SEAL

Solar Eclipse Activities for Libraries

SEAL Virtual Training Series

Citizen Science and the Upcoming Eclipses: Getting Started

GORDON AND BETTY MOORE FOUNDATION

STAR*net* Science-Technology Activities & Resources For Libraries

NASA @ My Library

scistarter Science we can do together.

Presenters

Dillon Connelly (he/they), Education Specialist, Space Science Institute

Tara Cox (she/her), Assistant Director of Programs at the National Girls Collaborative Project and Director for the National Citizen and Community Science Library Network

Claire Ratcliffe Adams (she/her), Education Associate, Space Science Institute

Roland Moundalak, Program and Quality Assurance Coordinator, SciStarter

Agenda

- Introduction and Icebreaker
- Introduction to the SEAL Project
- What is citizen science and how does it fit into library eclipse programming?
- Getting started with citizen science at your library
- Eclipse programming resources
- Upcoming virtual trainings

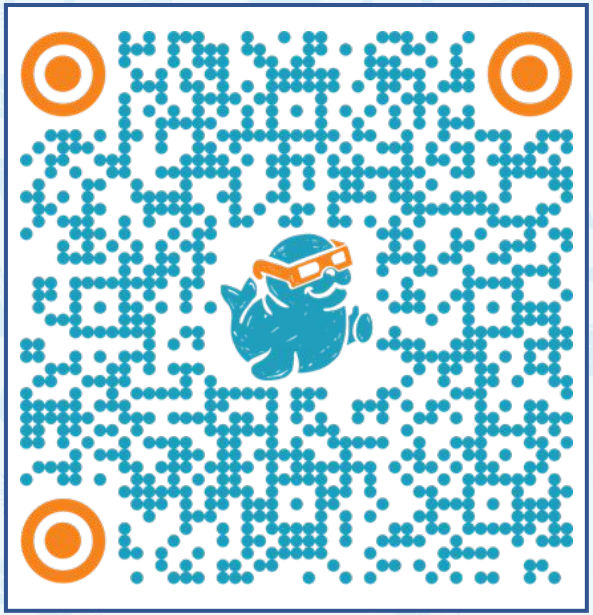
Icebreaker

What is your relationship to citizen science? Have you participated in citizen science projects at your library? Just getting started? Accidentally stumble into this webinar by falling down a rabbit hole? Let us know in the chat!

The SEAL Project

- Free eclipse glasses for libraries (up to 2000 per application)
- In-person trainings in all 50 states and 4 territories
- Recorded training videos and virtual workshops
- Circulating kits in state libraries with solar telescopes, books, and activities
- Access to scientists, volunteers, eclipse subject matter experts, and other librarians through the *STAR Net* online community

Getting Started



- SEAL resources blog
- Register for glasses
- Newsletter
- FAQ webinar
- Getting Started with SEAL webinar
  - Monthly (May through August)

CHECK IT OUT!
CITIZEN SCIENCE
AT YOUR LIBRARY

What is citizen science?

A global movement that enables people from all walks of life (anytime, anywhere) to participate in **real scientific research** by making and sharing observations with scientists.

It's how people can make an impact on issues they care about!

