

# BULLETIN

"An organization of people interested in the Natural Sciences"



October 2025; Vol. 79, #8

## President's Message

### Fall Paper Session

This Fall, on Saturday, November 1st, we will host the **51st Annual RAS Fall Scientific Paper Session**. The paper session will be held at *SUNY Geneseo*.

This event provides an opportunity for local college 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](https://rasny.org/paper-session). We do need members as volunteers to help organize the Paper Session and to help run it on the day, especially in staffing our publications and section outreach tables.

### 2025 Larry King Memorial Lecture

As noted last month, Dr. Marc David Abrams has accepted our invitation to deliver the keynote Larry King Lecture at 9 a.m. at the Paper Session. This should be an exciting and provocative talk.



*For thousands of years Indigenous peoples set frequent fires to manage forests*

Climate scientists routinely ignore the ecological role of Indigenous peoples of the past. One such was a 2020 paper by W. Wyatt Oswald, et al. titled *Conservation implications of limited Native American impacts in pre-contact New England*, in

which the authors claimed that fires in the Southern New England region were mainly climate-controlled and played a minor ecological role; that the region was dominated by closed-canopy, old-growth forests; and that Native American land use had little impact on vegetation. Dr. Abrams and his partner Gregory Nowacki refuted all those assertions in a response in a later edition of the same journal (*Nature Sustainability*). They concluded that the importance of Indigenous burning and other land uses in the vegetation–fire dynamics is being increasingly downplayed among paleoecologists. They found this view untenable and disrespectful to Indigenous people who view themselves as proficient vegetation and fire managers, a view shared by many scientists in many disciplines.

**SAVE THE DATE!**  
**Saturday, November 1st, 2025**  
**RAS Scientific Paper Session.**  
**SUNY Geneseo**

"In many locations, evidence shows that Indigenous peoples actively managed vast areas and were skilled stewards of the land," said Marc Abrams, professor of forest ecology and physiology. "The historical record is clear, showing that for thousands of years Indigenous peoples set frequent fires to manage forests to produce more food for themselves and the wildlife that they hunted, and practiced extensive agriculture." "The paleoecological view — based on a science of analyzing pollen and charcoal in lake sediments — that has arisen over the last few decades, contending

that anthropogenic fires were rare and mostly climate-driven, contradicts the proud legacy and heritage of land use by Indigenous peoples, worldwide," he said.

Pennsylvania State University has had several news releases on Mark Abrams and his co-authors' work over the years. The most recent is <https://www.psu.edu/news/research/story/cultural-burning-indigenous-peoples-increased-oak-forests-near-settlements>. I recommend that you come to the lecture and then read more as a follow-up.

\* \* \*

### Volunteers Needed

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

#### ↓ Volunteer Opportunity ↓

#### **RAS Scientific Paper Session**

Rochester Academy of Science, Rochester, NY.

**Volunteer Registrar** to receive registration emails from attendees from mid-September through mid-October and transfer data to registration spreadsheet. Expected number of registrants is 300. Registrar sends spreadsheet to committee weekly. This job can be shared.

**Outreach & Publications Table staffers** for 2 hours at Paper Session. For both assignments, Contact [mgrenier@frontiernet.net](mailto:mgrenier@frontiernet.net).



**Michael Grenier, RAS President**

# Events for October 2025

## Oct 1 Wed: Astronomy Board Meeting

7:00 pm – 9:00 pm. Farash Center. Members welcome to attend. Contact Tony Golumbeck at [President@rochesterastronomy.org](mailto:President@rochesterastronomy.org) for details.

## Oct 3 Fri: Astronomy Members Meeting

7:00 p.m. – 9:00 p.m. RIT, Carlson Building, Room 1125. Speaker: Sadie Coffin. Contact Tony Golumbeck at [President@rochesterastronomy.org](mailto:President@rochesterastronomy.org) for details.

## Oct 4 Sat: International Archaeology Day

11:00 a.m. – 3:00 p.m. Rochester Museum and Science Center. The Anthropology Section will join the Archaeological Institute of America (AIA) Rochester Section celebration at the RMSC. For more information contact Karen Wolf at 585-670-9709

## Oct 5 Sun: Astronomy Open House

12:00 p.m. – 3:00 p.m. Farash Center. Contact Tony Golumbeck at [President@rochesterastronomy.org](mailto:President@rochesterastronomy.org) for details.

