and the excitement was building with each day as it grew near. The Seaman Museum was coordinating the event this year without the Copper Country Rock & Mineral Club. The CCRMC had coordinated the enjoyable event for many years prior. There were some glitches in the event this year but none were insurmountable. The Keweenaw event would go on as planned.

I had signed up for the Central Exploration mine on Thursday 8/6/15 of the KMD. There was Prehnite, Copper, Silver and the highly prized Michigan gemstone ..Chlorastrolite/'Greenstone'. Silver had eluded me in the past but I have found specimens of all the rest.

Many rumors that all the tailings had been removed and crushed some years before and were circulating among the rockhounds. I was a little apprehensive of the meaning of 'prepared surface' listed for the Central Exploration mine. I pulled up to the mine to see that 6 to 8 feet of the tailings, below the road level, had been removed. The back third of the original mine tailings still remained. There would be plenty of material to look through. It began at 1:00pm and was to last until 4:00pm. Three hours seemed a short time to prospect but we had a little help. The remaining mine

tailings were being turned over while we waited to enter.

The cars began arriving one by one, at the mine dump, until there was a line of cars out of sight along the road. Everyone had their names checked off and anxiously waited with metal detectors, rock hammers and buckets in hand. 1:00pm arrived and everyone swarmed the piles. The sound of metal detectors filled the air. At times, the different beeping sounds became a chorus ...that would have made a good soundtrack for a science fiction movie. The beeps were followed by the sound of hammers splitting basalt.

I had a slow start finding only a few broken specimens when I was chased off by yellow jackets. I was breaking a rock too close to their nest in the ground. I took the less than friendly warning and moved away.

Small specimens of Prehnite, Datolite and Copper were slowly filling my bag. I walked over every inch, turning rocks over and breaking open some hopefuls. The pile was not yielding much to me as in the past so I decided to take a water and food break. I dropped off what I had found while on my break. The time to collect was running out with only an hour left. Replenished, I returned to the rock piles.

There were a couple of large boulders with some smaller debris that had been pushed next to the road. They had been there for a while because they had been under water and were covered in dried mud. Water was still standing in some low spots around the boulders. I noticed a lump that appeared to be a 'Greenstone' sticking out the side of one of the boulders. With sledge hammer in hand, I took a swing at the basalt to break a section off. A piece cracked off the edge and there was a Chlorastrolite/'Greenstone' the size of a quarter. My eyes widened with amazement. It had a broken edge and I could see the

'turtleback' pattern. With heart pounding, I stopped to examine the specimen.

Meanwhile, another rockhound was walking by and saw the flake I had removed from the boulder. He was impressed with the find. As we stood there admiring the specimen I had found, we noticed that the little pile of rock we were standing on had 'Greenstones' in them too. His son and my friend joined us as we began filling buckets with the smaller pieces of basalt.

With buckets filled, they cleared the space so I could take another swing at the big boulder. The first two whacks didn't budge the rock. The third strike hit true and broke off a larger chunk. Wow! This piece had a 'Greenstone', with the face broke off, that was a half dollar in size and extended two inches beyond the broken face! Plus, there ...were numerous unbroken 'Greenstones' up to half dollar size still in the basalt.

It was hard to imagine how dozens of rockhounds could have walked by this boulder for years without looking closer at it. The excitement had risen to a whelming level. If those large specimens were in the smaller chunks of the boulder, what could still be left in the rest of it? We were about to find out.

I positioned myself with firm footing and gave the remaining chunk a hearty strike with the sledge hammer. The boulder fell open. I gave a silent gasp because my brain was unable to tell my lungs to inhale while I looked down at the two halves. My eyes couldn't have bulged out any further as I looked at a Greenstone measuring 3 1/2 inches across!

