

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 displays the SciStarter website interface. At the top left is the SciStarter logo with the tagline "Science we can do together." The top right features a user profile for "chrickerson" and a search bar labeled "Quick Navigate". A navigation menu includes links for "@Girl Scouts", "Training", "Dashboard", "Project Finder", "Events", "Blog", and "Partner Gateways".

The main content area is divided into several sections:

- Hero Section:** A large image of a woman in winter gear taking a photo of a tree trunk. Text overlay reads "PEOPLE LIKE YOU ARE HELPING SCIENTISTS COLLECT DATA". To the right is a "FIND A PROJECT" sidebar with search filters: "by Keyword" (input field), "by Topic" (dropdown menu), "Online only" (checkbox), and "Near me" (checkbox). Buttons for "Find a Project" and "Advanced search" are at the bottom.
- Find volunteer opportunities:** A text-based section stating "Find volunteer opportunities that match topics you're curious or concerned about. There's something for everyone!".
- Recommended for chrickerson:** A section titled "Recommended for chrickerson Powered by AI" showing "Similar to projects that you like" with three project cards: "Monkey Health Explorer", "Fire Ant Tracker", and "Cedar Creek: Eyes on the Wild". A "see more recommendations" button is at the bottom.
- Earn a Badge:** A section with a gear icon and text: "Learn citizen science basics, participate in projects and make the most of SciStarter in a self-guided, free training module." Below is a circular badge icon.
- What is Citizen Science?:** A section with a brief description and a "Learn More" button.
- Benefits for Volunteers:** A section with a brief description and a "Learn More" button.
- Manage a Project?:** A section with a brief description and 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

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.

- 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.



**DATA
ANALYSIS**



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



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

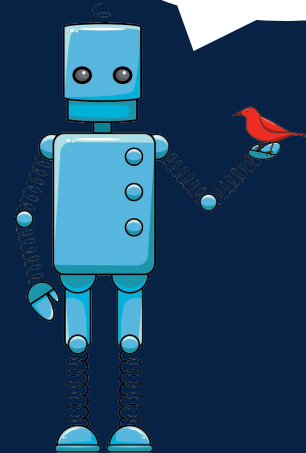
- Sign up for our newsletter
- Agree to our [Terms of Use](#)

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

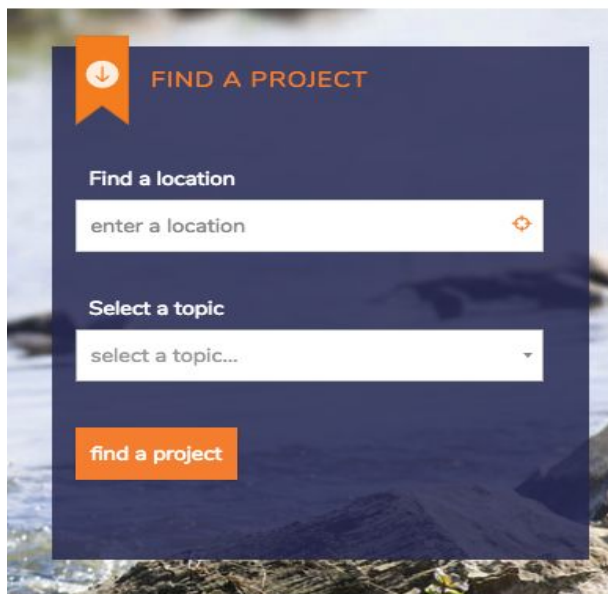


Add an event



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.

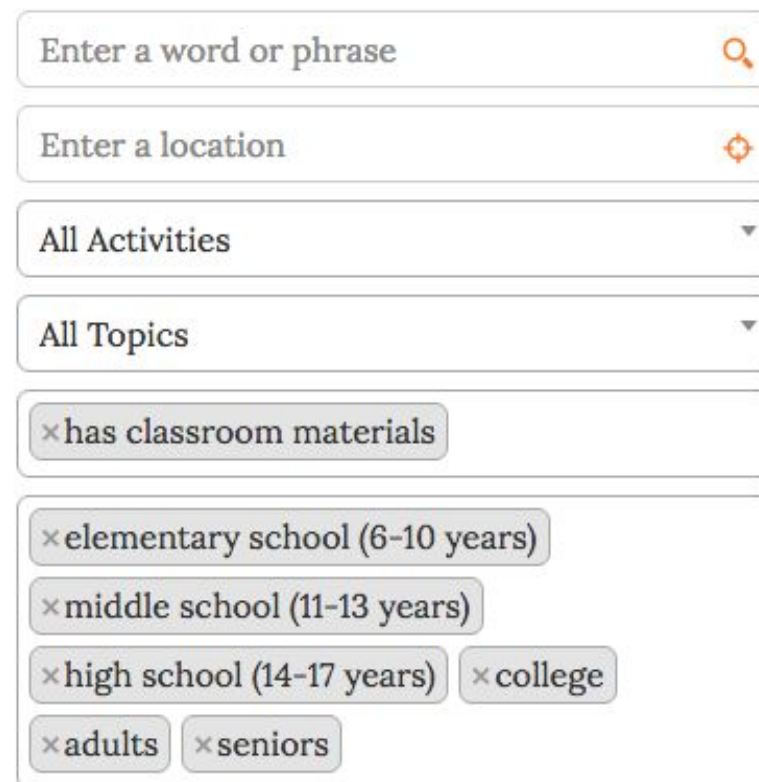


The screenshot shows a dark blue search interface with an orange ribbon at the top containing a downward arrow icon and the text "FIND A PROJECT". Below this, there are two input fields: "Find a location" with a placeholder "enter a location" and a location pin icon, and "Select a topic" with a placeholder "select a topic..." and a dropdown arrow. At the bottom is an orange button labeled "find a project".

