
THE BADGER DIGGIN'S

The Badger Lapidary and Geological Society, Inc.
Monroe, Wisconsin

Devoted to the Earth Sciences

Vol. 45, No. 7

September 2010

President's Message

Dear Badgers,

We had a better than expected turnout for the Aug. 28th fieldtrip. It was great to meet Allison Conrad and several other members of the Coulee Rock Club as well as our newest member, Eric Anderson. I want to thank Teri Marché for leading this trip; while it was a scorcher, a good time was had by all.

We brought the new pups along as unofficial good will ambassadors and for general good luck. The kids and I wore them out hiking the hills and dunes looking for Lake Superior agates. Happily, I was pulled by one of the pups into a goose-egg-sized laker that was only later topped by a purple banded, crescent-shaped laker that my son Connor found at a spontaneous stop on the way home. I'm sure he'll bring it to the next meeting to show.

There was the usual hit & miss for members collecting on this trip, which brings to mind a few proverbs I like to remember while rock hunting. J. R. R. Tolkien wrote, "There is nothing like looking, if you want to find something. You certainly usually find something, if you look, but it is not always quite the something you were after." The worst day of rock hunting (or fishing) is still better than the best day at the office, and as applied to the easily spooked Lake Superior Agate, "they are where you find them."

I'd like to thank longtime Badger rock club member Bud Higgins of Arkansas for delivering another generous donation of minerals from his collection, including jewelry findings and even a polishing machine. These items will be a great benefit to the club by generating interest and funds in the club silent auctions, in machinery that can be signed out and taken home by members, and will ensure that we have a variety of interesting and beautiful materials for the kids' spinner game and fish pond at the annual show. Thank you, Bud, from everyone in the Badger Rock Club!

The next planned event is the Badger Lapidary Day on October 9th at our farm near Dodgeville. There will be many machines available for cutting & polishing as well as a big pot luck lunch, dinner and campfire that evening. We'll also revisit a local gravel quarry that has produced some great fossils including

several giant cephalopods and a road cut nearby for onyx & druzy quartz.

One last proverb in this message that I will borrow from J. R. R. Tolkien: ". . . All those who wander are not lost . . ."; it's a good bet they're probably just rockhounds.

Dan Trocke

Next Meeting

Our next meeting will be held at 9:45 a.m. on Saturday, September 11, 2010, at the Monroe Public Library, 925 16th Avenue, Monroe, WI. Take the elevator to the second floor.

Program: Show and Tell

Bring along samples of rocks, minerals, or fossils that you have collected over summer. We'll also hear from Mike Riesch, director of the Earthaven Museum, who will bring some examples of fossils that may be found in the Door County area that will be the site of our next club field trip on Sept. 25-26.



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Tentative Calendar of Club Events – through Dec. 2010

- Sept. 11** Regular meeting – Show and Tell
- Sept. 25-26** Field Trip – Door County Fossils;
Leaders: Mike & Ruth Riesch (Earthaven Mus.)
- Oct. 9** Lapidary Day – Host: Trockes
- Oct. 23** Field Trip – TBA
- Nov. 13** Regular meeting
- Dec. 11** Christmas party

Dates for 2011 BLGS Show

Show Chairperson Teri Marché has announced that the dates for the 2011 annual show will be Saturday, March 26 and Sunday, March 27, at the Monroe High School. Set-up will take place on Friday evening, the 25th. More information, regarding dealers and displays, will be forthcoming.

Change of Editorship

Badger Diggin's editor Jordan Marché announces that he will be stepping down from the newsletter editorship, after the December 2010 issue. He will have served in that role for two years, the same time as the maximum length of an officer's consecutive terms. Anyone interested in taking over editing the newsletter should contact Jordan and the club officers. He can supply digital copies of the graphics currently used in producing the newsletter (the badger & footprints, the MWF and AFMS logos), along with the electronic and non-electronic mailing lists, membership list, and the most recent issues.

BLGS Loses Two Longtime Members

Word has reached us of the passing away of two longtime club members, June Windsor and Chunk Kiesling. Anyone having a story or remembrance regarding either of these members is urged to share them at the September 11 meeting.



MWF (& related) Club Events

Quarry Day: Sept. 18, Freeport, IL.

For the first time since 2004, Civil in Freeport, Illinois is going to host Quarry Day on September 18. It was a very popular event in the past where the public was allowed to come into the quarry and see how they operate, with most of the activities geared toward kids. There are piles of sand and gravel, where all of the pieces of heavy equipment have an operator in each. A kid sits in the operator's lap and puts his/her hands on the controls; then the operator puts his hands on the kid's hands and together they run the equipment.

