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.

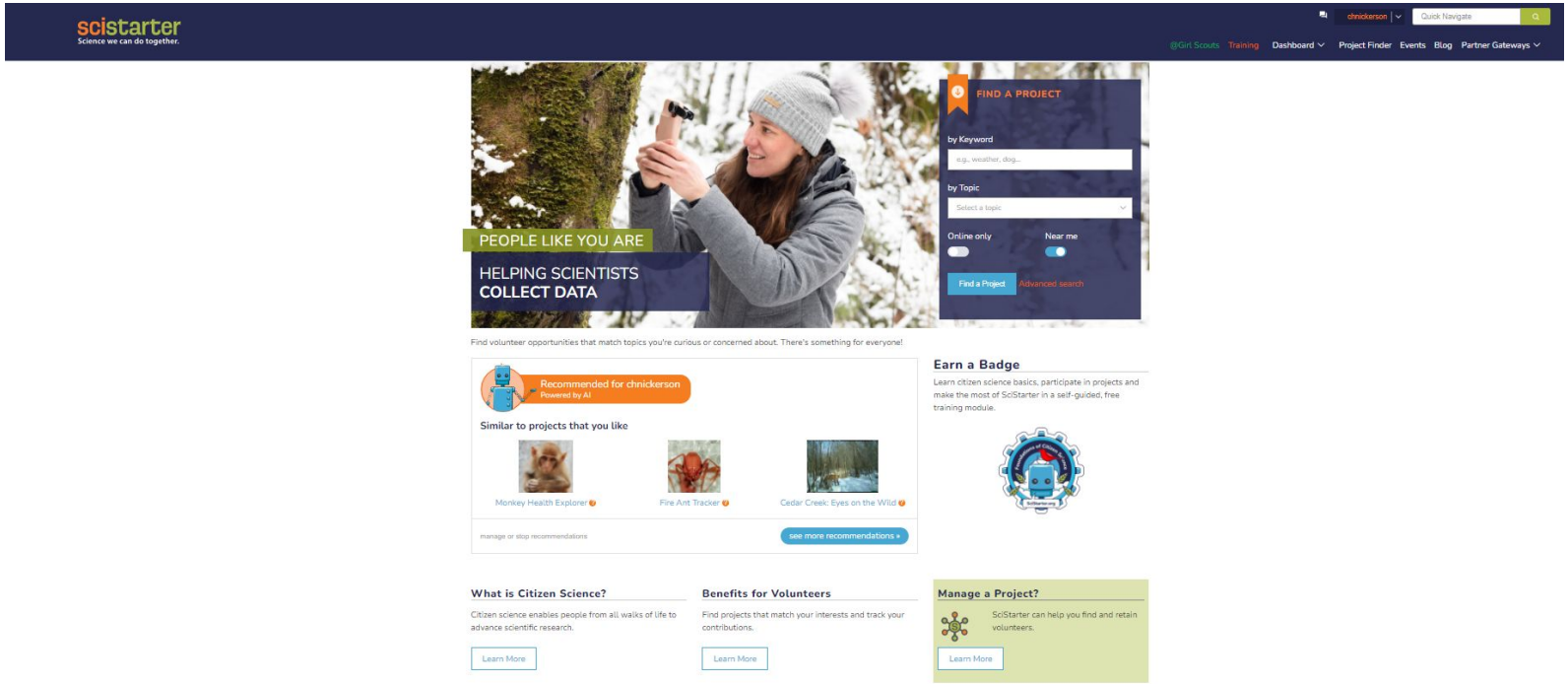
We connect them.

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.



"*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.

girl scouts

POP WARNER LITTLE SCHOLARS

NBC NEWS

NBA

PLOS | Open for Discovery

NFL

DISCOVER
SCIENCE, TECHNOLOGY AND THE FUTURE

INTERNATIONAL SPACE APPS CHALLENGE

NSTA National Science Teachers Association

USA SCIENCE & ENGINEERING FESTIVAL

instructables

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.

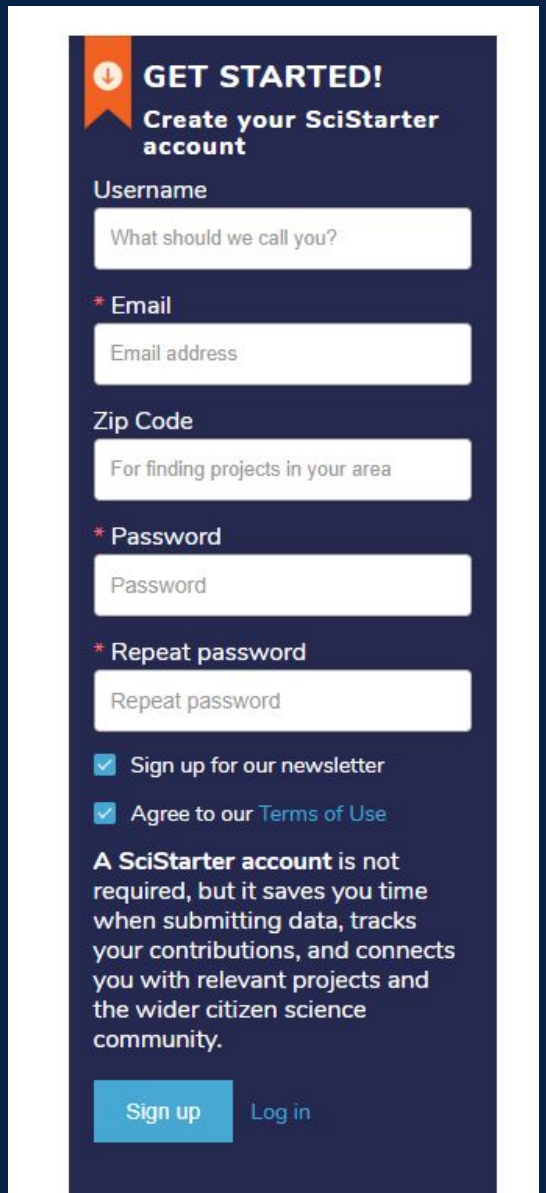
RESEARCH AND EVALUATION

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

SciStarter.org



scistarter

People-powered science.

