

The Petoskey Stone

OAKLAND COUNTY EARTH SCIENCE CLUB
WWW.OCESC.COM

FEBRUARY 2010

President's Message

I would like to begin by thanking the outgoing officers and board members (Jim Rives, Roberta Thomas, Eleanor Snyder, and Katherine Van Hoy) for their service to the club.

I would also like to thank all those who have so graciously volunteered to fill the open board positions and committee chairs. The hardest task of any club is to find the people to do the work that must be done. The response at the January meeting tells me that our club is alive and well. I look forward to a great 2010 and the future.

-Tony West, co-President

Election Results

Here are the 2010 Election results from our January meeting:

Co-Presidents: Dan Woerner and Tony West

Vice Pres: Dwight Keith

Secretary: Chris Shull

Treasurer: Leon Pearson

Board members- 3 year terms:

Linda Whitehead, Marie Petinga, Edward O'Neil

Board members- 1 year terms:

Laurie Wilkins (finishes Tony West's term).

Jane Gunterman (finishes Dwight Keith's term).

Board members Emeritus:

Eleanor Snyder

Katherine Van Hoy

**Club Meeting
Feb. 3rd
7:30**

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**DUES ARE
DUE
!!!!!!!!!!!!!!!!!!!!**

**PLEASE BE
PREPARED
WITH CASH----
CHECKS-----
GOLD TEETH--
OLD COINS--
OR STAMPS
ANY OF THESE
ARE
ACCEPTABLE**

**SEE ELLIE AT
THE FEBRUARY
MEETING
THANK YOU**

**February
Refreshments**

**Phyllis Keene
Debbie Rathburg
Lynnette West**

Also approved were the club Chairpersons:

Program Chair- Betty Cockerham

Website – Dave Whitehead

Classes co-ord. – Tony West

Grinding room- Leon Pearson

Children's Pgms - Rose Woerner

By-laws – Pam Brady, Cathy Roller, Leon Pearson

Historian- Linda Whitehead

Publication - Laura Sheffer

Sunshine – Sue Klopfer

Library – Linda Whitehead

Club Trips- Jim Rives

Banquet- Nancy Lill, Leon Pearson, Nancy Pfauth

-Laura Sheffer

Program for February- Selenite

Roberta Thomas will give us a program on the mineral Selenite during our February meeting. My thanks for last month's refreshments and program- they were wonderful.



Afterwards I thought-- Pam, what would have happened if everything from hundred's, or even thousands, of years ago had been recycled? Would we know as much about our past?

-Betty Cockerham, Program Chair

Upcoming Events (more events can be found at www.rockngem.com or

<http://www.amfed.org/mwfw/Calendar/>) For detailed information, please visit the club's website.

January 15, 2010: Club volunteers needed at the CAI club room to begin sorting material for the next auction. It is not necessary to be there at an exact time, nor to stay for the entire session.

January 2010: starting Wednesday, January 13th in the CAI club room, for club members. Classes will run for 8 weeks on Wednesday night from 7:00 to 9:00, except on Club meeting nights. The charge is \$35.00. If you have tools you are welcome to bring them. If you do not, I have whatever you will need. Silver and stones for making the jewelry are included in the cost of the class. Contact Eleanor Snyder if interested.

Feb. 27-28, Schoolcraft Special Benefit Auction: Visatech Center Bldg. 18600 Haggerty Rd, Livonia MI. Sat. 11-6Pm, Sun. Noon-6pm. Free admission and parking, hourly door prizes, children's auctions, silent and verbal auctions. For the benefit of the Roamin' Endowment Fund & Tom Williams Scholarship Fund at Schoolcraft College. contact Clarence Sterling at 248-969-2196.

Jan-Feb 2010: Mt Clemens Gem & Lap. Soc Rock and Mineral workshop, classes to assist students grades 3-6 in Science Olympiad competition. Info- Sandra Chownyk, 586-469-2939, yourhobby@yahoo.com

April 23rd – Arbor Day; www.arborday.org

2010 Refreshments

Jan. Jane Gunterman & Linda Whitehead
Feb. Phyllis Keene, Debbie Rathburg, Lynnette West
Mar. Linda _____, Eric _____
April Chris Shull, Sue Klopfer
May Jackie Presson, Monica Rowe
June Banquet

2010 Programs

Jan. Brady's – Recycling Today
Feb. Roberta Thomas - Selenite
Mar. Dwight Keith
April Silent Auction
May ID specimens- bring yours!