The specimen had split in half showing dark green velvety center with laumanite filling part of the void. Both halves of the rock had near equal parts of the gigantic 'Greenstone'. There were abundant 'Greenstones' up to over 2 inches across in each rock surrounding the big

'Greenstones'. My hands, and body, were trembling with excitement. I decided to stop there and take the large pieces home to work on. With only minutes left to collect, I didn't want to rush preparing these superb specimens in the field. I spent the rest of the day seeing 'Greenstones' every time I blinked.

At home I carefully began dissecting the larger boulder pieces. Even more 'Greenstone' amygdules had been hiding just beneath the surface. Almost all of them had the beautiful 'turtleback' pattern showing. I gathered well over a pound of loose amygdules for tumbling. Traditionally most Greenstones are free of the matrix and are polished for use in jewelry. Should I break it all up for gems or keep it as a specimen? I finally decided to leave the largest chunk of the boulder unaltered. It is a wonderful museum specimen, on the surface, in spite of what gems may be waiting inside.

After prepping and cleaning the specimens, I looked at them in complete amazement. They are all numbered now for my collection and will make a superb display for shows. At last, I think of how little material is left at the Central Exploration mine and that this may be my last gasp at the X.

Kevin Ponzio



September Mineral Events

September 11-13-ORLANDO, FLORIDA:

Annual show; Central Florida Mineral and Gem Society, FL National Guard Armory; 2809 Fern Creek Ave.; Fri. 1 pm-6 pm, Sat. 10 am-6 pm, Sun. 10 am-5 pm; Adults \$5, Students \$2; Annual Fall gem, mineral, and bead show will be at the Florida National Guard Armory, 2809 South Fern Creek Ave. Orlando, FL 32806. Show will be on Friday September 11, 1pm to 6pm, Saturday September 12, 10am to 6pm, and Sunday September 13, 10am to 5pm. Go to www.cfmg.org for \$1 off coupon. There will be demonstrations, 30 minute auctions, kids table, sluice mining for gems, and hourly door prizes. See and buy gems, minerals, beads, metaphysical stones, fossils and much more from all over the world. Scouts can earn merit badges from a mineral gemologist to assist with identification and requirements. Demos include cutting cabochons, faceting gems, wire wrapping, flint knapping and metal work. Adults \$5.00, Students \$2.00, Scouts free. Free Parking. ; contact Paul Hayes, 1400 Sawyerwood Ave, Orlando, FL 32809, (407) 816-1229; e-mail: phayes3@cfl.rr.com

September 12-20-DENVER, COLORADO:

Annual show; Eons Expos, LLLP, Denver Coliseum; 4600 Humboldt Street; Sat. 9 am-6 pm, Sun. 9 am-6 pm, Mon. 9 am-6 pm, Tue. 9 am-6 pm; Admission is Free; Come see 250 dealers on both levels of the Denver Coliseum plus in 100 tent spaces outside. It's all here: fine minerals, fossils, meteorites, gems, artisan jewelry, gold, silver, lapidary, beads and rough – split evenly between wholesale and retail. Running from Sept 12 – 20, this is Denver's only weekend-to-weekend show and attracts 18,000 visitors of those nine days. With 2,000 tables covered with earth treasures and free parking for 1,500 cars on the 33 acre complex, this is America's largest mineral, fossil, and gem show. The low booth fee and aggressive advertising ensures that the show continues to grow 20% a year. Meet the cast of the TV show 'Prospectors' who will be at the show selling their finds. Peruse the dinosaurs on display. Ogle museum-quality sculptures in solid blocks of clear quartz. Take home a piece of the Moon. Select specimens found in only one place on Earth, being offered by the mine owner herself. Prices range from just \$1 to \$1 million. Free Parking and Admission! ; contact Heather Grana, 235 First Avenue, Keyport, NJ 07735, (973) 903-3256; e-mail: Heather@EonsExpos.com

September 18-20-RICHMOND, VIRGINIA:

