

# Citizen Science Resources: Leveraging SciStarter for Participatory Research

**scistarter**

Science we can do together.



# Today's Agenda



**Citizen Science and SciStarter Overview**



**For Project Leaders: How to use free tools**



**For Facilitators, Educators, CBOS: How to use free tools**



**Promoting Your Project or Event during Citizen Science Month**



**Questions**

**Presenters: Darlene Cavalier, Caroline Nickerson, Bradley Allf**

**Special thanks to Dr. Caren Cooper from NC State.**

Millions of  
people enjoy  
science and  
nature.







Thousands of  
scientists need  
volunteers.



*But they can't  
find each other.*



We  
connect  
them.



# Citizen Science

A **collaboration** between researchers and those of us who are curious, concerned and **motivated to make a difference.**

It's how people can make an impact on issues they care about...and help **science!**



# SciStarter connects citizen scientists to over 2,000 projects, events and tools.

The screenshot shows the SciStarter website with a dark blue header. The SciStarter logo is on the left, and navigation links like '@Girl Scouts', 'Training', 'Dashboard', 'Project Finder', 'Events', 'Blog', and 'Partner Gateways' are on the right. A search bar is also present. The main content area features a large image of a woman in a winter hat taking a photo of a tree trunk. Below this image is a section titled 'PEOPLE LIKE YOU ARE HELPING SCIENTISTS COLLECT DATA'. To the right of the image is a 'FIND A PROJECT' sidebar with search filters: 'by Keyword' (with a text input), 'by Topic' (with a dropdown), and location filters 'Online only' and 'Near me'. Below the main image is a section titled 'Find volunteer opportunities that match topics you're curious or concerned about. There's something for everyone!'. This section includes a 'Recommended for chnickerson' box with a robot icon and 'Powered by AI'. Below this is a 'Similar to projects that you like' section with three project cards: 'Monkey Health Explorer', 'Fire Ant Tracker', and 'Cedar Creek: Eyes on the Wild'. To the right of the 'Find a Project' sidebar is an 'Earn a Badge' section with a badge icon and text about learning citizen science basics. At the bottom, there are three sections: 'What is Citizen Science?', 'Benefits for Volunteers', and 'Manage a Project?', each with a 'Learn More' button.

***“SciStarter is the Amazon of Citizen Science,”*** Carl Zimmer, Discover and The New York Times

**2,000+** projects and events

**125,000+** registered, active community  
members

**Millions** of visitors

**scistarter**

**Science we can do together.**

We partner  
to reach  
millions of  
people  
where they  
are.





SciStarter digitally connects and disseminates otherwise siloed citizen science activities and makes engagement trajectories explicitly visible in service to the public, organizers, and researchers



**DATA  
ANALYSIS**

By revealing patterns of engagement, SciStarter revolutionizes assessments, supports deeper engagement across a spectrum of citizen science environments, and drive initiatives to reach new audiences and increase participation.



**RESEARCH AND  
EVALUATION**  
Designed by life-long learning  
researchers and practitioners

- Tools to **organize data** from trusted sources.
- Dashboards to **showcase participation**.
- Embedded assessments to **evaluate outcomes**.
- Analytics to **support outreach** strategies.
- AI-powered **recommendation system**.
- **Social media** integration.



**WORKFLOWS**



## GET STARTED!

Create your SciStarter account

Username

What should we call you?

\* Email

Email address

Zip Code

For finding projects in your area

\* Password

Password

\* Repeat password

Repeat password

☒ Sign up for our newsletter

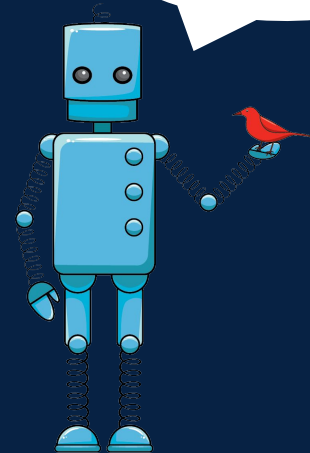
☒ Agree to our [Terms of Use](#)

A SciStarter account is not required, but it saves you time when submitting data, tracks your contributions, and connects you with relevant projects and the wider citizen science community.

Sign up

[Log in](#)

Make a SciStarter Account!



# scistarter

People-powered science.



Add a project



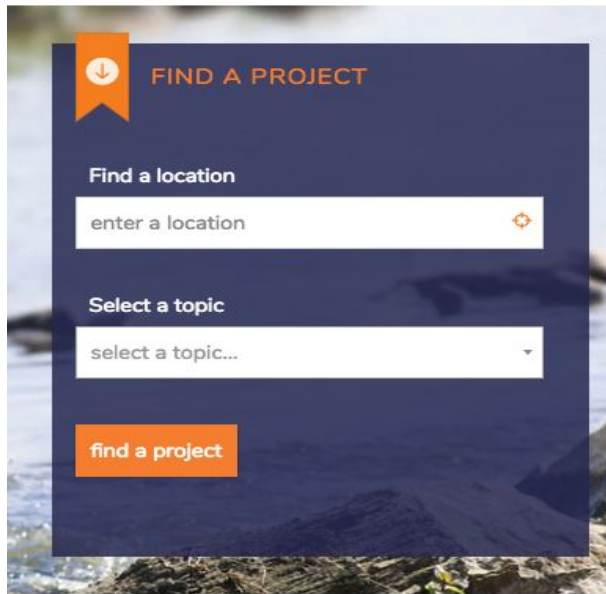
Add an event



Add a tool



User-friendly tools to search thousands of local or global projects spanning disciplines, locations, age groups, interests, skills, time commitments and more.



*Show me what I can do:*

- *in NJ*
- *at the beach*
- *suitable for adults*

## Project Finder

Enter a word or phrase

Enter a location

All Activities

All Topics

× has classroom materials

× elementary school (6-10 years)

× middle school (11-13 years)

× high school (14-17 years) × college

× adults × seniors

clear form

find projects


## Project Finder

plants, animals, weather, etc

Enter a location

Projects to do while... ▾

Select a topic ▾

are SciStarter affiliates  ▾

Age group(s) ▾

Relevant Sustainable Development Goal ▾

[clear form](#) [find projects](#)

1-11 of 189 Newest [Oldest](#)



An [EyesOnALZ](#) game

Human Computation Institute

### Stall Catchers \*

Goal Speed up Alzheimer's research

Task Report stalls, clogged blood vessels, in movies of [more»](#)

Where Online

< 1 2 3 4 5 6 ... 19 >



Project Squirrel

### Project Squirrel \*

Goal Help scientists better understand tree squirrel

Task Count squirrels anytime, anywhere, report findings [more»](#)

Where Global, anywhere on the planet



NASA

### Globe at Night \*

Goal Raise awareness about light pollution.

Task Measure the night sky brightness.

Where Online

# iNaturalist



CALIFORNIA  
ACADEMY OF  
SCIENCES



iNaturalist

### iNaturalist \*

Goal Share observations of biodiversity.

Task Take photos of biodiversity and upload to [more»](#)

Where Global, anywhere on the planet

# Our tools benefit everyone in citizen science!



## Participants

Track and earn credit for their contributions to projects



**843**

Contributions  
to Affiliate Projects ?



**0**

Recent Contributions  
to Affiliate Projects (last 14 days)



**Saved and Visited Projects**

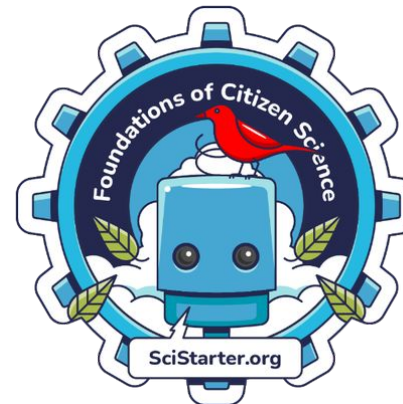
Review later & join!