Another activity they have for the kids is a sand pile. Here, they mix pyrite into the sand to let the kids dig for 'gold'. So we are looking for scrap pyrite to be used in the sand pile – any amount. Anyone who has any extra pyrite that isn't good for much else is asked to donate it for the kids. Please bring those pyrite samples to the meeting.

Civil has also asked the Freeport Rock Club if we could set up a display. We are looking for people that would like to bring specimens of fossils or minerals from the midwest that have been found in quarries. They are going to provide us with a 10 x 20 foot tent; the club has banquet tables and three show cases in which to display the materials.

For more information, call Brian Green at 815-745-2228. Thank you.

September 25-26: Oshkosh, WI. Oshkosh Earth Science Club's 39th Annual Gem & Mineral Show, Sunnyview Expo Center, 500 E. County Road Y. Sat. 9-5, Sun. 10-4. Contact: Bob Fox, (920) 235-4669.

October 2-3: Jefferson, WI. Rock River Valley Geological Society's 38th Annual Gem & Mineral Show, Jefferson County Fair Park, 503 N. Jackson Ave. Sat. 10-5, Sun. 10-4. Contact: Paul Novitzke, (920) 674-7148.

October 23-24: Davenport, IA. Black Hawk Gem & Mineral Club's Fall Rock, Gem & Jewelry Show, Mississippi Valley Fairgrounds, 2815 W. Locust St. Sat. 10-6, Sun. 10-3:30. Contact: msrocks2@charterinternet.com, or (563) 445-3034.

Door County Fieldtrip, September 24-26

by Mike Riesch
earthaven@ez-net.com

Mike and Ruth Riesch (Earthaven Museum) invite members of the BLGS up for the weekend of Friday, Sept. 24th through Sunday, Sept. 26th. Saturday will be a field trip to a farm or two north of Sturgeon Bay in Door County, Wisconsin, to search for Silurian corals and fossils in the old fence rows. We will spend a few hours collecting rocks and fossils in that area. Lunch along the way is recommended. There should be lots of material available to collect. We will spend as much time as people wish at the various locations. Door County has many scenic and geologically interesting areas within a half hour of Sturgeon Bay for those wishing to tour. We can provide camping and a cookout on Friday night, plus a tour of the museum on Saturday. Anyone staying over is welcome to another cookout on Saturday night and a possible collecting trip to the Schaal Quarry a mile from here on Sunday. There is also a nice, inexpensive motel three miles from here in Gillett for those who aren't camping or staying in our guest rooms, but who would like to overnight anyway. So it can be a fun weekend. We would appreciate a headcount of those interested. Thanks.

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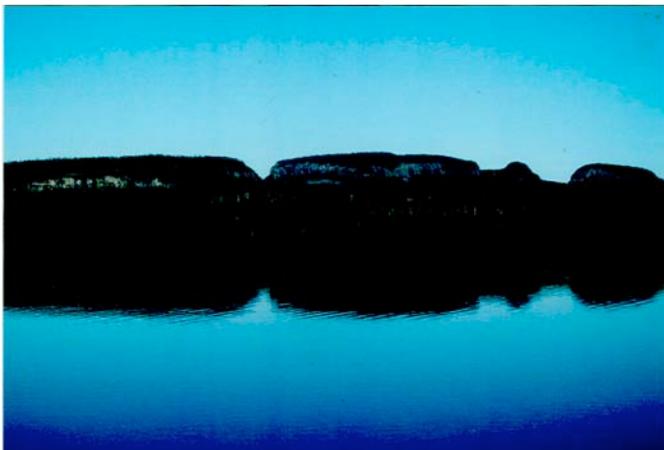
Of Amethyst and Agates

by Teri Marché

This year's major trip took us to Minnesota and Canada for a week of fun, exploring, and collecting. We came from almost all directions, west, east, and south. Dave Zimmerman, Normand Labbé and Johanna Paradis came from Quebec. It was really good to see them all again. Harold Carter came from the west, since he was already at his cabin in Canada; Johnny Fay showed up from somewhere; and the Trockes came from the south, as did the group I traveled with. We included Cathy Romeis, Jody Rymaszewski, Ken Schweitzer, and myself. It is this last group that I will follow here.

