

# ***THE BADGER DIGGIN'S***

***The Badger Lapidary and Geological Society, Inc.***

***Monroe, Wisconsin***

***Devoted to the Earth Sciences***

**Vol. 47, No 10**

**December 2012**

## ***President's Message***

Dear Badgers:

It is time once again for the club's annual Christmas party! We will meet at 5:30 p.m. on Saturday, December 8, at the **World Buffet** in Monroe, located at 145 7 ½ Street. To reach the Buffet, proceed west on 8<sup>th</sup> Street from Hwy. 69. It is set back from the road, on the right-hand side, a short ways beyond Farm & Fleet.

After a short business meeting, where we will elect officers for the coming year, we will play the **Gold Brick Game** as usual. Everyone should bring two inexpensive wrapped gifts that are very well cushioned.

Dinners at the Buffet are normally around \$11.50 per adult; prices for children are based upon age. But as in the past, the club will subsidize **half** of the adults' and **all** of the children's meal costs. If you have not already done so, please let treasurer Daisy Peterson know how many in your family will attend, so that we may submit an approximate count in advance. Phone: 608-445-9109 or e-mail: [daisyjovilu@gmail.com](mailto:daisyjovilu@gmail.com).

The new BLGS mineral calendars, "Wonders of the Earth 2013," will also be for sale at the party; costs are \$9 each for club members. These could make a great gift item for your geology-minded friends, no matter where they live.

And a reminder about the payment of dues for next year; please renew your membership in the club. There will be plenty of activities, including the annual show, meetings, and field trips during the months ahead. We look forward to seeing you at the Christmas party and in the new year. Happy holidays!

Jordan D. Marché II

BLGS president

## **December Meeting**

**The December meeting will be the annual Christmas Party. It will be at the World Buffet in Monroe. The Christmas Party will start at 5:30 on Saturday, December 8<sup>th</sup>. We will have a short meeting and then play the Gold Brick game immediately after the meal. Please bring a couple of small (around \$3) gifts to donate to the Gold Brick game. Hope to see everyone there for some Holiday fun!**

## ***Officer Roster:***

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## **November Meeting Minutes**

The November meeting was called to order at 10:20 on Saturday, November 10<sup>th</sup> at the Monroe public library. It was a very small meeting, as many of our members were either working at or attending the Freeport Rock show. The members attending the meeting were: Dan & Laurie Trocke and family, Johnny Fay, Clay Schroll, Neal Trickel, and Teri Marche'.

The first order of business was announcements. Johnny Fay didn't have an announcement, but he had a fantastic story of how he found a really nice Quartz Scepter when he was rock hunting in Mt. Ida. He said that he was the last person of a group to walk down a path and happened to look down and there was a perfect Quartz crystal lying right in front of him. Everyone else had walked right over it. He has carried it with him ever since. He said "You don't find Quartz crystals, they find you!"

There were not any minutes in the last newsletter and we didn't have a Treasurer's report, so we moved on to old business.

Laurie Trocke offered to cover for Ralph Bergner as Secretary for the remainder of the year.

The December meeting will be the Christmas party at the World Buffet in Monroe at 5:30 on Saturday, December 8<sup>th</sup>.

Johnny Fay suggested a possible field trip for next year. He said that once a year, they close down the Macinaw Island Bridge to traffic and you can walk across it. He thought this would be a great thing to build in as part of a Michigan field trip.

There were 6 door prizes handed out at this meeting. There was not a meeting in October due to Lapidary Day, so the door prizes were doubled for November. The first 2 prizes went to Connor Trocke and Erin Trocke. Connor won a cool pink Quartz crystal that was shaped like an ear and Erin won a very pretty polished stone pendant.

The calendars are complete. Ten of them were given to Brian Green and ten to Jack Hoxie to sell at other shows. The rest are available to be purchased. They will be \$9.00 for club members and \$12.00 for the general public. There will be calendars available to purchase at the Christmas Party.

The next two door prizes were won by Teri Marche' and Neal Trickel. Teri won a cool Trilobite fossil from Racine, WI and Neal won a beautiful Citrine crystal.