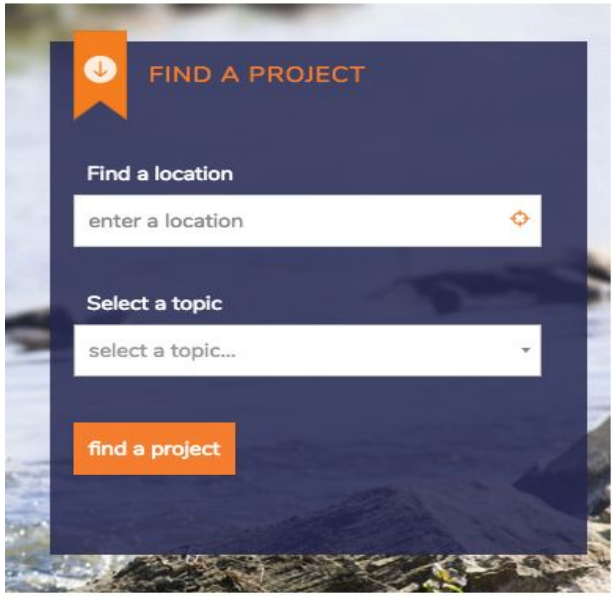
SciStarter.org/add

Add a project

Add an event

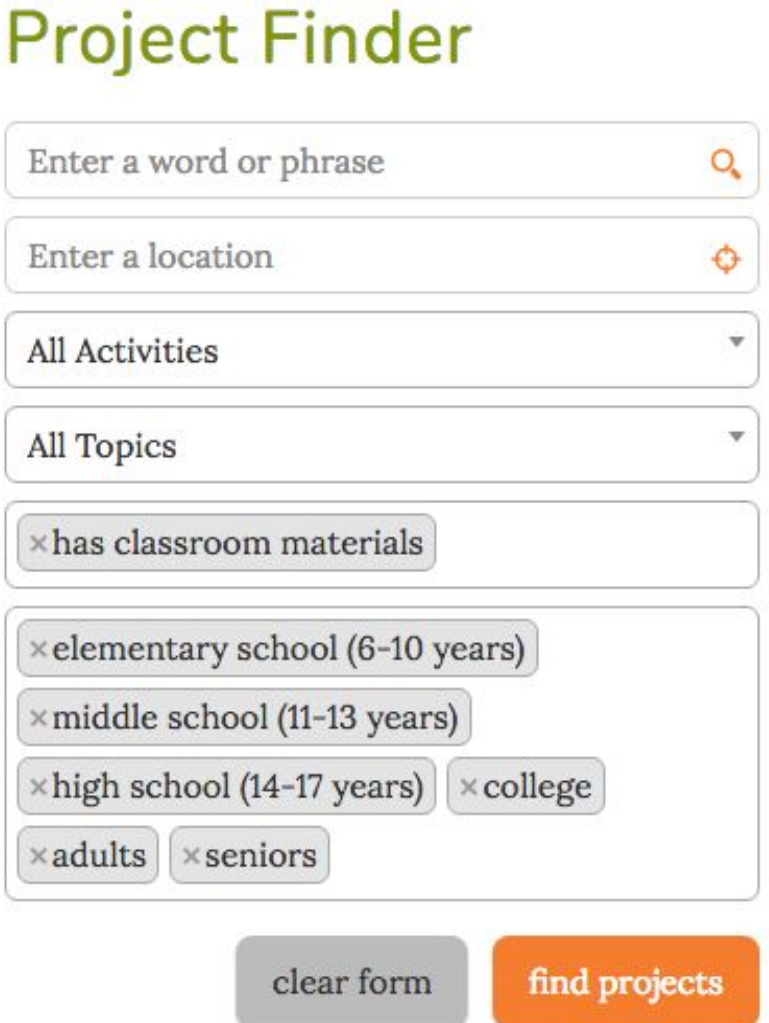
Add a tool

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*



SciStarter.org/finder

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

‹ 1 2 3 4 5 6 ... 19 ›

STALL CATCHERS
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

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

CALIFORNIA ACADEMY OF SCIENCES | NATIONAL GEOGRAPHIC

iNaturalist

iNaturalist *

Goal Share observations of biodiversity.

