Rochester Academy of Science

BULLETIN



February 2018 - Vol. 72, #2

"An organization of people in the Natural Sciences"

President's Message

February greetings! Have you been enjoying the arctic air this winter? Despite the frigid temperatures, I hope you are cheered by the sunny days and starry nights. It's a bonus we can appreciate whenever a high pressure air mass arrives (during the summer time too).

Speaking of sunny days, perhaps *Marmota marmox*, in a field near you, will cast a shadow on February 2 as we recognize the halfway point between the winter solstice and the spring equinox.

If you've been keeping warm by staying indoors, you may be spending time watching TV. Are PBS nature/science shows on your watch list? Entertaining and educational, they are not to be missed! I was particularly impressed by the wellchoreographed Black Hole Apocalypse. It takes you on a two hour journey through the history of black hole science and what we are learning from these amazing features. Explanations are understandable and enhanced by clever animations and simulations. Look for this Nova show online and enjoy.

Jutta Siefert Dudley

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Students Receive Research Grants from RAS

The Undergraduate Student Grants Committee (Helen Haller, Karen Wolf, Michael Grenier, Bill Hallahan) completed its review of the 2017-2018 Student Research Grant proposals. Amount granted this year: \$1841.10 from RAS, plus \$250 from Life Sciences. Seven projects were awarded:

Nathan Marshall, SUNY Buffalo for <u>Patterns of change in biomarker signatures support a linkage between graptolite and phytoplankton community changes.</u> Award: \$450 (\$300 from RAS, \$50 from Life Sciences, \$100 from donors). Sponsor: Charles Mitchell & Elizabeth Thomas.

Abigail Robinson, Canisius College for <u>Behavioral Differences</u> <u>Exhibited in Zoo-housed Social and Solitary Felids.</u> Award: \$200. Sponsor: Susan Margulis.

Magdy Gad, Hobart & William Smith Colleges for Remote sensing: detection of blue green algae using drones outfitted with spectrometers. Award: \$200 (\$100 from RAS, \$100 from Life Sciences). Sponsor: Ileana Dumitriu.

Lillian Denecke, SUNY Brockport for <u>Sensitivity of native versus</u> invasive zooplankton species to agrochemicals: an eco-evolutionary <u>approach.</u> Award: \$250. Sponsor: Michael Chislock.

Kaleigh Block, Niagara University for <u>Characterization of the Photoautotrophic Microbial Communities and Their Activities Within the Chemocline of Fayetteville Green Lake</u>. Award: \$300 (\$250 from RAS, \$50 from Life Sciences. Sponsor: William J. Edwards.

Olivia Gomez, Cornell University for Finding the cause of 'Candidatus liberibacter asiaticus' acquisition and transmission: comparing Wolbachia repressor gene sequence and gene expression in different Diaphoina citri populations. Award: \$250 (\$200 from RAS, \$50 from Life Sciences). Sponsor: Michelle L. Heck.

Nathan Johnson, Rochester Institute of Technology for Stereoselective cyclopropanation of aryldiazoacetates with chiral silver N-heterocyclic carbene complexes. Award: \$491.10 plus \$50 to the student as this was the best proposal. Sponsor: Michael Coleman.

William Hallahan, Ph.D. Chair, Student Grants Committee

RAS Outreach at the Mendon Ponds Park Winterfest

Despite the freezing air temperature, outdoor enthusiasts enjoyed the sunny sky and snow laden grounds of Mendon Ponds Park on Winterfest day in mid-January. There were many things to see or do that day, both indoors and out. At the Cobblestone House, visitors were greeted by our volunteers from the Astronomy, Fossil and Mineral Sections. Vicky Rotolo and Don Chamberlain provided many educational astronomy handouts and used an indoor telescope pointed at "Pluto" to delight the children. Meanwhile, Douglas Kostyk braved the cold to show off prominences on the sun with his telescope. Dan Krisher, Paul Dudley, and Fred Haynes displayed interesting geological specimens. They, along with John Handley spent the entire day sharing their knowledge of fossils and minerals with the families that came by. Jutta Dudley engaged visitors in the interpretation of a glacial map of the area and got a kick out of helping children select specimens to take home. Stephen Busschaert stopped in later to aid with the exhibits.