Retail show; Treasures of the Earth, Inc., Richmond Raceway Complex; 600 E Laburnum Ave.; Fri. 12 noon-6 pm, Sat. 10 am-5 pm, Sun. 10 am-4 pm; Adults \$5.00, military Free with ID, Children 16 and under Free; Vendors from across the US bring their merchandise to you. You will find – 14K and sterling silver, classic, estate, fashion and handmade jewelry – Loose stones, beads and

findings, pearls – Mineral specimens, crystals, lapidary supplies – Books, carvings and gift items Displays and demonstrations by the Richmond Gem & Mineral Society ; contact Jane Westbrook, PO Box 59, Gloucester Point, VA 23062, (804) 285-4281; e-mail: jane@treasuresoftheearth.com

September 19-20-MAYS LANDING, NJ:

Cape-Atlantic Rock Hounds Annual Fall Gem, Jewelry, Rock, Mineral and Fossil Show. Located at 2641 Cologne Ave. Mays Landing, NJ 08330. Free Parking & Admission, with food on site. Saturday and Sunday show hours are from 9am to 5pm (rain or shine). For more information or to become a dealer please visit our [website](#) or call Billie Brockhum (Show Chair & VP) at (609)879-1179.

September 25-27-OCEAN CITY, MARYLAND:

Retail show; Treasures of the Earth, Inc., Roland E Powell Convention Center; 4001 Coastal Highway; Fri. 12 noon-6 pm, Sat. 10 am-5 pm, Sun. 10 am-4 pm; Adults \$5.00, Military Free with ID, Children 16 and under Free; Vendors from across the US bring their merchandise to you. You will find – 14K and sterling silver, classic, estate, fashion and handmade jewelry – Loose stones, beads and findings, pearls – Mineral specimens, crystals, lapidary supplies – Books, carvings and gift items ; contact Jane Westbrook, PO Box 59, Gloucester Point, VA 23062, (804) 285-4281; e-mail: jane@treasuresoftheearth.com

September 26-27-FRANKLIN, NEW JERSEY:

Annual show; Franklin Mineral Museum, Franklin Elementary School; 50 Washington Ave; Sat. 9 am-5 pm, Sun. 10 am-4 pm; Adults \$7, Children \$4; Saturday, September 26th and Sunday, September 27th Indoor show: Saturday 9:00 am to 5:00 pm. Sunday 10:00 am to 4:00 pm. Outdoor Swap: Saturday 7:30 am to 6:00 pm. Sunday 10:00 am to 5:00 pm. Adults:\$7 and Children are \$4 (ages 6-16); contact Robyn Seger, 32 Evans Street, Franklin, NJ 07416, (973) 827-3481; e-mail: pesolutions.minerals@gmail.com

Wisconsin September Events

12 Manitowoc - Sputnikfest. This quirky festival commemorates the piece of space debris from Russian Sputnik IV that landed here in Manitowoc on Sept 6, 1962. Festivities include family activities, costume contest, Miss Space Debris Pageant, food, juried art fair, entertainment and lot more spacey fun! Free Rahr-West Art Museum, 8th Street. For more information call (920) 686-3090 .

12 - 13 Manitowoc - Rural Life Days: Tractor Show and Thresheree. Presented in partnership

with the Mid-Lakes Rustic Iron Club, discover what life was like during our communities early years with live field demos, steam engines, farm tractors, and various activities in 25 historic buildings. Fee charged, 9 am-4 pm Pinecrest Historical Village, Hwy. JJ. For more information call (920) 684-4445.

18 Madison - Moon over Monona Terrace. Friday, September 18, 2015, 7:30pm - 9:30pm, Rooftop Garden; One of our most popular programs, Moon Over Monona Terrace combines the talents of the Madison Astronomical Society (MAS) with the striking views from the Monona Terrace Rooftop, topped off with crossed fingers for a crystal clear Madison evening! Monona Terrace Rooftop Garden. For more information call (608) 261-4000.

