

The Petoskey Stone

OAKLAND COUNTY EARTH SCIENCE CLUB
WWW.OCESC.COM

MAY 2010

Club Meeting

May 5
7:30



May
Refreshments:
Jackie Presson
Monica Rowe



Hi Club Members,

Well we had another successful meeting and Auction. It is always a lot of fun. I hope everyone left with a great treasure. Thanks to those who set up for the Auction I know it is a lot of work. It is truly appreciated by all members. For some of our members this was their first auction. I am sure they will never miss a future auction. Thank you also to Chris Shull and Sue Klopfer for the fine refreshments.

In May we are scheduled to have a SHOW AND TELL / ASK. So you may plan accordingly. Roberta Thomas's son has just offered to speak to us about gems and how to tell fake from real. I apologize for not having his name in front of me but I am sure it will be a great program.

In June we will be having our Banquet. The meat will be provided by the club. A sign up sheet was and will be circulated for folks to sign up for our part as a pot luck. If you did not sign up at the last meeting please find the list and add your name and bring your favorite dish for us to share.

I was looking for something a day or two ago, and came across a list from 2005, showing I have been doing this job for more than five years.

It has been fun, but maybe someone else

should take over.

Looking ahead to another great year,

- Betty Cockerham
Program and Refreshment Director

Silent Auction that was Not Very Silent

Those of us who prepared for the April Auction were pleased that we had many interesting, beautiful, or intriguing specimens to put out for you to carry home with you. Many items came from the generosity of the Wing Lake Seniors when they moved to a smaller area for lapidary and rock activities, several came from our own club members as they high-graded their collections, and several came from the Monday Night lapidary group as they cut and polished stones. All our auction items come from donations given to us and we have been very fortunate this past year to have acquired the variety and quality we had.

That quality was surpassed by the quality of help we had from you, our club members, from the beginning of sorting back in January through the end of the auction on April 7, including the delivery of leftovers back to the clubroom on April 8. Every time we said we needed some help, members appeared and the job was done. Thank you, Tony & Lynette, Nancy Lill, Marie, Ellie, Nancy Pfauth, Tom Pierson, Terry, George, Gerry, June, Phyllis, Kathy, and anyone I have missed. And special thanks go to Monica, Jackie, and Leon who gave many hours of work and special thought toward making this a night for fun and for carrying home a treasure or two.

Don't we have a good club! Of good people!
Of good fun! Of good food! And of good
stuff to learn about!

- Katherine Van Hoy

The Petoskey Stone

Apr. 30-May 2, Kalamazoo club show 'Fantastical Fossil', 2900 Lake St, Kzoo MI, gems, jewelry & minerals, door prizes, gold mine, geode cracking; Donation \$3, info Kitty Starbuck 269-649-1991,

May1-2 Cincinnati GeoFair, 2250 Seymour Ave (Cincinnati Gardens); info wisoh@msn.com

May14-16, Southgate Civic Arena 2010 Gem & Min Show, Dearborn club show; 14700 Reaume Pkwy, Southgate, MI, Fir 5-8pm, Sat 10-7, Sun 11-5.

May 15-16 Cleveland area Gem & Min. show, Cuyahoga Cty Fairgrounds on Bagley Rd

May 15-16 Wisconsin Geol. Soc. Show, Muellner Bldg at Hart Park, 72nd St and W. State St., Wauwatosa WI.

May 22-23, Marv & Kitty Starbuck's Huge Rock & Min Sale- 7636 East V avenue, Vicksburg, MI, Sat. 9-6, Sun. 9-4, 269-649-1991.

May 29, Petoskey Stone Festival, Barnes Park, Eastport MI; info www.petoskeystonefestival.com

Jun 12-13, MGAGS Rockhound Seminar, Webberville School, 309 E. Grand River, Webberville MI (12 miles east of Lansing); info www.mgags.org

Aug 27-28-29, 2010 Midwest Federation Convention & Show Friday, Sat & Sunday; To Be Held with the Peoria Show At The Grand Hotel, Brandywine Drive • Peoria • Illinois. Peoria Show Highlights: Special Exhibits, Silent Auction, Running Water Sluice, Displays, Children's Area, Free Admission and Free Parking. For Show details and directions contact Jim Travis boatnick@aol.com 309 645-3609

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-Potluck
Sept. _____
Oct. _____
Nov. _____
Dec. _____

2010 Programs

Jan. Brady's – Recycling Today
Feb. Roberta Thomas - Selenite
Mar. Dwight Keith
April Silent Auction
May ID specimens- bring yours!
June --
Sept. --
Oct. --
Nov. Club Member Swap/Sale
Dec. --
(Details of remaining month's programs is coming).
--Betty Cockerham, Program Chair

May Birthdays

9 BRIAN CURTIN (15)
9 JACKIE PRESSON
9 MARIE RATHBURG
9 MONICA ROWE
11 BOB ALBERTSON
17 JAYSON WOERNER (13)
22 LORRAINE JANES
24 LYNNETTE WEST

While one person hesitates because he feels inferior, they other is busy making mistakes and becoming superior.