## Oct 7 Tues: Fossil Members Meeting

7:00 p.m. – 9:00 p.m. Pittsford Community Center, room 019, 35 Lincoln Avenue Pittsford, NY 14534. Open to all RAS members and guests. It will also be broadcast on Zoom. Speaker: Section member Michael Grenier. Topic: *The Worst Day Ever: End-Cretaceous Extinction Event*. Michael will cover what we know about what happened during and after the asteroid impact and how we know it based on world-wide research. This has something for almost everyone—astronomy, fossils, minerals, and life sciences. (Anthropology would be a stretch.) For meeting details and Zoom login info see the FossilLetter or contact Michael Grenier

at [paleo@frontier.com](mailto:paleo@frontier.com) or (585) 671-8738

## Oct 8 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](mailto: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](mailto:rasherbarium@gmail.com).

## Oct 12 Sun: Family Archaeology Day

9:30 a.m. – 4:00 p.m. Cumming Nature Center, 6472 Gulick Road, Naples, NY 14512. Subject: Exploring Frost Town, an abandoned 19<sup>th</sup> century homestead. Cost is the price of admission to CNC. Check out <https://rmsc.org/events/familyarchaeologyhistoryday/> for more information on the event and where to sign up. Contact Dr. Alexander Smith at [alsmith@brockport.edu](mailto:alsmith@brockport.edu) for more information.

## Oct 15 Wed: RAS Board Meeting

7:00 p.m. - 9:00 p.m. Pittsford Community Center Room 207. Zoom option available. For details, contact Michael Grenier at [mgrenier@frontiernet.net](mailto:mgrenier@frontiernet.net).

## Oct 17 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 [President@rochesterastronomy.org](mailto:President@rochesterastronomy.org) for details.

## Oct 18 Sat: Astronomy Member Observing

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

## Oct 28 Tues: Mineral Section Meeting

7:00 p.m. – 9:00 p.m. Pittsford Community Center and via Zoom, Room 19. Members will receive more information in October. Guests welcome. Contact: Jutta Dudley, [juttasd@aol.com](mailto:juttasd@aol.com).

## Nov. 1 Sat: Fall Paper Session and Larry King Memorial Lecture

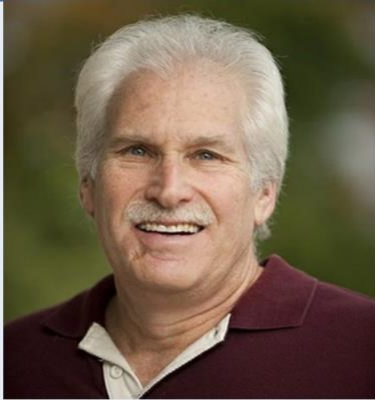
8:00 a.m. – 3:00 p.m. SUNY Geneseo Bailey Hall. See article on page 1. Schedule: 8:00-8:45: (ISC Atrium) Check-in/Registration, Coffee & Pastries, time to put up posters and check in to presentation rooms in Bailey. 8:45-9:00: (Newton Lecture Hall) Welcome Remarks. 9:00-10:00: (Newton Lecture Hall) Dr. Lawrence King Memorial Lecture, Dr. Marc Abrams. See page 1 for details. 10:15-12:30: (Bailey Hall) Concurrent Oral Presentation sessions. 12:30-1:15: Lunch (Bailey Hall or Main Street) pre-purchased boxed lunches and space for eating in Bailey or find lunch in the Village. 1:30-2:30: (MacVittie College Union Ballroom) Poster Session. Oral sessions are 12 minutes for talk, 3 minutes Q&A.

## STRASENBURGH OBSERVATORY:

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

## OUTSIDE RAS EVENTS:





**Rochester Academy of Science  
Lawrence J. King Memorial Lecture**

**Dr. Marc David Abrams**

**Keynote Speaker at Scientific Paper Session**  
Nancy & John Steimer Professor of Agricultural Sciences  
Professor Emeritus of Forest Ecology and Physiology  
Pennsylvania State University



***Native Americans, Smokey the Bear and  
the rise and fall of eastern oak forests***

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



**GENESEO**  
THE STATE UNIVERSITY OF NEW YORK



**Public Lecture**

▣ **Saturday, November 1, 2025** ▣

**SUNY GENESEO**

Newton Lecture Hall, 25 University Drive,  
Geneseo, NY 14454

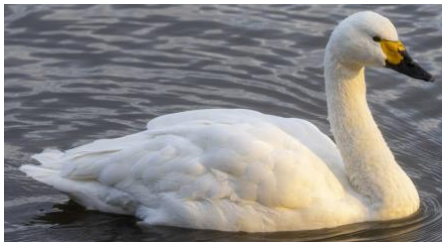
**9:00 a.m. ▣ Free**

## The Birds of Livingston County

FREE copies of this book are available from the Rochester Academy of Science if you pick them up. Details are below.

