Rochester Academy of Science™

BULLETIN

"An organization of people interested in the Natural Sciences"



September 2025; Vol. 79, #7

President's Message

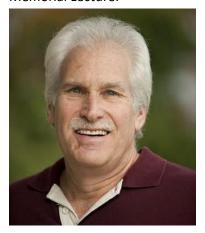
Fall Paper Session

This Fall, on Saturday, November 1st, we will host the 51st Annual RAS Fall Scientific Paper Session at SUNY Geneseo.

Save the Date!
Saturday, November 1st, 2025
RAS Scientific Paper Session
SUNY Geneseo

This event provides an opportunity for local colleges and university science students and faculty to gather and share their research interests and results. For more information and to register go to rasny.org/paper-session. We do need members as volunteers to help organize the Paper Session and to help run it on the day.

We are pleased that Dr. Marc David Abrams will be our keynote speaker for our annual Lawrence J. King Memorial Lecture.



He is Professor Emeritus of Forest Ecology and Physiology at Pennsylvania State University as the Nancy & John Steimer Professor of Agricultural Sciences. His talk is titled Native Americans, Smokey the Bear and the rise and fall of eastern oak forests. It is based on his career-long research on oak forests and cultural burning. Dr. Abrams is one of our most highly cited and influential forest ecologists. His most recent paper on the topic was published this past June. If you would like to read this paper, contact me for a copy. (Tulowiecki, S.J., Hanberry, B.B. and Abrams, M.D., 2025. Spatial and Temporal Pervasiveness of Indigenous Settlement in Oak Landscapes of Southern New England, US, During the Late Holocene. Land, 14(3), p.525.)

"The results of this study strongly suggest that Native Americans did, indeed, extensively use fire and other disturbances such as land clearing for villages, agriculture and trails, and both directly and indirectly promoted fire-adapted trees," said Dr. Abrams. "These trees were very important to the Native American diet because of the mast — nuts and acorns — they produced. This mast also fed large and small mammals and birds, which then were hunted for food by the Native Americans."



Native Americans extensively used fire to manage their environment. Credit: Penn State

This free Public Lecture will be the opening event at the Paper Session at 9:00 a.m. in Newton Lecture Hall, 25 University Drive, Geneseo, NY 14454. I thank Dr. Stephen J. Tulowiecki for arranging for Dr. Abrams' visit. Dr.

Tulowiecki is a co-author of the recent paper, Associate Professor of Geography and Sustainability Studies at SUNY Geneseo, and will introduce Dr. Abrams. I also thank RAS member Dr. Kristi Hannam for being our on-site coordinator on behalf of SUNY Geneseo's Biology Department and leading the planning team there.

I do hope to see you there!

Volunteers Needed

Help is needed in preparation for our annual Scientific Paper Session.

Classified Advertisement **Volunteer Opportunity Volunteer Opportunity**

RAS Scientific Paper Session Registrars

Rochester Academy of Science, Rochester, NY.

Part-time **Volunteer Registrar** to receive registration emails from attendees from September through mid-October and transfer data to registration spread sheet. Expected number of registrants is 300. Registrar sends spreadsheet to committee weekly. This job can be shared. Send note of interest to mgrenier@frontiernet.net.



Michael Grenier, RAS President

Events for September 2025

NOT MEETING IN SEPTEMBER:

- -Fossil section
- -Anthropology section

Sept 3 Wed: Astronomy Board Meeting

7:00 pm – 9:00 pm. Farash Center. Members welcome to attend. Contact Tony Golumbeck at

<u>President@rochesterastronomy.org</u> for details.

Sept 5 Fri: Astronomy Members Meeting

7:00 pm – 9:00 pm. Farash Center. Speaker: Matt East, L3Harris. Topic: The Search for Earth-like Planets. Contact Tony Golumbeck at

<u>President@rochesterastronomy.org</u> for details.