Show me what I can do:

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

Project Finder



The screenshot shows a search interface with a search bar containing "Enter a word or phrase" and a magnifying glass icon. Below it is a location input field with "Enter a location" and a location pin icon. There are two dropdown menus: "All Activities" and "All Topics". Below these are several filter tags: "× has classroom materials", "× elementary school (6-10 years)", "× middle school (11-13 years)", "× high school (14-17 years)", "× college", "× adults", and "× 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



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 [more»](#)

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



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)



148
Saved and Visited Projects
Review later & join!



My Events
Events you participate in



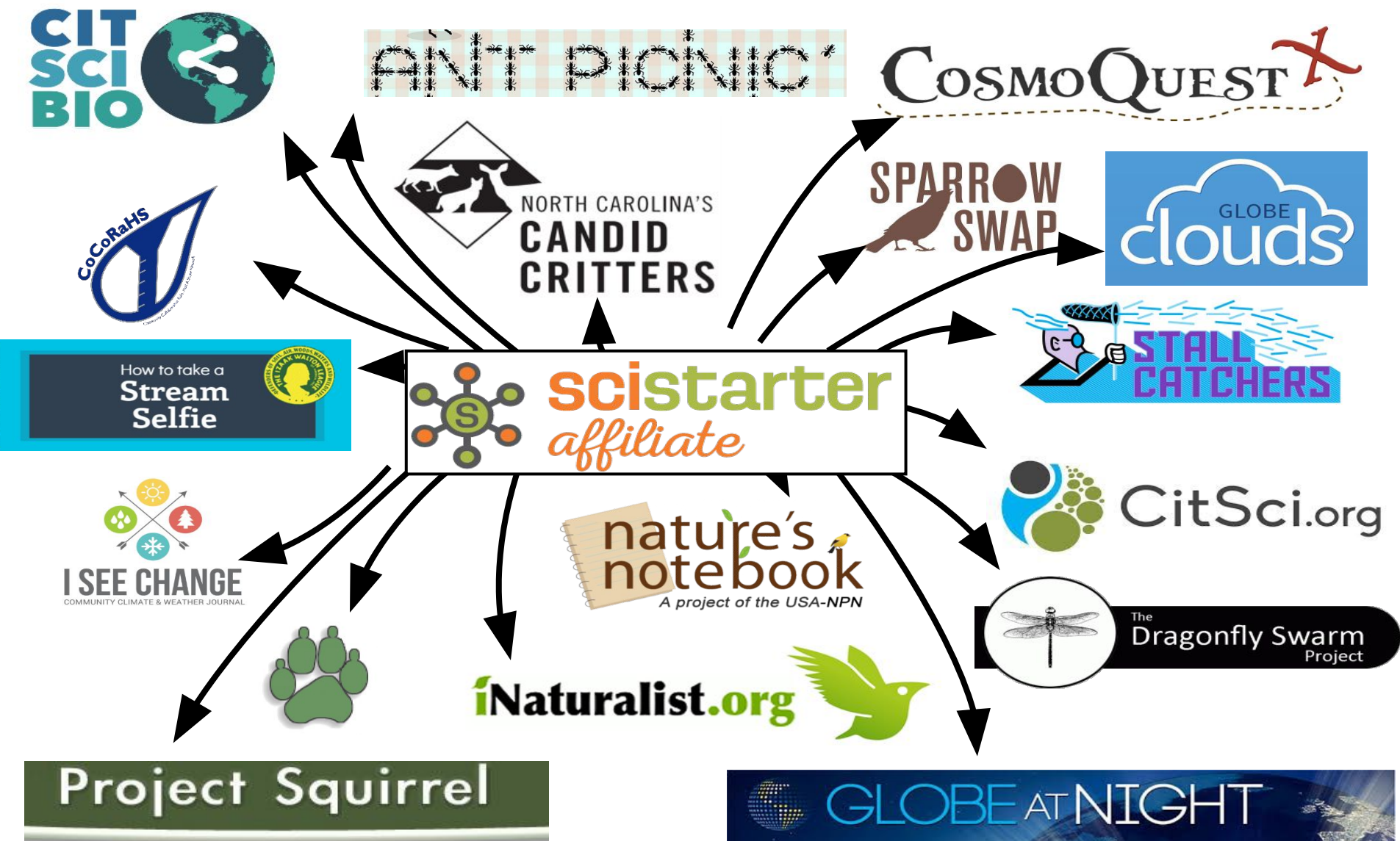
Personalized Dashboards Feature:

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

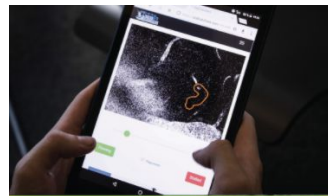
The screenshot displays the SciStarter user dashboard. At the top left is the SciStarter logo with the tagline "Science we can do together." The top right navigation bar includes links for "My Account", "Project Finder", "Event Finder", and "Calendar". A left sidebar menu lists: "My Account", "Dashboard", "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" (with a microscope icon), "My Bookmarks" (with a bookmark icon), and "My Events" (with a calendar icon). The "My Projects" tab is active, showing details for the "NASA GLOBE Observer: Clouds" project. The project card includes the project title, a URL, the join date "06/20/2017", and a line graph titled "YOUR PARTICIPATION HISTORY" with data points at approximately (1, 8), (2, 8), (3, 1), (4, 3), (5, 1), and (6, 3). To the right of the graph, it shows "LAST PARTICIPATION 06/20/2017" and a "participate now" button. Below the graph is a "RELATED PROJECTS:" section.