**148**



**My Events**

Events you participate in



## Personalized Dashboards Feature:

- Find recommended projects
- Track your contributions across projects and platforms
- Display your profile and accomplishments

The screenshot displays the SciStarter dashboard interface. At the top, the SciStarter logo and tagline "Science we can do together." are on the left, and navigation links "My Account", "Project Finder", "Event Finder", and "Calendar" are on the right. A left sidebar contains a menu with "My Account", "Dashboard", "My Projects, Bookmarks & Events" (highlighted), "My Messages", "My Profile", "Account Settings", "My Interests & Tools", and "My Places". The main content area features three tabs: "My Projects" (selected), "My Bookmarks", and "My Events". Below the "My Projects" tab, a card for the "NASA GLOBE Observer: Clouds" project is shown. This card includes the project name, a URL, the join date "06/20/2017", a line graph titled "YOUR PARTICIPATION HISTORY" showing participation levels over time, and a "participate now" button. A "RELATED PROJECTS:" section is visible at the bottom of the card.

**SciStarter**  
Science we can do together.

[My Account](#) [Project Finder](#) [Event Finder](#) [Calendar](#)

**My Account**

**Dashboard**

**My Projects, Bookmarks & Events**

**My Messages**

**My Profile**

**Account Settings**

**My Interests & Tools**

**My Places**

**My Projects**  
Projects you participate in

**My Bookmarks**  
Save projects to review later

**My Events**  
Events you participate in

**NASA GLOBE Observer: Clouds**  
</project/16830-NASA-GLOBE-Observer%3A-Clouds>  
Joined: 06/20/2017

**YOUR PARTICIPATION HISTORY**

Participation Level
8
8
1
3
1
3

**LAST PARTICIPATION**  
**06/20/2017**

**participate now**

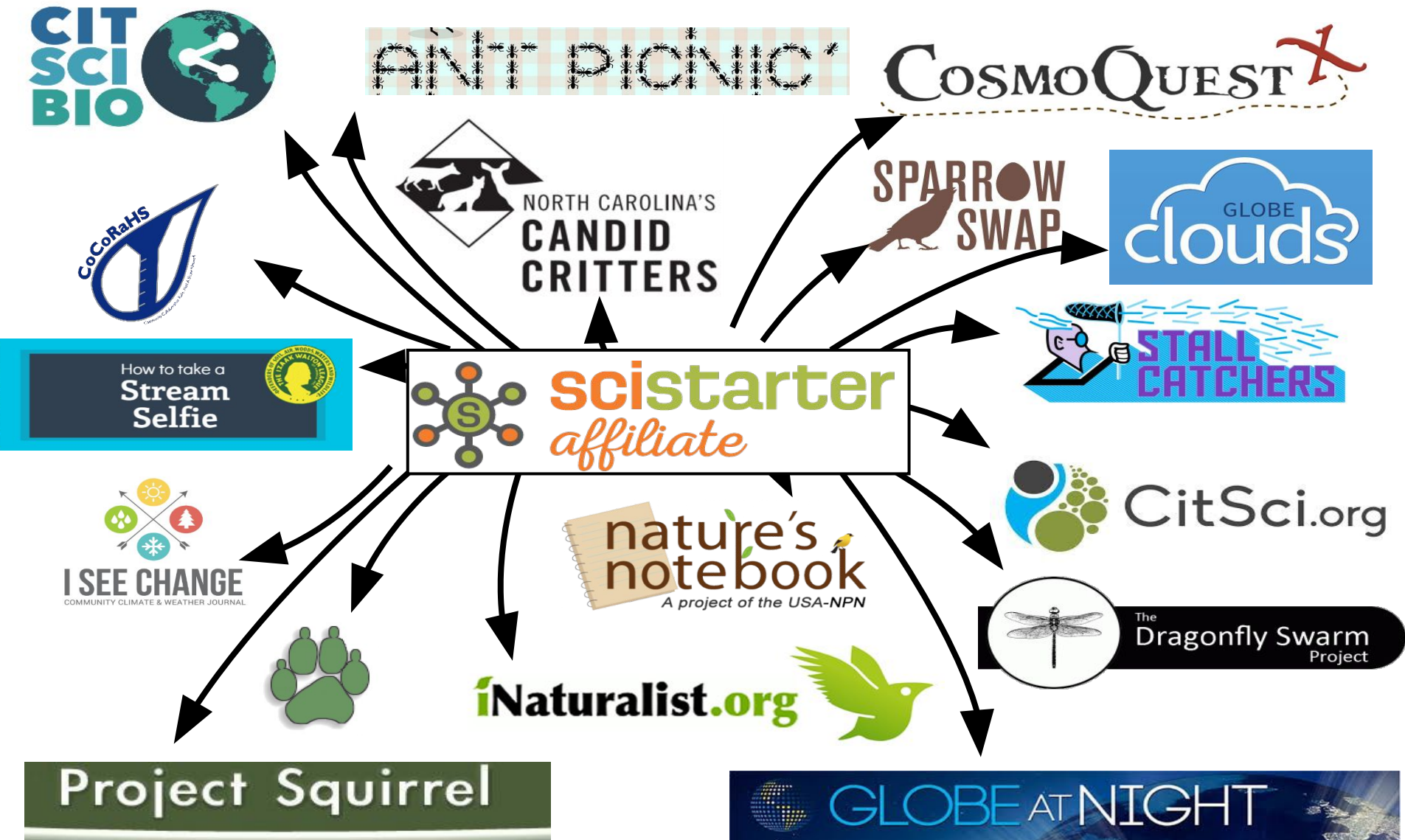
**more actions**

**RELATED PROJECTS:**

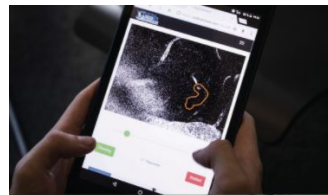


# RESEARCH

Track contributions & earn credit for hundreds of SciStarter Affiliate projects.

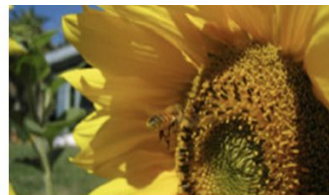


# Find select affiliates at [SciStarter.org/Affiliates](http://SciStarter.org/Affiliates)



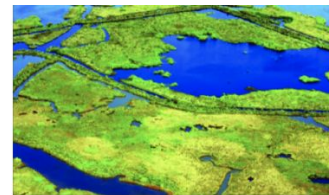
## STALL CATCHERS

Accelerate Alzheimer's research by playing an online game.



## THE GREAT SUNFLOWER PROJECT

Identify if pollinators are declining to help improve their habitats.



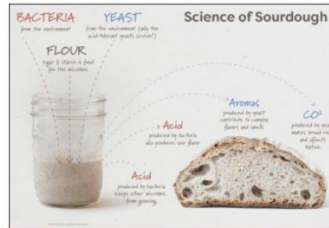
## LAND LOSS LOOKOUT

Monitor land loss on the Mississippi River Delta.



## BUDBURST

Help scientists by observing seasonal changes in plants.



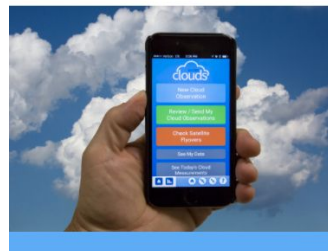
## SOURDOUGH FOR SCIENCE

Learn how microbes affect the rise and flavor of bread.