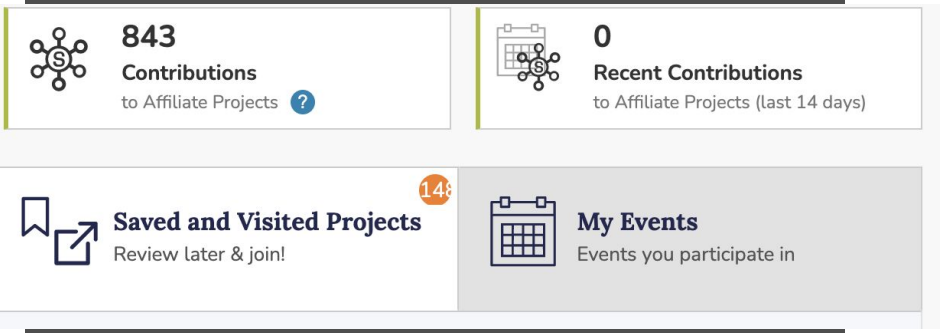
Task Take photos of biodiversity and upload to more»

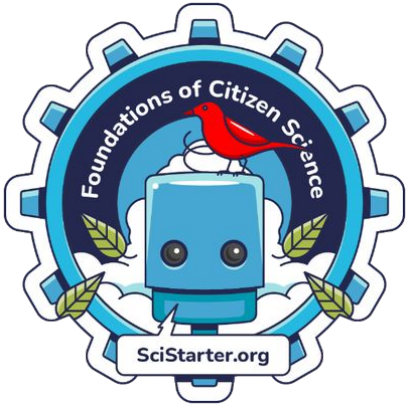
Where Global, anywhere on the planet

Our tools benefit everyone in citizen science!

Participants

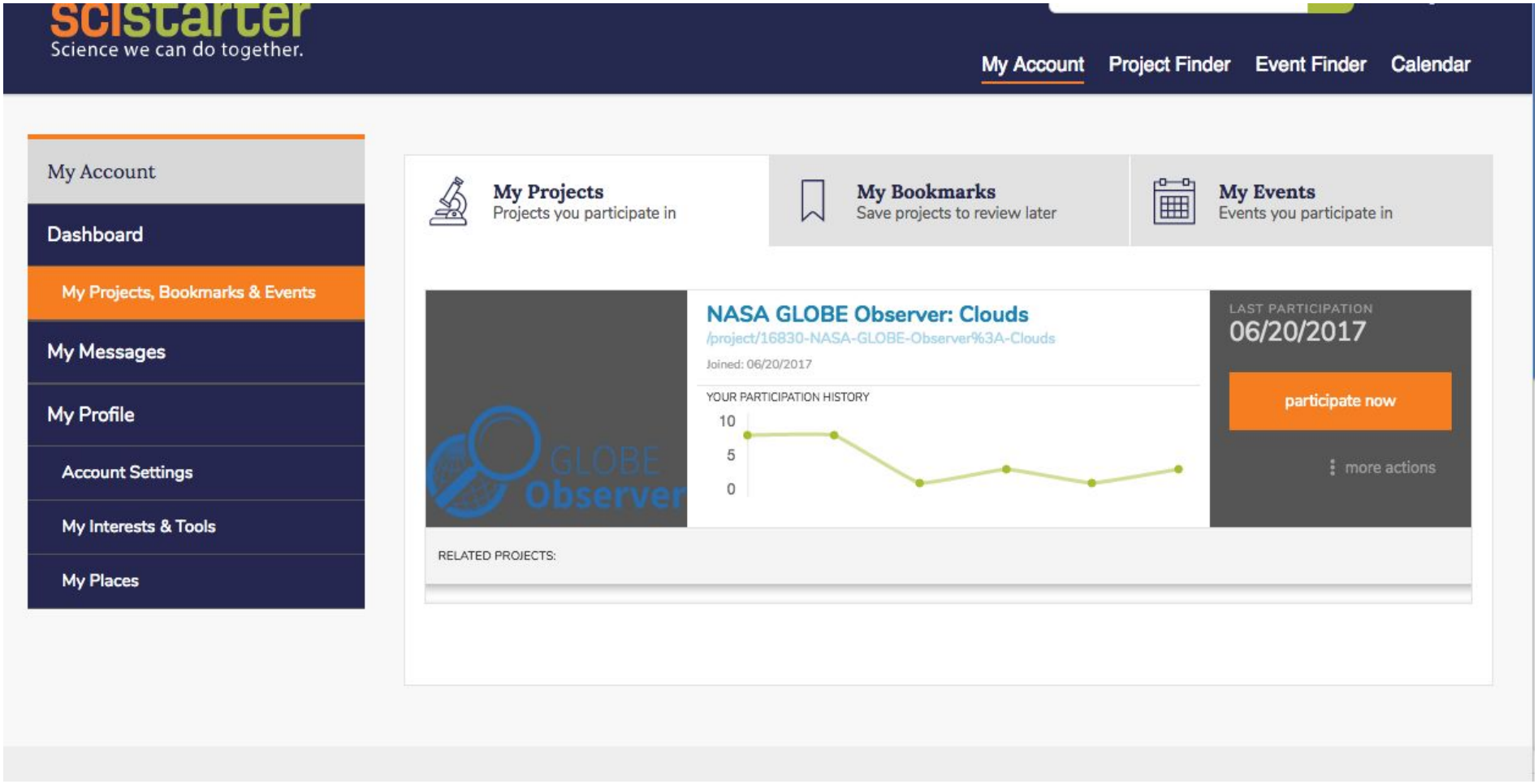
Track and earn credit for their contributions to projects