RESEARCH

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



Find select affiliates at SciStarter.org/Affiliates



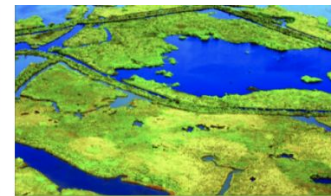
STALL CATCHERS

Accelerate Alzheimer's research by playing an online game.



THE GREAT SUNFLOWER PROJECT

Identify if pollinators are declining to help improve their habitats.



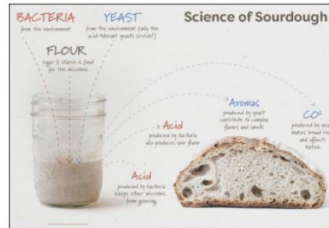
LAND LOSS LOOKOUT

Monitor land loss on the Mississippi River Delta.



BUDBURST

Help scientists by observing seasonal changes in plants.



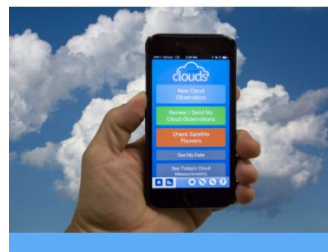
SOURDOUGH FOR SCIENCE

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



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



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



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



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



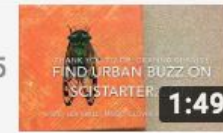
12 **How to use the SciStarter Affiliate Tools for your Citizen Science Project**



13 **Measure the snow, help the planet! SciStarter**



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



15 **How to Participate in Urban Buzz on SciStarter**
SciStarter



16 **How To Volunteer to Survey Fish Populations**
SciStarter



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



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



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

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

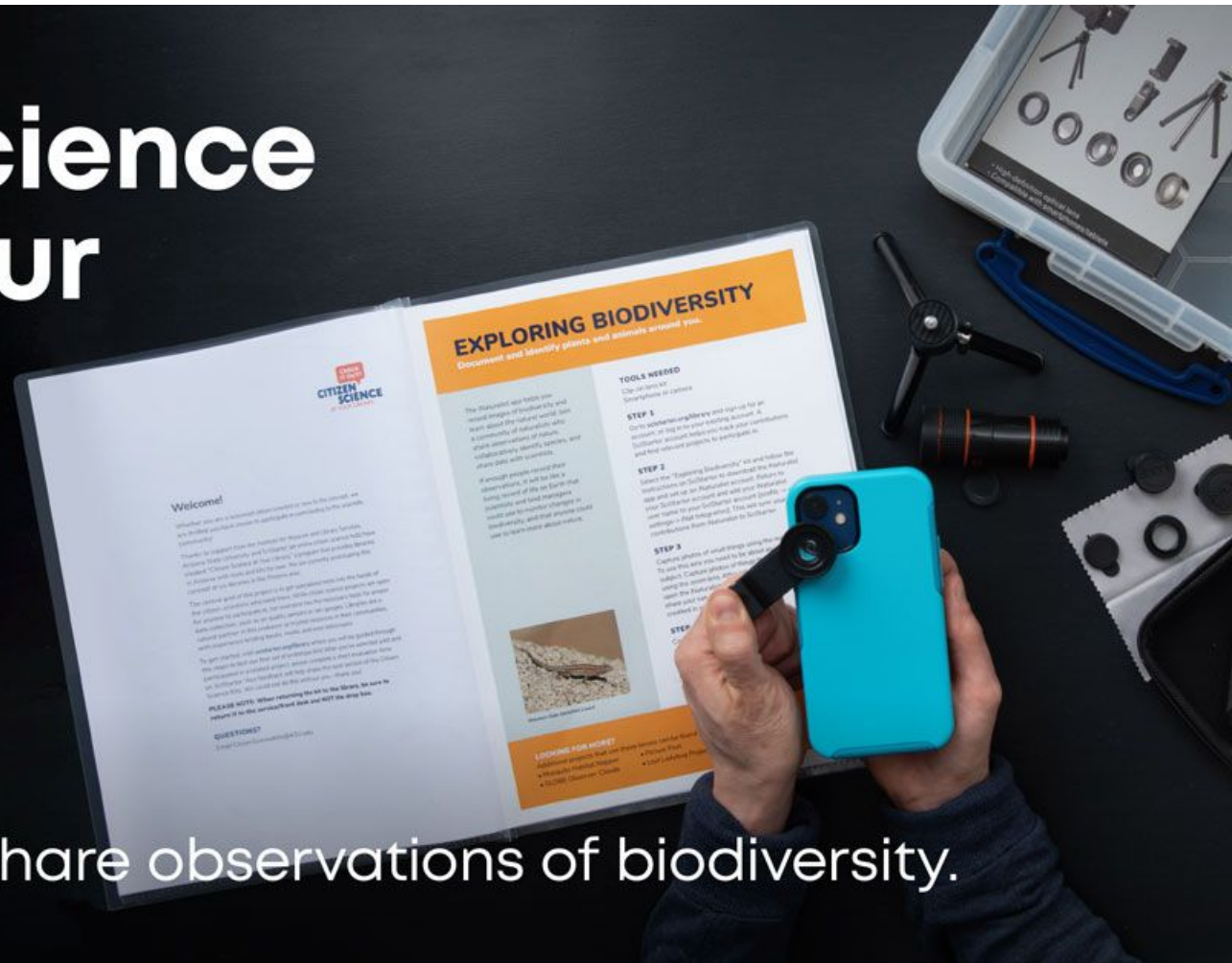
Tools and Resources through Libraries!

Citizen Science Kits at Your Library

CHECK ONE OUT!