Next up on the agenda was new business. The first thing was selecting a nominating committee to select officers for next year. Clay and Teri offered to serve as the nominating committee. After some discussion, it was determined that the current slate of officers would be put on the slate for next year, except for Ralph Bergner who is stepping down as Secretary due to conflicts with a new job.

Jordan Marche' as President; Dan Trocke as Vice President; Daisy Peterson as Treasurer; Marv Hanner as Officer at Large; and Laurie Trocke volunteered to be Secretary. Anyone else that is interested and would like to be considered, please contact Teri or Clay so they can add your name to the roster to be voted on at the December meeting.

The February meeting will be at the Trocke's. We will be putting the fish pond bags together for the kids' game at the March show. If you have fish pond or spinner rocks to donate, please bring them in February.

Will Ward's family donated a trim saw to the club. Neil picked it up from the family – Thanks Neil!! Teri is going to use it for the first month and will bring it to the next meeting so someone else can borrow it if they would like.

We received an email from a metal detector company. They offered to donate two gift certificates for their company to the club if we would provide a link to their company on our website. After some discussion, it was determined that the best way to proceed was to pass this on to our WebMaster, Ken, and let him decide if the link would be a suitable thing to add to our website.

We then moved on to Show Business. Teri has flyers printed up for the show. She is sharing them with the dealers as well as with club members. The flyers were available at this meeting and will also be available in December.

Teri said that she has checks from 7 of the dealers. We will have 2 new dealers at the show this year – Fossil Hut and Rapid Rock Gems. One speaker has been lined up, we still need 2 more. We also need demonstrators. The Monroe Homemakers have been contacted, so we should have excellent food at the show again this year. We need to start getting the word out on the show and advertising can start right away. There is not a theme for the show this year.

Teri is looking into gold panning for the kids' project this year. It will depend on how much the gold will cost.

The last two door prizes were won by Clay Schroll and Jayden Trocke. Clay won a nice polished Cephalopod and Jayden won a fossil fish.

Before we adjourned, Johnny told us about a phone call that he had received from a woman in the Chicago area. She has 11 crates of what she thinks is Jasper and Agate. She wants to sell this. Johnny is going to contact her and try to set up a date for the club to visit and take a look at her material. We are going to try to set this up as the January field trip, with a visit to her house in the morning and then a trip to one of the great museum's in Chicago in the afternoon.

The meeting was adjourned at 11:10 and we headed down to enjoy the Freeport show.

## A Fossil Leaf and its Living Descendents

[door prize article]

by Jordan D. Marché II

I recently had the opportunity of visiting the Bay Area of California and to tour the San Francisco Botanical Gardens within Golden Gate Park. This is a most impressive layout which contains some 55 acres and has over 8,000 different kinds of plants from all parts of the world. Areas within the garden are arranged to display the floras of particular regions, and extend from native desert plants to a century-old redwood grove.

One area of particular interest to me was their "Ancient Plant Garden," where they have assembled large groups of the more primitive yet still-living plants that long preceded the rise of flowering plants (angiosperms). For instance, they have recreated areas that closely resemble the floors of the ancient coal forests that were rich with ferns and horsetails, during the Pennsylvanian Period. Two other areas are devoted to the Jurassic and Cretaceous Periods, wherein abundant cycad trees may be seen (that were fed upon by dinosaurs), along with some early flowering plants. In addition, an area is devoted to the Eocene Epoch, with a flora more nearly resembling that of our own time. I would certainly recommend a visit to this particular garden, along with the rest of the Botanical Garden as a whole, to anyone who may contemplate such a future trip.

Yet, another tree that I encountered, largely by chance, also left a particular impression upon me, because of its relation to a plant fossil that I had acquired long ago, while living and working in Nevada. At the time (early 1980s), I had learned of a remarkable new fossil site of Miocene age in south-central Nevada, named Stewart Valley. Most of the land within this site belonged to the Bureau of Land Management (BLM). The Stewart Valley site had been formed in a similar fashion to that of the older

Florissant, Colorado, fossil beds. When the fossils were preserved, the climate was evidently Mediterranean (i.e., much like that of present-day San Francisco) with warm dry summers and cool damp winters. Freshwater lakes and rivers were seemingly abundant and surrounded by forests of diverse trees. The fossils were preserved because of occasional volcanic eruptions and the deposition of large volumes of ash that quickly buried and sealed the organic remains. Of particular interest are the large numbers of fossil insects found in the strata, along with various plant, fish, and mammal fossils. Today, however, Stewart Valley is a dry and strongly eroded environment (think of 'badlands') within the Basin and Range province, having no trees and only sparse desert vegetation.