18 - 20 Wisconsin Dells - Wo-Zha-Wa Fall Festival 2015. A festive celebration of autumn, Wo-Zha-Wa Days is filled with free family activities, including an arts and crafts fair, antique flea market, Maxwell Street Days, live entertainment and a 100-unit parade. Enjoy great food from service clubs and downtown restaurants, visit attractions and the street carnival. Downtown.

19 Chippewa Falls - Lake Wissota State Park Walk. The Dairyland Walkers of Madison are sponsoring this 5K/10K walk. Walkers may register and start walking anytime between 10 am and 2 pm. Cost is \$2/\$3. The routes go through prairies, woods, and along the shoreline of the lake. 18127 County O. For more information call (608) 821-0263.

19 - 20 Hubertus - Holy Hill Art & Farm Market Event. 9-4pm Rustic Marketplace Artists and Farmers Paintings Photography Sculptures Pottery Glass Wood Vintage Metal Garden Jewelry Fabric Antiques Hot Food Soups Produce Bakery Refreshments Canned Goods Relax Stay for the Farm Fresh Food! Live Music Free Admission & Parking 4958 Hwy 167. For more information call (262) 644 5698.

19 Jefferson - Pretzel Polka Run/Walk. In conjunction with the annual celebration of Gemuetlichkeit Days the inaugural running of the Pretzel Polka Run/Walk will take place on September 19, 2015 beginning at 9:00 AM at the Jefferson County Fairgrounds. 503 Jackson Avenue. For more information call (262)-458-2411.

19 Phelps - Sixth Annual Scarecrow Fest. Music, food from local restaurants, free chili from the Women's Club. Play bingo, hayrides, sea plane rides, homemade wine tasting and beer

stand. Children's games and pumpkin chuck'n and scarecrow judging. Highway 17 . For more information call (715) 522-0535.

19 Weyauwega - Horse & Buggy Days. Street fair with a 5K run, parade, pool tournament and old time fun. Main Street. For more information call (920) 712-0068.

20 Milwaukee - Granville Car, Truck & Bike Spectacular. Do you love cars? More than a half-mile of cars, trucks, motorcycles, hot rods and custom vehicles will be exhibited on North 76th Street between Good Hope and Bradley roads, from 10 a.m. to 3 p.m. The event will feature food and live music. All attendees receive a goody bag. North 76th Street. For more information call (414) 736-2891.

26 Monona - 13th Annual Pipers in the Prairie. Bagpipers will enchant guests with their ethereal melodies during this unique and extravagant evening featuring a buffet, Celtic music, an onsite and online silent auction, Irish dance demonstration, a bonfire, and pipers in the prairie. \$75/adult, \$25/child (5-17) 330 Femrite Drive. For more information call (608) 216-9373.

26 Mosinee - Kronenwetter Fall Festival 2015. Mark you calendars! From 10:00 am - 4:00 pm we will be hosting a Classic Car Show, Craft Show, Kids Activities, Historical Reenactments, Farmer's Market, Fire Safety Demonstrations, Food, Drinks and more! 6:00 - 10:00pm enjoy live music by The Archives, Raffles, Food, Drinks and Prize Drawings. 1582 Kronenwetter Drive. For more information call (715)370-8371.

26 Phillips - Celebration of Arts in Action. The park will be host to a Wandering Wisconsin Roadside Art Experience event. Attendees will be offered an array of opportunities to create art. All open-air paintings are eligible for entry into a competition. A quilt display, music, auction and great food make this a wonderful family event. N8236 S. Hwy. 13. For more information call (715) 339-7282.

26 Siren - Walk for the Animals - HSBC. Walk for the Animals (1 mile), "My Dog Can Eat Anything" contest and "Stupid Dog Tricks" contest. All proceeds benefit the Humane Society of Burnett County! Veterans Park/Gandy Dancer Trail (Hanson and Main). For more information call (612) 423-1613.