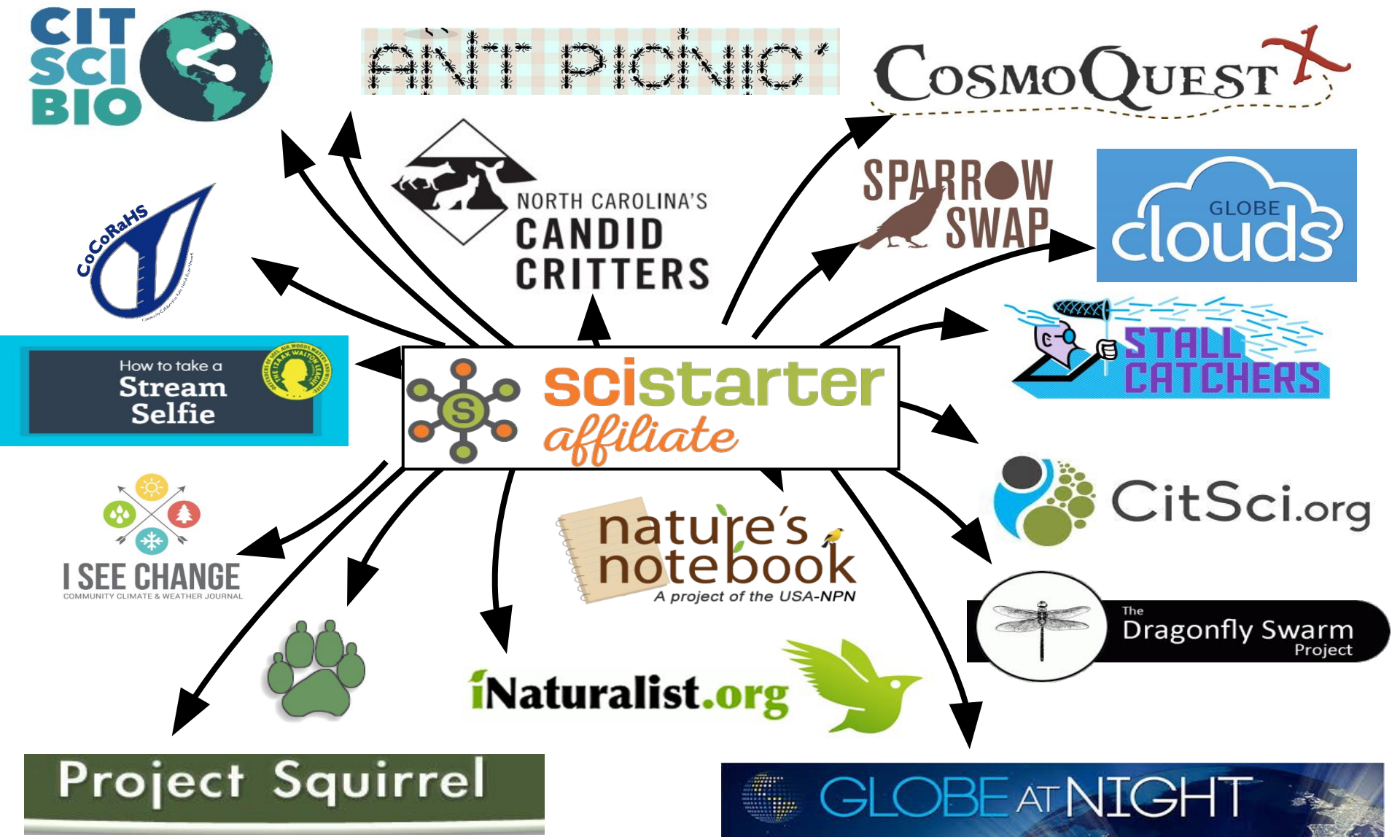
Personalized Dashboards Feature:

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

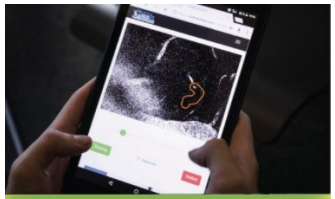


RESEARCH

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



Find select affiliates at SciStarter.org/Affiliates

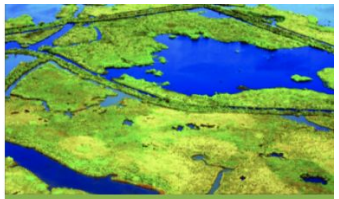


STALL CATCHERS

Accelerate Alzheimer's research by playing an online game.

THE GREAT SUNFLOWER PROJECT

Identify if pollinators are declining to help improve their habitats.

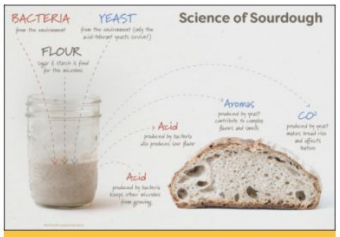


LAND LOSS LOOKOUT

Monitor land loss on the Mississippi River Delta.

BUDBURST

Help scientists by observing seasonal changes in plants.

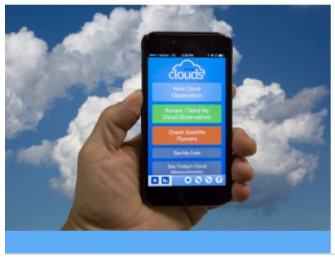


SOURDOUGH FOR SCIENCE

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

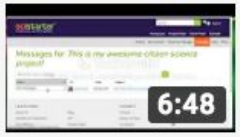
Help create the first-of-its-kind map of streams with Stream Selfie on
SciStarter

10

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

11

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

12 

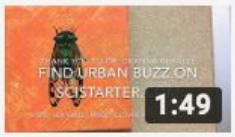
How to use the SciStarter Affiliate Tools for your Citizen Science Project
SciStarter