## GLOBE OBSERVER: TREES

Help NASA measure tree height using your smartphone.



## “How To” videos on YouTube and Facebook.



7 **Become a citizen scientist with Ant Picnic on SciStarter**  
SciStarter  
0:55



8 **Learn how to be a citizen scientist and advance research about squirrels on SciStarter**  
SciStarter  
2:07



9 **Help create the first-of-its-kind map of streams with Stream Selfie on SciStarter**  
SciStarter  
1:08



10 **How to hunt ZomBees and become a citizen scientist on SciStarter**  
SciStarter  
1:51



11 **How to become a Citizen Scientist through Ocean Eyes on SciStarter**  
SciStarter  
1:40



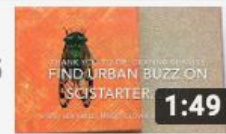
12 **How to use the SciStarter Affiliate Tools for your Citizen Science Project**  
SciStarter  
6:48



13 **Measure the snow, help the planet! SciStarter**  
SciStarter  
2:03



14 **Learn how to be a Mosquito Mapper with NASA SciStarter**  
SciStarter  
2:12



15 **How to Participate in Urban Buzz on SciStarter**  
SciStarter  
1:49



16 **How To Volunteer to Survey Fish Populations SciStarter**  
SciStarter  
2:04



17 **How to make the most of SciStarter as a citizen scientist SciStarter**  
SciStarter  
7:35



18 **How to participate in Landslide Reporter (COOLR) SciStarter**  
SciStarter  
1:10



19 **How To Help NASA Create a Global Map of Land Coverage SciStarter**  
SciStarter  
0:49

Find dozens of informative, brief, “How To” videos on SciStarter’s YouTube channel and Facebook page.



# Training for Beginners

1. **R**ecognize what citizen science is and how it can be used to address real-world questions in collaboration with others.
2. **A**rticulate how participating in citizen science benefits science and society.
3. **R**ecognize who can participate in different citizen science projects.
4. **R**ecall the types of citizen science projects you can participate in, the skills you can practice or acquire, and the ways you can advance real-world research.
5. **R**ecall what SciStarter is and how it can connect you to citizen science projects and help you track your participation.

**[SciStarter.org/training](https://SciStarter.org/training)**



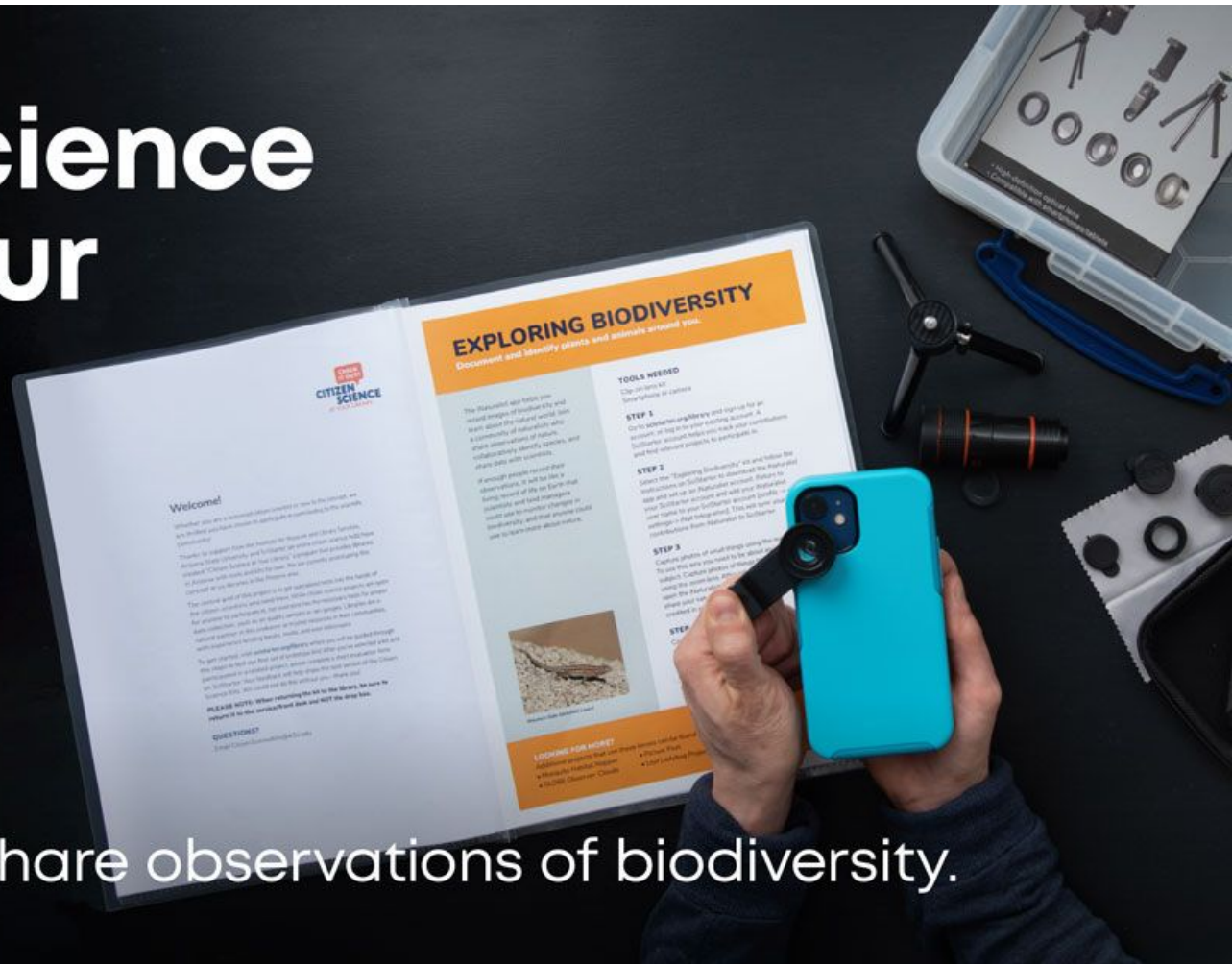
# Tools and Resources through Libraries!

## Citizen Science Kits at Your Library

CHECK ONE OUT!

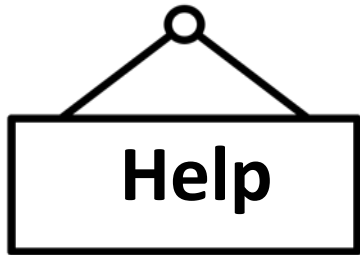
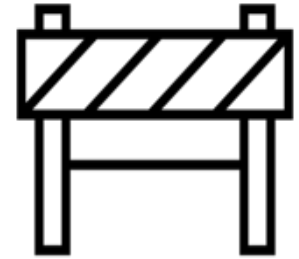
**MARIANA:**

Getting ready to share observations of biodiversity.



ASU and SciStarter partner with public libraries to advance citizen science.

**Lower Barriers** to participate in projects that require tools



citizen scientists & scientists find & access the right tools

Partner with **libraries** and **museums** to curate, bundle projects, tools, instructions into kits so people can do >1 project



# Our tools benefit everyone in citizen science!



## Project Leaders

Amplify projects, recruit more participants, and learn more about participants' experiences and interests while advancing scientific research



## Participation API

Amplify your project, recruit more participants, and help your volunteers earn credit for contributions to your project.

### BEST FOR:

- Project owners that want to be part of our **affiliate program** which allows your project to be eligible for inclusion in special, curated programming with the Girl Scouts, Discover, PBS, Nature, schools, universities, libraries, and more!

[SciStarter.org/API](https://SciStarter.org/API)



# Our tools benefit everyone in citizen science!

## People Finder

Use our People Finder tool to find and invite members of the SciStarter community to participate in your project or event.

