

The Petoskey Stone

OAKLAND COUNTY EARTH SCIENCE CLUB
WWW.OCESC.COM

MAY 2017

Club Meeting
May 3rd
7:30 PM

Board meeting 6:30



Refreshments

Jackie Presson
Monica Rowe

President's message- Greg's thoughts from the Grindstone...

This newsletter finds me with a lot to talk about so I'll try to briefly summarize things. First off I'd like to **thank everyone who helped with all the hard work** of getting our silent auction set up, maintained and torn down. **Thanks also to all** that attended. By my estimate there were about 60 of us in all. It really was a great show and I'm sure everyone found a treasure. I spoke to a lot of people at the show from both clubs and was told the auction was great.

On Tuesday 4/18, I attended the Livingston Gem and Mineral Society's April meeting with Anne Marie McFadden. If you have not been to their club I recommend going for a visit. This was my first time there. They have a very nice facility and a lot of very nice people. The reason for my visit was to provide the club with a donation from the proceeds from the silent auction. I presented their president with a check who along with their members were very appreciative of our contribution. While at the meeting I learned of the clubs plans to tour the Upper Peninsula during the week of May 20 through May 27.

This rock hounding trip is open to any member of our club. For more information contact Nancy Bartel at nancyp17@charter.netor at 810-923-5567. When I returned home from the meeting I took a call from Brad

Zylman of the Michigan Mineralogical Society. He told me that their club is targeting Sunday July 23rd as the date for the summer picnic and rock swap at the Drayton Plains Nature Center. I will soon be in touch with members of our club who have helped make this meeting a success in the past to plan for this year's get together.

Lastly, I want to let everyone know that Leon Pearson and Gerry Runkle spent some time in the grinding room reviewing the equipment and have ordered about 10 new grinding wheels for the Genie grinder/polishers. Thank you both for helping improve the equipment in our grinding room. See you soon and as always, Happy Hounding ---Greg Lemke

Device pulls Water out of Dry Air

Imagine a future in which every home has an appliance that pulls all the water the household needs out of the air...That future may be around the corner, with the demonstration this week of a water harvester that uses only ambient sunlight to pull liters of water out of the air each day in conditions as low as 20 percent humidity, a level common in arid areas. The solar-powered harvester, reported in the journal *Science*, was constructed at the Massachusetts Institute of Technology using a special material - a metal-organic framework, or MOF - produced at the University of California, Berkeley.

The prototype, under conditions of 20-30 percent humidity, was able to pull 2.8 liters (3 quarts) of water from the air over a 12-hour period, using one kilogram (2.2 pounds) of MOF. Rooftop tests at MIT confirmed that the device works in real-world conditions.

Read more at: <https://phys.org/news/2017-04-device-air-powered-sun.html#jCp>

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

Grinding room at the Waterford Recreation Center(CAI) Building - \$3 per person, per visit, is the fee. Bead Group has ended for the Spring/Summer, to reconvene in the fall.

May 5-7: Annual show: Kalamazoo Geological and Mineral Society, Kalamazoo County Expo Center; 2900 Lake Street; Fri. 4-8, Sat. 10-6, Sun. 10-5; Adults \$4, Children 12 and under free; Occupying 20,000 sq. ft. of show space the show is a fun filled event for the whole family.

May 20-21: Annual show, St. Joseph Blossomland Club- Sat. 9-6, Sun.12-6; Lk Mich. Catholic Elem. School, 3165 Washington Ave. Info nancyswoff@hotmail.com

<p>2017 Refreshments <u>Please Note: The Club has set a refreshment reimbursement limit of \$50 per meeting.</u> Jan. C. Roller Feb. M. Rowe Mar. D. Rathburg April L. Whitehead May J. Presson, M. Rowe June Banquet-Potluck Sept. Oct. Nov. Dec. Potluck</p>	<p>2017 Programs Jan. Greg Lemke Feb Greg Lemke- J. Kelly's Collection Mar April Silent Auction- with Livingston Club May June Sept. Oct. Nov Club Member Swap/Sale (Election results) Dec. Potluck -2nd Wednesday</p>
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May Birthdays

Monica Rowe-9 Jackie Presson-9 Bob Albertson -11
 Lynnette West- 24 James McFaden- 26



FREE! Open Positions available- *We have several free positions for club members* who would like to assist our club activities. See any Board Member.

OCES BOARD MINUTES for April – no formal meeting was held.