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

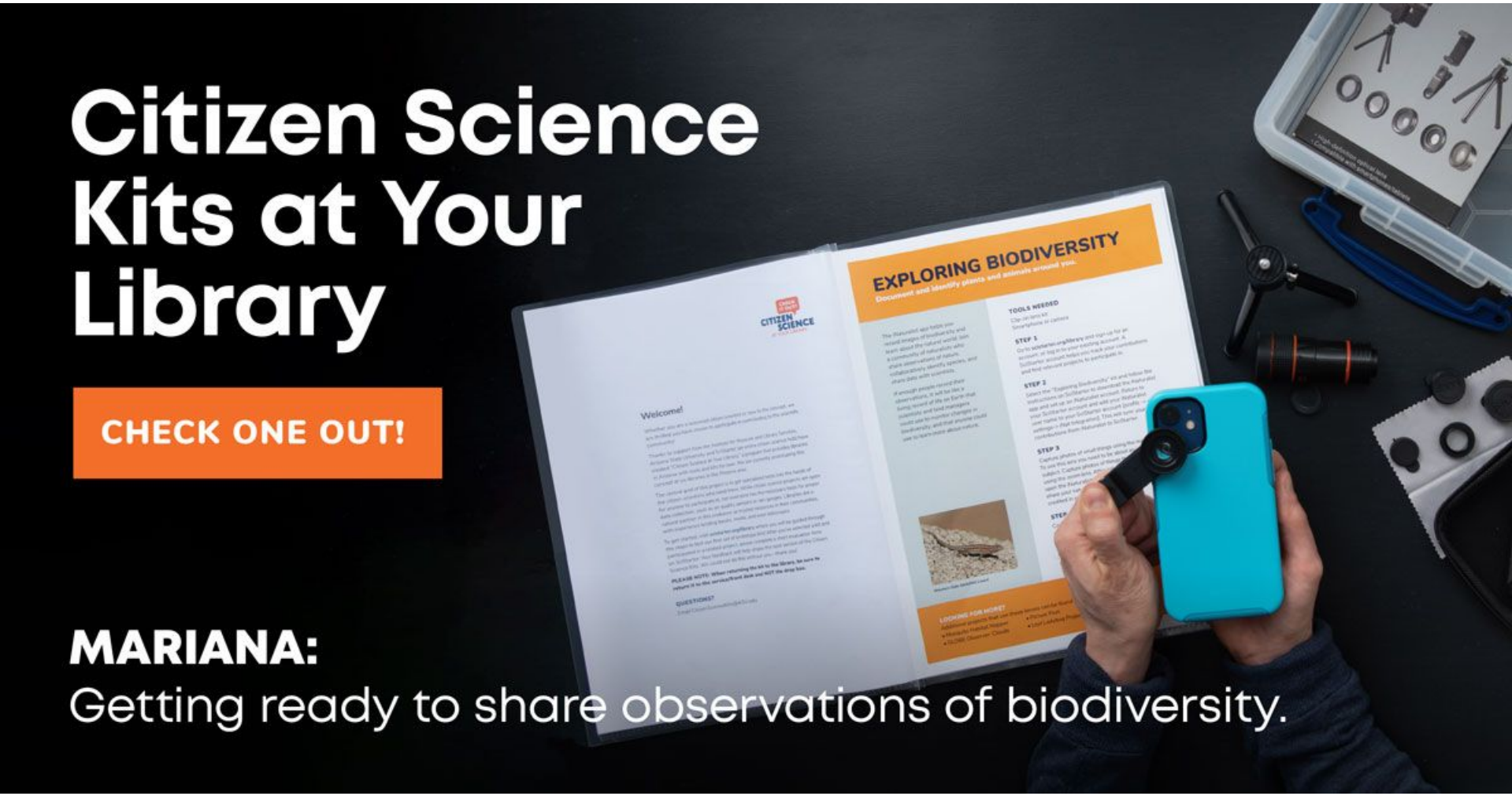
Find dozens of informative, brief, “How To” videos on SciStarter’s YouTube channel and Facebook page.

Training for Beginners

1. Recognize what citizen science is and how it can be used to address real-world questions in collaboration with others.
2. Articulate how participating in citizen science benefits science and society.
3. Recognize who can participate in different citizen science projects.
4. Recall 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. Recall what SciStarter is and how it can connect you to citizen science projects and help you track your participation.

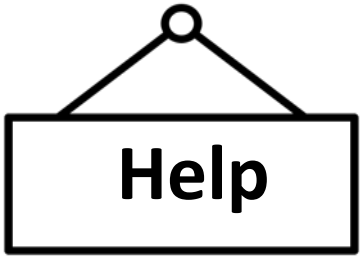
SciStarter.org/training

Tools and Resources through Libraries!



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

INSTITUTE of Museum and Library SERVICES

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!