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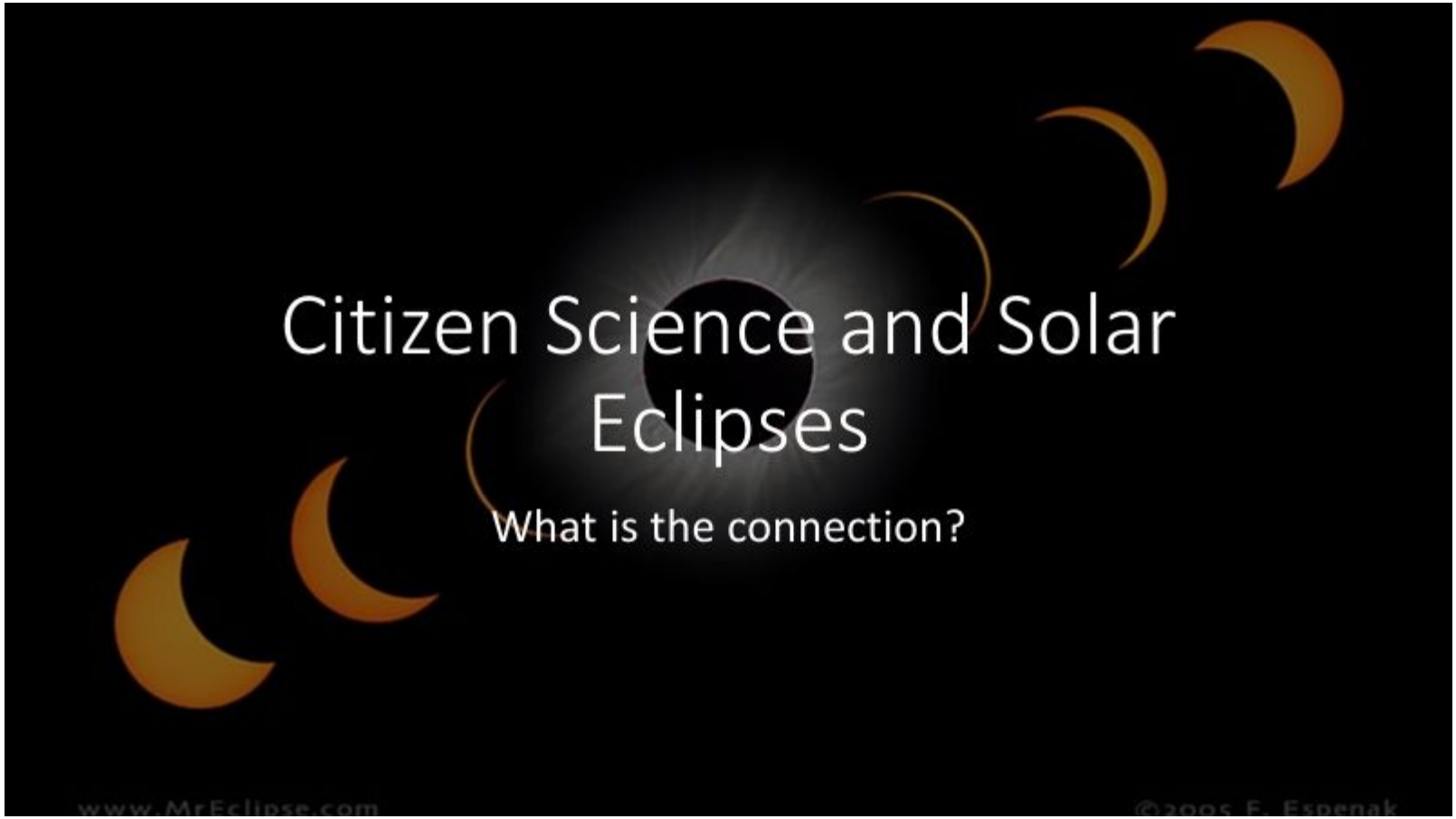
Citizen Science

- A collaboration between scientists and those of us who are curious, concerned, and motivated to make a difference
- Encourages people to participate in the scientific process
- Asking questions, making observations, conducting experiments, collecting data
- Members of the public can help advance scientific knowledge and benefit society

Is "Citizen Science" the best term for your community?