During a visit to Stewart Valley, a friend of mine happened to find a large, complete leaf fossil that was several inches long. I acquired and still have one of the corresponding impressions of the leaf, which was identified for us as *Garrya axelrodi* (named for a University of California paleobotanist). One of the living descendants of this fossil is the wavyleaf silktassel tree, *Garrya elliptica*, which occurs along the coastal ranges from about Santa Barbara, California northward to southern Oregon. As another UC paleobotanist, Howard Schorn, related to us at the time, "I never cease to be impressed with the contrast of collecting forest plants in present-day Stewart Valley."

I was therefore pleasantly surprised when I came across a similar species, *Garrya laurifolia*, growing by itself (but labeled as such) in the Botanical Garden. This species is native to Mexico and may normally live under a still warmer climate. The time of my visit was also somewhat fortunate, because the tree was in the process of losing its oval-shaped leaves for the season. There were a number of freshly-fallen leaves on the ground, two of which I collected, and thus I did not have to risk pulling one or more living leaves off the tree.

Upon arriving home, I photographed both the fossil and living leaves, and present the comparison below. In fact, the living leaf shown is around twice the size of its fossil ancestor, while a second leaf is still larger. Both will be placed in the same drawer as the fossil leaf, which is probably some 5 - 10 million years older than its living relative. But in terms of basic shape and structure, the two look very much alike.



*Garrya axelrodi*  
(Miocene; left); *Garrya laurifolia* (Holocene; right)

Photos by J. Marché

### **Agate Collecting in Colorado – Wolf Creek Pass Zeolites**

Posted on [November 14, 2012](#) by [rocky](#)  
reprinted with Permission from [wheretofindrocks.com](#)

Near the border of Archuleta County in Colorado, Wolf Creek Pass and Treasure Mountain contain a deposit of silicates and zeolites that have made their way into mineral collections around the world. The collecting area, spread out over the rocky mountainside, is often referred to as Wolf Creek Pass. However, Wolf Creek Pass is actually a 10,000 foot mountain pass that wraps around Treasure Mountain and follows the Wolf Creek. The mountain does not bear gold or

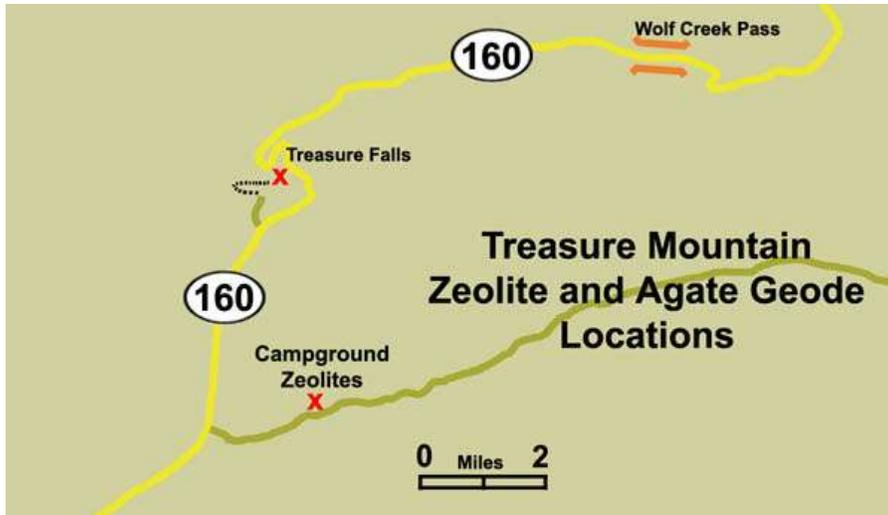
jewels, but the volcanic basalt deposits are near a very photogenic waterfall, Treasure Falls. Surrounded by scenic views, this basalt deposit is one of the most thrilling areas of Colorado.