Do you like birds? Then you should have a copy of this monograph by Kurt Fox. Although it specifically identifies birds known to having been seen in Livingston County, the birds do not care where county boundaries are, so this book is largely applicable to all the surrounding area.

Nearly 300 species of birds are covered by Fox. Most are well-documented. There are nineteen reported as having been seen by various bird watchers but which are not adequately documented. There is also a list of birds that have been seen in surrounding counties within one hundred miles but not documented within Livingston County at time of publication. They may have been seen there since then or might be soon. All of them should be on your personal list of birds to seek and check off.



*Tundra Swan aka Bewick's swan (Cygnus columbianus) – an irregular Fairly Common Winter Visitant and Regular Fairly Common Spring & Fall Transient. Photo by Dave Dunn, used with permission.*

For each bird, the author starts with an assessment of how likely you are to spot one. He starts with *frequency* of recorded sightings and categorizes each as regular, irregular, occasional, sporadic, casual, or exotic. Birds seen every year are *regular*, whereas birds seen less than once in every twenty years are *casual* visitors.

His second category is *abundance* and he categorizes each as abundant, very common, common, fairly common, uncommon, rare, and very rare. A bird species that occurs in such numbers that a competent observer, in a single day, at the proper time and place might see 500 or more specimens is certainly *abundant*. If *uncommon*, you might see only 1 to 5 in a day of viewing.

His third category is *seasonal occurrence*, and these are categorized as *transients* (birds of passage that do not breed locally and may occur in spring or fall or both seasons), *visitants* (non-breeding temporary visitors in summer, winter, or as vagrants), and *residents* (breeding species here either for summer or year-round).

This occurrence rating is followed by one or more paragraphs with information on the bird and records of sightings.

Some birds are extraordinarily rare, but having been seen once, they might well be seen again. Fox tells the following story: *Charles and Mary Dilgard of Dansville fed birds for 40 years. On 14 Dec. 1979, they saw an unfamiliar bird, then on 22 Dec., again on Christmas and daily thereafter. They identified it as a Painted Redstart. They alerted John W. Brown who wrote a weekly birding column in a Rochester newspaper. On Jan. 6, 1980, Mr. Brown confirmed the identification*



*Painted Redstart. Exotic Very Rare Winter Visitant. Photo by Dee Carpenter, used with permission.*

*and photographed the bird. By 25 Jan. over 750 visitors signed into the Dilgard's guest book, some from as far away as Chicago . . .*

Jan 24th, 1979, was the last day it was seen alive. This Painted Redstart (*Myioborus pictus*) was a long way from its home in the southwest U.S. and Central America, notably in Arizona's Chiricahua Mountains. It is the only such recorded in New York, and only four others had been seen east of the Mississippi River as of publication.

For those who wish to do birding in Livingston County, Fox provides a map, listing, and description of 29 exceptionally good mostly public birding sites, and another 11 nearby in surrounding counties. Letchworth Park, for example, is noted for its diversity of wood-warblers. A remarkable 225 bird species have been recorded there. This is 51% of all the bird species recorded in New York State as a whole! Another area is the Genesee flats which are unique in Upstate New York as the area was always a grassland and prairie habitat.

*The Birds of Livingston County* by Kurt A. Fox is 131 pages long. It was published by the Rochester Academy of Science as Volume 18, Number 4 of the *Proceedings of the Rochester Academy of Science* in November 1998. We have several dozen copies on hand and they are available to members, first-come, first-served.