Drag the circle's border to resize it, or drag the map to another spot.

- ✓ 3903 Participants
- ✓ 78 Project Owners

Contact these people

Leaflet | © OpenStreetMap contributors



# Our tools benefit everyone in citizen science!

Project Recruitment Volunteer Manager Messages **Stats** Tools

## Project Stats



### Events

How users interact with your project on SciStarter



### Users

Information and Demographics



### Feedback

Joins and Non-joins Explored



### Contributions

Tracked through your affiliate tools

### All-Time Stats

Updated: Feb. 18, 2022 04:58



**98,202**

Views ?  
All-Time

Your participants' median across all projects : 526.0



Your participants' mean across all projects : 3448.9



**11,831**

Visits ?  
All-Time

Your participants' median across all projects : 6.0



Your participants' mean across all projects : 54.7



**813**

Saves ?  
All-Time

Your participants' median across all projects : 4.5



Your participants' mean across all projects : 24.0



**9,168**

Joins ?  
All-Time

Your participants' median across all projects : 3.0



Your participants' mean across all projects : 53.0

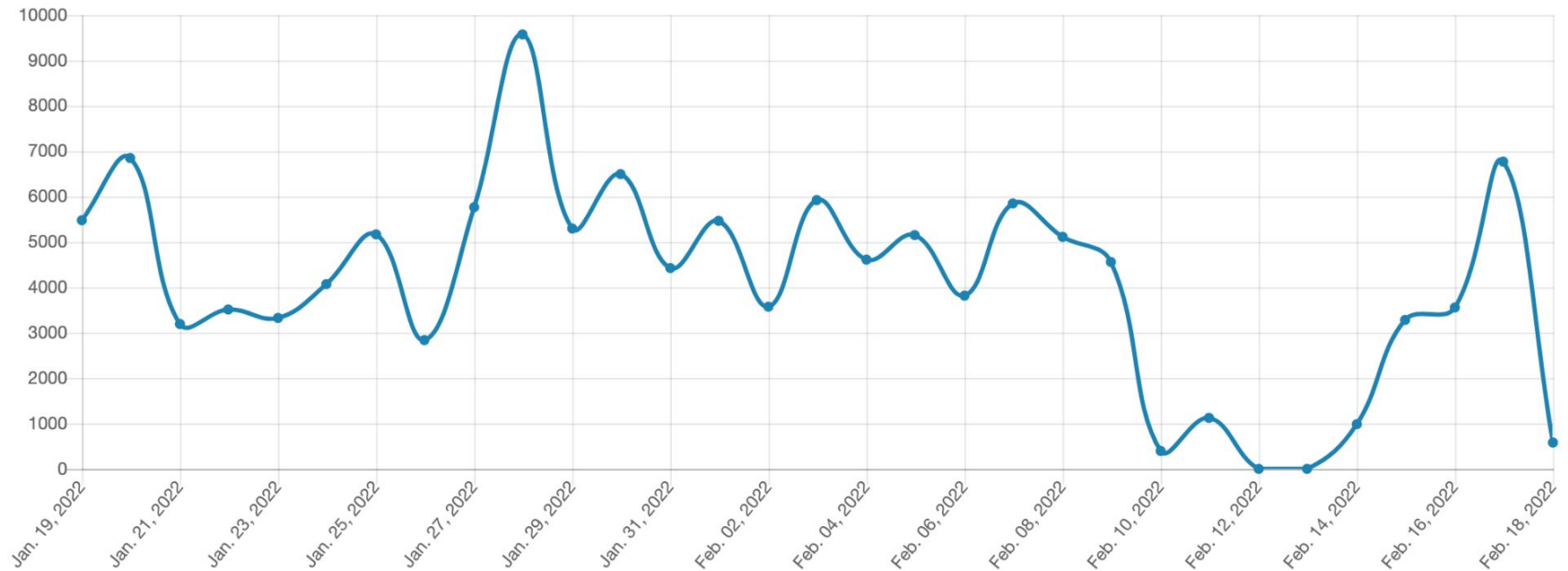


# Our tools benefit everyone in citizen science!

## Contribution Trend Graph

Last 30 Days ▾

Contributions

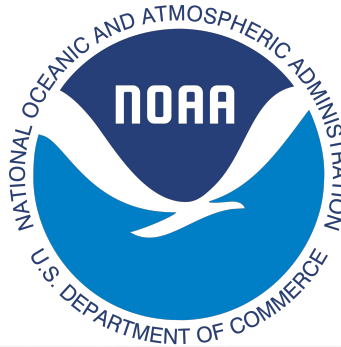


# Our tools benefit everyone in citizen science!



## Organizations

Including Girl Scouts USA, Discover, PBS, school districts, college campuses, libraries and others share projects from SciStarter with their communities and acquire evidence needed to award badges, credits, and recognition



America250 Foundation



Partner



**All of Us**  
RESEARCH PROGRAM

**verizon**✓



**NC STATE UNIVERSITY**

Citizen Science Campus



**Arizona State University**

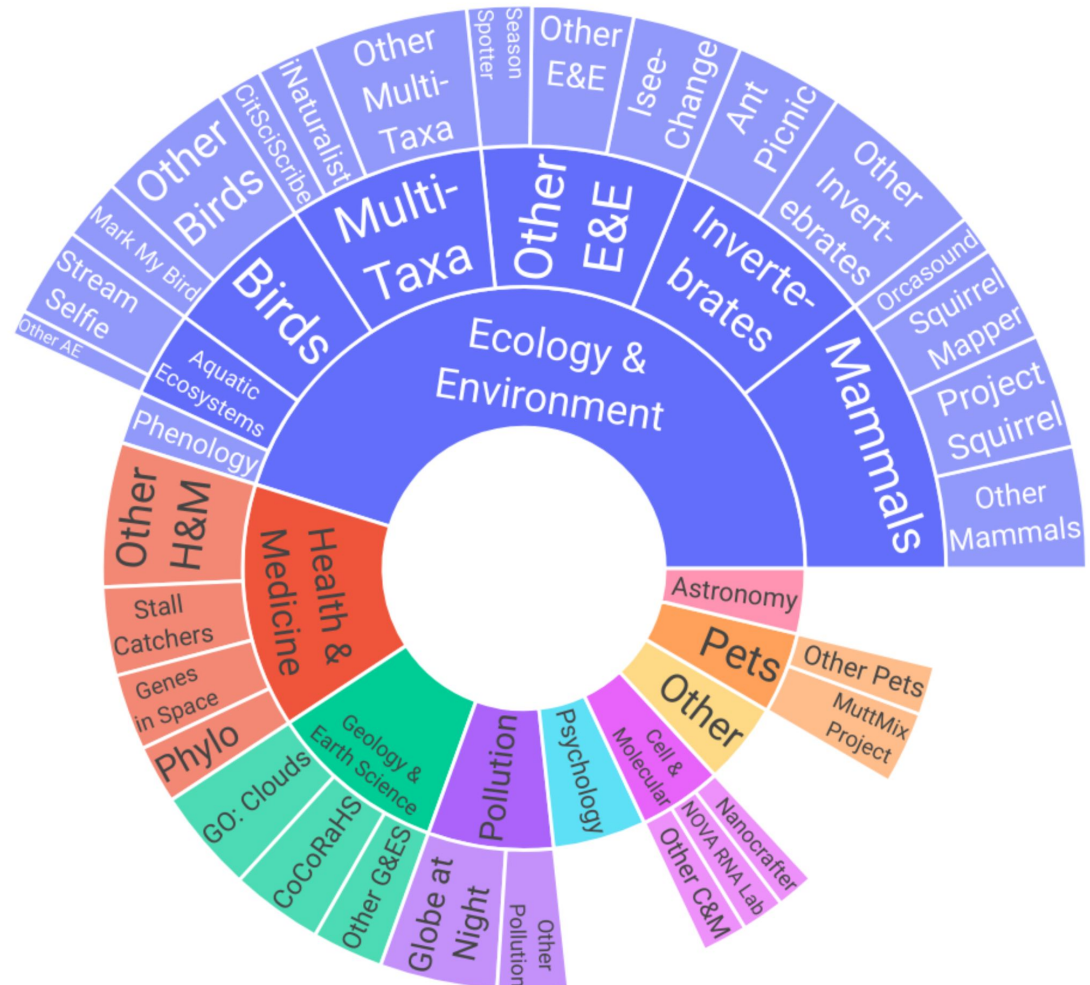
# Our tools benefit everyone in citizen science!