**Quartz specimen with banded agate and a crystal center with a slight purple hue.**  
Photo by Mathew Marulla ([marulla.com](#))

Treasure Mountain is named after the legendary stash of gold, left behind by a

French expedition in 1790. Several search parties have tried to find the fortune of gold bars acquired from a gold deposit near the Peak of Treasure Mountain, but none have been successful in finding the bars or the deposit.



Much of the collecting area is adjacent to highway route 160 and in the boulders and exposed rock of the mountainside just north of the falls. The mineralized area is fairly large and boulders containing the material have been distributed across the area, both naturally and due to the construction of route 160 and Wolf Creek Pass. In fact, due to the close proximity to Archeuleta county to the south, part of the deposit crosses this manmade border separating the counties which only serves to cause confusion in geographic labeling of specimens from this deposit.

#### Map of the Agate and Zeolite locations around Wolf Creek.

Rounded amygdaloids fill the voids in the volcanic deposit of basalt, as with many occurrences. These host crystals of quartz and about half a dozen zeolite minerals.

The quartz and agate are similar to that found in many other volcanic silica deposits. The agate is typically clear, white and/or shades of blue, often with alternating layers that make it desirable for lapidary use. Some have crystallized centers. Typically the crystals form on a layer of agate, which varies in thickness from miniscule shells to thick rinds. Sometimes the crystals are amethyst, making attractive specimens on dark colored volcanic matrix. Though the agate and quartz found here do not rival that found at many other locations, it is one of only a few still open for collecting.

Of course, the zeolite species are what makes the location a true Colorado classic. Analcime is typically found as very small crystals usually below 1 cm in size. However, at one location, analcime is found up to 3.5 cm. Chabazite occurs here, but not in crystals larger than a few millimeters in size. Heulandite is sometimes found as crystals up to 5 cm across. However, typically the crystals are only millimeters in size, lining the cavities and serving as matrix to other minerals. One such mineral is mordenite, which is found as well formed clusters of white fibers. These clusters, up to a few centimeters in size, were referred to as being one of the best locations for the species in the United States for many years.



#### Mordenite crystals in a vug of basalt

Photo by Mathew Marulla ([marulla.com](http://marulla.com))



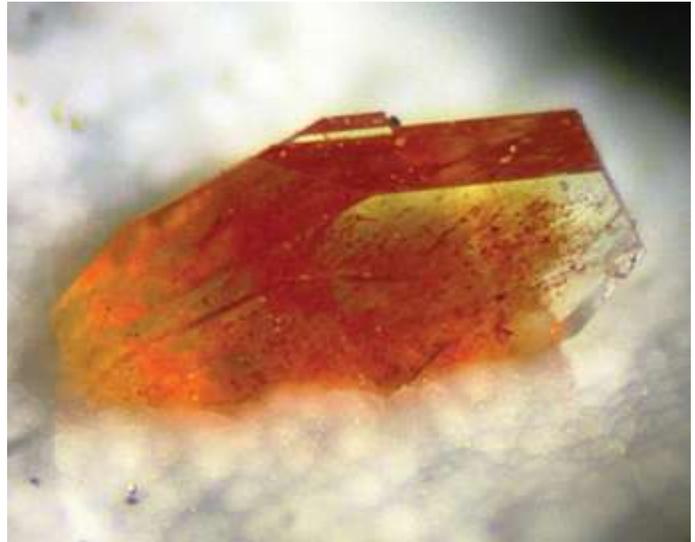
**Mordenite Crystals up to 2 cm long can be found at the location**

Photo by Mathew Marulla ([marulla.com](http://marulla.com))