Consider alternative terms when promoting your programs:

- Community Science
- Neighborhood Data Collection
- Crowd Source Science

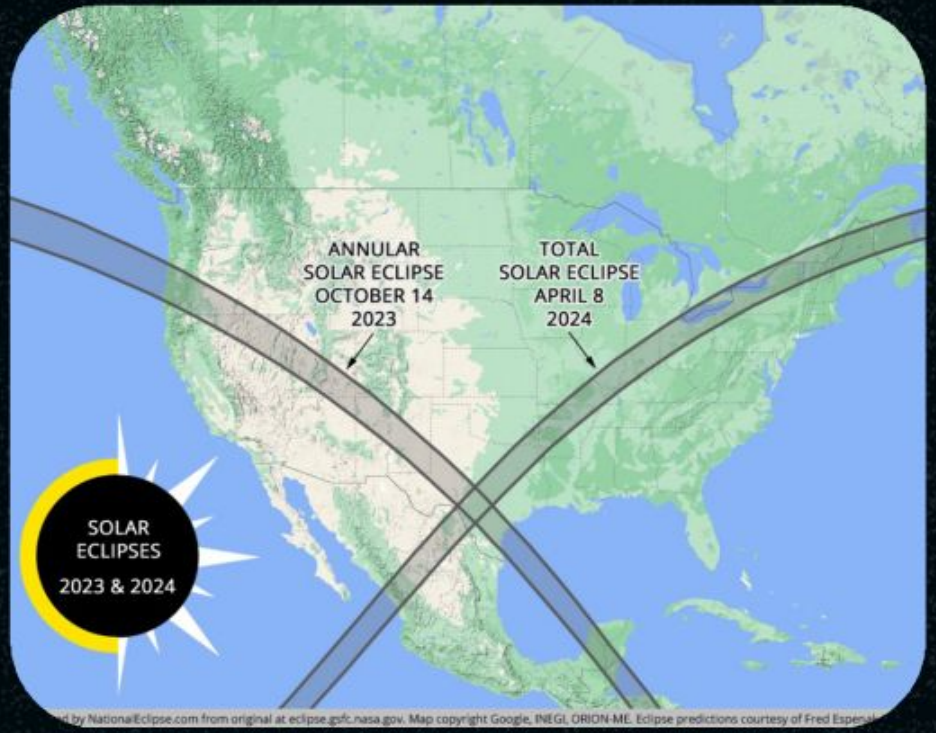

Citizen Science and Solar Eclipses
What is the connection?
www.MrEclipse.com
©2005 F. Espenak

The 2023 and 2024 Eclipses

Photo Credit: American Astronomical Society

The 2023 and 2024 North American Eclipses

- GreatAmericanEclipse.com for maps; TimeAndDate.com for specifics.
- 4 min is about the maximum for totality
- www.scigames.org/eclipse/



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THE NATIONAL CITIZEN & COMMUNITY SCIENCE LIBRARY NETWORK

A growing network of libraries and other community-based organizations dedicated to becoming community hubs for citizen science supported by SciStarter, Arizona State University, and The National Girls Collaborative Project.