We started in two cars after meeting up in Madison at 8:00 a.m. and by early afternoon we were above Duluth, Minnesota at Two Harbors. We checked out the Agate City rock shop, grabbed some lunch, and were off to the beach to look for agates. The picking was slim, a situation we found throughout Minnesota. Still, it was good to be on a beach again. During our overnight in Silver Bay, a storm front caught up with us, and we gave up on beachwalking for the morning. As we drove north, the weather improved, so we stopped off at Thompsonite Beach to check out the resort for our return trip, and look at the beach. Simply put, there was none. No beach at all. Just rocky cliffs that we were informed are off limits to collectors. However, we learned that just up the road, at the next wayside stop, was a public beach for collecting.

The place is called Cutface Creek Wayside, and we found it easily. There had been some major roadwork on the hillside above the beach, and lots of giant boulders were tumbled down. They proved to be excellent sources of thompsonite. I found several of my best pieces there. Luckily the weather relented and we had broken cloud, blue sky, and only isolated showers for the rest of the trip north. Somehow I expected to cross the border and be in Thunder Bay. Of course that did not happen. It took about another two hours or so of driving through some very interesting country to reach the city and another hour to get to the turnoff to Sleeping Giant Provincial Park. Then we still had about 40 miles to go. The park was lovely, with generally good facilities, beautiful views, and plenty of wildlife. However, if I ever get back up there, I will definitely opt for Mirror Lake Campground, which is much closer to the mine.



The 'Sleeping Giant' seen at twilight.

Blue Points mine is definitely THE place to go digging for amethyst, but take really sturdy tools with you. I don't know which was harder, the basalt matrix or the quartz seams. The place looks more like a smallish elongated quarry, about 20 feet deep on average. They are blasting right down on the amethyst vein, and following it in a line. The general public (mostly families) comes in and picks over the spoil piles, which have some fine material in them. To go down into the pit, one now must have full safety equipment, a new situation since just the weekend before we arrived. We got to explore, and ended up working the back section of the mine.



Blue Points Amethyst Mine, w/ Dave, Cathy, Ken, & Teri.

Several folks, including Ken and Dan (who arrived one day late, but made up for the time) hit clay-filled pockets with loose points. Easy digging, but really hard on the hands. Those points are sharp! Some of us went to banging on the sides and bottom of the mine, trying to open a pocket, or to get off plates of points. It was hard on the tools (most came out really damaged) and on the hands (one smashed Marché finger, a bashed and swollen Labbé knuckle, and a cracked (?) Trocke rib).

Dave set about demolishing rock starting from the top down and exposed much brecciated rock with vugs of druzy amethyst with iridescent coatings. The material from lower in the mine had the typical hematite inclusions, neat because they are inclusions and not crusty coatings as I have seen on some specimens from other mines. That keeps the crystals shiny and pointy while still adding the red color. High quality stuff here. We came out with buckets full of lovely material.

The trip included an impromptu picnic at the mine on Tuesday evening, thanks to Laurie Trocke, who pulled out her trusty Coleman stove and cooked up hamburgers and hot dogs for all, including Lyndon Swanson, mine owner, and his resident assistants. Of course this allowed everyone, including Dan, to stay late at the mine. Lyndon keeps it open as long as anyone is there. Moreover, the evening light up there lasted until about 10:00 p.m., so it really added lots of time for hunting.

On Wednesday, with weather threatening, some of us tried to go to Dan and Bill's Mine, but signals got crossed, and with no cell phone service up there, we had no way to uncross them. Still, we found a few things before the rains came.

After meeting up with the rest at Blue Points, we decided to do some amethyst touring, driving up dirt roads with a wicked storm front blowing through. White birch trees seem to blow down easily, and we found ourselves group-demolishing a decent-sized one by hand to remove it from the road to the Panorama Mine. This is the most heavily publicized mine in the area and the most touristy. The digging is restricted, prices are way too high, and the material available is less than wonderful.

We ended the day in Thunder Bay at the Purple Haze Amethyst Shop, actually the living room of the couple who own and operate the mine. They have a wide variety of amethysts, both in form and color, and really decent prices. Then you get a look at their backyard: beautiful, often large, and just ever so slightly less than perfect pieces at wonderful prices. We had a terrific time with them, and ended the evening sitting with them, chatting on their front steps. That shop is a must for rockhounds!

The next morning we broke camp and headed for the border. By the way, we had not one bit of trouble at the border, either coming or going. The first car in line was questioned and gave the officer the whole story. All cars following said "rockhound" and were waved through!

