

The Petoskey Stone

Oakland County Earth Science Club
WWW.OCESC.COM

October 2009

Club Meeting

Oct. 7th
7:30



See articles at right, and refreshment schedule on page 2- many ways to help, and learn about rocks, too!

Refreshments
Betty Cockerham,
Nancy Mathura

October Club Program

Hi Club Members,

September's meeting went well, thanks to all of you. Thank you so much for your participation. It is always fun to see and hear all about what others do.

This past week I went to Cranbrook for the program they had a " system they use to figure the age of the earth and rock formations." It was interesting, and I always like going to Cranbrook. I took two of my cousins from Taylor. Everyone had a good time.

Our program for October will be compliments of Nancy Mathura. She is going to talk about Hungry Hollow and some of her finds. Refreshments will be from Betty Cockerham and Nancy Mathura.

Please check the program and refreshment list, and sign up. See you soon.

-Betty Cockerham
Program and Refreshments Chairman

A Fun, Busy October for Our Club Members

What a busy time we have in October. Save the first week for rocks, rocks, rocks ! as well as fossils and minerals. Tuesday Oct. 6, we need help setting up the Detroit

Show--easy tasks or harder, come anytime from noon on. Come to Door or Gate 7. Any questions, call Katherine 248 698 4386. We need your help if possible.

Next night, October 7, we'll see you at the club meeting.

Next day, October 8, if you're exhibiting, this is set-up day

Next 3 days - October 9-11, come to the Greater Detroit Show. Enjoy all the displays and activities, AND--if you haven't signed up to help at our club booth during the show, please do that. Call Katherine 248 698 4386.

Many thanks to all of you who contribute to the show itself and/or to our booth at the show.
-Katherine Van Hoy

Young Rockhound Needs Help

Eleanor Snyder forwarded me a letter from a young rockhound named Aaron Hendricks. Aaron is looking for samples of rocks and minerals from Michigan for a school science project. If you have a few small samples of Michigan related items that you would like to donate, bring them to the next club meeting and we will figure out how to get them to this young man. After all, the world needs more rockhounds - right?

If you want to contact Aaron directly you can send him an e-mail through his mom's e-mail at leinani35@yahoo.com. See you at the next meeting. -Dave Whitehead

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Upcoming Events (more events can be found at www.rockngem.com or <http://www.amfed.org/mwf/Calendar/>) For detailed information, please visit the club's website.

Sept 24-27 and Oct 1-4, **4th Annual Rocky Garage Sale** at Lynnette and Tony West's, 3679 N. Milford Rd, (2 miles north of M-59) Highland, MI. Time: 9 to 5.

Sept 25-27, **International Gem & Jewelry Show**, Rock Financial Showplace, Novi MI, Admission \$8. Info- www.intergem.com

Sept 25-27 **Hamilton, IL, Geodefest 2009**, Wortheren Earth Searchers. Montebello Access Area, Riverfront, Fri-Sun, Contact: Merlin Tobias, 1765 E Co Rd 900, Carthage, IL 62321, (573) 518-4739, 1stcrackgeodes.com

Sept 26-27 **Traverse City, MI, Annual Show**, Grand Traverse Area Rock & Mineral Club, Grand Traverse Heritage Ctr, 322 6th St, Contact: Karen Thomas, 2287 Ingersoll Rd SW, Fife Lake, MI 49633

Oct. 9-11 Warren, MI, **Annual Greater Detroit Show**, Michigan Mineralogical Society, Gibraltar Trade Center North, 237 N. River Rd., Mt Clemens, MI (Exit 237 off I-94)., Fri 9:00-7:00, Sat 10:00-7:00, Sun 11:00-5:00, Contact: Carol Werner, (248) 887-3906, briarhillwerner@comcast.net

Oct 17-18: Clio, MI, **42nd Annual Show, Flint Rock & Gem Club**, Carter Middle School, Rogers Lodge Dr, Sat 10:00-5:00 Sun 10:00-5:00, Contact Ed Hearn, (810) 687-2339, dleo324@comcast.net

Oct 23-25: Mason, MI. **44rd Annual Show, Central Michigan Lapidary & Mineral Society**, Ingham Co Fair Grounds, MainArena, 700 E. Ash, Fri 6:00-9:00, Sat 10:00-7:00, Sun 11:00-5:00. Contact: Alan Hukill, (517) 641-6125, Facetman60@yahoo.com

Oct. 25th, **Mt Clemens Gem & Lap. Society Show**, Knights of Columbus Hall, St. Claire Shores, MI. 10AM-4PM, 20 Vendors, Auction, Kids' activities.