To get a free copy, come to the Fall Scientific Paper Session at SUNY Geneseo on November 1st and get it at our Publications table. You also can get one at our Annual Meeting in April. If you cannot make it to either of these, we will send you a copy by mail if you make an exactly \$9.77 donation to our Student Grants Fund. Make the gift at our website homepage: <https://rasny.org/>

**Michael Grenier, RAS President**





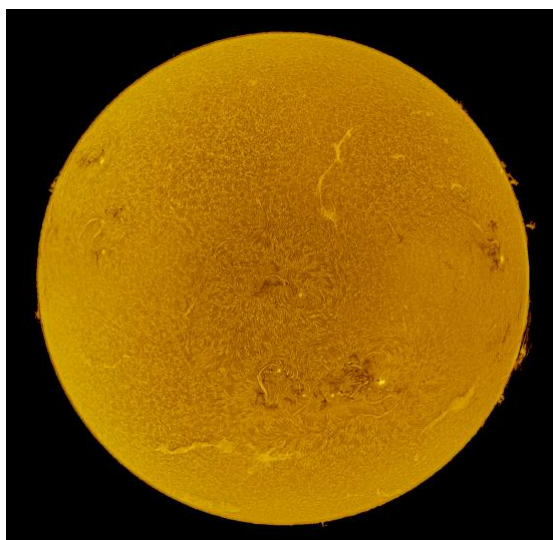
Pelican Nebula. Pat Cosgrove, Sept, 2025.



Saturn. Kevin Lyons, Sept 15, 2025.



Titan shadow transit on Saturn. John Osbourne, Sept 20, 2025.



Sun image. Doug Kostyk, August 31, 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.)

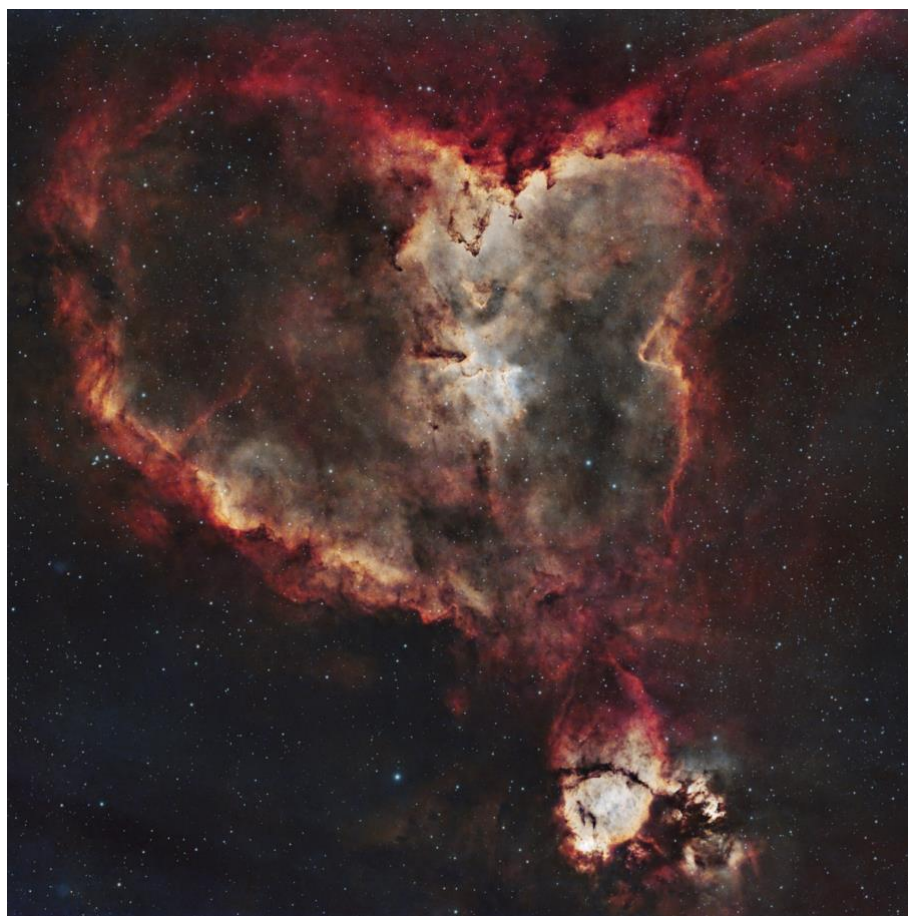
[Scientists just found out forever chemicals are shockingly acidic.](#)  
[University at Buffalo; September 13, 2025.](#)

[Strange signals at absolute zero hint at dark matter's secrets.](#) Cornell University collaboration; September 16, 2025.

[AI exposes 1,000+ fake science journals.](#)  
[Syracuse University; August 30, 2025.](#)

[Scientists crack the mystery of brain cell clumps, and make them vanish.](#)  
[University at Buffalo; August 8, 2025.](#)

[The key to spotting dyslexia early could be AI-powered handwriting analysis.](#)  
[University at Buffalo; May 14, 2025.](#)



IC 1805 'Heart Nebula' Kevin Pierce, Sept. 17, 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](mailto: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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