

THE BADGER DIGGIN'S

The Badger Lapidary and Geological Society, Inc.

Monroe, Wisconsin

Devoted to the Earth Sciences

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February 2011

President's Message

Happy Almost Spring!! February is finally over and spring is nearly here. March brings with it some wonderful events, the main one being our annual show! To prepare for the show, the March meeting will be at our farm on the 12th. We will be preparing the fish pond bags and the sand & gem bags for the panning. I know it is a long drive out here, but we could use all of the help we can get! If you can't make it to the meeting, but have pebbles to donate for the kids' games, please contact one of the officers so that we can make arrangements to get those from you. Several of our members, Barb Woodruff and Dave & Donna Reese have already contributed some wonderful items, both spinner rocks and fish pond fillings! The meeting will be pot luck; we will provide sandwiches and soda and ask that you bring a dish to share. Also, don't forget to let Teri know if you would like to reserve a display case or sign up to work at the show.

February did leave us with some wonderful memories. The meeting activity was a great success; many of the gem trees were looking fantastic! A huge 'Thank You' goes to Callie Hoxie for leading the program. Nice job, Callie!! The field trip for February was to Prairie du Chien to explore the personal museum of Phil

Burgess. Phil has created a lifestyle in perfect harmony with his rock collection. This symbiosis should be an inspiration to all of us!! He has a world class collection. It cannot be understated how impressive his collection of mostly local, self collected minerals and fossils is. They are proudly displayed in every room of his house, often in a manner you would expect to see in a museum. There were a couple of notable exceptions such as the 7' cephalopod that is hiding behind his couch and the freezers that are dedicated to a spectacular Marcasite collection from South West Wisconsin!! Phil seems to have pioneered a method to keep this fragile mineral from deteriorating, which is a huge problem that collectors face with Marcasite. Phil is also extremely knowledgeable about everything in his collection and was great in answering all of the questions from the kids – young and old!

Hope to see everyone at the March meeting and if you cannot make it to the meeting, hopefully I'll see you at the show! I leave you now with this thought.....Did you know that joining a club has been shown to have the same effect on your happiness quotient as doubling your income? Wishing you much happiness!!

Dan Trocke
President
BLGS

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Meeting Minutes

February 12, 2011 Meeting Minutes

The meeting activity for this month was making Gem Trees. Callista Hoxie led the group with a demonstration on how to make one type of tree. Dan Trocke also sent around a printout showing how to make another type. Most people were able to complete the wire wrapping portion of the project but planned to glue on the stone and gems later. It was fun to see all the different sizes and styles.

The meeting was called to order by Club President, Dan Trocke. Teri Marche made a motion to approve the January meeting minutes as written. Marv Hanner seconded the motion. Minutes were accepted and approved as written.

Next was the Treasurer's report. Donna reported the club auction was a success. A donation was made to the Monroe Public Library for the use of the meeting room. Donna also reports the club is in good standings and the Midwest Federation dues were paid.

Announcements and Reminders were next. The March meeting will be at the Trocke's farm on 03/12/2011. The activity will be filling fish pond bags for the show. Please bring small fossils and minerals or any shiny rocks that kids will enjoy. Lunch will be pot luck so please bring a dish to pass. The February field trip (02/26/2011) will be to Prairie Du Chien to see a private collection. A sign-up sheet was passed around for anyone interested in going. An email will be sent out with the address, times and directions to the home. We will be sending a thank you card to Bud Higgins for the donation to the club.

Ted announced the club website is close to being finished.

It was discussed and decided that all the children activities at the show will be .50.

The first door prize was won by Jack Hoxie. It was a nice fossil donated by Jordan.

The next item on the agenda was old business. Donna said she received a nice thank you from Suzanne Holland for cash donation made to the library. The money will be used to purchase books or help with the children's program.

Second door prize was won by Teri Marche. It was a nice piece of Druzy Quartz.

For new business Teri asked that a full calendar be put in the monthly newsletter from time to time. We also have permission to go to the Ryan Quarries for fossils. They own two quarries in an area that is only a few miles apart. They are located about 10 miles east of Brodhead. This field trip will be August 27. The November meeting program will be Kevin Ponzio giving a demonstration on flint napping.