"In matters of style, swim with the current; in matters of principle, stand like a rock." Thomas Jefferson

OAKLAND COUNTY EARTH SCIENCE CLUB
 Christ Lutheran Church
 5987 Williams Lake Road
 Waterford MI 48329

Club Web Site—www.OCESC.com

Editor: Laura Sheffer, e-mail: lsheffer1@comcast.net note that the first email ID character is a lower case 'l' as in 'Laura', and the last character is the digit '1' as in '1-2-3'

Midwest Federation Library: Rentals are open to all club members. \$5 each DVD- contact Pat Powers, e-mail SLCNewsletter@aol.com

General Meeting: First Wednesday each month (except December), September through June at 7:30 PM Board Meeting: Same day as General meeting, at 6:30 PM General and Board meeting are held at Christ Lutheran Church. Purpose: To associate the member families, to promote activities that help families learn about Earth sciences and lapidary arts, and to cooperate with other similar organizations.

Grinding classes and workshops are held at the Waterford Recreation Center building- 5640 Williams Lake Rd.

Open hours in the grinding room- \$3.00/person/day.

Officers – 2017	
President: Greg Lemke	
Vice-Pres: Dwight Keith	
Secretary: Chris Shull	
Treasurer: Leon Pearson	
Directors	
Bob Albertson (17-19)	
Jim Glassbrook (16-18)	
Rod Krupka (13-15, 16-18)	
Gerry Runkle (15-17)	
Eleanor Snyder (Emerita)	
Terry Swindlehurst (17-19)	
Roberta Thomas (17-19)	
Katherine Van Hoy (Emerita)	
Linda Whitehead (17-19)	

**OCESC is a member of
MWF-AFMS**

Committees:
 Refreshments- Monica Rowe
Programs- Open position
 Classes- Tony West, Jim Glassbrook
 Field Trips- J. Rives
 Children's - **open position**
 Membership- D. Rathburg
 By-Laws- C. Roller, P. Brady, L. Pearson
 Library- L. Whitehead
 Historian- L. Whitehead
 Silversmith-**open position**
 Scholarship- **open position**
 Rock Raffle- **open position**
 Shows- **open position**
 Sunshine- N. Mathura
 Publ.- L. Sheffer
 Website- D. Whitehead
 Grinding Room- L. Pearson, G. Runkle, B. Albertson
 Banquet- N. Pfauth, C. Shull
Newsletter Contributions- All Members:
 Articles and items of interest are welcome! – Please send them to the editor (US Mail or E-mail) by the 13th of the month. See above for Editor's address.

Membership- \$20 per year, per household or individual. Only new member fees are pro-rated during the first year of membership. Students pay \$7.50 if not covered by family membership. Club name tag is \$10.00 per person. ALL adults are required to wear their name tag. Make checks payable to "OCESC" and forward to Debbie Rathburg, or submit cash or check to her on the meeting night.

OAKLAND COUNTY EARTH SCIENCE CLUB
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WATERFORD, MI 48329

FIRST CLASS MAIL

Mineral news: “Human industry and ingenuity has done more to diversify and distribute minerals on Earth than any development since the rise of oxygen over 2.2 billion years ago, experts say in a paper published today. The work bolsters the scientific argument to officially designate a new geological time interval distinguished by the pervasive impact of human activities: the Anthropocene Epoch.

In the paper, published by *American Mineralogist*, a team led by Robert Hazen of the Carnegie Institution for Science identifies for the first time a group of 208 mineral species that originated either principally or exclusively due to human activities. That's almost 4% of the roughly 5,200 minerals officially recognized by the International Mineralogical Association. Some “Anthropogenic” minerals are directly created synthetic mineral-like compounds such as YAG (yttrium aluminum garnet) crystals used in lasers, silicon "chips" for semi-conductors, carbide grits for abrasives, and various specialty metals and alloys for magnets, machine parts, and tools.” complete article at --- <https://phys.org/news/2017-03-human-caused-minerals-bolsters-argument-declare.html>



Above: YAG laser crystal, Taiwan Applied Crystal Ltd.

Fossil News: “Together with an international team, Senckenberg scientists [Frankfurt, Germany] examined the diet of the extinct Giant Sloth Megatherium. Based on analyses of the collagen in the fossil bones... researchers [say] that Megatherium subsisted on an exclusively vegetarian diet... In carnivores, the proportion of proteins is significantly higher than in herbivores, which primarily eat food high in carbohydrates. These differences can be documented in the isotopes. In order to reinforce their results, the scientists compared their data with more than 200 bones from modern mammals, whose diet is known, as well as with fossil specimens from both carnivores and herbivores... “Megatherium and the first human inhabitants of America – their habitats overlapped for several thousand years, before the Giant Sloth became extinct,” complete article --- <https://www.sciencedaily.com/releases/2017/04/170418094855.htm%3E>.