### **Rochester Academy of Science**

# BULLETIN

"An organization of people in the Natural Sciences"



January, 2012 - Vol. 66, #1

#### President's Message

Happy New Year! I hope you are looking forward to another year of member activities and public teaching events.

Adding to an already full calendar of outreach programs, several sections will be teaching their favorite topics on Science Saturdays at RMSC this spring. Attending families can explore minerals February 4<sup>th</sup> and on March 24<sup>th</sup>, they can learn about the past with fossils and discover something new about the celestial Thank you Mineral, world. Fossil, and Astronomy members for your ongoing contributions to informal science education!

The Publications Committee is busy making final preparations for the publication of the next RAS Proceedings. It will be in paper format as well as CD. The two main articles are of regional geologic interest, featuring the paleontological Hiscock Site in Byron (author Richard Laub, Buffalo Museum of Science) and the history of the Genesee River (by Richard Valley Young, SUNY College at Geneseo). These will soon be available on the RAS Web site. I think the articles will be of interest to many people since this information is not readily available to the general reader.



Photograph by Deedra McClearn, Director of LaSelva Biological Station in Costa Rica. Originally posted in the December 2011 e-Canopy newsletter. Permission granted to reproduce in the RAS Bulletin.

# Amazing Bridge Constructed by Eciton burchelli

Hundreds of thousands of army ants marched through Dr. Deedra McClearn's field home at La Selva Biological Station in Costa Rica one day in November 2011 and ended up building a dramatic bridge from the house to a tree. If you've been to a neotropical forest you may have seen lines of ants and bent down for a closer look. Hurried workers and soldiers with formidable looking mandibles greet the eye of the curious. The ant species Eciton burchelli are carnivorous and significant predators in the tropical American forests. On their forays they collect mostly arthropods, dead or alive. Workers sting, and with their mandibles, pull insects apart into smaller parcels more easily carried back to the nest.

Their nests are temporary above ground bivouacs formed by workers holding each other's bodies together with the help of their mandibles and hooked foot claws. Imagine the bridge in the photograph as a much larger hanging mass and you have an army ant colonial nest! Inside is a hubbub of activity as the queen lays eggs and larvae are cared for.

La Selva Biological Station is located in the Caribbean lowland at the northern base of Braulio Carrillo National Park. It is one of three stations owned and operated by the Organization for Tropical Studies (OTS). OTS is a non-profit consortium of many universities and research institutions from around the world and aims to provide leadership in education, research, and the responsible use of natural resources in the tropics. The work at the stations has contributed significantly to our understanding of tropical ecology. For more information about OTS and to learn what's happening at the field stations go to <a href="http://www.ots.ac.cr">http://www.ots.ac.cr</a>.

~ Jutta Siefert Dudley

**Membership Form** 

Name

# 2012 Rochester Academy of Science, Inc.

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http://www.rasny.org

Mail to:										
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6658 North Avon Rd.	For your convenience, please pay your dues to the R.A.S. and its sections with a single check. Make check payable to: Rochester Academy of Science, Inc.									
Honeoye Falls, NY 14472										
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Membership Categories R.A.S. dues are a prerequisite for section membership		Rochester Academy of Science	Anthropology Section	Astronomy Section	Life Sciences Section	Fossil Section	Mineral Section	Total		
Member (Individual over age 18)		\$10.00	\$2.00	\$17.00	\$2.00	\$5.00	\$5.00			
<b>Family</b> (Including students to age 18)		\$15.00	\$3.00	\$22.00	\$3.00	\$6.00	\$6.00			
<b>Student</b> (K to full-time undergrad.)		\$5.00	\$1.00	\$5.00	\$1.00	\$2.00	\$2.00			
Supporting (Individual or family)		\$20.00	****	\$30.00	\$10.00	\$10.00	\$10.00			
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Life (Individual only)		\$200.00	****	\$300.00	\$40.00	****	****			
Gift (Thank you) Fill in amount ⇒										
Check box you are interested in serving on a section committee		$\Rightarrow \Rightarrow$								