Next item was Show business. Teri reports that everything is set for the show but she is still waiting for one demonstrator. The show posters are ready and everyone was asked to take some with them. A sheet was sent around for members to list what city or area they plan to distribute the posters. A sign-up sheet was passed for

volunteers to help at the show and another sign-up for show cases. Anyone signing up for a case will need to be there for set-up on Friday and take down on Sunday.

The radio ad is almost ready for recording. Jack and Teri are working on it. Dan asked that we replace some of the Plexiglas on the show cases. They were getting scratched and damaged. Ralph has access to Lexan (bullet proof Glass) at work. Dan will get dimensions to Ralph so we can get them replaced.

The third door prize was won by Erin Trocke. She won a nice cabochon with dendrite.

Thank You to Brian and Cindy Green for the wonderful snacks and to Callista for a nice job with the gem trees.

Submitted by

Ralph Burgener

Next Meeting

The next meeting will be on March 12th at the Trocke Farm. The activity will be filling the fish pond bags and the sand bags for the kids panning activity. Bring any small stones, fossils or interesting specimens that could be used for the kids, also any larger pieces that could be used in the spinner games. Dan will send out a reminder e-mail with directions to our farm closer to the 12th.



What's Rockin'

The winter weather didn't deter the full house of club members that showed up with their favorite new rocks to the Feb. meeting. Marv Hanner had a whole collection of stuff from Burma starting with Petalite, Sapphire, Urite (tourmaline group), Spinel and Sespolite. From the rest of the world Marv had Danburite from Bolivia, Prehnite from China and Apache Creek Agate from New Mexico. Ted Tinker brought Ice Agate from Norway, Moss Agate and Black Skin Agate from India, Berber Agate from Morocco, Cobalton from Africa, Calondria Agate from Mexico and Wave Hills Agates from Australia. Dave Reese brought Sylvanite Gold Ore that he mined at the club auction and a vinegar etched coin. Donna Reese brought a Prehnite Vug with copper wire from the Cliff Mine in the U.P. and Agate from Crater of Diamonds State Park, Murfreesboro Arkansas. Dan Trocke brought a Carved Jade Vase and several cases of agates and a case of Trilobites. The Green's



Club Calendar

- March 12th: Meeting – Fish pond bags, Trocke's
- March 26th: Annual show
- April 9th: Meeting & Rufer's Quarry in Monroe
- April 23rd: Field Trip – Meteorite Hunt & Fossil Quarry, Dodgeville, WI area
- May 14th: Meeting – Tyrell Rouse Fluorescence
- May 28th: Field Trip – Jacob's Geode Mine, Hamilton, IL
- June 11th: Annual Picnic
- June 25th: Field Trip – Door County Fossils, Mike Riesch
- July 9th: Field Trip – Fossil Park, Rockford, IA Jordan Marche'
- July 23rd: Field Trip – Stockton, IL Quarry, Brian Green
- August 13th: Belleview Agate Pits
- August 27th: Beloit Quarries, Ralph Burgener
- Sept 10th: Meeting – Show & Tell
- Sept 24th: Field Trip – Wendling Quarry?? Teri Marche'
- October 8th: Meeting – Lapidary Day, Trocke's
- October 22nd: Field Trip – Cave in Rock, IL
- Nov 12th: Meeting – Flint knapping, Kevin Ponzio
- Nov 26th: No trip – Thanksgiving
- Dec 10th: Annual Party
- Dec 24th: No trip - Christmas

Review: *Bretz's Flood: The Remarkable Story of a Rebel Geologist and the World's Greatest Flood*, by John Soennichsen (Seattle, WA: Sasquatch Books, 2008).

By Jordan D. Marché II

“Extraordinary claims demand extraordinary evidence.”

Carl Sagan (date, place of quotation unknown)

In November 1923, University of Chicago geologist J Harlan Bretz (1882-1981) published a paper in the *Journal of Geology* entitled, “The Channeled Scabland of the Columbia Plateau,” which set off a decades-long controversy over the processes that formed this extraordinary region of southern and eastern Washington and beyond. Bretz’s hypothesis was based on his roughly 3,000 miles of meticulous fieldwork logged across an area that displayed flood features of enormous scale, including valleys (e.g., Grand Coulee) up to several miles wide, with walls hundreds of feet in height, carved from solid basaltic bedrock, and Dry Falls, a dry cataract of equal width and 400 feet high. In Bretz’s estimate, this ragged and torn landscape could only have been produced by a flood of catastrophic proportions during a geological instant. But Bretz’s radical hypothesis left his geological colleagues in shocked silence, not from a want of compelling evidence, but because he had deliberately (if reluctantly himself) violated one of the key foundational principles of the discipline; namely, the principle of uniformity, first espoused by British geologist Charles Lyell in his *Principles of Geology* (1830-33).