## Researchers

Learn more about the motivations, behaviors, and learning outcomes of participants

## Projects Joined by SciStarter Vols





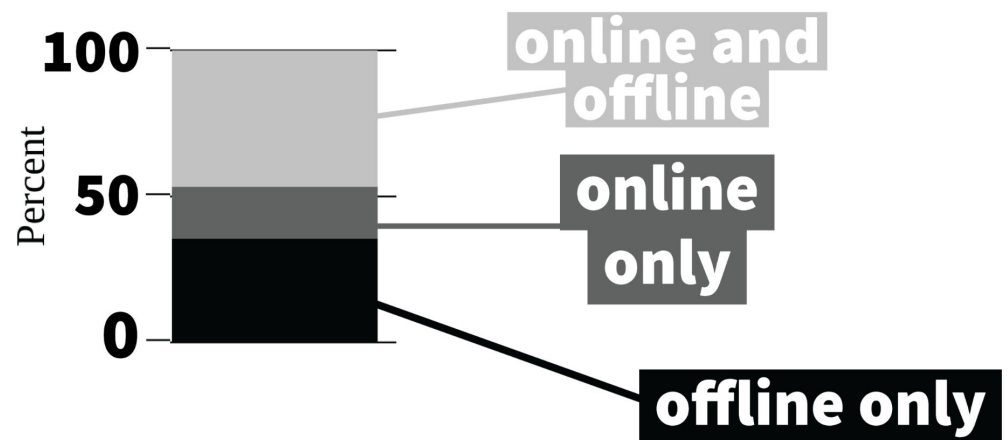
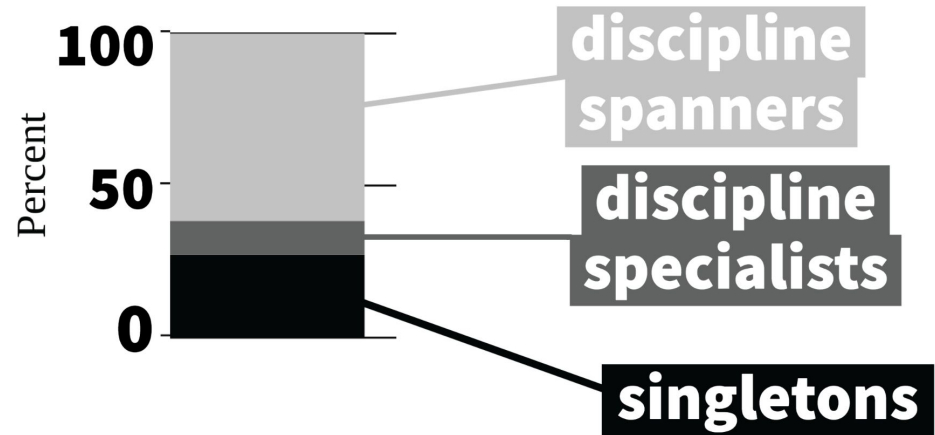
# Our tools benefit everyone in citizen science!



## Researchers

Learn more about the motivations, behaviors, and learning outcomes of participants

## SciStarter Volunteers' Participation in the CitSci Ecosystem



# Our tools benefit everyone in citizen science!



## Researchers

Learn more about the motivations, behaviors, and learning outcomes of participants

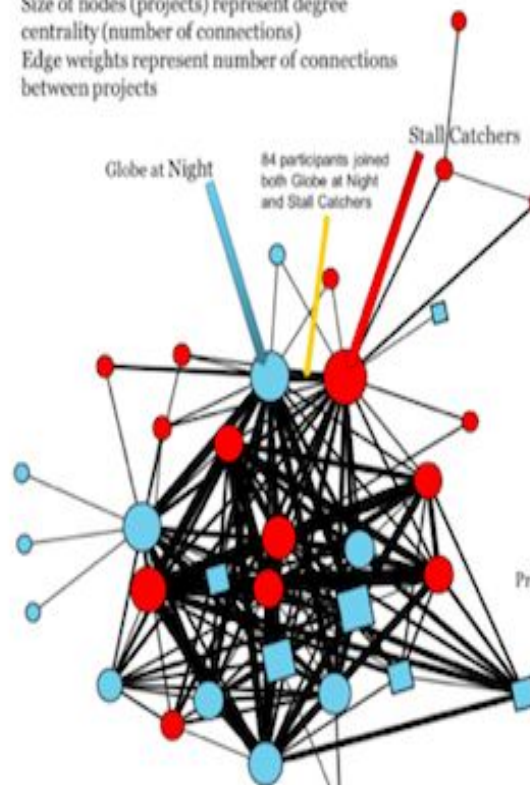
## A Social Network Analysis

Sara Futch, Lincoln Larson, and Caren Cooper

### Connected Projects within the SciStarter Network

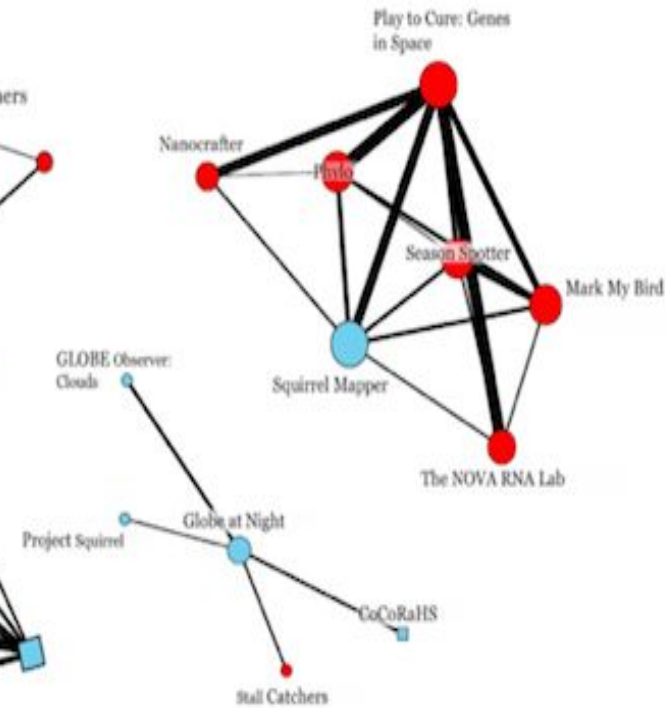
Size of nodes (projects) represent degree centrality (number of connections)