scistarter.org/library-network

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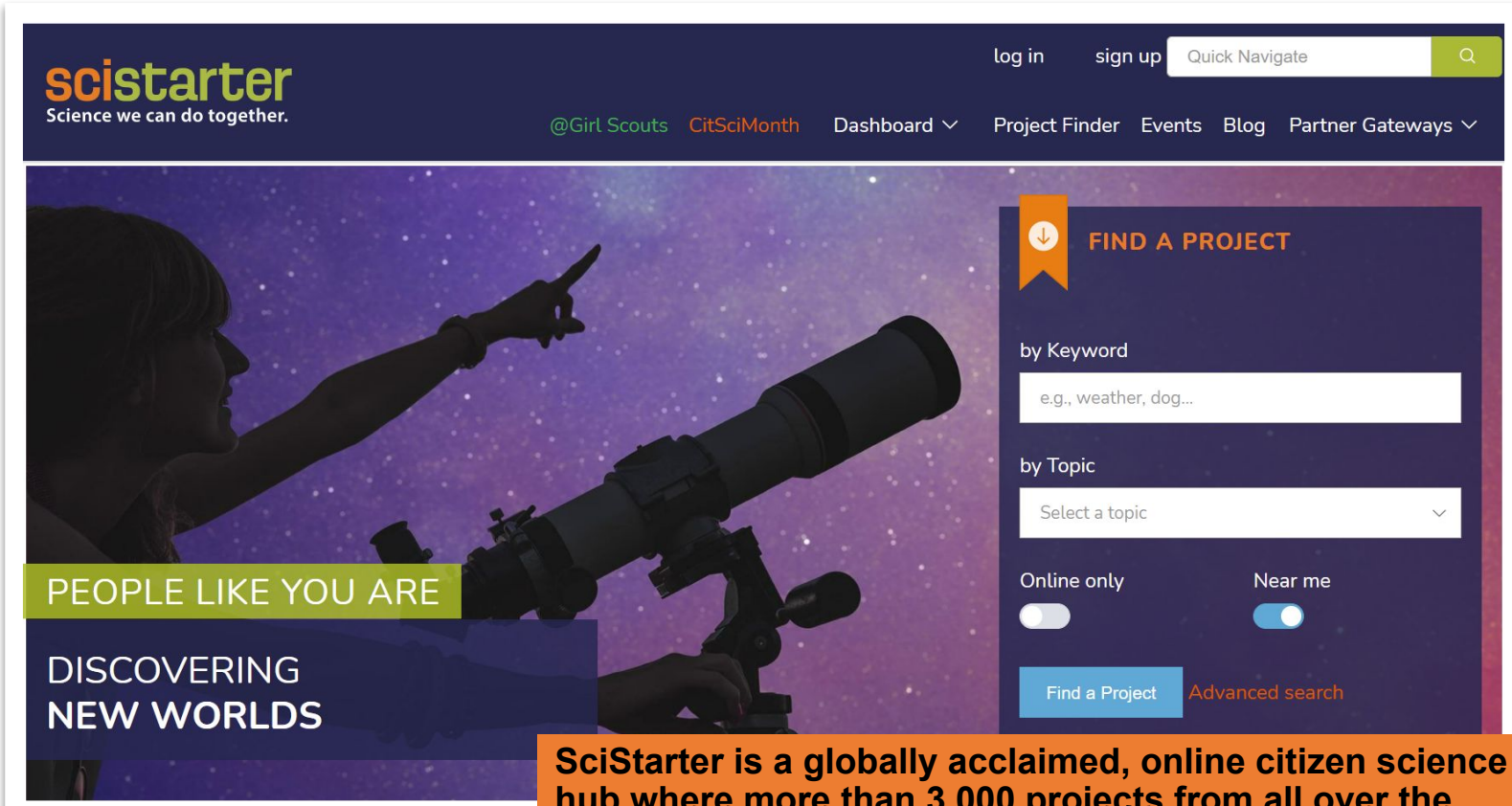

SciStarter is a globally acclaimed, online citizen science hub where more than 3,000 projects from all over the internet have been organized and made searchable!

Choose Citizen Science Projects

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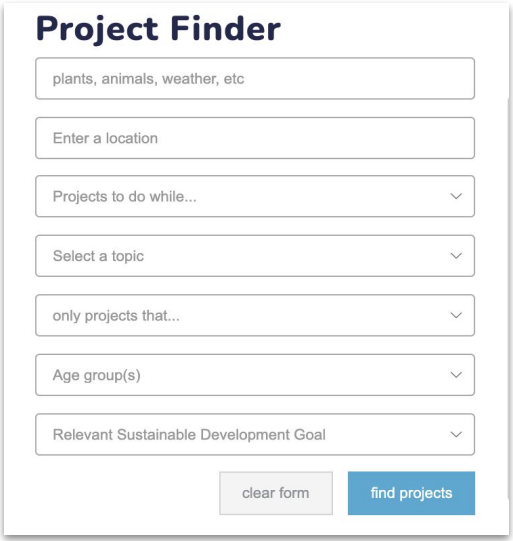
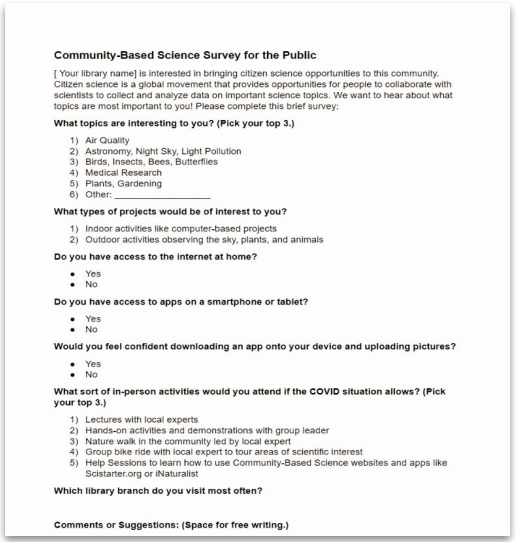
AT YOUR LIBRARY