When additional papers of Bretz, extending and confirming his hypothesis, continued to appear in succeeding years, he was invited to deliver a lecture (12 January 1927) before the Geological Society of Washington (D.C.), whose leaders largely consisted of the conservative, upper-echelon figures from the U.S. Geological Survey. What

Bretz didn’t know was that this cohort had prearranged for a “planned attack” upon his interpretations, in an effort to embarrass and silence his lone voice on this matter. Following Bretz’s presentation, one after another of the meeting’s organizers rose to challenge and demean Bretz’s conclusions, while putting forth alternative, and more ‘uniformitarian’, explanations for the features of his “Spokane Flood.” Few, if any, of those present, however, had ever conducted fieldwork in the scablands area.

Although Bretz left the meeting in a state of gloom and depression, which persisted for some months, he did not give up. He also gained support from geologist Joseph T. Pardee, who, some years before, had uncovered convincing evidence of an enormous glacial lake, now called Glacial Lake Missoula in western Montana, that had abruptly vanished, perhaps when an ice dam suddenly gave way. Pardee’s discovery of giant ripple marks, as much as 50 feet high and 500 feet apart, offered further credence to Bretz’s catastrophic flood hypothesis. By around 1930, Bretz willingly accepted Glacial Lake Missoula as the source of his floodwaters. But the American geological community did not come around to accepting Bretz’s interpretation of the channeled scablands until the 1960s. Only in 1979, when Bretz was 97 years old, did he finally receive a formal acknowledgment of the significance of his work, when he received the Penrose Medal of the Geological Society of America (after his third nomination!) for his lifetime of achievements.

Soennichsen’s volume is extremely well written, highly engaging, scientifically accurate, and also presents the fullest picture of Bretz the man (husband and father, and not just the scientist) of any work available. It is based on a thorough study of all of Bretz’s published and unpublished writings, family papers, interviews with surviving family members, consultations with professional geologists, and historical records held at a number of institutions and

organizations. The volume is well illustrated with photos and drawings of major scabland features. Soennichsen's narrative is a far more complete and compelling account of this geological controversy than is found in the single brief chapter devoted to Bretz's labors contained in David Alt's *Glacial Lake Missoula and its Humongous Floods* (2001).

There is even a modest connection between Bretz and the geology of Wisconsin. For around thirty years, starting in 1915, Bretz conducted summer field study courses for his University of Chicago students at the Devil's Lake area near Baraboo. His trademark Socratic style of teaching emphasized direct student investigation and reconstruction of the complex geological history preserved there. Along with some very humorous anecdotes recalled by former students, there were also occasional tragedies.

Originally trained as a biologist and initially a high school biology teacher, Bretz nonetheless developed an extraordinary ability to 'read' and decipher a landscape, even one as vast and challenging as the scablands. His lifelong uphill battle to gain acceptance of his unorthodox views cast him in much the same role as Alfred

Wegener, who in the early twentieth century proposed the equally radical notion of continental drift. Wegener's theories, based on firm but incomplete fossil and geological evidence, lacked the necessary mechanism to explain how the continents themselves moved. But with the discovery of seafloor spreading and related processes, many of his leading ideas were later reborn in the theory of plate tectonics.

Bretz's theory of catastrophic flooding did not by itself bring about a paradigm shift within the geological community. But it did represent perhaps the first significant crack in the edifice of uniformitarian geology, before recognition came of the role of mega-eruptions, meteorite impacts, and mass extinctions in the fossil record. It is no longer possible to deny the occurrence of geological events that dwarf in scope any similar occurrences witnessed during the very brief span of human scientific investigation. In ordinary cases, it may still be claimed that 'the present is the key to the past'. But as some of Bretz's former detractors, who were finally persuaded to accept his views on the origins of the channeled scablands, put it to him succinctly in 1965, "We are all now catastrophists!"