(Details of remaining month's programs coming). --Betty Cockerham, Program Chair

February Birthdays

2 George Lindano
12 Eric Parker('94)
15 Tina Catenacci
16 Brooke Keith ('96)
25 Roberta Thomas
27 Patricia Caceres



Nature is the most thrifty thing in the world; she never wastes anything; she undergoes change, but there is no annihilation, the essence remains – matter is eternal. Horace Binney, Congressman

Dues Dues Dues Reminder!

Yes, that time of year is here. Please see Eleanor wherever you can find her and pay your \$20.00 for the year 2010; either check or cash is acceptable. Thank you. If you are not able to attend the February Meeting, you can send a check to Leon Pearson, or to "Treasurer". His address is in our club contacts list.

OCES Board Meeting: The January 2010 Board meeting was called to order at 6:29 PM.

Attendance: Betty Cockerham, Dan Woerner, Jim Rives, Eleanor Snyder, Leon Pearson, Katherine Van Hoy, Gerry Runkle, Dwight Keith, Nancy Pfauth, Tony West and Laurie Wilkins. The minutes were approved as it appeared in the Petoskey Stone. The Treasurer's Report was given. Motion seconded and passed to pay the Midwest Federation [dues] (includes dues and insurance). Grinding Room report- only 4 people this past Monday. If interest continues, Tuesday night could be opened for use. Leon said that he will be teaching classes through Waterford Parks & Recreation department, with [part] of the fees going to the club. The classes are to run Tuesday & Thursday, mid February to mid March. He is purchasing new blades from the Kingsley North company. Club members can purchase supplies at the club discount from the catalog. Eleanor Snyder is going to start her silversmithing classes next Wednesday (Jan. 13th) for the first timers and the regular classes for everyone else on Jan. 20th. Classes will be on Wednesdays except for the club's meeting night. Eleanor mentioned that club dues are due in January. Members who joined in the middle of the year will be charged for half a year. Library duties will be taken over by Linda Whitehead while Nancy Mathura is unavailable. Betty Cockerham said that we now have a full list of programs for the rest of the year. January's program will be on recycling given by Pam Brady. Refreshments will be furnished by Jane Gunterman and Linda Whitehead. Katherine Van Hoy will be starting an auction sorting meeting on Friday, Jan. 15th at the CAI Building. Members can help anytime between 12:00 Noon to 4:00 PM. There was a discussion about the need for two vice presidents instead of just a president and vice president. Nominations will be handled by Cathy Roller tonight. Leon stated that we needed a member to run the MMF stamp program and to encourage people to save cancelled stamps. Domestic and foreign, commemorative or unusual stamps are collected and then made into bookmarks. Jim Rives announced the Schoolcraft Auction to be held on Feb. 27 & 28 (contact Clarence Sterling at 248-969-2196). The meeting was adjourned at 6:55 PM.

OCES General Meeting Minutes January 6, 2010: The meeting was called to order by Jim Rives at 7:40 PM. We had one visitor, Izzie, and one new member, Laurie Wilkins. Welcome to both! Treasurers Report was given and approved. Grinding Room Report: There were 4 people on Monday. Tuesday night could be opened if the need is there. Members can order from the Kingsley North catalog and save money by buying through the club; call Leon if interested. Silversmith Classes: Eleanor will start on Jan. 13th for first time participants and the following Wednesday for returning members. There are plenty of tools in the grinding room. The fee is \$35 and includes materials. There is no limit on number of people. Library Report: Linda Whitehead has the key! Books can be checked out. Auction Report: Katherine Van Hoy will start a sorting meeting for the auction on Friday, Jan 15th from 12:00 Noon to 4:00 PM at the CAI Building. You can come and stay as long as you like. Nancy Mathura is in Florida and is due back soon, hopefully feeling better. Dave Whitehead stated that he had received an email from a Cub Scout leader regarding a project or program. Display case is in the Grinding Room and can be used for lectures. Mineral sample bags can also be used for demonstrations; is it still possible to start a kid's program? Jim Rives mentioned the Schoolcraft Auction to be held Feb. 27th & 28th. The next part of the meeting was run by Catherine Roller. Cathy presented the list of nominations that had already been received. There were a few nominations from the floor. The following slate of officers were listed:

Co-Presidents -Tony West and Dan Woerner; Vice President -Dwight Keith; Secretary- Chris Shull; Treasurer- Leon Pearson; Directors (3 yr. term)-Linda Whitehead, Marie Petminga and Edward O'Neil; Directors (1 yr. term) Laurie Wilkins and Jane Gunterman.

