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Rochester Academy of Science  
**BULLETIN**

"An organization of people in the Natural Sciences"



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April, 2006 - Vol. 60, #4, Page 4

ABOUT THE **ACADEMY** - The Rochester Academy Of Science, Inc. is an organization which 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 membership chairman Stephen Busschaert, 54 Keswick Rd., Rochester, NY 14609; by telephone 288-5683; or by e-mail <sbusschaert@msn.com>.

The *Academy* Internet web page is <http://www.rasny.org>

The *Astronomy Section* Information phone number is (585) 987-5330. The *Astronomy Section* Internet web page is <http://rochesterastronomy.org>

This "**BULLETIN**" is produced monthly, *except July and September*, by the *Astronomy Section, Rochester Academy of Science*. The editor is Frank Bov, 16 Gladbrook Rd., Pittsford, NY 14534 Phone (585) 422-9910 (days) and (585) 385-1518 (evenings), e-mail <frank.bov@xerox.com>

**ROCHESTER ACADEMY OF SCIENCE OFFICERS**

		Phone	
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The Academy Postal address is P.O. Box 92642, Rochester, NY 14692

**RAS 2006 SPRING  
LECTURE SERIES**

*News from Mars: an Update  
on the Rover Project*

Zoë Learner

Mars Rover Science Operation  
Working Group Documentarian,  
Cornell University

Thursday, April 13, 7:30 PM  
Brighton Memorial Library  
2300 Elmwood Avenue

It may be hard to have an exciting résumé when you are still a graduate student but Zoë Learner has just that. While she is still working on her PhD at Cornell in Astronomy, she is also a member of NASA's Athena Science Team, analyzing data sent down from the Mars rovers, and a member of the Flight Operations Team, commanding the rovers in their day-to-day activities. She is currently using data from the rovers to study chemical weathering of rocks as part of her PhD thesis at Cornell.

While she has won distinguished student scientific awards and received the honor of being brought in on the Mars project, she has won other fascinating awards such as being the youngest person to win NASA's Way Cool Scientist award and has been part of a team that has been



**Mars Exploration Rover**

Courtesy NASA/JPL-Caltech

referred to as: NASA's M-Team:  
Not Your Average "Rock" Stars

Even now as a scientist and a graduate student, Zoë maintains a childlike excitement for her work. "The kid in me who was so excited to see those live images from Voyager can't wait to be among the first to see the images of Mars," says Zoë. From orbit, these landing sites appear to be unlike any of the previous landing sites of Viking and Pathfinder. "It's the thrill of seeing something that no one has ever seen before," says Zoë, "that lights a fire in my belly, and makes my heart beat twice as fast."

Join us for dinner at 6:30 PM. The cost is \$16 with RSVP by April 7 to [RochAcSci@aol.com](mailto:RochAcSci@aol.com) or phone 461 -1272. No RSVP needed for the free lecture, but seating is limited.

**WHAT IS THE RAS  
HERBARIUM?**

The RAS Herbarium is a collection of about 60,000 preserved plant specimens, which is currently housed on the ground floor of the Rochester Museum and Science Center. These specimens were collected by numerous botanists who studied plants in New York State, other parts of North America, and from around the world. The RAS Herbarium collection is a significant record of the Rochester area ecology and a valuable resource to both local and international scientists.

Each plant specimen is pressed and mounted on a large sheet of acid-free paper, along with details of what it is, who collected it and where. The entire collection is housed in about 30 large metal cabinets. Most of the plants were collected between 1860 and 1950. Because of the large number, and the delicate nature of the specimens, accessing information for research and study is a slow process. Computerization would make this historic collection more easily accessible to research throughout the world. Interested individuals are invited to contact Elizabeth Pixley, Curator of the RAS Herbarium, if they would like to be involved in the on-

going upkeep of the collection and/or computerization of the database. You can reach Elizabeth at [epixley@rochester.rr.com](mailto:epixley@rochester.rr.com) or 585-334-0977

\* \* \*

### WHY IS THERE A NORTHERN HAWK OWL SPENDING THE WINTER IN ORLEANS COUNTY?

The Northern Hawk owl is a bird of the northern boreal forest. Its preferred habitat is coniferous forests bordering open areas and marshes. Its range is from Alaska to Labrador and south to British Columbia and Newfoundland. Interestingly, a subspecies of the owl exists in Europe and Asia ranging from Scandinavia to Siberia. It is named for its appearance when perched, its flight and other habits which resemble that of some of the smaller hawks.

The Northern Hawk Owl is the most diurnal (active both day and night) of all North American owl species. It perches in prominent trees, hunting primarily by sight, gliding low over the ground at high speed. It feeds on rodents, mice and lemmings. In winter it may take grouse, hare, ptarmigan and small birds. It is a medium sized bird about 15-17" in height. The male weighs 11-12 oz, the female about 15 oz. The Hawk Owl has a barred breast, facial discs with bold black borders and a long tail, rounded and barred. It has a life span of approximately 10 years.

Periodically these owls "invade" southern Canada and the US. Winter visits are thought to



correlate with high reproductive success followed by severe winter conditions and/or reduced prey availability. These birds are usually females or juveniles. Like many northern birds that have rarely seen humans, they can be exceedingly tame and easily approached and observed. Frequently they will remain for several weeks or months, eventually returning north to their breeding habitat. There are no records of attempted nesting or breeding in New York State.