Blue Quartz

Dave Zimmerman

Blue quartz occurs at a number of localities. Colorado has an occurrence of blue quartz in Park County. Small, doubly terminated crystals in a rhyolitic porphyry, informally known as Llanoite, occurs in Llano County Texas. The blue crystals weather out and can be easily collected. Blue quartz is found in Wisconsin in a diorite near the Dairyland Power Dam near the town of Tony. Recently discovered blue quartz in the Cushing Point formation of Peak's Island, Maine has inclusions that have the chemistry of biotite. The presence of biotite in blue quartz is new-past research has not listed biotite as a possible inclusion. Research suggests that the inclusion of biotite on Peak's Island blue quartz may be responsible for giving this quartz its blue color. Blue quartz is also located in the pegmatites of the Cape Ann granite at Andrew's Point in Rockport, Massachusetts.

Here is the link of the source if interested:
<<http://coloradoearthscience.blogspot.com/>>
<http://coloradoearthscience.blogspot.com/> (way down at the bottom)



Events Around Wisconsin

Wollersheim Winery - "Open House"

Saturday, March 5, 2011 through Sunday, March 6, 2011. 10 am - 4 pm. Wollersheim Winery's annual Open House offers grapevine pruning, cooking with wine demonstrations, and winemaking explanations scheduled each day. Visits through the winery's modern fermentation facilities and historic underground aging cellars take place throughout the day, plus bottling line demonstrations and interactive displays are available for families to enjoy along a self-guided tour. (No admission fee. Open to the public.) Wollersheim Winery, located 25 miles northwest of Madison, 7876 Hwy 188, Prairie du Sac. Call 608-643-6515

Maple Syrup Family Day

Saturday, March 19, 2011. 1 pm to 4 pm. Enjoy a beautiful outdoor day in the Richfield Historical and Nature Park. Watch maple syrup being made. Tours of Messer/Mayer Grist Mill and miller's house. Free. Richfield Historical Park, Enter at Nature Park, Hwy. 164, 1/2 mile north of Holy Hill Rd, 4399 Pleasant Hill Rd, Richfield. Call 262-628-2841.

Music Under Glass at the Domes

Thursday, November 4, 2010 through Thursday, March 31, 2011. 6 to 8pm. Enjoy live musical performances after hours under glass at this world-renowned Milwaukee landmark. Food and beverages available for purchase. Best assortment of musical styles and talent in the region. Great ambiance and a natural escape. Mitchell Park Domes, 524 S Layton Blvd, Milwaukee,. Call 414-649-9830.

Mummies of the World

Friday, December 17, 2010 through Tuesday, May 10, 2011. The largest exhibition of mummies and related artifacts ever assembled. Mummies features an astounding collection of 150 objects, including real human and animal mummies and related artifacts. The ground breaking exhibition bridges the gap between past and present, showing how science can shed light on the historical and cultural record around the world. Milwaukee Public Museum, 800 W Wells Street, Milwaukee,. Call 414-278-2702

Kettle Moraine Geological Society

Gem and Mineral Show

April 8th & 9th

Pictures from February



Calista Hoxie leads the Gem Tree Class



A great project for kids of all ages!



Success!!



Physics Fair, UW Madison

Phil Burgess Museum!



Badger Lapidary & Geological Society, Inc.

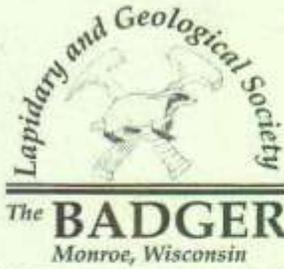
Laurie Trocke, Editor

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The 41st Annual Rock, Gem & Mineral Show



March 26 & 27, 2011

9:00 am to 5:00 pm – Saturday and Sunday

Monroe High School – 1600 26th Street, Monroe, WI

Admission: Free Will Donation, Free Parking

An Affordable, Educational, Family-Friendly Event



This Year's Theme – Rocks At Work



Quality Dealers: Gems, Minerals, Fossils, Crystals, and Jewelry

Children's Activities: Fish Pond, Scavenger Hunt, Roaming Rock Wizard, Gemstone Panning

Other Goodies: Quality Member Displays, Fluorescent Display, Door Prizes, Demonstrations

Great Speakers, Good Food

Presented by the Badger Lapidary and Geological Society

A Non-profit organization dedicated to promotion of earth science study for children, adults, and families.

MEMBER OF THE AMERICAN FEDERATION AND MIDWEST FEDERATION OF MINERALOGICAL AND GEOLOGICAL SOCIETIES

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