Edge weights represent number of connections between projects



### A Closer Look at the Strongest Connections

Projects with 70+ shared volunteers



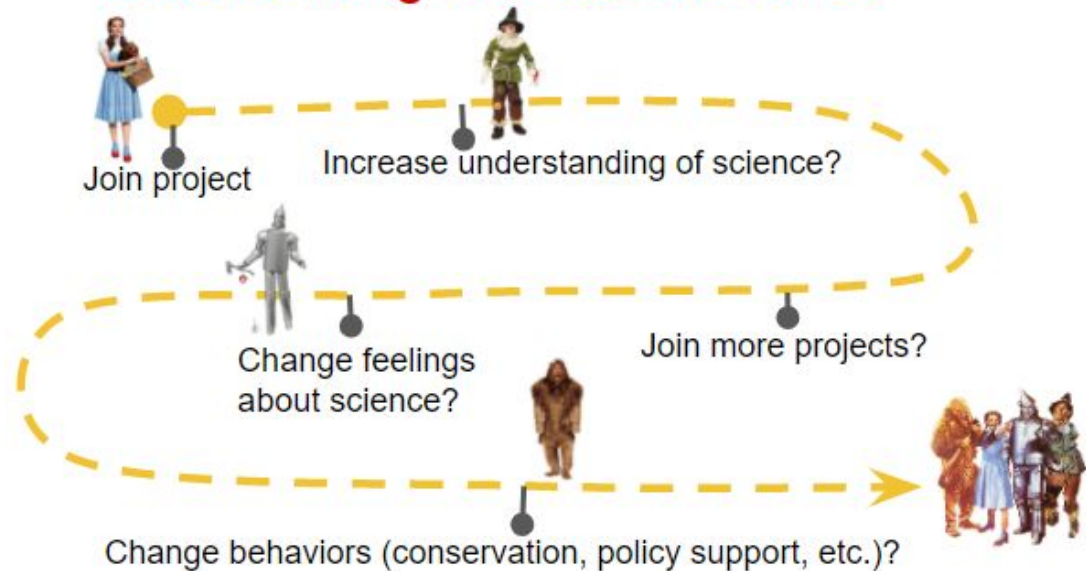
# Our tools benefit everyone in citizen science!

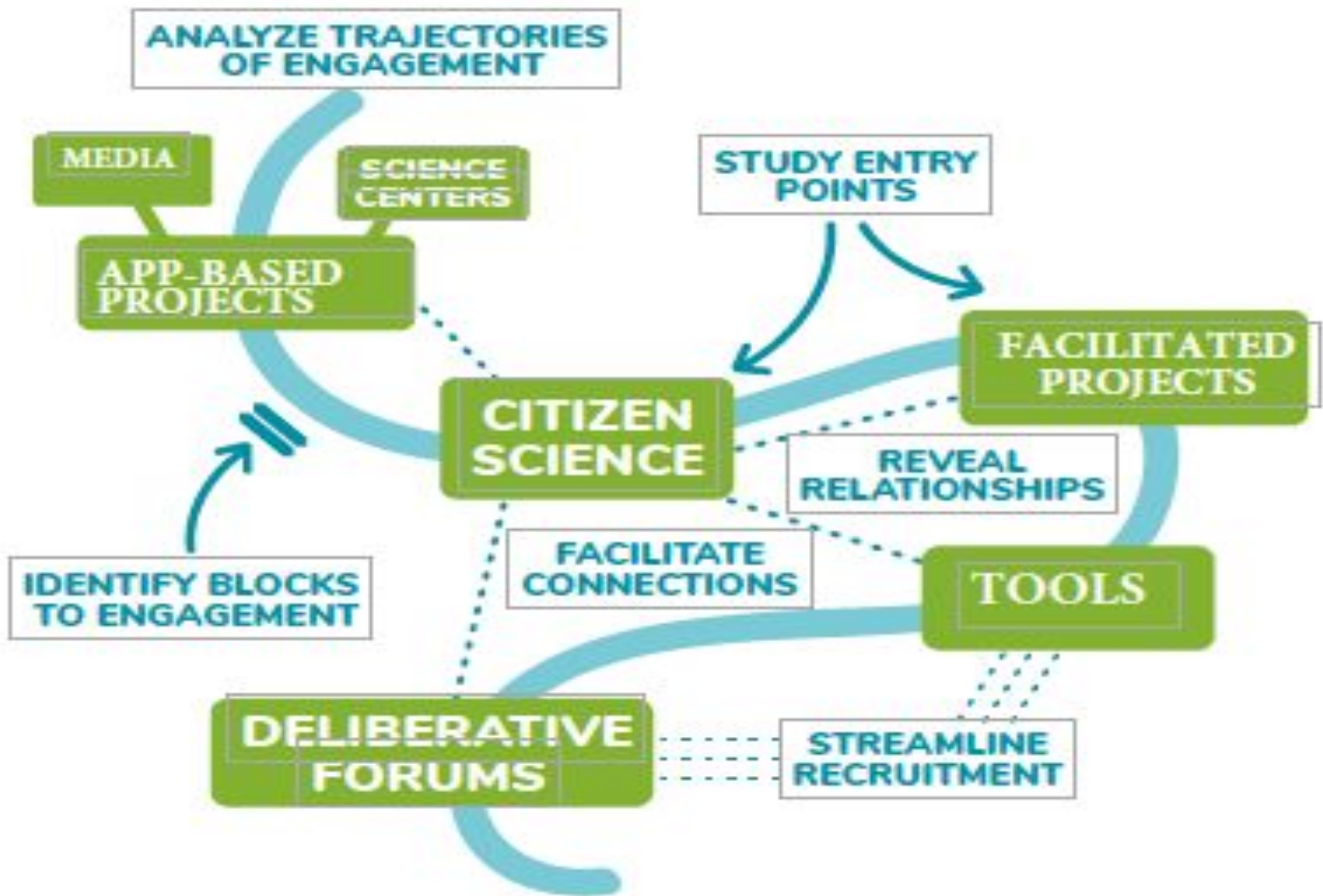


## Researchers

Learn more about the motivations, behaviors, and learning outcomes of participants

## Understanding Volunteer Outcomes





SciStarter provides researchers with unprecedented data on the landscape of projects, as well as when, where, why and how people engage across the spectrum of citizen science.



# Our tools benefit everyone in citizen science!




## Website Owners


Add citizen science to their websites through an embeddable project finder widget

[SciStarter.org/widget/new](https://scistarter.org/widget/new)


## Widget preview


Science we can do together



Speed up Alzheimer's research 


**Or find other projects**

pick an activity 


pick a topic... 

search keywords

☐ Near me, or global

powered by SciStarter 

**find them**



## Widget embed code

```
<iframe src="https://scistarter.org/ui/widget?
widget=53&style=header&layout=horizontal-project-finder&type=featured"
width="470" height="306"></iframe>
```

Used by libraries, museums, schools, PBS, media partners and others.

## Free, Plug-and-Play, Customizable “Project Finder Widgets”



The SciGirls website features a colorful, cartoonish design. At the top, there's a navigation bar with links for ACTIVITY, APPS, VIDEOS, GAMES, and PROFILES. The main header includes the SciGirls logo and a tagline: "Citizen Science Fun for All!". Below this, there's a section for downloading the "Nature Nurture" Journal. A prominent "Find a project!" section includes a brief explanation of citizen science and a search widget. The widget has dropdown menus for "Pick an activity" and "Pick a topic", a text input for "Keywords", and a "Search" button.

**Find a project!**

Citizen science happens when ordinary people study the world around them and send in the data they collect to scientists. Anyone can do citizen science!