We hit several beaches on the way down the coast, and while there were rocks a-plenty, there was little, if any, agate. We checked into the resort at Thompsonite Beach, with fine, comfortable rooms, and an honest-to-goodness bathroom! Wonderful.

Plans for the next day called for early thompsonite gathering, and the low rock cut along

the highway across from the resort called to us. Unfortunately, as the morning progressed, it brought out a progressively larger horde of flies. They formed clouds that followed you as far as you could run. They took flesh and blood (literally), and they were all along the coast! It was "the day of the flies" and I used an entire can of spray. It didn't repel them; it just made me non-tasty. At any rate, by day's end, we were all nearly frantic.

Another night's stay at Silver Bay and a stop for anorthosite and taconite balls, and we were ready to face the road construction in Duluth. It was a mess, but we managed to get through surprisingly well and on to Moose Lake.

The show was fun, and we spent most of the time with the "tailgaters" outside. There was plenty of agate here, at some really wild prices. We all came away with some beauties. Connor Trocke parlayed \$5 into a \$100 agate. Ask him how he did it.

The indoor show was large and crowded and I was only able to see about half of it. The agate stampede was due to start at 2:00 p.m., and I really wanted to participate, but we had reports of the dangerous crowds and small agates at last year's event. By this time, the swelling on my hand had eased enough to tell for certain that the finger was broken, and needed attention, so I agreed to leave early. The Trockes stayed and got plenty of agates at the stampede, although hunting in the pits was less productive. Maybe another year . . .

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How to Properly Recycle Scrap Iron

by David Zimmerman

I really struggled with the title of this one, as I had about ten names to use and it was hard to choose. Regardless of the title, the article does indeed deal with a very important safety issue; namely, that of using steel tools safely in the field. We all use them, but how much do we really know about them?

As some of you have seen through the years, I happen to be one that has a big hammer and knows how to use it. The quartz claim at Herkimer, New York has allowed me to finish my 'Master's Degree' on breaking rock (though still hoping for a doctorate!). This dig is also the location of my most

serious injury, which recently managed to land me in the emergency room for eight hours.

This injury was something that we four, very experienced collectors, managed to overlook, despite the obvious signs. We were using my friend's pneumatic jackhammer bit as a chisel, and slamming it with a 16-pound sledgehammer. The bull-point chisel is 1.5 inches in diameter and 2 feet long, and comes to a perfect point; hence its namesake. This chisel was made for using in a jackhammer tool.

Our overlooked safety warning occurred four weeks prior, when I was using that tool combination. The chisel managed to shoot a piece of metal shrapnel into my leg. It first felt like a rock chip that bounced, which I promptly ignored for ten minutes. Then I thought I would roll up my pant leg to investigate and saw the wound. I managed to cut it out with a knife. The metal fragment was only lodged in about one-quarter inch and was a rather easy pull. I had also noticed that my hammer had lost several metal fragments near the edges, with the largest one being an astounding 2 inches!

A few weeks later, we were using that same tool combination in New York when it sent a smaller shrapnel piece into my friend's leg. Still not heeding the warning signs, and not remembering the rule, "Use the proper tool for the job," I picked up the cursed chisel and started slamming my hammer on its fraying head. After 5 minutes of use, I was forced to loosen my grip on the hammer, when I felt something like an electrical shock run through my hand. I initially thought that my plastic hammer handle had shattered, sending a splinter into my wrist area, but after a minute's worth of investigation, I found that the hammer appeared OK, but my wrist was bleeding profusely. I also noticed what the culprit was – a large metal fragment protruding from my skin.

I really did lose a lot of blood in a short amount of time. We called for the gals, who were dirt picking crystals in the general area, and when they came, we decided to try and pull out the fragment. Even though we could see one quarter-inch of metal sticking out, it would not come out. We decided to go into town to the hospital to have it professionally addressed. My friend lent his shirt as a wound dressing, and I applied pressure and elevated it all the way to the hospital.

At the eighth hour, the doctor finally lanced the skin and pulled out the 5/8" shrapnel. There was

great concern over whether the piece of metal was lodged in a vein or artery and the possibility of nerve damage. The shrapnel piece managed to travel into my wrist for an inch and a quarter and then tried to exit. I am VERY lucky that the travel was parallel to the skin and not perpendicular. The results were that there was a medium-sized vein that was severed, and a medium-sized nerve was severed, which is what gave me that initial electrical shocking sensation. As of a week later, I still have just a blood clot holding the blood back in the vein, and no feeling in half of the back of my hand. I have heard from others that the nerve might heal itself in three years.