Henry C. Link



OCES Board Meeting: April 2010 The meeting was called to order at 6:25 pm with President Dan Woerner, Tony Pearce , Kathryn Van Hoy, Betty Cockerham, Eleanor Snyder, Dwight Keith, Gerry Runkle, Laurie [Wilkins], Marie [Petinga], Linda Whitehead, Tony West, Nancy Pfauth were in attendance. The Minutes were approved as printed in the Petoskey Stone. Treasurer's Report given and approved. Gerry Runkle gave the Grinding Room Report: 5 people attended; the band saw needs repair or replacement. Dan will check into pricing new saw. Sunshine Report: Dwight is back! His shoulder operation was a success and healing has begun. Also, several people saw Nancy Mathura and report that she is doing well. Rose Woerner will be making necklaces with the kids tonight. No report on website. Betty Cockerham had a question about the pricing for the auction tonight; some beginning prices seemed too high and probably won't sell. We will try the higher prices and if the specimens don't sell, we'll save them for next year. There will be plenty of tables and extra volunteers may be needed to help restock the items. Motion passed to approve the paying of bills (Rose for newsletter; nametags). The May Meeting will be changed to a "Show and Tell" type instead of a "What is This" kind of meeting because some of our best identifiers will be out of town. Members can bring in anything and give a talk about what it is and where it came from, etc. We have a volunteer to collect stamps for We have five new members this month and have been averaging about 45 to 50 members per meeting. Linda Whitehead mentioned that Facebook has all kinds of information about similar clubs on their site. Discussed June Potluck; will have sign-up sheet. The club will furnish the meat and members can donate a dish to pass. Dinner will be at 6:30 pm in June. The Board also talked about finding a place for the summer picnic; possibly Baywood in Independence Twp or Hess-Hathaway in Waterford. Meeting adjourned at 7:00 pm.

OCES April 7, 2010 GENERAL MEETING: The meeting was called to order at 7:05 pm. The minutes were approved as printed in the Petoskey Stone. Treasurer's Report given and approved. Grinding Room had 5 members and is going well; every Monday 7:00 pm-9:00 pm. We had one visitor, Jacob Worth. The sign-up for the June Banquet is going around. We need to get a count of members who will be attending. The May Meeting will be a "Show and Tell" type of demonstration and lecture with members bring in their own specimens. Bills were approved to pay. The Silent Auction will start with written bids and minimum increases. Two tables will close at a time. Lots of great items to chose from. A big thank you to all those members who participated in the preparation and management of the Silent Auction! The meeting adjourned at 7:15 pm. Respectfully submitted, Chris Shull, Secretary.



Michigan's Geologic and Volcanic History

Excerpt from USGS.gov, "America's Volcanic Past – Michigan"

Michigan is unique among the states in that it is divided into two areas geographically, the Northern and Southern Peninsulas, and in that, to a considerable degree, these two geographical provinces are geologically separate and distinct. This geological dichotomy is not absolute, inasmuch as the eastern part of the Northern Peninsula is geologically similar to parts of the Southern Peninsula. The western part of the Northern Peninsula is underlain by rocks of Precambrian and Cambrian age. In contrast, underlying rocks of the eastern Northern Peninsula and the entire Southern Peninsula are younger (Ordovician to Pennsylvanian) in age.

In addition to this broad split, Michigan geology also is characterized by a major horizontal break—bedrock geology vs. surficial geology. Much of the state is veneered by deposits of Pleistocene age, the results of glacial and glaciofluvial depositional processes. These sediments are unconsolidated tills, gravels, sands, silts, and clays. They effectively mask much of the bedrock geology, particularly in the Southern Peninsula. For this enormous span of time the rock record is incomplete and, indeed, within many areas, only fragmentary. Much has happened to Precambrian rocks both within Precambrian and within Phanerozoic (post-Precambrian) time.