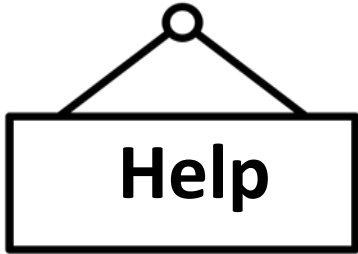
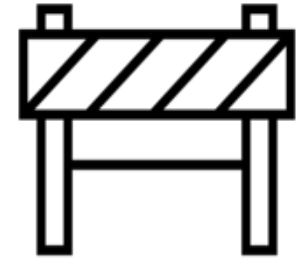
MARIANA:

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:

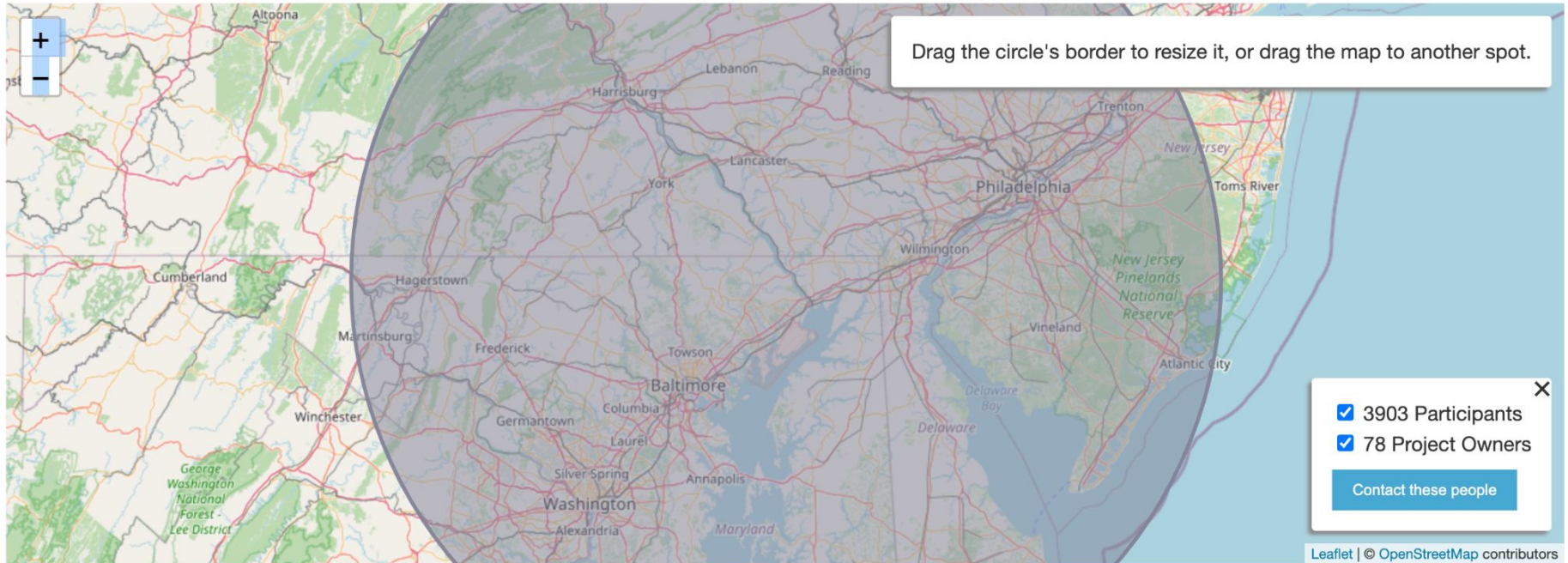
- Project owners that want to be part of our **affiliate program** which allows your project to be eligible for inclusion in special, curated programming with the Girl Scouts, Discover, PBS, Nature, schools, universities, libraries, and more!

SciStarter.org/API

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.



The screenshot displays a map of the Philadelphia area with a large, semi-transparent blue circle overlaid, indicating a search radius. A white tooltip box above the circle contains the text: "Drag the circle's border to resize it, or drag the map to another spot." In the bottom right corner, a white results panel with a blue border displays the following information:


- 3903 Participants
- 78 Project Owners
- Contact these people


At the bottom right of the map, there is a small text attribution: "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