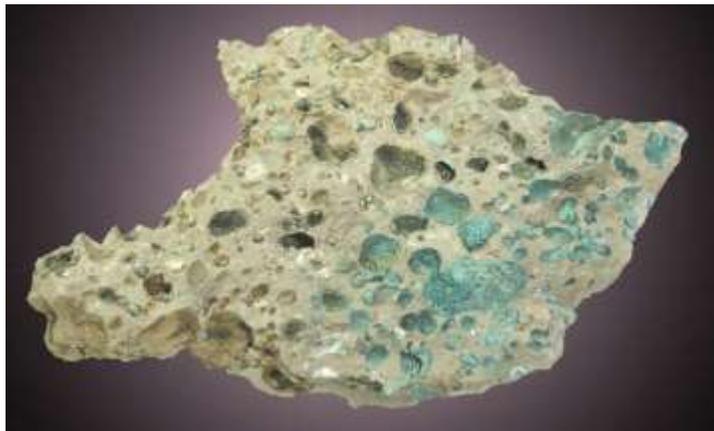
Other associated minerals include globular common opal, small rhombs of calcite, and small pyrite crystals. The locality is also a classic locality for the clay minerals celadonite and nontronite, which form in abundance. Laumonite, natrolite and wellsite also occur in the deposit, but they occur rarely and only as small crystals

**Isolated Heulandite crystal on matrix. Specimen size is millimeters**

Photo by Luigi Mattei



6



**Several voids filled with celadonite overall size 10 x 5 x 3 cm.**

Photo by Martins da Pedra

Due to the vast deposit and mountain conditions, this source of colorful quartz, agate and zeolites will always exist in the mountains of Colorado. Maybe the lack of gold is a bit disappointing for a mountain with such high aspirations, but to many mineral collectors around the world, the real treasures are the mineral collecting opportunities and the often-visited Treasure Falls.

Submitted by Dan Trocke

Follow this link for more great information on agates and some really stunning pictures:

<http://rockhoundstation1.com/pdfs-etc/June2009.pdf>

## Wisconsin December Events

**6 Stoughton - Branson on the Road - Christmas Style!** A wonderful way to kick off your holiday season! Not only can you expect great Christmas music, old country favorites and amazing instrumental abilities at this show, but also plenty of hilarious comedy every step of the way. Show times are 3PM & 7PM. Stoughton Opera House, 381 East Main Street. For more information call (608) 646-0019.

**7 - 16 Beaver Dam - Trial of Ebenezer Scrooge.** Comedy Play - Holiday fun for the whole family. December 7, 8, 12, 13 & 14 at 7PM; December 9 & 16 at 2PM. Early Bird Special pricing through Wednesday, November 21. A year after his miraculous transformation, Ebenezer Scrooge is back to his old ways and is suing Jacob Marley and the Ghosts of Christmas. Beaver Dam Community Theatre, 219 N. Spring Street. For more information call (920) 885-6891.

**7 Stoughton - Cherish the Ladies - Celtic Christmas.** One of the most sought-after Irish-American bands in the world invite you for an evening of high-energy yuletide favorites, Celtic-style. A blend of beautiful vocals, captivating arrangements, stunning step dancing and virtuosic instrumentals including flute, tin-whistle, fiddle, guitar, banjo, mandolin and accordion. The show begins at 7:30 PM. Stoughton Opera House, 381 East Main Street. Event starts at 7:30PM. For more information call (608) 646-0019.

**15 - 16 Monona - Frozen Fun Wonder Weekend.** Saturday, December 15, 11AM - 4PM; Sunday, December 16, Noon - 4PM. Explore a fantastic frozen world and how it plays a critical role in climate change research with presentations from guest speakers, hands-on exhibits, showings of Frozen, NASA's Science On a Sphere film that probes the icy places on Earth known as the cryosphere, and more! Aldo Leopold Nature Center, 330 Femrite Drive. For more information call (608) 216-9374.

**21 Monona - Winter Solstice Celebration at Aldo Leopold Nature.** This family friendly celebration features a naturalist-led twilight hike on ALNC's trails; nature crafts for the kids including a fun and functional pinecone birdfeeder; Inspirational Winter Solstice stories from around the globe; a festive bonfire and ceremonial burning of the Yule log; Wassail made over a fire in the Children's Shack; and Hot cocoa, yummy seasonal snacks and more! Aldo Leopold Nature Center's Monona Campus, 330 Fe. For more information call (608) 216-9374.

**22 Milwaukee - Milwaukee Santa Hustle 5k Run.** The race will be held along the length of Veterans Park at 9AM. Experience the beauty of famous areas such as the Milwaukee Community Sailing and the Milwaukee Yacht Club while having fun running in provided Santa beards, tunics and hats. Veterans Park.



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