Youngsters choose their favorite fossil and look to see what's happening on the Sun.



Photo Credits: J.S. Dudley

The Golden Eagle and Screech Owl are among the many raptors (injured) that serve as ambassadors for wildlife conservation during Winterfest at Wild Wings.



Events for February 2018

For updates to events, check the Academy website, http://www.rasny.org, and Section websites.

2 Fri: ASTRONOMY SECTION MEETING

7 p.m. - 10 p.m. RIT Gosnell Hall Room A 300. Speaker: Dr. Michael Richmond, RIT. Topic: The interstellar comet 'Oumuamua. Also: RIT grad student Trent Seelig will talk about a new type of instrument on the big Gemini Telescope. Snacks available at 7:00 p.m. prior to meeting. Contact: Mark Minarich: (585) 257-6042.

5 Mon: ASTRONOMY BOARD MEETING

7:00 p.m. University of Rochester, Bausch & Lomb Hall, 4th floor Chart Room. All ASRAS members are welcome. Contact Mark Minarich: (585) 257-6042.

6 Tues: FOSSIL SECTION MEETING

7:30 p.m. Note Change of Venue: Brighton Senior Program Center, 220 Idlewood Rd #125 Rochester, NY 14618. Dr. Lindsay MacKenzie, will present a talk on "Using statistics to better understand exceptional preservation in the fossil record." She is Assistant Professor of Geo-science at Hobart and William Smith Colleges. Contact: Dan Krisher DLKFossil@gmail.com.

16 Fri: ASRAS ASTRONOMY WINTER LECTURE SERIES

7 p.m. - 10 p.m. RIT Gosnell Hall Room A 300. Speaker: Joel Schmid, Past President ASRAS. Topic: Imaging Software Tutorial. Contact: Mark Minarich: (585) 257-6042.

17 Sat: LIFE SCIENCE HERBARIUM WORKSHOP

10 am-2 pm. Rochester Museum & Science Center basement. Come help organize the Herbarium materials. No experience necessary! If you plan to attend, please send an RSVP to Elizabeth Pixley. At the RMSC front desk ask the staff person to call ext. 368 in the Herbarium. For more information, contact Elizabeth Pixley, herbarium curator (334-0977 or eypixley@gmail.com).

17 Sat: ASTRONOMY PUBLIC OPEN HOUSE

12:00 p.m. - 4:00 p.m. (or later, if skies are clear). Marian and Max Farash Center for Observational Astronomy, 8555 County Road 14 Ionia, NY 14475. Sledding, weather permitting. For weather related cancellations or changes contact Mark Minarich: (585) 257-6042 or see www.rochesterastronomy.org/cale ndar-of-events.

20 Tues: MINERAL MEETING

7:00 p.m. Brighton's Brookside Recreation and Senior Center. 220 Idelwood Rd. Use entrance off Winton Rd to access back parking lot. Dr. Michele Hluchy of Alfred University will present "Feats of Clay." Come and learn about the different types of clay minerals and how they are used. You are likely thinking about ceramics, but you will be surprised how many other ways

you encounter clays in your everyday life! Join us for an interesting talk, door prizes and refreshments. Contact: Stephen Busschaert (585) 351-7633.

21 Wed: RAS BOD MEETING

7:00 p.m. Karen Wolf's home. 1397 Five Mile Line Rd., Penfield.

ONGOING EVENT

ASRAS will operate telescopes on the sidewalk at Strasenburgh Planetarium on mostly clear Saturday nights. Contact: Jim Seidewand, (585) 703-9876.

Looking for a gift for that someone special? Buy through **Amazon Smile** and let Amazon donate to RAS. Find out at: http://smile.amazon.com/ch/16-6043765



Don't forget to renew your RAS Membership!

See the January Bulletin for a membership form.



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ABOUT THE ACADEMY - The Rochester Academy of Science, Inc. is an organization that has been promoting interest in the natural sciences since 1881, with special focus on the western New York state region. Membership is open to anyone with an interest in science. Dues are minimal for the Academy and are listed in the membership application online. Each Section also sets dues to cover Section-related publications and mailings.

For information, contact President Jutta Dudley at (585) 385-2368 or by e-mail: pres@rasny.org.

The Academy Internet website is

http://www.rasny.org

Or see us on Facebook at

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