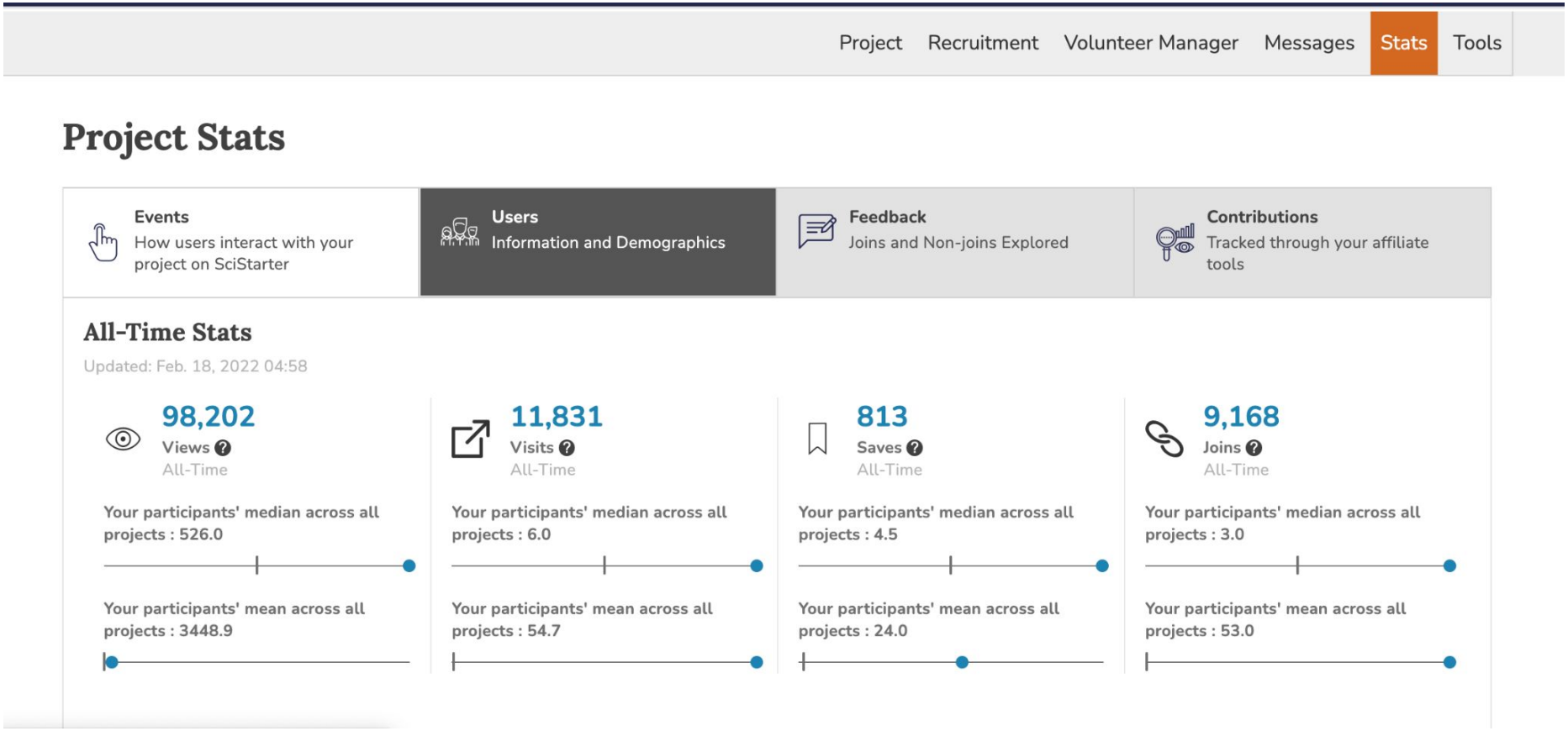
SciStarter.org/API

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.

Our tools benefit everyone in citizen science!



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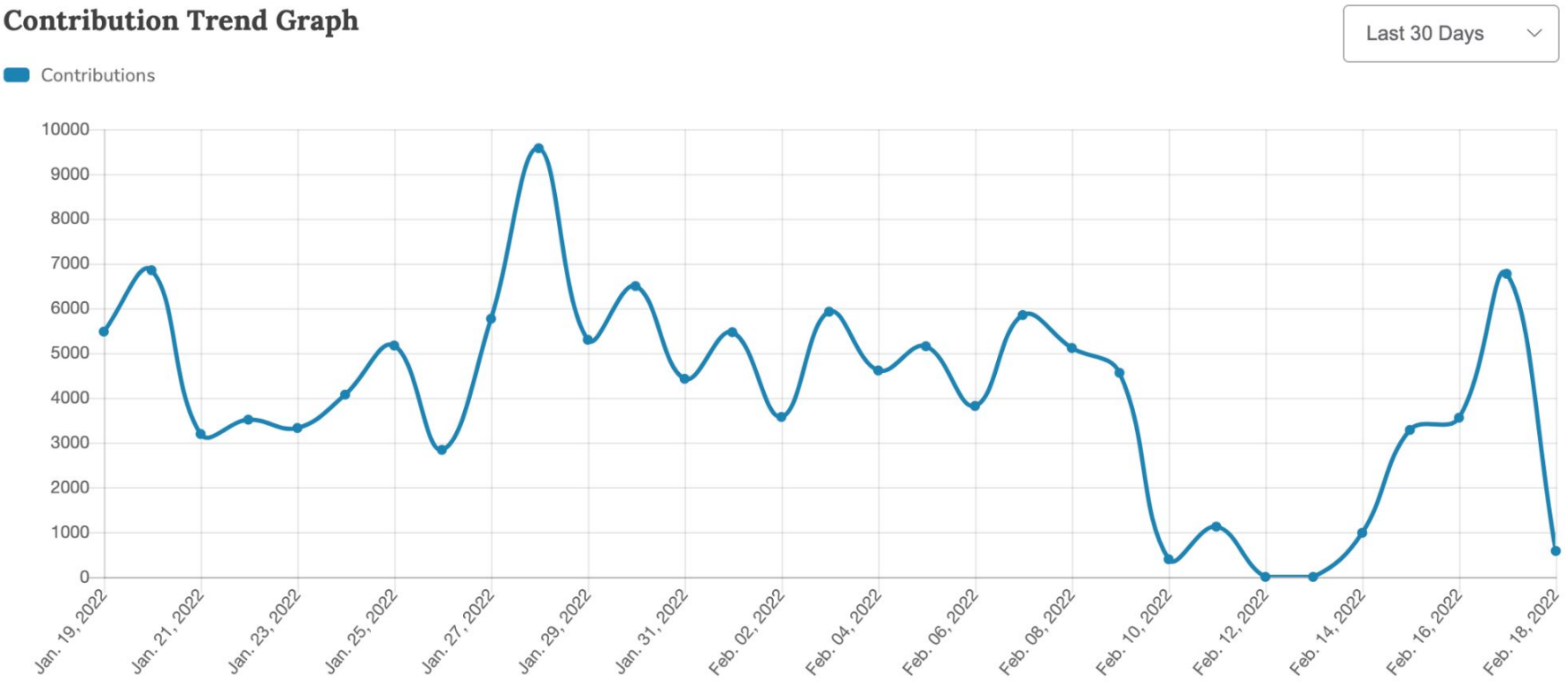