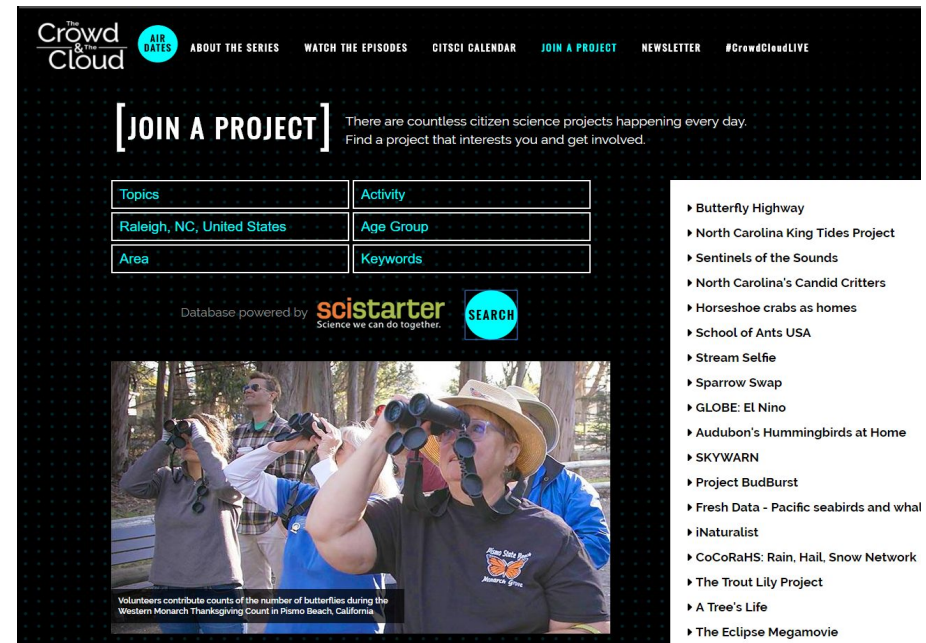
Special thanks to [SciStarter](#) for sharing their project database. Visit their site for advanced searches.

**Pick an activity**  
-- Select an activity --

**Pick a topic**  
-- Select a topic --

**Keywords**  
[Text Input]

**Search**



The Crowd & the Cloud website has a dark theme with a grid pattern. The navigation bar includes links for AIR DATES, ABOUT THE SERIES, WATCH THE EPISODES, CITSCI CALENDAR, JOIN A PROJECT, NEWSLETTER, and #CrowdCloudLIVE. The main section is titled "JOIN A PROJECT" and includes a brief description: "There are countless citizen science projects happening every day. Find a project that interests you and get involved." Below this is a search form with two columns: Topics and Activity. The Topics column has a dropdown for "Raleigh, NC, United States" and a text input for "Area". The Activity column has a dropdown for "Age Group" and a text input for "Keywords". A "SEARCH" button is located to the right of the form. Below the search form, there's a section titled "Database powered by SciStarter" with a "SEARCH" button. A photo of volunteers using binoculars is shown, with a caption: "Volunteers contribute counts of the number of butterflies during the Western Monarch Thanksgiving Count in Pismo Beach, California." On the right side, there's a list of projects:

- Butterfly Highway
- North Carolina King Tides Project
- Sentinels of the Sounds
- North Carolina's Candid Critters
- Horseshoe crabs as homes
- School of Ants USA
- Stream Selfie
- Sparrow Swap
- GLOBE: El Nino
- Audubon's Hummingbirds at Home
- SKYWARN
- Project BudBurst
- Fresh Data - Pacific seabirds and whal
- iNaturalist
- CoCoRaHS: Rain, Hail, Snow Network
- The Trout Lily Project
- A Tree's Life
- The Eclipse Megamovie

Add Citizen Science to your website in minutes.

## Find or ADD events.

### Event Finder

[Add to SciStarter](#)

search map

- ☒ Events anywhere
- ☐ Only online events
- ☐ Near my current location
- ☐ At a location

Pick a start date

Pick an end date

#### What type of event?

Select one or more event types

clear form

find events



#### The Great Backyard Bird Count

02/01/2022 to 02/28/2022

Regional



#### Citizen Science Story Time

02/10/2022 to 03/10/2022

Online only



#### "Birds" A Citizen Science Story Time

02/10/2022 to 03/10/2022

Online only



#### STEAM Club: Unboxing our Citizen Science Kits

02/11/2022 to 03/10/2022

Online only

# Let's demonstrate: How To Add Your Project or Event to SciStarter



Add a project



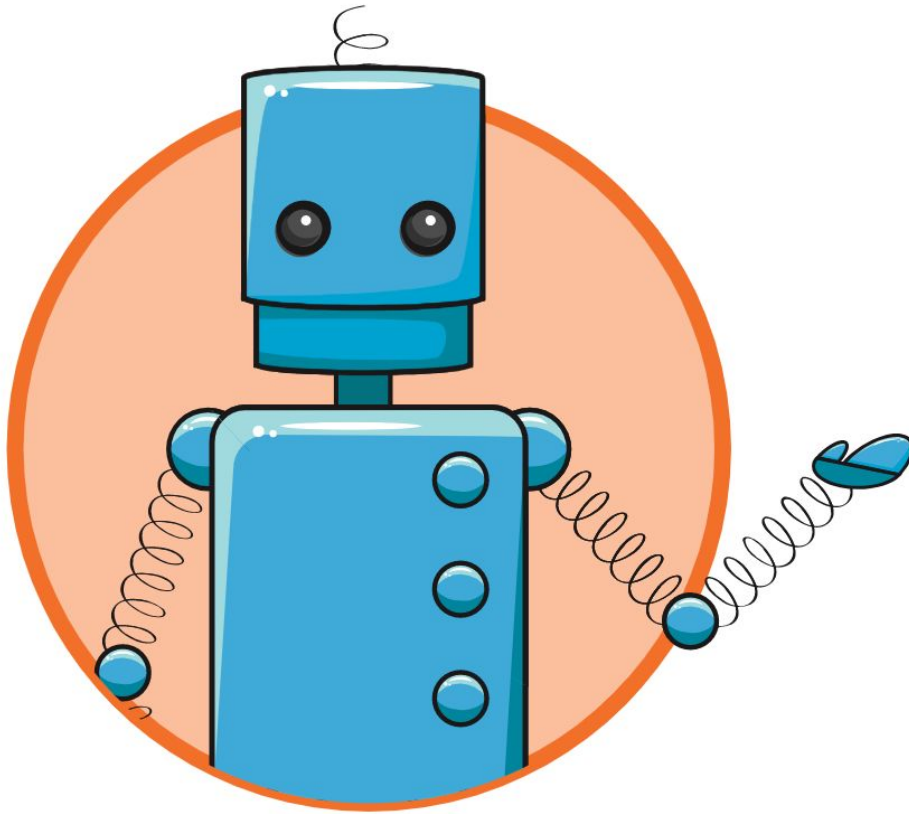
Add an event



Add a tool



# Let's demonstrate: How To Become an Affiliate



Various options:

- API
- Integration with iNaturalist, Zooniverse, CitSci.org, or Anecdota.org
- Form hosted on SciStarter
- ...something else! Get in touch with your specific request:  
[info@SciStarter.org](mailto:info@SciStarter.org)