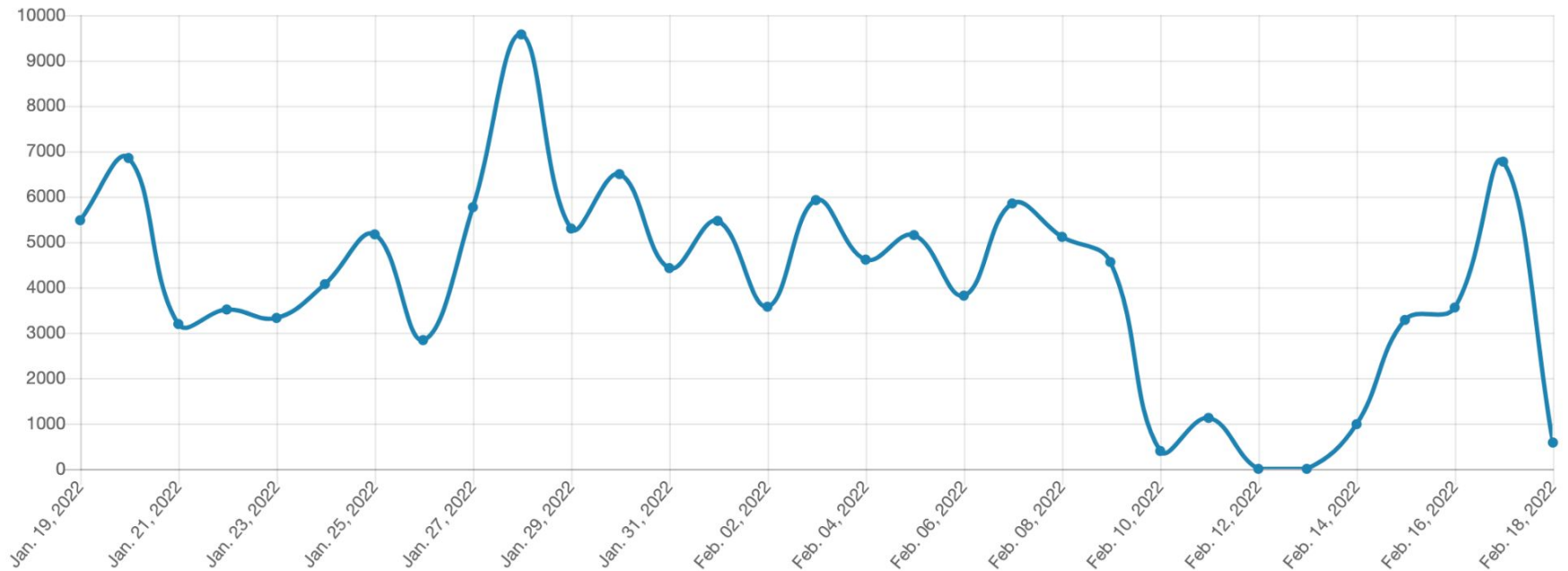


Our tools benefit everyone in citizen science!

Contribution Trend Graph

Last 30 Days ▾

Contributions

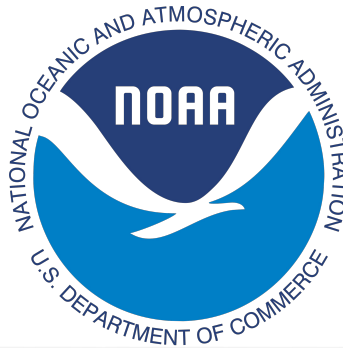


Our tools benefit everyone in citizen science!



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



NC STATE UNIVERSITY

Citizen Science Campus



Arizona State University

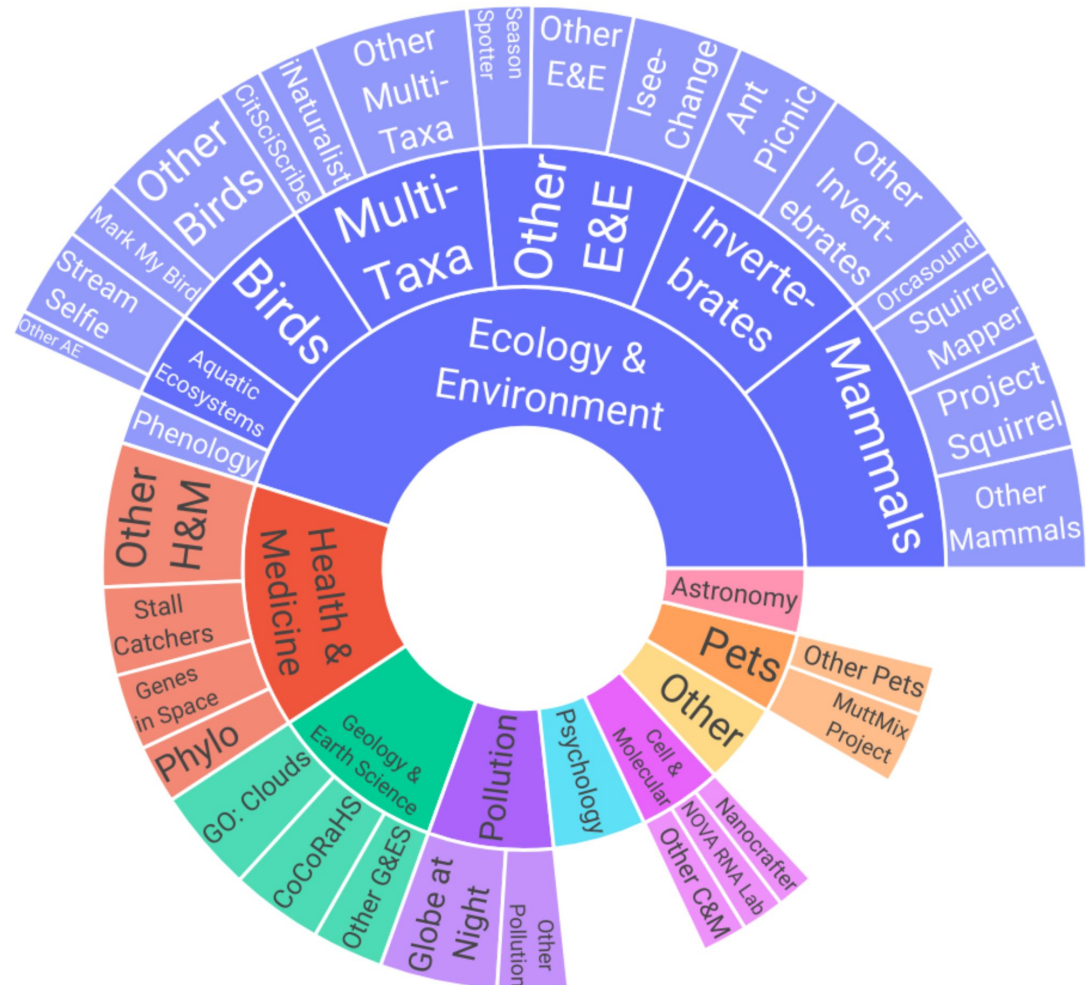
Our tools benefit everyone in citizen science!