It was also moved and approved to elect Eleanor Snyder and Katherine Van Hoy with the status as Board Members Emeritus. The slate of officers accepted their nomination and the slate, as shown was motioned and

approved by the club members. Congratulations to all! The Installation Oath was given to all officers and Board members by Tom Pierson. A copy of the club's by-laws and constitution were given to all sworn-in members. The next part of the meeting was concerned with all of the programs and their chairpersons. The list follows: Programs-Betty Cockerham; Membership- Eleanor Snyder; Refreshments- Betty Cockerham; Publications-Laura Sheffer; Website-Dave Whitehead; Grinding Room- Leon Pearson; Classes-Tony West; Show-Eleanor Snyder and Katherine Van Hoy; Children's Activities- Rose Woerner; By-Laws- Cathy Roller, Pam Brady and Leon Pearson; Sunshine-Sue Klopfer; Library- Linda Whitehead; Field Trips-Jim Rives; Banquets- Nancy Pfauth, Leon Pearson and Nancy Lill; Historian- Linda Whitehead. There was a big "THANK YOU" given to Roberta Thomas and Jim Rives for their terms as officers and their continuing participation and support of our club. A refreshment break was called and the raffle was drawn during that time. The winners were Sydney Yankee and Gerry Runkle. The meeting was adjourned at 8:45 PM. Pam Brady gave a very interesting talk on recycling. Remember.....**Reduce, Reuse, Recycle.** Respectfully submitted, *Chris Shull, Secretary*

Mineralogy Chair Report, Midwest Federation News, January 2010

By Kevin Ponzio

Happy New Year to everyone. 2009 has been a wonderful year with many new and exciting events. Several clubs have initiated mineral study groups. Congratulations on your efforts and successes. Keep up the good work! It is wonderful to see the renewed enthusiasm for minerals within some of the clubs. Your club can implement a mineral study group, too. You would be surprised at how easy it is, and the rewards are fulfilling. Most individuals have a hard time waiting for the next meeting so that they can share and discuss the specimens they bring. If you would like help to initiate a group, contact me and I will share some guidelines to a successful meeting.

This is the perfect time to coordinate mineral study themes and regular meeting programs with field trips for the year. Watch the activity grow at regular meetings, when these three are in sequence. 2010 looks to be another great year.

There has been a slow trickle of photos coming in for the Midwest Federation Virtual Museum. Anyone can participate by sending me photos of minerals from the Midwest. Once we have a good representation of all the states, it will become available to members. Digital photos can be sent to my e-mail address a couple at a time. If you have more than five, just put them on a CD and mail it to me (my contact information is below). Photos can be from your collection or other sources. With permission, some show vendors will allow pictures to be taken of their specimens. Also, when on field trips, take pictures of specimens *in situ*. There are specimens in rock too large to bring home or too fragile to try to remove. This project will eventually yield the most comprehensive collection of mineral specimens in the Midwest.

Cancelled Stamp Committee – How Can I Help? (Step 5)

By Lyle and Colleen Kugler, MWF News, Jan. 2010

One of the most important things you can do is to buy the bookmarks made from the stamps you send to us. This is also the easiest step. The cost is \$2 per bookmark. We get to several shows each year and we try to attend the MWF meetings, but you do not have to wait for those events to happen. You can call, email, or write to us with your order – make sure you tell us what category of bookmarks you would like.