# EVENTS for January, 2012

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

#### **JANUARY RAS EVENTS**

## NO FOSSIL MEETING THIS JANUARY.

# Friday 6 ASTRONOMY MEETING

7:30 PM to 10:00 PM

RIT, Gosnell Hall, Room A-300

### Saturday 14 HERBARIUM WORKSHOP.

10 AM to 2 PM Located in the basement of the Rochester Museum and Science Center (RMSC). No experience needed! Plan to come and help with this valuable collection – and learn about plants in the process. Lunch is served in the RMSC Cafe until 2 pm. If you plan to attend the workshop, please send an RSVP to Elizabeth Pixley. Then, at RMSC, go to the front desk and ask staff person there to call ext. 368, the phone in the Herbarium. For more information, contact Elizabeth Pixley, Herbarium Curator (334-0977 or epixley@rochester.rr.com).

### Sunday 15 MENDON PONDS WINTERFEST

11:00 AM to 4:00 PM. Mineral & Astronomy Sections will have tables located in the heated East Lodge where we'll have specimens on display & to give away, a telescope, and info about our clubs. Fossil Section will be displaying in the Cobblestone House. Numerous family indoor & outdoor activities are available at this event. For activities list, schedule, map and more, go to

### www.mendonpondswinterfest.org

To volunteer to help at your Section table, contact your club coordinator.

# Tuesday 17 MINERAL SECTION MONTHLY MEETING

7:30 – 9:30 PM at Brighton Town Hall, Downstairs Meeting Room, 2300 Elmwood Ave., Rochester, NY 14618. Rochester's Gem Lab jeweler, Paul Cassarino will talk about "Diamonds and Other Minerals, From Rough to Refined Jewelry and Related History." Refreshments and door prizes. For more information, contact Stephen Busschaert at sbusschaert@msn.com or 585-288-5683, or go to www.rasny.org/mineral for updates.

# Wednesday 25 RAS BOD MEETING

7:00 PM at the Brighton Town Hall, Upstairs Conference Room.

### Saturday 28 LIFE SCIENCE AND ANTHROPOLOGY DINNER AND MEETING

3:00 PM at Karen Wolf's home, 1397 Five Mile Line Road, Penfield. Please come to a dishto-pass dinner/meeting. Dinner begins about 4 pm with the sections furnishing sandwich fixings. Bring anything else to eat/drink or \$3 towards the fixings. We will discuss the future of the sections including the Herbarium, our relationship with the AIA, several other events of RAS, etc. Contact Karen Wolf 585-6709709.

## Saturday 29 MINERAL SECTION JUNIOR EVENT

1:00 PM Open House at Member, Jim Synyard's home in Ontario, NY to see his Nature Collection. We'll start with his minerals, of course! Jim has quite an extensive collection of everything related to the outdoor world, and has been a guest speaker at The Harley School. This is a members-only event. Children accompanied by an adult, as well as adult members without children, are welcome. Please RSVP to mineralpres@rasny.org or 395-1713 for directions, carpooling info and so we can get a count of who is coming – if a large group signs up, arrival times may need to be staggered.

#### **NON-ACADEMY EVENTS**

### Wednesday 11 FREE ROCHESTER MUSEUM & SCIENCE CENTER LECTURE

Drilling the Marcellus Shale and its Impact on the Geology and the People. Reservations necessary. http://www.rmsc.org/Experiences/FamilyPrograms/ScienceOnTheEdge

### Wednesday 18 RMSC SCIENCE ON THE EDGE LECTURE

Twilight of the Big Bang with Adam Frank.

http://www.rmsc.org/Experiences/FamilyPrograms/ScienceOnTheEdge

### **Rochester Academy of Science** P.O. Box 92642 Rochester, NY 14692-0642

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January, 2012 - Vol. 66, #1, Page 4

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 385-2368; or by e-mail <JuttaSD@aol.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 Benjamin Carlino, 23 Monroe Street, Fairport, NY 14450 Phone (585) 944-7748 (days) <editor@rasny.org>

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