Sept 10 Wed: Life Sciences Nature Walk

6:00 pm. Webster Arboretum Walk. The Life Sciences section will hold a Nature Walk at Webster Aboretum in a showcase of native trees, plus a few interesting exotics. We will also walk through their garden areas and keep an eye out for the myriad of birds living there. This will be a guided tour by Arboretum Board member George Riehle who will discuss the Aboretum's diverse plant life, its history, and conservation efforts. Advance registration required— call or write Michael Grenier at (585) 671-8738 or mgrenier@paleo.com to let him know you are coming. Refreshments after the walk. Meet in the parking lot at 1700 Schlegel Road, Webster, NY 14580. Don't be

late. https://www.thewebsterarboretum.org for more information.

Sept 10 Wed: Astronomy Board Meeting

7:00 pm – 9:00 pm. Farash Center. Members welcome to attend. Contact Tony Golumbeck at

<u>President@rochesterastronomy.org</u> for details.

Sept 17 Wed: Herbarium

12:00 p.m. - 3:00 p.m. The Life Sciences section will hold a workshop at the RAS Herbarium, located in the basement of the Rochester Museum and Science Center (RMSC). We will be continuing to organize plant specimens in preparation for digitizing the collection. If you plan to attend, please send an RSVP to rasherbarium@gmail.com. At RMSC go to the front desk to meet other participants. For more information, contact herbarium curators, Tim Tatakis and Steven Daniel, by emailing rasherbarium@gmail.com.

Sept 17 Wed: RAS Board Meeting

7:00 p.m. - 9:00 p.m. Pittsford Community Center Room 206. Zoom option available. For details, contact Michael Grenier at mgrenier@frontiernet.net.

Sept 19 Fri: Astronomy Public Observing

7:30 p.m. – 11:00 p.m. Join us for Public Observing at the Marian and Max Farash Center for Observational Astronomy. All welcome. Members come to help visitors look at deep sky objects through our telescopes. Contact Tony Golumbeck at

<u>President@rochesterastronomy.org</u> for details.

Sept 20 Sat: Astronomy Member Observing

7:30 p.m. – 11:00 p.m. Farash Center. Contact Tony Golumbeck at President@rochesterastronomy.org for details.

Sept 23 Tues: Mineral Section Meeting

7:00 p.m. – 9:00 p.m. Zoom and Pittsford Community Center, Room 19. Social gathering at 7:00 pm. Presentation at 7:30 pm. Join speaker Dan Robertson for an interesting and timely talk about the minerals and mining in Ukraine. Members will receive more information in September. Guests welcome. Contact: Jutta Dudley, juttasd@aol.com.

Sept 24 Wed: Astronomy Forum

7:30 pm – 9:00 pm. Topic: Optics. Speaker: TBD Contact Tony Golumbeck at <u>President@rochesterastronomy.org</u> for details.

STRASENBURGH OBSERVATORY:

ASRAS will operate the telescope at the Strasenburgh Planetarium on mostly clear Saturday nights, dusk until 10:30. For more information, contact: Jim Seidewand at (585) 703-9876.

OUTSIDE RAS EVENTS:

Sept 20 Sat: Ionia Fall Festival

10:00 a.m – 3:30 p.m. Ionia United Methodist Church. ASRAS will be offering tours of the Observatory and will also staff a table at the event. Contact Tony Golumbeck at President@rochesterastronomy.org for details.

The 2025 Golden Goose Award Ceremony

The Golden Goose Award honors scientists whose federally funded work may have been considered silly, odd or obscure when first conducted, but has resulted in significant benefits to society. Join us in celebrating impactful federally funded research on September 16, 2025 at 5:30 PM E.T.

Here's the link: https://www.youtube.com/live/hy3GamjUozA

Book on Rochester Eclipse planning coming out soon

Drawn from material recently released by Debra Ross.

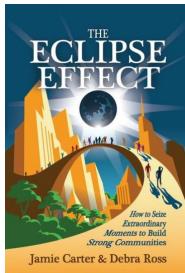
Debra Ross was the Co-chairperson of Rochester's Eclipse Task Force. The Task Force had over 500 members in tourism, science education, arts and culture, transportation, government, and emergency management who prepared everything necessary for our region to make the most of this experience. She also co-chaired the American Astronomical Society's Solar Eclipse Task Force.