2009 Refreshments

Jan. Linda Whitehead
Feb. Pat Rives, Debbie Rathburn
Mar. Lynnette & Tony West, Phyllis Keene
April Chris Schull, Sue Klopfer
May Jackie Presson, Monica Rowe
June Banquet
Sept. (didn't get a name- thanks to those folks!)
Oct. Betty Cockerham & Nancy Mathura
Nov.
Dec. Club Potluck

2009 Programs

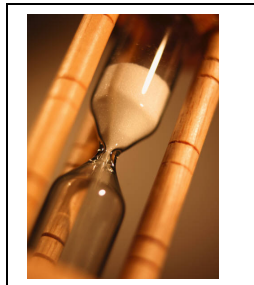
Jan. Pam & Mike Brady--"A Desert by Any Other Name"
Feb. Dave Whitehead
Mar. Tony West
April Silent Auction
May J. & P. Schnur-flint knapping
June George Matyas, Cave of Giant Crystals
Sept. Members' Trips and Projects
Oct. Nancy Mathura- Hungry Hollow
Nov.
Dec.

Please look over this list and see if you can fill in somewhere. Remember you do not have to do a program yourself. You can elect to be responsible for getting a speaker or a video etc.

--Betty Cockerham, Program Chair

October Birthdays

2 Sue Klopfer
4 Mary Agnes Winters
5 Tony West
9 Steve Gravilla
30 Cory Whitehead



Just a reminder that Tony and Lynette West are having their **4th Annual Rocky Garage Sale**. This will be held over two extended weekends: September 24th through the 27th and October 1st through the 4th. Times are from 9:00 a.m. to 5:00 p.m. See the address above under the "Upcoming Events." Tony & Lynette always have some great rock and mineral samples in their sale.

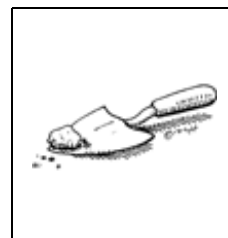
-Dave Whitehead

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OCES Board Meeting Sept. 2, 2009 Meeting called to order 6:27 pm Attendance: Eleanor Snyder, Katherine Van Hoy, Tom Pierson, Nancy Pfauth, Betty Cockerham, Nancy Mathura, Leon Pearson, Tony West, Dan Woerner, Gerry Runkle, Roberta Thomas. Dan Woerner, Vice president presiding. Jim Rives indisposed because of gall bladder surgery. Hopefully he will be feeling much better without it and will make his appearance at our October meeting. Secretary's report approved as it appeared in the Petoskey Stone. Treasurer's report read by Leon Pearson. Bills presented; approved, payment will be mailed. Program for the club meeting this evening will be presented by a few volunteers on recent acquisitions or work completed by the presenter. Field trips--nothing definite at the present time. Nancy Mathura suggested Arkona (fossils) but not much interest shown. Grinding room is now open. Usual time 7 to 9 pm Mondays. One dollar per person for use of the room goes to the CAI building. Katherine Van Hoy will be passing a sign up sheet during the club meeting for volunteers for set up for MMS Greater Detroit Show prior to the show and also for volunteers to work at the show. Show set up time begins Tuesday, October 6 at noon 9 pm. Your choice--to work one hour or more. Library case will be open this evening. A new blade is needed for the 14" saw in the grinding room. Since this is a somewhat expensive item (\$180-\$200); there was discussion regarding purchase. Motion made, seconded, then passed. There is a definite need for shelving in the room adjacent to the grinding room. Leon and Tony will look into the possibly of buying stand-alone used shelving if available. Since it seemed to be quite popular when we had members bring in rocks/items for sale or swap this past year, it has been decided to try it again in January 2010. Tony West has brought in flyers for the 4th Annual Rocky Garage Sale, September 24--27. Meeting adjourned 7:15 pm.

OCES General Meeting called to order 7:38 by Dan Woerner, Vice President (Jim Rives has taken time off for gall bladder surgery). Secretary' report was approved as it appeared in the Petoskey Stone. Treasurer's report approved as read by Leon Pearson. Betty Cockerham will have club flyers available for distribution in schools and also at the MMS show in Mt. Clemens. Rose Woerner is having a wire wrapping class through Waterford Parks and recreation. For those interested there will probably be a field trip to Arkona, Ontario. Further information in our October meeting. Grinding room will be open September 14 through the first week in June. Tony West and Leon Pearson will be checking on shelving for the room adjacent to the grinding room to ease the crowd Nancy announce the library is open this evening and there will be an inventory available soon. Our visitor this evening is Lesley Bart. He is a Petoskey Stone lover. Dave Whitehead needs the email addresses for anyone who wants to receive announcements. If your email changes don't forget to update Dave. Dave Whitehead and Leon Pearson are still working on our club standing as a charitable organization. No additional news at this time. The Detroit Mineral show is October 9, 10, 11. Held at the Gibraltar Trade Center North, 237 N. River Road, Mt. Clemens, MI, Exit 237 off I-94. Workers are still needed for both setup prior to the show and for workers during the show. George Matyas has given a glimpse into the special attractions, special activities and other "just plain neat" things that will be a part of the show. He has also extended an invitation to anyone interested to attend the Detroit Mineral Club's meeting held at Cranbrook, 7:30, the second Monday of each month. Flyers are available to the fourth annual Rocky Garage sale held September 24--27 and October 1--4. The raffle items have been generously donated by Tony West. Meeting adjourned 7:57 pm. Raffle winners: Marie Petinga--rose limb cast; Eleanor Snyder--rainbow obsidian; Monica Rowe--petrified wood. Respectfully submitted, Roberta Thomas, secretary