ROCK & MINERAL SWAP MEET



Saturday September 12, 2015

6219 Forest Hills Road Rockford, Illinois
ODD FELLOWS HALL

Bring it, Swap it, Buy it, and Sell it

9:30 am to 4:00 pm

\$20 space donation for 10ft by 10ft

Rain or Shine Public Admission Free

Sponsored by the Rock River Valley Gem & Mineral Society

Contact John Wood at 815-978-6960, gotwood63@gmail.com



Forthcoming Book — Stromatolites

Stromatolites: Ancient, Beautiful, and Earth-Altering (Atglen, PA: Schiffer Publishing) is the title of a forthcoming book by Robert J. Leis (who spoke at the 2014 BLGS show!) and paleontologist Bruce L. Stinchcomb, with illustrations by Terry McKee. This is the first work of its kind aimed at a general audience that includes rockhounds, fossil enthusiasts, collectors, and geologists (whether amateur or professional). The book explores the evolution of stromatolites, which are mainly produced by photosynthetic cyanobacteria, over the past 3.5 billion years of Earth history. Apart from their intrinsic beauty as fossil forms, these organisms were responsible for the first production of free oxygen in our planet's atmosphere that not only made the later evolution of higher animals possible but also produced a host of oxide-related minerals (that we collect!) which could not have arisen by any other means.

Due to be released in September 2015, the 8.5-in. x 11-in. softcover book of 160 pages will feature 636 color images of these remarkable fossil forms. The expected price is \$29.95. For more information on the book's availability, visit the publisher's website: <http://www.schifferbooks.com>, or phone (610) 593-1777.

Southern Illinois & Marion KY - Fluorite Collecting Field Trip

Badger Lapidary and Geological Society

Sept 26 & 27, 2015

BLGS Contact Person:

Teri Marche, Ph: 608-835-2653, email: tmarche555@gmail.com

Cell. 608 320 3144 On and after Sept. 22 only

Please reply ASAP by email or phone if you plan to attend.

Field Trip Schedule Options Meeting Places, Times, Cost & Directions:

Teri and Deb will be driving down on Tuesday, Sept. 22, and camping at Cave-in-Rock. Anyone who wants to come down before Friday is welcome to join us. Plan on at least 8 hours of driving plus breaks from Monroe. We will be exploring the Lee Mine, and also the Annabel Lee Mine on Wednesday, Thursday, and Friday for certain. For these days meeting time will be 9:30 a.m. at the Cave-in-Rock Park entrance. See directions to the park below. As you approach the park take the right fork in the road to the first, large parking lot.

The Lee Mine is on National Forest land, and requires a hike through the woods and a small stream. If you have bucket carts, they would be good here. There are old, overgrown piles through the woods, but also one high pile that is very steep. I have visited it twice before, but never tried digging into the large pile. I want to give it a try this year.

At the Annabel Lee Mine you can see the remaining mine workings, head frame, pump house, winch house and dig in the tailing piles for fluorite and associated minerals such as calcite, galena, and sphalerite. Park your car along the side of the drive way in front of the gate to the site. This site has produced some very nice blue fluorite specimens in the past. These are tailing piles and much digging is required to chance upon larger pieces of mine run fluorite. Check out the mine photos at <http://www.mindat.org/gallery.php?site=1&loc=3752>

The main dangers here are ticks and poison ivy. If the temps get into the 90 degree levels, heat stroke is also a danger. Bring plenty of water, and take breaks in the shade!

If at least 10 people wish to dig with the Clement Museum on Saturday, we will do so, but ONLY if at least 10 people sign up and pay before September 1. See below:

Clement Museum Options

Saturday Sept 26th –Meet at the Ben E. Clement Mineral Museum at 8:30 AM.