Ask your community what topics interest them!

- Host a listening session.
- Use the project finder.
- Send out a survey.
- Connect with local civic leaders, scientists, and citizen scientists.
- Check out Scistarter.org/people-finder to make connections in your area.





Community-Based Science Survey for the Public

[Your library name] is interested in bringing citizen science opportunities to this community. Citizen science is a global movement that provides opportunities for people to collaborate with scientists to collect and analyze data on important science topics. We want to hear about what topics are most important to you! Please complete this brief survey:

What topics are interesting to you? (Pick your top 3.)

1) Air Quality
2) Astronomy, Night Sky, Light Pollution
3) Birds, Insects, Bees, Butterflies
4) Medical Research
5) Plants, Gardening
6) Other: _____

What types of projects would be of interest to you?

1) Indoor activities like computer-based projects
2) Outdoor activities observing the sky, plants, and animals

Do you have access to the internet at home?

- Yes
- No

Do you have access to apps on a smartphone or tablet?

- Yes
- No

Would you feel confident downloading an app onto your device and uploading pictures?

- Yes
- No

What sort of in-person activities would you attend if the COVID situation allows? (Pick your top 3.)

1) Lectures with local experts
2) Hands-on activities and demonstrations with group leader
3) Nature walk in the community led by local expert
4) Group bike ride with local expert to tour areas of scientific interest
5) Help Sessions to learn how to use Community-Based Science websites and apps like Scistarter.org or iNaturalist

Which library branch do you visit most often?

Comments or Suggestions: (Space for free writing.)

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Online Training Tutorials

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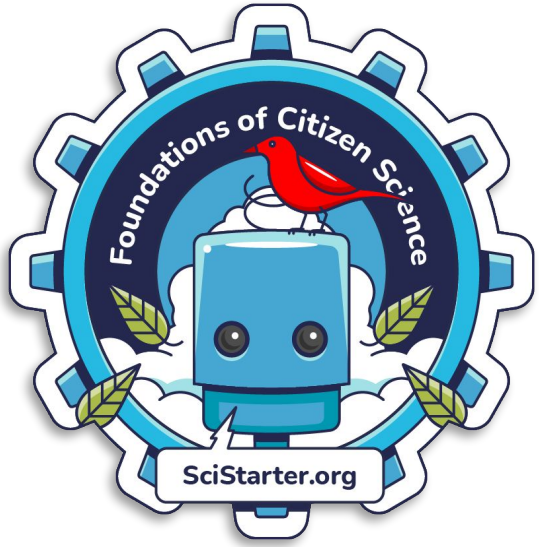

SciStarter.org/training

SciStarter.org/library-training

Online, interactive module created by instructional designers at Arizona State University.