“We shall find peace. We shall hear the angels, we shall see the sky sparkling with diamonds.” *Anton Chekhov (1860 – 1904)*



Lucy in the Sky with Diamonds

Extracted from an article originating from the BBC, via Rocky Reader, 8/09; and Rockpile 9/09

Twinkling in the sky is a diamond star of 10 billion trillion trillion carats, astronomers have discovered. The cosmic diamond is a chunk of crystallized carbon, 4,000 km across, some 50 light-years from Earth in the constellation Centaurus. It is the compressed heart of an old star that was once bright like our Sun, but has since faded and shrunk.

Astronomers decided to call the star “Lucy” after the Beatles song, “Lucy in the Sky with Diamonds.”

The huge cosmic diamond- technically known as BPM 37093 – is actually a crystallized white dwarf. A white dwarf is the hot core of a star, left over after the star uses up its nuclear fuel and dies. It is made mostly of carbon.

The white dwarf is not only radiant but also rings like a gigantic gong, undergoing constant pulsations. “By measuring those pulsations, we were able to study the hidden interior of the white dwarf, just like seismograph measurements of earthquakes allow geologists to study the interior of the Earth. We figured out that the carbon interior of this white dwarf has solidified to form the galaxy’s largest diamond,” says astronomer Travis Metcalfe, of the Harvard-Smithsonian Center for Astrophysics, who led the team of researchers that discovered it.

Astronomers expect our Sun will become a white dwarf when it dies 5 billion years from now. Some two billion years after that, the Sun’s ember core will crystallize as well, leaving a giant diamond in the center of the solar system. “Our Sun will become a diamond that truly is forever,” says Metcalfe.

You Must Have Been a Beautiful Baby...

By Judith Washburn, Geology Chair, MWF Newsletter, Sept. 2009

If you missed the May issue of *National Geographic* or April 26th special, “Waking the Baby Mammoth,” on the National Geographic Channel, let me introduce you to Lyuba, a one month- old, near-perfect, frozen baby mammoth that resurfaced after 40,000 years, bearing clues of a great, vanished species. I know. I’m crossing that tenuous line between geology and paleontology, again! It’s so hard to stay on one side - sorry Ceil.

Discovered by reindeer herders in 2007 on the Yamal Peninsula in northwestern Siberia, Lyuba was recognized as an important discovery. The Nenets who found her, believing that people who found mammoth were marked for an early death, stopped to placate the infernal powers with the sacrifice of a baby reindeer and libations of vodka before moving the frozen carcass. Turned over to scientists, the ancient carcass began to thaw during examination inside Shemanovsk Museum in Salekhard, Siberia, and had to be moved outside to refreeze.

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Researchers transported the mammoth in a refrigerated container from Siberia to Jikei University's medical school in Tokyo to be CT scanned. Hospital officials insisted that handlers wear special suits and a plastic passage be erected to ensure that ancient bacteria from Lyuba would not contaminate their facility. The CT scan provided detailed new insights into a mammoth's anatomy as well as important clues to Lyuba's death.

So, how did Lyuba die? Evidence of sediment found blocking the trunk's nasal passages and in the mouth, esophagus, and windpipe suggests that she asphyxiated by inhaling mud after becoming trapped in a river. More than likely, she submerged in wet clay and silt that sealed out oxygen and thereby thwarted aerobic microbes that would have broken down her soft tissue. Other microbes that produce lactic acid colonized her tissues which acted as a preservative, essentially pickling her carcass. Thus the marvelous preservation!

Then the permafrost came. Lyuba's body dehydrated and shrank to half its weight. In 2006, a river undercut the block of permafrost that contained Lyuba's body. The block melted and exposed her after thousands of years. Floodwaters carried it to the sandbar where it was found. The strong smell of lactic acid kept away the scavengers.

Pick up the magazine, try to catch the special on reruns, or wait until 2010 when Lyuba comes to Chicago. The Field Museum will be mounting an exhibit then - the date is still pending. Time for a field trip?

Resources: Mueller, Tom. (2009). "Ice Baby," *National Geographic*, Vol. 215, No. 5, pp. 30-49.