Address: 205 N Walker Street, Marion, KY - www.clementmineralmuseum.org Ph: 270-965-4263

Tour the museum from then proceed as a group to the museum dig site to dig for fluorite. The dig location is a new fluorite seam adjacent to older mines and located near a stream. Plan to get wet and muddy, so bring change of clothes and dry shoes. Hard rock breaking tools and heavy digging tools will be best. Pay to Dig Charges are \$250 for a group of 10 to 30 persons with half paid in advance as a deposit to hold the date and includes museum access and first bucket of material. If we have 10 persons will be \$25 each. Cheaper per person with more people. Please RSVP ASAP!! Will settle up the per person cost at the museum.

Saturday Night – 2 hour fluorescent mineral night hunt with the museum. \$40 fee per person for night dig which includes first bucket of material. We can decide that morning who would like to do this. Meet at the Museum parking lot at 7 PM (need to confirm Saturday morning). UV Lights: Bring a portable long-wave UV light if you are interested in fluorescent minerals. The museum has two UV lights that can be used during the night dig. However, if you are a serious collector, it is best to bring your own light. Night digs last two hours after we reach the dig site. The most common fluorescent mineral in the area is calcite, which under a long wave UV light can glow a soft to bright pearly white. There are colors other than white, but they are fewer in number. There are also specimens of fluorite that glow various shades of pale yellow due to petroleum inclusions and blue from Europium impurities in the fluorite. Reportedly there is sandstone, which can glow a coral pink to red under short wave ultraviolet light.

If we do not get 10 people for the Saturday Clement dig, we will give another day to the Annabel Lee Mine. I will need names and \$25 per person by Sept. 1, in order to book this dig. If more than 10 sign up, we will sort out the cash refunds at the museum.

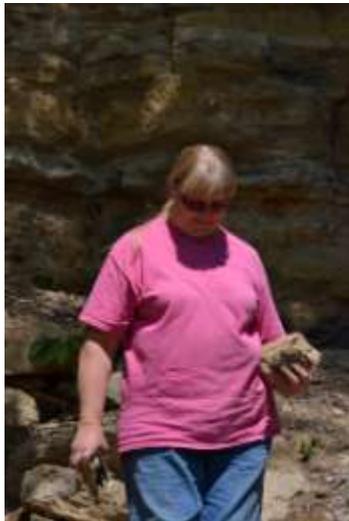
Sunday Sept 27th

Visit with Guy & son Gary Griffith's in the morning to purchase fluorite at their farm near Elizabethtown, IL, call ahead at Phone: 618-0287-8808 or 618-287-3962. This family does surface digging at their mine and pull out beautiful deep purple to pink-violet to totally clear cubes. The prices are low. They will also happily cleave out octohedrons for you at the drop of a hint.

Then Proceed to the Rosiclare American Fluorite Museum, open 1-4 PM, costs \$3 per adult & \$1 per child 6 to 12 yrs old. Ph: 618-285-3513. This is a small, volunteer-run museum, but my (Teri's) favorite. There is one room filled with the most beautiful gigantic fluorites ever, and good info about how the mines operated.

We will tour the museum and then head for home.





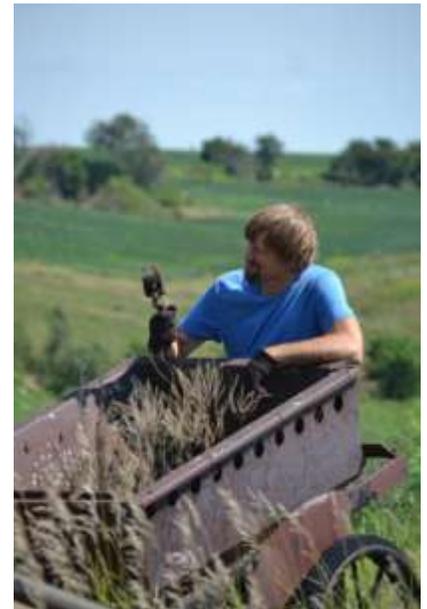
Fossils & Agates
June 2015





Shullsburg, Wisconsin

August 2015



Badger Lapidary & Geological Society, Inc.

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