

BULLETIN

"An organization of people in the Natural Sciences"



October, 2016 - Vol. 70, #8

President's Message: Come to the Scientific Paper Session!

We will gather at Roberts Wesleyan College in Chili for our 43rd annual Scientific Paper Session on November 12th. Our program host is Dr. Emily Smithers of the Department of Biological and Chemical Sciences. Featured presenters will be RAS members, area scientists, and students, who will share their investigations and interests about scientific topics. Join us for lunch and the program finale, the Larry King Memorial Lecture, given by Jacob Berv on bird evolution after the Cretaceous mass extinction event. I hope you will come!

Jutta Siefert Dudley

Second Call for Presentations at the Fall Paper Session

Have you been engaged in a project? Share your experiences with the community! We are eager to hear all about it! You have a great opportunity to tell us at the next RAS Scientific Paper Session through a poster or short oral report. There is still time to sign up and send in your abstract before the deadline October 14th. Go to <http://rasny.org> and follow the link to the presenter's reservation forms.

RAS Scientific Paper Session Schedule Saturday, November 12 Roberts Wesleyan College

Map:

<https://www.roberts.edu/media/6378/campus-map-july2015.pdf>.

Free parking. Parking Lot C.

8:30 a.m. Presenters sign-in. Refreshments for all attendees. Area between Crothers Science & Nursing Center and Smith Hall.

9:30 a.m. through 12:15 p.m. Oral presentations followed by a poster session. Crothers Science & Nursing Center and Smith Hall.

12:30 p.m. Lunch, optional. \$12.00. Garlock Dining Hall.

Lunch Reservation required.

Find form on page 2 in this Bulletin or on www.rasny.org.

Please mail check by Monday, October 31.

1:15 p.m. Lecture. Garlock Dining Hall. Seating available for those opting out of lunch.

Larry King Memorial Lecture Presented by Jacob Berv:

*Surviving the Mass Extinction:
The Amazing Story of Bird
Recovery and Radiation after the
End-Cretaceous Catastrophe*



Artist: Danielle Dufault. From <http://www.iflscience.com>

In the Mesozoic ("Age of Dinosaurs"), prominent and well-known Cretaceous bird taxa included the Enantiornithes--a diverse group of mostly flying forms, which filled most of today's bird niches; the Hesperornithiformes--toothed birds which were mostly flightless swimmers; the Ichthyornithiformes--toothed flying birds that probably fed on fish; and the Neornithes--relatively small toothless birds. The end-Cretaceous mass extinction eliminated most birds, with only a few species of the Neornithes--today's birds--surviving. All evidence indicates that an extra-terrestrial impact event caused an environmental catastrophe, with darkness, acid rain, and a lengthy "nuclear winter" afterwards.

Jacob Berv will review with us the birds of the Mesozoic, the mass extinction, and focus on those that survived, prospered, and subsequently radiated to

become an extremely distinctive and successful clade, with an estimated 9000 species worldwide. Birds had to be small specialized feeders to survive, and Jacob's measurements and analyses demonstrate that they had an accelerated evolution following the extinctions.

About our Speaker

Jacob Berv is a PhD. candidate at Cornell University, where he studies evolutionary ornithology, including genome analysis for reconstruction of bird evolutionary history, population genomics, and phylogenetic comparative methods. While an undergraduate at Yale, Jake studied with ornithologists Richard Prum and Kristof Zyskowski and conducted field

work in Suriname, Ecuador, and Brazil that resulted in several scientific papers and reports. Most recently, he is co-author of the well-received "A comprehensive phylogeny of birds using targeted next-generation DNA sequencing," which was published this past July in Nature and already has 63 citations.



Jacob Berv, evolutionary ornithologist, with an Emerald Toucanet in Ecuador.

RAS Student Grant Applications for Research Announcement

The Academy will award up to \$500 for supplies and \$50 unrestricted funds to a top qualifying research proposal from an undergraduate college student. Partial funding of at least \$100 will be awarded to four other proposals.

Applications are due by December 16, 2016. Detailed information about the grants and the procedure for applying are found on www.rasny.org. The information is annually emailed to science departments in colleges throughout western New York State.

43rd Annual Fall Scientific Paper Session November 12, 2016 Lunch Reservation Form

Menu: Variety of sandwich wraps, vegetable trays, desserts, assorted beverages. Served in Garlock Dining Hall, 12:30-1:00 p.m.

Cost: \$12.00 per person.

Fill out this form and mail **by Monday October 31** with a **check payable to Roberts Wesleyan College** to:

Dr. Emily Smithers
Department of Biology and Chemistry
Roberts Wesleyan College
2301 Westside Drive
Rochester, NY 14624

Name: _____

Total number of meals: _____

Total payment enclosed: \$_____

Lunch tickets and receipts will be at the registration table during the event.