# Let's demonstrate: How To Use Your Project Leader Dashboard

## Project Stats



### All-Time Stats

Updated: Feb. 17, 2022 09:09

 **62,433**  
Views   
All-Time

Your participants' median across all projects : 526.0



Your participants' mean across all projects : 3447.1



 **2,171**  
Visits   
All-Time

Your participants' median across all projects : 6.0



Your participants' mean across all projects : 54.7



 **739**  
Saves   
All-Time

Your participants' median across all projects : 4.5



Your participants' mean across all projects : 24.0



 **733**  
Joins   
All-Time

Your participants' median across all projects : 3.0



Your participants' mean across all projects : 53.0



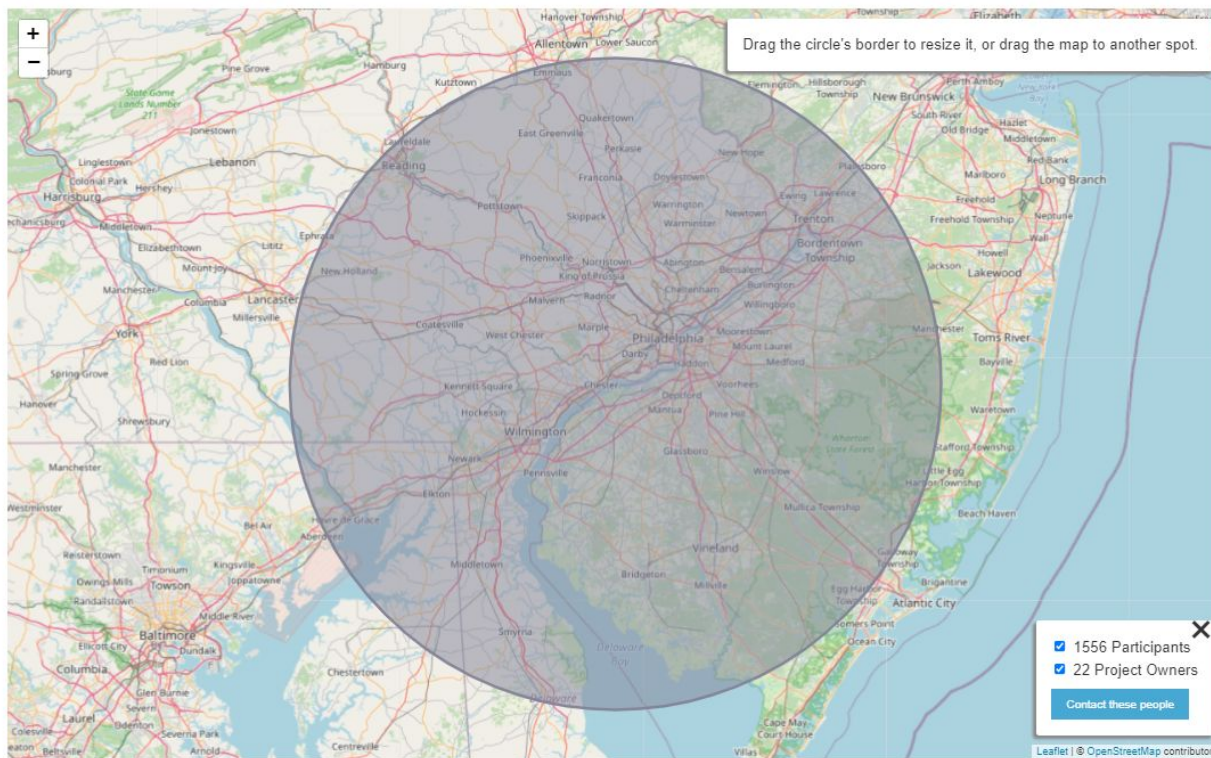
### Last 30 Days

Updated: Feb. 17, 2022 09:09

# Let's demonstrate: How To Use the People Finder

## People Finder

Use our People Finder tool to find and invite members of the SciStarter community to participate in your project or event.



# Tools for educators and facilitators!

- [SciStarter.org/education](https://SciStarter.org/education)
- SciStarter Lists
- Citizen Science Month Programming





Citizen science is an excellent way to address these Science & Engineering Practices of the Next Generation Science Standards (NGSS):

1. Asking questions (for science) and defining problems (for engineering)
2. Developing and using models
3. Planning and carrying out investigations
4. Analyzing and interpreting data
5. Using mathematics and computational thinking
6. Constructing explanations (for science) and designing solutions (for engineering)
7. Engaging in argument from evidence
8. Obtaining, evaluating, and communicating information

View the Introduction to SciStarter Video.



## What is Citizen Science?

### Projects for Grades PreK-2 and Up



#### SEEK

Get outside, explore and learn about the nature all around you!



#### THE GREAT SUNFLOWER PROJECT

Identify where pollinators are declining to help improve their habitats.



#### ANT PICNIC

Study the dietary preferences of ants.

List View

Stats View

## Find a project

Choose a project from this page or search through thousands more options with our Project Finder.

Find a Project

[Advanced search](#)

## For Class A

Hi, check out these great projects!



Human Computation Institute

### Stall Catchers \*

Goal Speed up Alzheimer's research

Task Report stalls, clogged blood vessels, in movies of mice's [more»](#)

Where Online



NASA

### Globe at Night \*

Goal Raise awareness about light pollution.

Task Measure the night sky brightness.

Where Global, anywhere on the planet



Logo by ZevRoss Spatial Analysis

### Crowd the Tap \*

Goal We're creating a national inventory of tap water pipes.

Task Volunteers will test tap water pipes to determine their [more»](#)

Where Global, anywhere on the planet



ISEECHANGE

### ISeeChange \*

Goal Connecting communities to investigate weather and [more»](#)

Task Share observations and questions to document climate [more»](#)

Where Global, anywhere on the planet

*This is a list!*

# What is Citizen Science Month?

Citizen Science Month is a **month-long celebration** in April that features **hundreds of events hosted by libraries** to help build awareness of and engagement in citizen science!



# Last year's results: Citizen Science Month 2021

- **250+** events resulting in more than **350,000** data contributions to projects
- **Two-thirds** of survey respondents said Citizen Science Month helped change the way they think about libraries and the services libraries provide
- **100%** of event organizers reported CitSciMonth **matched or exceeded expectations**
- More than **one million people** reached through social media!



**Add your own event  
and use free resources  
to plan and promote it**

**FREE RESOURCES:**

**CitizenScienceMonth.org**



# CitizenScienceMonth.org/Resources



**CITIZEN  
SCIENCE  
MONTH**

**You can make  
an impact!**


Learn how your  
contributions can lead  
to new discoveries.

**GET STARTED!**


Find local events and projects  
to turn your curiosity into impact.  
[CitizenScienceMonth.org](http://CitizenScienceMonth.org)




**FEATURED CITIZEN SCIENCE PROJECTS INCLUDE:**




**Flu Near You**  
Help scientists predict flu outbreaks  
by sharing your symptoms online.



**Globe at Night**  
Measure light pollution—which affects wildlife  
patterns and even human health—while stargazing.



**Flu Near You**  
Help scientists predict flu outbreaks  
by sharing your symptoms online.



**Debris Tracker**  
Use an app to record debris  
and help protect the environment.

**Find your mission**

**THIS IS CITIZEN SCIENCE**

Learn more about  
Science



WE CONGRATULATE

FOR CONTRIBUTING TO  
THE FOLLOWING  
CITIZEN SCIENCE  
PROJECTS:

  
Arizona State University

[SciStarter.org](http://SciStarter.org)

**Tell us!**

What citizen science projects have you participated in?  
What are you interested in investigating through citizen science?



**WHAT IS CITIZEN SCIENCE?**

Citizen science is a collaboration between scientists and  
everyday people that helps accelerate research and discovery,  
from astronomy to zoology. SciStarter.org can match you to the  
right project based on your interests, location, and favorite  
activities. You can make an impact!

**CITIZEN  
SCIENTIST**

[SCISTARTER.ORG](http://SCISTARTER.ORG)

- **Sign up for facilitator updates:**  
<https://CitizenScienceMonth.org/MailingList>
- **Add your program/event to SciStarter:**  
[SciStarter.org/add-event](https://SciStarter.org/add-event)



# Follow-up

- Contact SciStarter ([info@SciStarter.org](mailto:info@SciStarter.org)) if you're interested in:
  - learning more about citizen science or SciStarter
  - becoming an affiliate project to be included in partner programs
  - sponsoring your own customized, curated page
  - Free resource flier:  
[https://media.scistarter.org/curated/SciStarter+flier\\_project+leaders\\_educators.pdf](https://media.scistarter.org/curated/SciStarter+flier_project+leaders_educators.pdf)