Within Michigan, the oldest Precambrian rocks have been subjected to at least three major periods of crustal deformation and mountain building and to at least three or four additional minor or local deformational episodes. In many cases these crustal crumplings were accompanied by the intrusion of molten masses of granitoid igneous rocks emplaced deep within the crust and subsequently unveiled by uplift and erosion. Periods of volcanism (at least four) produced lava and pyroclastic rocks, chiefly of basaltic composition and accompanied by dikes of diabase and gabbro.

Granites and Syenites

By Michele Yamanaka, MWF Junior Activities Chairman

From "Focus on Juniors" MWF News, April 2010

(Editor's note: for the complete article, visit www.amfed.org/mwf, then go into 'Newsletters')

Review: What is a rock? A rock is a natural, solid, group of mineral grains, glasses, and/or organic solids. Let's make it simple: A rock is a lot of mineral pieces stuck together. We call these mineral pieces "grains". Rocks are named by the size of the grains, the kind of mineral, and how light or dark it looks. Rocks are divided into 3 groups according to how they form: 1) igneous (hot melted minerals); 2) sedimentary (layers of minerals); and 3) metamorphic (pressure on minerals to change them to something else). In igneous rocks, the grains are interlocking (like a puzzle).

THE PETOSKEY STONE

One of the most familiar igneous rocks is

GRANITE.

Granite is formed out of at least three different minerals:

---always QUARTZ

---always FELDSPAR (usually ORTHOCLASE)

---always a dark mineral (usually BIOTITE MICA and/or HORNBLLENDE).

It can have more than one kind of feldspar in it, or have other minerals, too. But it has to have QUARTZ,

FELDSPAR, and dark minerals like BIOTITE MICA or HORNBLLENDE. Usually it is light colored. You can also see the mineral grains just by looking carefully.

It also has to have a certain amount of each of them. The recipe for GRANITE is:

27% or more Quartz

3-10% dark mineral

63-70% Feldspar and other minerals

WHAT HAPPENS IF GRANITE HAS LESS THAN 27% QUARTZ? Then the rock is called:

SYENITE.

Syenite has about the same recipe as granite except less Quartz and more of the other minerals. It has 10% or less quartz. If it has no Quartz at all, it will have the mineral NEPHELINE. Nepheline forms only when there is no silica (needed for Quartz). Then it is called NEPHELINE SYENITE.

Nepheline Syenite has Nepheline, Feldspar, and dark minerals like Biotite Mica. But it also may have

AEGERINE - a dark mineral and SODALITE (a blue mineral) that only form where there is little or no quartz.



THE PETOSKEY STONE

THE RELATIVE TIME SCALE From USGS.gov website

Long before geologists had the means to recognize and express time in numbers of years before the present, they developed the geologic time scale. This time scale was developed gradually, mostly in Europe, over the eighteenth and nineteenth centuries. Earth's history is subdivided into eons, which are subdivided into eras, which are subdivided into periods, which are subdivided into epochs. The names of these subdivisions, like Paleozoic or Cenozoic, may look daunting, but to the geologist there are clues in some of the words. For example, **zoic** refers to animal life, and **paleo** means ancient, **meso** means middle, and **ceno** means recent. So the relative order of the three youngest eras, first **Paleozoic**, then **Mesozoic**, then **Cenozoic**, is straightforward.

Fossils are the recognizable remains, such as bones, shells, or leaves, or other evidence, such as tracks, burrows, or impressions, of past life on Earth. Scientists who study fossils are called **paleontologists**. Remember that **paleo** means ancient; so a paleontologist studies ancient forms of life. Fossils are fundamental to the geologic time scale. The names of most of the eons and eras end in **zoic**, because these time intervals are often recognized on the basis of animal life. Rocks formed during the Proterozoic Eon may have fossils of relative simple organisms, such as bacteria, algae, and wormlike animals. Rocks formed during the Phanerozoic Eon may have fossils of complex animals and plants such as dinosaurs, mammals, and trees.

EON	ERA	PERIOD	EPOCH
Phanerozoic	Cenozoic	Quaternary	Holocene Pleistocene
		Tertiary	Pliocene Miocene Oligocene Eocene Paleocene
	Mesozoic	Cretaceous	Late Early
		Jurassic	Late Middle Early
		Triassic	Late Early
	Paleozoic	Permian	Late Early
		Pennsylvanian	Late Middle Early
		Mississippian	Late Early
		Devonian	Late Middle Early
		Silurian	Late Middle Early
		Ordovician	Late Middle Early
		Cambrian	Late Middle Early
	Proterozoic	Late Proterozoic Middle Proterozoic Early Proterozoic	
	Archean	Late Archean Middle Archean Early Archean	
pre-Archean			