Researchers

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

Projects Joined by SciStarter Vols



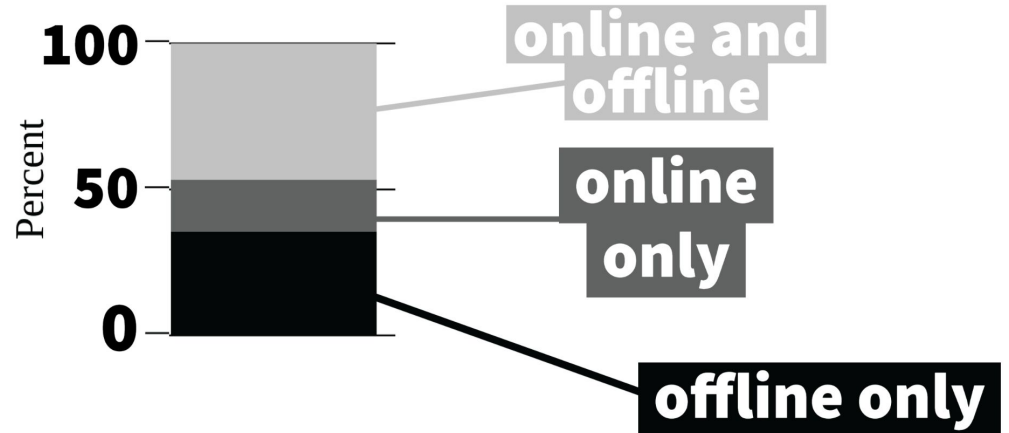
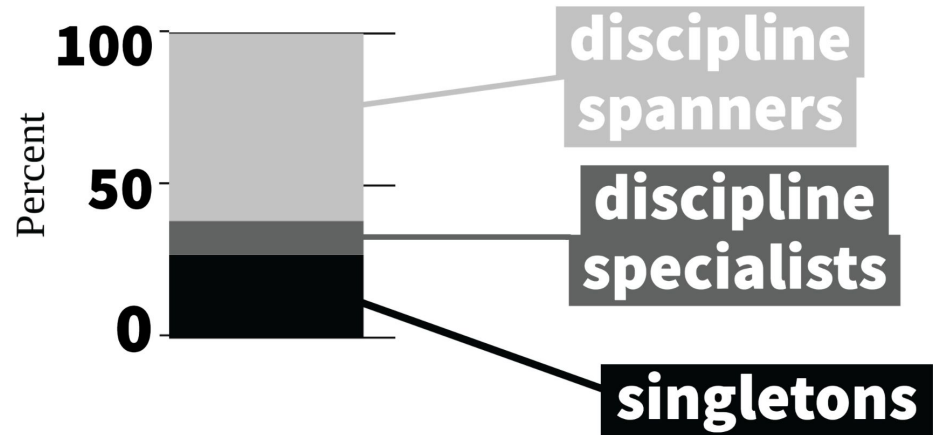
Our tools benefit everyone in citizen science!



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

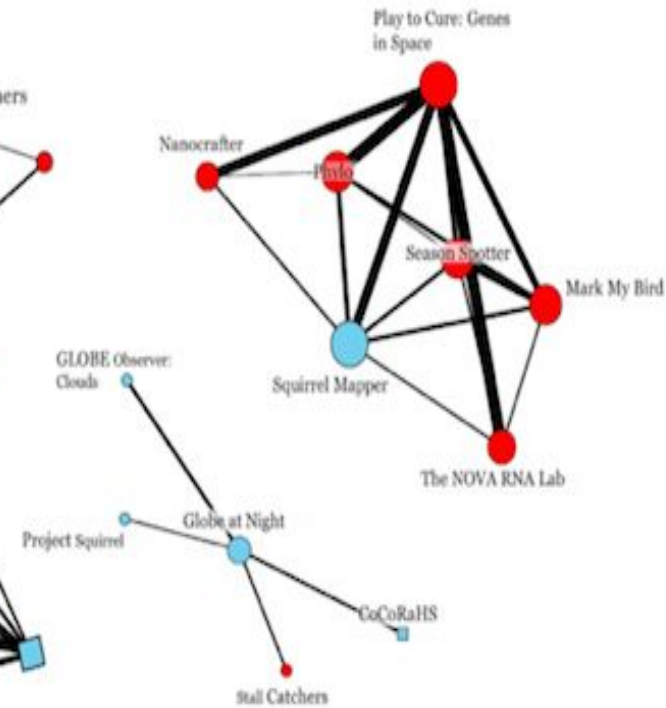
Connected Projects within the SciStarter Network

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



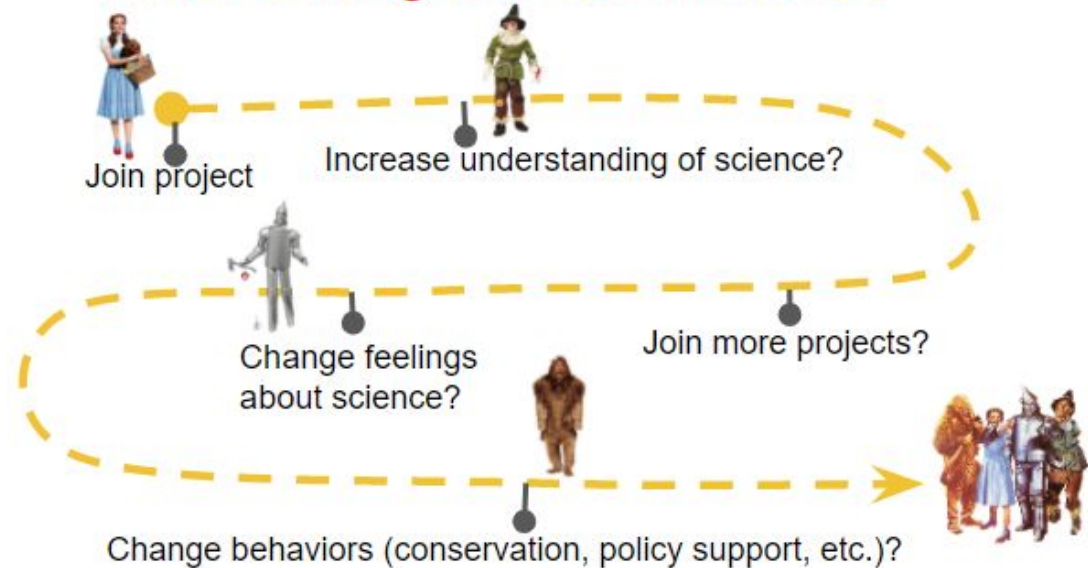
Our tools benefit everyone in citizen science!