It was the hammer that shed this shrapnel, despite the chisel shedding the previous three times. There is a serious debate in my head about trimming chisel heads. Despite everything that I have read about trimming chisel heads when they begin to "mushroom," what I have experienced in the field was actually just the opposite. I have experienced more flying shrapnel using a well trimmed (or sometimes completely new) chisel, then from my old trusty ones that have huge mushrooms on the tops. I find that the large mushrooms seem incapable of shedding shrapnel, as the metal flanks tend to bend and break off, rather than fly off. I will let you form your own opinions about chisel heads, but I think that Dan's idea of welding metal washers onto the shanks actually addresses this issue, as well as misplaced hammer blows.

More important than the chisel head, however, is the steel quality/ hardness. The pneumatic chisel steel was much harder steel than the typical masonry chisels that are the proper steel. In actuality, the steel hardness of the hammer closely matched that of the pneumatic bit. **As a steadfast rule: Never strike two steel objects of similar hardness together.** One needs to be softer in order to wear. Also, your old trusty sledgehammer might just be your worst enemy. Repeated smashing of metal results in martensite hardening of that area on the sledge, and this is highly susceptible to throwing shrapnel. At this point, I am not using my old trusty sledge, due to assumed martensite hardening and micro-fracturing. As a rule of thumb, I think that heavily-used chisels and hammers should be replaced after a number of years of service. Off-the-shelf hammers tend to be very cheap steel that is hardened to a 50 on the

Rockwell scale, and your typical cold-chisel is around 57 or so. Ideally, you want to have a sharp tip of 54, and the rest of the shaft at 40 or so, swinging a hammer with a hardness of 50.

This is all compounded by the fact that good tool manufacturers are disappearing in the American quest for cheaper goods. As a carpenter, I know the value of good American/ German/ English/ Japanese tools, but oddly enough, I never thought much about it with the hobby tools. As many of you know, I have started making my own specialty tools. My future plans involve much more of these, coupled with custom tempering. I tried doing my own tempering six years ago, using Sinkankas's book, *Gemstones and Minerals*, but I did not master it, nor follow up with it again. Many serious collectors eventually hook up with a good blacksmith for tempering their tools. I'm sure Dan has further insight on this topic, and I hope he expounds upon it.

I'd also like to see a doubling down of safety protocol on fieldtrips. In my opinion, the most important piece of safety gear is the eyeglasses. Why people can spend \$200 for a mineral specimen at a show and not spend \$10 for a comfortable, quality piece of eye protection is beyond me. I've been faithfully wearing good eyeglasses for five years now and I even wear them while walking through the woods so that a twig does not poke my eye. Secondly, I have always endorsed ankle support in the footwear. Hardhats and steel toes are next on the list for obvious reasons. Last on my list are kneepads, gloves, pants, foam pads, and orange vests. Some collecting locations/groups require all/ most of these items on the person at all times to even be allowed to collect. I think this last month has been a real safety learning experience for all BLGS field-trippers. I would also like to see safety officers in the club pull hammers out of the hands of people that do not have safety glasses on.

So, in reference to the title, what is the best way to recycle scrap iron? Well, I decided to extract it from my wrist and have it wire-wrapped as a pendant for my necklace. How's that for a rockhound conversation piece? Please read the references cited below from top to bottom, and then read them again.

Stay safe.

References:

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Mindat Treasure Trove

by David Zimmerman

Bonjour from Quebec! I was just organizing my collection and needing a few locations for the labels, and I was amazed to see that the quarry list on Mindat has been fleshed out quite nicely using a 1982 MSHA Aggregate Producers List. I don't know why all the locations are not shown on the state view, but when you search by county, look at all the flags that pop up! I think that in the La Salle/Utica Region there are about 25 quarries that are identified! The whole Mindat project is done by volunteers plugging in some local data; some might be new and some might be old. It looks like there is some sort of code error on the Mindat site, but either way, have at it!

Here is the link to Mindat's Illinois page:

<http://www.mindat.org/loc-14607.html>

Here is Mindat's link to the LaSalle, Illinois area:

<http://www.mindat.org/loc-45307.html>

I think this new data could easily be used to find some new places and make some new trips. Happy trawling.

P.S.: It is the same way for Wisconsin as well. When you zoom in on the county view, there are many more locations shown. Green County alone had about 30 quarries showing, as opposed to the single one that was found on the state view.

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