The Rochester Museum & Science Center (RMSC) was the hub and hired Dan Schneiderman as its full-time representative. "Visit Rochester" is the Rochester tourism and convention information bureau and played a key leadership role to manage the preparations, as did the Genesee Transportation Council.

Under Debra's leadership, the Task Force started preparing for the 2024 eclipse right after the 2017 eclipse by learning best practices from communities that were in that path. Rochester's team became the national benchmark in how to do community planning for the eclipse and representatives from many other cities on the path came to Rochester to study how we were doing it.

The book on Rochester's experience is being published this December by Simon & Schuster! It is written by Debra Ross with Forbes.com science journalist Jamie Carter and titled *The Eclipse Effect: How to Seize Extraordinary Moments to Build Strong Communities*. The book is focused on business and community leadership, providing collected stories that share strategies for uniting a varied group of people to make a difference in the world, by leveraging the momentum of a catalyst and adopting smart community management techniques. Rochester's extraordinary eclipse effort is at the heart of the book.

The stunning cover is by Tyler Nordgren, whose eclipse posters you probably saw all over town. (The Smithsonian sure did — they acquired them for their permanent collection!)



If you are interested, you can pre-order the book (\$18.95). It is available from Amazon.com; Barnes & Noble; Walmart.com, Target.com, Bookshop.com; and Books-a-Million.

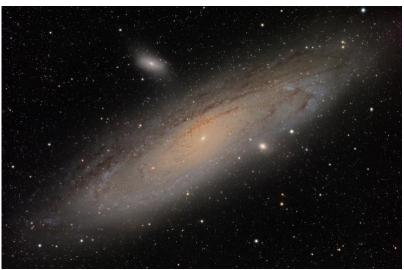
See the website (https://theeclipseeffect.com/) for the chapter-by-chapter summary, endorsements (including from Wikipedia founder Jimmy Wales!), and the story behind the book.

In reviewing *The Eclipse Effect*, Wikipedia founder Jimmy Wales said the book is "...about rolling up your sleeves and building something that matters, together. Through the lens of the extraordinary communities that sprang up around recent total solar eclipses, this book explores how shared moments can grow into lasting movements."

RAS Member Images



M13 using Pegasus Smart Eye electronic eyepiece. Eric Day; August, 2025.



M31 in LRGB. Don Kubisa, August, 2025.



Saturn. Kevin Lyons; August 21, 2025. The rings are slowly closing again until November when the planet will again appear to be nearly ringless, then opening until 2032.



Milky Way from Ionia. Michael Naven; August, 2025. The reddish glow is from the red light outside the Classroom building.



Veil Nebula, Western portion. Richard Albrecht; August, 2025.



Hidden Nebula, SH2-124, Sharpless Catalog. Pat Cosgrove; August, 2025.

Rochester Research in Review.

(These are Hot Links which when clicked lead to the press release on the Science Daily and other science websites.)

<u>Cornell researchers build first</u>
<u>'microwave brain' on a chip. Cornell</u>
University, August 14, 2025.

<u>Dirty water, warm trucks, and the real</u> reason romaine keeps making us sick. <u>Cornell University; July 19, 2025.</u>

Are lefties really more creative? 100 years of data say no. Cornell University; July 1, 2025.

Study shows how millions of bird sightings unlock precision conservation. Cornell University; May 2, 2025.

Climate is changing fast—and forests are 200 years behind. Syracuse University; July 4, 2025

Rock record illuminates oxygen history.
Syracuse University; June 29, 2025

Capuchin monkeys develop bizarre 'fad' of abducting baby howlers. Ithaca College; May 19, 2025

Scientists uncover hidden brain shortcut to weight loss without the nausea. Syracuse University; August 10, 2025.



Trifid and Lagoon Nebulae. Burny Baron; August, 2025.

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. We are recognized as a 501(c)3 organization.

For information, contact President Michael Grenier at (585) 671-8738 or by email paleo@frontier.com.

The Academy Internet website is http://www.rasny.org or see us on Facebook at https://www.facebook.com/Rochester-Academy-of-Science-792700687474549.

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