\* \* \*

### CENTRAL NEW YORK PALEO MEETING FEATURES SPEAKER ON MARK TWAIN, SCIENTIST

The next meeting will be held at 6:30 pm, April 24 at the Museum of the Earth in Ithaca and will feature Professor Michael Pratt from Elmira College. Professor Pratt will give a talk on Mark Twain's interest in science and a satirical essay Twain wrote debunking the notion that the natural world was designed for

human benefit. (Twain apparently had a fossil collection from a quarry near Elmira.)

If you plan to attend, please RSVP to Rob Ross ([ross@museumoftheearth.org](mailto:ross@museumoftheearth.org)).

The Central New York Paleo group comprises paleontologists, geologists, students, professors and collectors from throughout the Central and Western New York region. Anyone interested is most welcome to attend.

\* \* \*

### RMSC DISTINGUISHED SCHOLAR LECTURE

#### *Forty Years in Space*

Kathy Rapp  
ITT Industries

Wednesday, April 26 7:30pm  
Eisenhart Auditorium

From 1960–72, in a Cold War project code-named "Corona," the U.S. routinely photographed the Soviet Union from space. The Corona Project rivaled the engineering feat of sending men to the moon, but its successes are generally unknown. De-classified in the 1990s, this amazing story can now be told. In a multi-media presentation, Kathy Rapp describes Rochester's crucial role in Corona and other cutting-edge satellite tech projects through the present day.

Kathy Rapp is Director, Office of the Chief Engineer, ITT Industries.

Call (585) 697-1942 for Tickets:  
RMSC Members

\$14 adult; \$7 student  
Public \$15 adult; \$8 student

## EVENTS for APRIL 2006

(For updates to Academy events, check the Academy web site, <http://www.rasny.org>, or appropriate Section web site.)

### Tue 04 FOSSIL MEETING

7:30 PM Community Meeting Room, Brighton Town Hall. Dan Krisher will give a talk titled: "Origin of Birds: Cladistics and Feathered Dinosaurs." Contact Linda Heffron 461-4179 for information.

### Thur 06 to Sun 09 MINERAL SYMPOSIUM

33rd Annual Rochester Mineralogical Symposium at the Radisson Hotel, 175 Jefferson Rd. See RAS web site for details.

### Thur 06 MINERALOGICAL SYMPOSIUM LECTURE

8:00 PM Radisson Hotel, on Jefferson Rd. Gilles Haineault will speak on "Great Finds at Mt. St-Hilaire (Quebec) Since 1970" This lecture is part of the Mineralogical Symposium, but is free to all RAS members.

### Fri 07 ASTRONOMY GENERAL MEETING

7:30 PM at RIT, Gosnell Science Bldg; room A-300. Dr. Michael Richmond of RIT will give a talk titled: *The (not-quite) Latest News on the SDSS Supernova Search* plus short talks by members. Visitors are always welcome. For information, call Carol Latta at 230-9548.

### Sat 08 FOSSIL FIELD TRIP

Niagara Gorge at Artpark with the SUNY Fredonia Historical Geology Class led by Professor

Gordon Baird. For details, contact John Handley at 802-8567 or [jhandley@rochester.rr.com](mailto:jhandley@rochester.rr.com).

### Thur 13 RAS SPRING LECTURE

7:30 PM Brighton Library Community Room, 2300 Elmwood Av., Brighton, NY  
*News from Mars, An Update on the Rover Project* by Zoë Learner, Mars Rover Science Operations Working Group Documentarian. The lecture is free and open to the public. Dinner preceding the lecture at 6:30 PM for \$16; reservations required by April 7<sup>th</sup>. Contact Stan Spector at 461-1272 or [RochAcSci@aol.com](mailto:RochAcSci@aol.com)

### Sat 15 FOSSIL FIELD TRIP

Murder Creek/Elevenmile Creek (near Darien Lake) with the SUNY Fredonia Historical Geology Class led by Professor Gordon Baird. For details, contact John Handley at 802-8567 or [jhandley@rochester.rr.com](mailto:jhandley@rochester.rr.com)

### Wed 15 RAS BULLETIN

Deadline for May issue notices to reach the editor.

### Wed 19 RAS BOARD OF DIRECTORS MEETING

7:00 PM Brighton Town Hall, Stage Conference Room.

### Wed 26 RMSC DISTINGUISHED SCHOLARS LECTURE

7:30 PM at Eisenhart Auditorium. Kathy Rapp of ITT Industries will deliver a talk titled: *Forty Years*

*in Space*. Kathy Rapp is Director, Office of the Chief Engineer, ITT Industries. Call 697-1942 for Tickets: RMSC Members \$14 adult; \$7 student and General Public \$15 adult; \$8 student

### Mon 17 LIFE SCIENCES\* MEETING

\* Formerly Botany Entomology  
7:00 PM at the Brighton Town Hall Library in the Friends of the Library Learning Center. The program will be a film titled "The One Degree Factor," part of the National Geographic film series "Strange Days on Planet Earth." For more information contact Elizabeth Pixley 334-0977 or Karen Wolf 670-9709.

### Fri 21 ASTRONOMY PUBLIC STAR PARTY

9:00:PM to 11:00:PM at Northampton Park on Hubbell Rd. in Ogden. Join us for views of Saturn and deep sky objects in members' telescopes. For information, contact Jim Seidewand 723-6225

### Sun 30 ANTHROPOLOGY MEETING

3:00 PM Karen Wolf's home 1397 Five Mile Line Road, Penfield. Dr. Kal Vizy will present: *My search for linguistic interactions*, a personal account of his search of languages which impacted his Hungarian language and ancestry. Bring a dish to pass; the Section will furnish drinks, meats, and rolls for dinner after the talk. Please contact Karen Wolf for information at 570-9709