Our tools benefit everyone in citizen science!

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

NOAA National Oceanic and Atmospheric Administration U.S. Department of Commerce

America250 Foundation

NASA Partner

NIH NLM › NNLM

All of Us Research Program

verizon

girl scouts

NC State University Citizen Science Campus

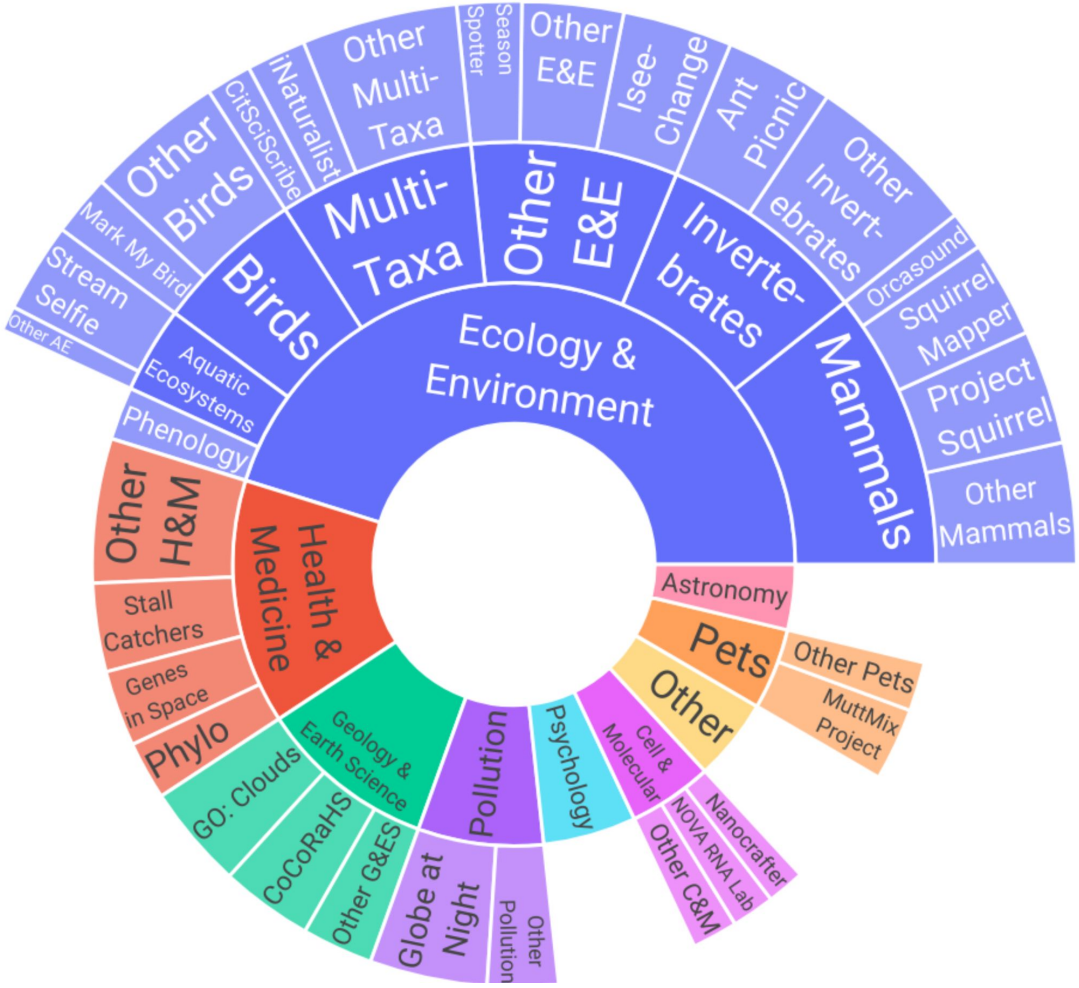
ASU Arizona State University

Our tools benefit everyone in citizen science!