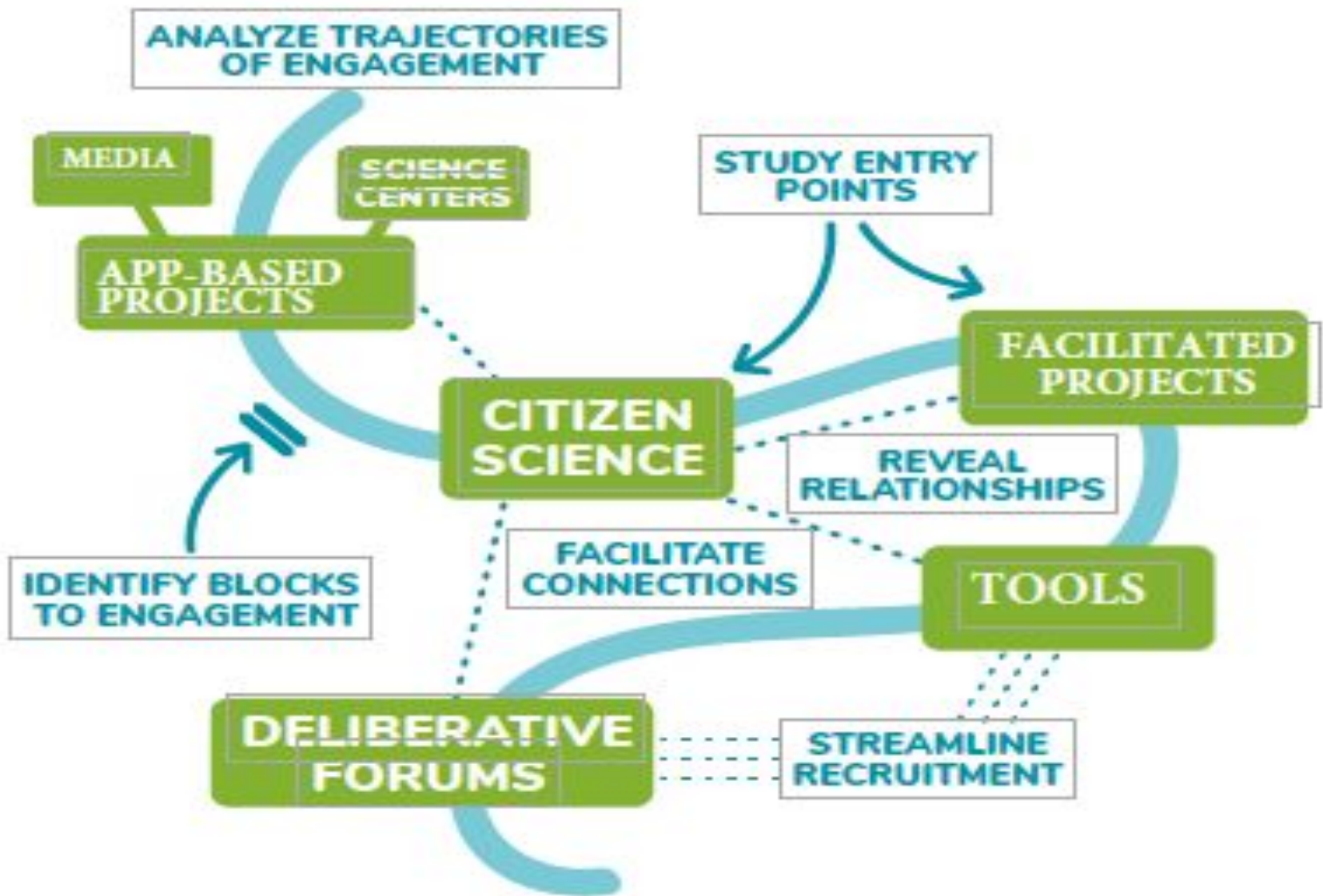


Researchers

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


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”