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Build Citizen Science Kits

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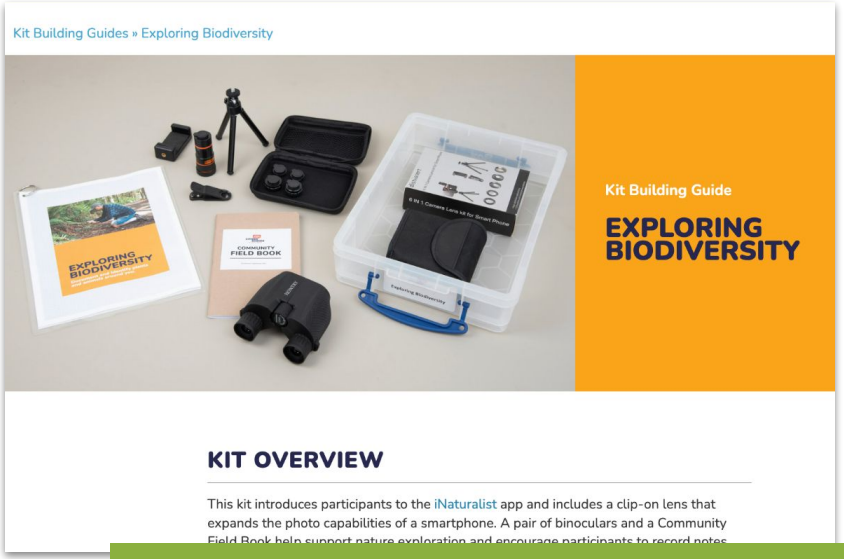

Individual Kit Building Guides
SciStarter.org/library-build-a-kit

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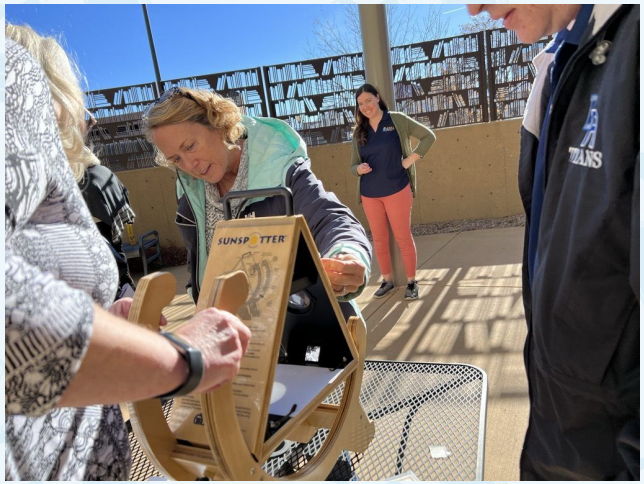
Eclipse Programming Resources

- *STAR Net* STEM Activity Clearinghouse
- *STAR Net* Eclipse Community site
- SEAL Newsletter
- State Library Solar Science Circulation Kits
- Find out more at our April 25th webinar!

Solar Science Kits



- Available through your state library
- Contact your state library for circulation details
- Multigenerational kit for all ages
- Kit geared towards younger learners
- Each kit consists of a container with solar science equipment, a book, and a hands-on activity
- Questions about kits? Contact Sky Reid-Mills sreidmills@spacescience.org

Multigenerational Kit

- Container
- Coronado Personal Solar Telescope (1)
- Telescope Case (1)
- Telescope Mount (1)
- "When the Sun Goes Dark" book
- Large Sunoculars (2)
- Big Sun, Little Moon Activity Guide

Kit for Younger Audiences

- Container
- Sunspotter Telescope
- Moon Bear's Shadow Book
- Moon Bear's Shadow Activity Pieces
- Sunocular minis (2)
- Sorting Game

Upcoming Webinars and Virtual Events

- SEAL Citizen Science Virtual Trainings
  - April 25th
    - Eclipse Programming and Citizen Science
  - May 4th
    - Eclipses and Citizen Science: NASA Globe Observer Eclipse
  - May 16th
    - Eclipses and Citizen Science: Eclipse Soundscapes

Upcoming Webinars and Virtual Events

- Getting Started with SEAL Monthly Webinars
  - May through August
  - Links available in blog post and on *STAR Net* webinar page
- SEAL Virtual Training: What to Expect on Eclipse Day
  - September (TBA)

Upcoming Opportunities

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CITIZEN SCIENCE MONTH

Pollinator Palooza
April 19, 2023
11am Pacific/2pm Eastern

scistarter.org/events

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