Events for October, 2016

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

Tues 4 FOSSIL SECTION MEETING

7:30 p.m. Brighton Town Hall. Guest speaker, SUNY Brockport Professor Dr. Judy Massare, a Mesozoic marine reptile specialist, will speak about working with historic collections and the problem of composite specimens: *The challenges of research on historic collections: Lower Jurassic ichthyosaurs from England*. Contact: Dan Krisher 698-3147.

Fri 7 ASTRONOMY SECTION MEETING

7:30 p.m. to 10:00 p.m. Farash Center in Ionia, NY. Snacks at 7:00 p.m. Kevin C. Cooke, a 4th year PhD candidate in astrophysics at RIT will talk on *The Commercial Space Race*. Join us also for a short Town Hall discussion (Part 2) led by ASRAS president Joel Schmid on future growth. Contact: Joel Schmid, 533-2097.

Mon 10 ASTRONOMY BOARD MEETING

7:00 p.m. University of Rochester, Bausch & Lomb Hall, 4th floor, Chart Room. All ASRAS members are welcome. Contact: Joel Schmid, 533-2097

Sat Oct 8 FOSSIL SECTION FIELD TRIP

Last field trip of 2016! A visit to Middle Devonian sites of Pompey Center and Swamp Road, located just east of Syracuse. We may also visit the Sheds site a bit further to the south. If you are interested in attending email Dan Krisher at dlkfossil@gmail.com no later than October 6th.

Wed 12 LIFE SCIENCES HERBARIUM WORKSHOP

1:00 – 4:00p.m. Basement of the Rochester Museum and Science Center (RMSC). We will continue work on replacing torn and damaged genus folders. It is a great way to see interesting plants from the Rochester region and around the world! No experience needed! If you plan to attend, please send an RSVP to Elizabeth Pixley. At RMSC ask the front desk staff person to call ext. 368 in the Herbarium. For more information, contact Elizabeth Pixley, herbarium curator 334-0977 or eypixley@gmail.com.

Sat 15 ANTHROPOLOGY SECTION at RMSC EVENT

11:30a.m. – 4:00 p.m. Rochester Museum & Science Center. We join AIA for a celebration of annual National Archeology Day. There will be posters and displays of objects of interest for both anthropologists and archeologists. Contact Karen Wolf for more details: 670-9709.

Sun 16 ASTRONOMY PUBLIC OPEN HOUSE

Noon to 4:00 p.m. (and later, if skies are clear). Farash Center for Observational Astronomy, 8555 County Road 14, Ionia.14475. Contact: Joel Schmid 533-2097.

Tues Oct 18 MINERAL SECTION MEETING

7:00 p.m. Downstairs meeting room. Brighton Town Hall. 2300 Elmwood Avenue. Canadian David Joyce returns to speak about *Minerals from the Bay of Fundy*. Expect good minerals, scenery, and adventures! Join us for an informative presentation and refreshments. Contact: Stephen Busschaert, 732-5321 or mineralvp@rasny.org.

Wed 19 RAS BOARD MEETING

7:00 p.m. Brighton Town Hall, Stage Conference Room. Contact: Jutta Dudley, 385-2368.

Thurs 20 ANTHROPOLOGY MEETING/LECTURE

7:30 p.m. Memorial Art Gallery. Visit with the Rochester Chapter of the Archeological Institute of America for a lecture *The Invention of Writing in Mesopotamia: New Approaches to a Very Old Problem* presented by AIA National Lecturer Jennifer C. Ross. Contact: Karen Wolf, 670-9709.

Fri 21 ASTRONOMY PUBLIC STAR PARTY

7:30p.m. - 9:30 p.m. Mendon Ponds Park, Hopkins Point Rd. Contact: Jim Seidewand, 703-9876.

Sat 22 LIFE SCIENCES FIELD TRIP

10:00 a.m. Parking lot at Tinker Nature Park, 1525 Calkins Rd. in Henrietta. We'll walk a trail and end with a visit to the indoor exhibits at Tinker's Hansen Nature Center. Contact: Larry Hirsch, 429-6199.

Saturdays in Oct STRASENBURGH PLANETARIUM TELESCOPE OPERATION

Clear Saturday nights at the observatory at the Rochester Museum of Science. See www.rochesterastronomy.org for current times. Contact: Jim Seidewand at 703-9876.

November 2016

Sat 12 RAS FALL SCIENTIFIC PAPER SESSION & LECTURE

8:30AM-2:00 p.m. Robert Wesleyan College. See page 1 for details. Contact: Jutta Dudley, 385-2368.

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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. Each Section also sets dues to cover Section-related publications and mailings.

For applications and/or more information, contact Jutta Dudley, 140 Railroad Mills Road, Pittsford, NY 14534; by telephone (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 <https://www.facebook.com/RochesterAcademyOfScience>

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