- ▶ 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

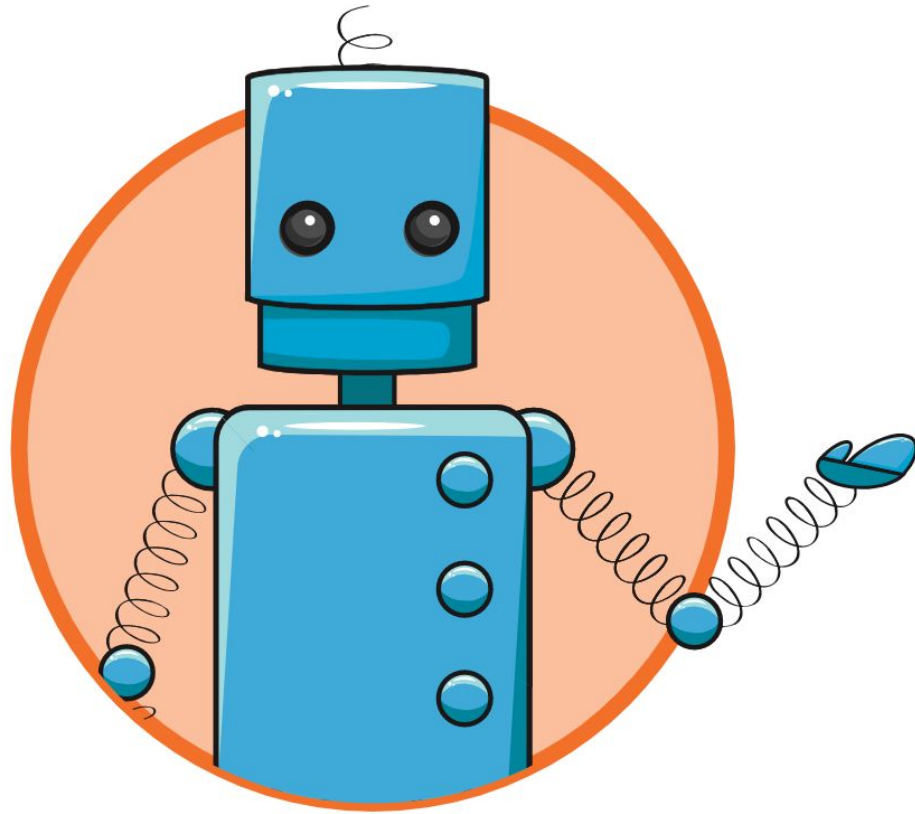


Add an event



Add a tool

Let's demonstrate: How To Become an Affiliate



Various options:

- API
- Integration with iNaturalist, Zooniverse, CitSci.org, or Anecdata.org
- Form hosted on SciStarter
- ...something else! Get in touch with your specific request:
info@SciStarter.org

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

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
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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



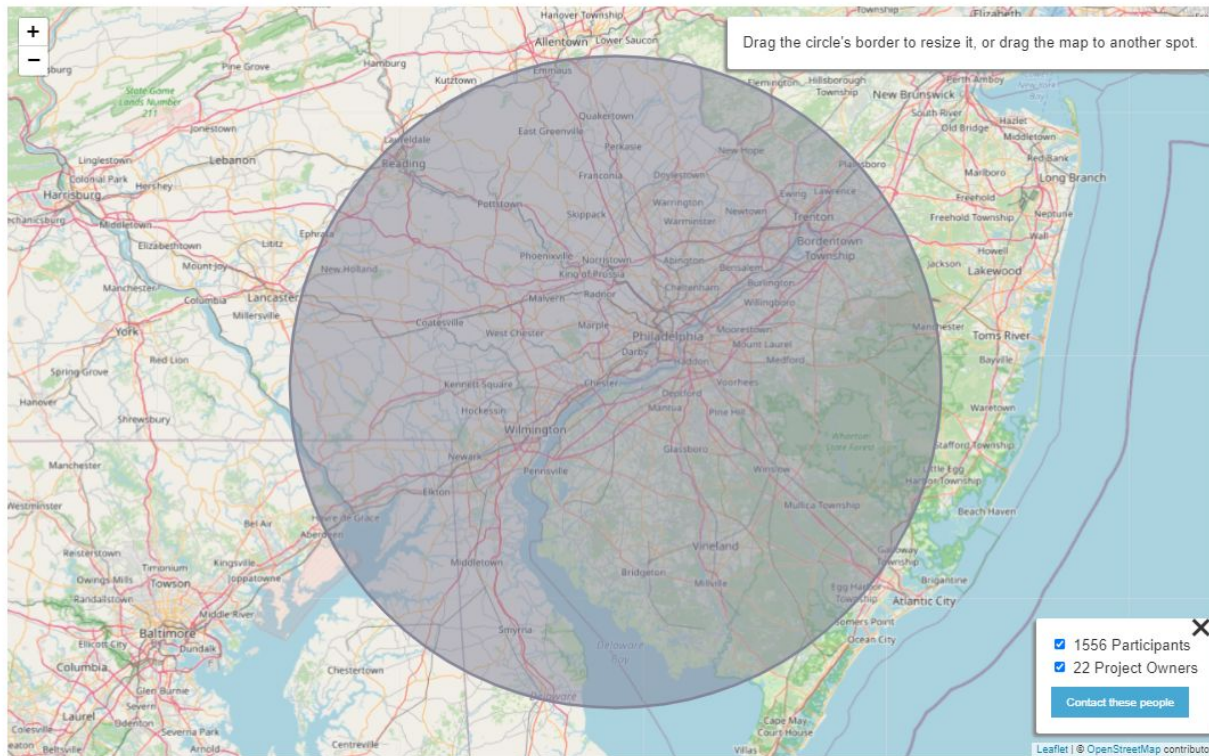
Last 30 Days

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
- SciStarter Lists
- Citizen Science Month Programming



View the Introduction to SciStarter Video.

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



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

This is a list!

Find a project

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

Keyword

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

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

The logo for Citizen Science Month features a stylized orange molecular structure above the text "CITIZEN SCIENCE MONTH". The text "CITIZEN SCIENCE" is in a large, bold, blue font, and "MONTH" is in a smaller, bold, blue font below it, flanked by two horizontal orange lines.

**CITIZEN
SCIENCE
MONTH**

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



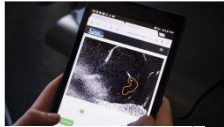
FEATURED CITIZEN SCIENCE PROJECTS INCLUDE:



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.



Debris Tracker
Use an app to report and help prevent debris.

Find your mission

THIS IS CITIZEN SCIENCE
Learn more about citizen science projects.

FEL Me ligh whi #ci



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

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



Follow-up

- Contact SciStarter (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