We try to have a large variety with some mineral and dinosaur bookmarks included. In the past, we sent out a selection of bookmarks to clubs to sell at their shows or to have available at their meetings. All you have to do is contact us; tell us how many bookmarks you would like; we send them to the responsible contact person; your club sells them at your event; and then the responsible person returns the unused bookmarks along with a check

for those sold. We also accept prepayment for orders if you would prefer to handle it that way – this eliminates extra mailings and postage. So SELLING BOOKMARKS is the final step in how you and your club can help. In the coming months we will make available a form for you to complete and send in with your donations of stamps. Using this form will help us better organize those donations. Watch for it in future newsletters. (contact: ckugler@frontiernet.net)

Luminescence in Rocks, Minerals and Fossils

By Harlin Unruh, McPherson Club Member, The Post Rock, Nov. 2009, via Conglomerate, Jan. 2010

One of the most captivating properties of certain rocks minerals and fossils is their ability to luminesce, or “glow in the dark”, under the right conditions Luminescence is when a specimen gives off visible light, of a specific color, due to stresses on the material. These stresses cause changes to the electrons of the specimen. To understand luminescence you first need to understand the parts of the atom, in particular the behavior of the electrons. Simply put, without the electrons there would be no luminescence of any kind. Imagine that the atom is a tetherball pit, the pole is the dense nucleus of the atoms, and the ball is the electron(s). Now remember, without any outside energy the ball will stay against the pole, but once the ball is hit by an outside force, such as your hand, it will swing out quickly; but if left alone, it will eventually return to its original state. The stress will give the electron(s) added energy and push them to outer orbits, but once that extra energy is gone, the electron will return back to its original energy state and give off the extra energy as visible light.

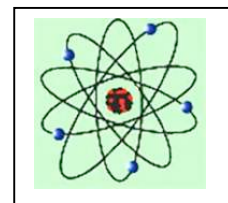
There are several different types of stresses that can cause different types of luminescence.

Thermoluminescence is a type that can be caused by heating the substance. We see this every day in incandescent electric light bulbs. As electricity flows through the filament, the resistance of the filament causes it to become very hot and, in doing so, it causes it to give off light. Some minerals will also thermoluminesce; these include celestite, barite, apatite, spodumene and fluorite. As we heat these minerals they begin to glow with visible light.

Triboluminescence is caused by mechanical stresses such as rubbing or friction. The friction adds energy to the electrons of the specimen and the specimen gives off light as the electrons return to their normal orbits. This can be seen in fluorite, sphalerite, lepidolite and quartz.

Photoluminescence occurs when specimens emit visible light, when illuminated by high energy light, such as UV black light. There are two types of photoluminescence: fluorescence and phosphorescence. If the specimen stops glowing immediately after the black light is turned off, then it is fluorescent. However, if it continues to glow, even for a short time, after the black light is turned off then it is phosphorescent. Some minerals are nearly always fluorescent; however, most are only fluorescent if the proper “activator” is present in the right amounts. This activator is usually another element, which acts as an impurity. Different activators may cause the same mineral to fluoresce different colors. Scheelite is normally fluorescent in the blue-white range. But when it has molybdenum as an activator, then it is yellow. Willemite from Franklin, NJ contains manganese which causes it to fluoresce a bright green-yellow. Many rock and mineral species have a varied response. Some of the calcite found within the Tri-state area may fluoresce red while calcite from other areas may fluoresce a different color, or not at all. Again, the activator present in each particular specimen determines whether or not it will fluoresce.

**The lights of stars that were extinguished ages ago still reaches us.
So it is with great men who died centuries ago, but still reach us
with the radiations of their personalities. Kahlil Gibran (1883 - 1931)**



The Petoskey Stone

Michigan Welcome Center Rock Garden

In Monroe, MI

Article from Michigan Mineralogical Soc. Conglomerate, Jan. 2010

Planning on traveling I-75 and crossing the Ohio border? Well, if so, think about visiting Monroe's special outdoor rock garden at the Michigan Welcome Center in Monroe.

Northbound – Follow I-75 North to the 10 Mile marker (10 miles north of the Ohio line).

Southbound- Follow I-75 South to Exit 9 (Otter Creek Rd.). Exit right and go to the Stop sign (at Otter Creek Rd); turn right onto Otter Creek Rd and go over the freeway to I-75 North; follow I-75 North one mile to the Michigan Welcome Center .

Editor's note: According to the map of the Welcome Center, there are 37 specimens in the garden, all originating in Michigan. The map includes a Rock Garden Key which, I think, is available at the Welcome Center.