Researchers

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

Projects Joined by SciStarter Vols

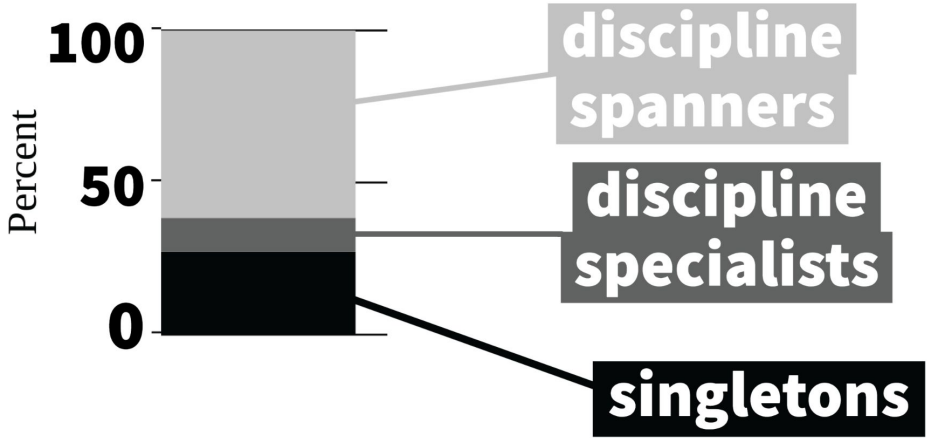


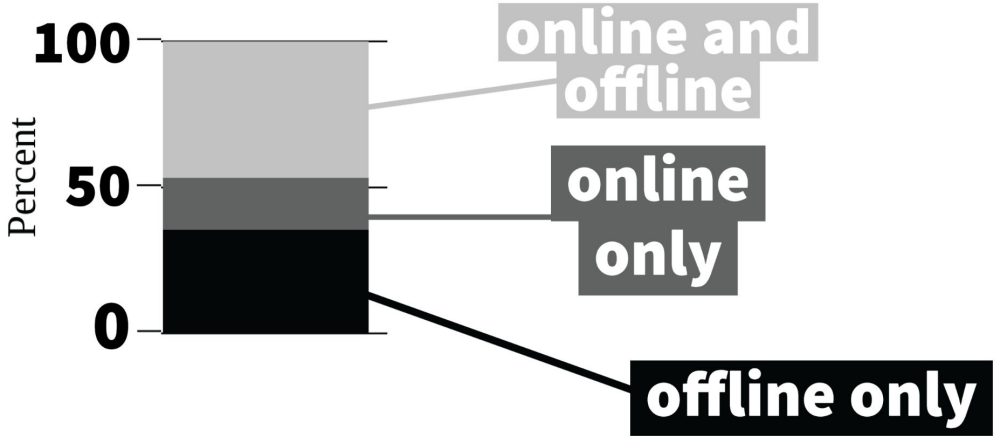
Our tools benefit everyone in citizen science!

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

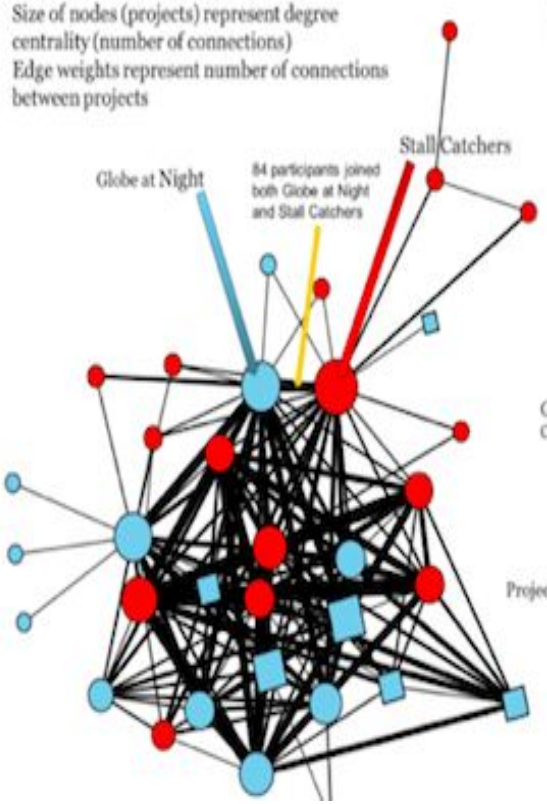
Learn more about the motivations, behaviors, and learning outcomes of participants

A Social Network Analysis

Sara Futch, Lincoln Larson, and Caren Cooper

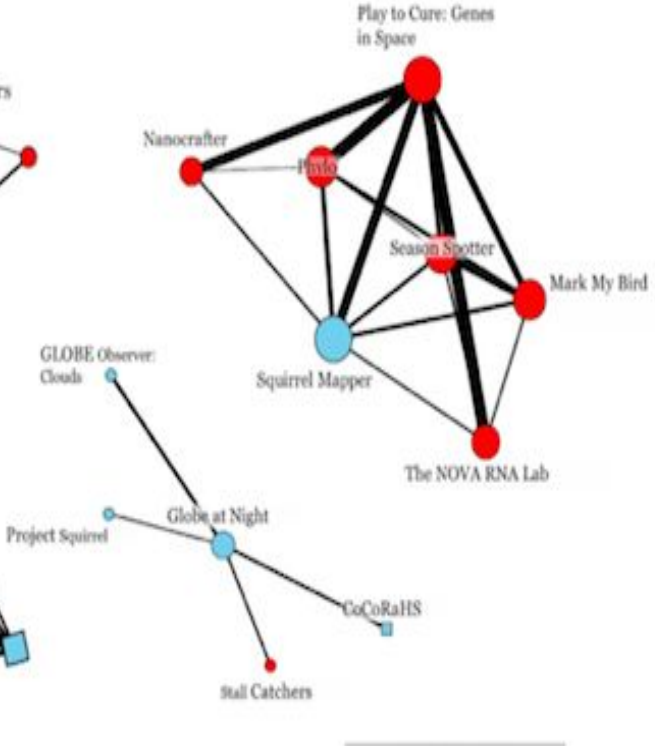
Connected Projects within the SciStarter Network

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



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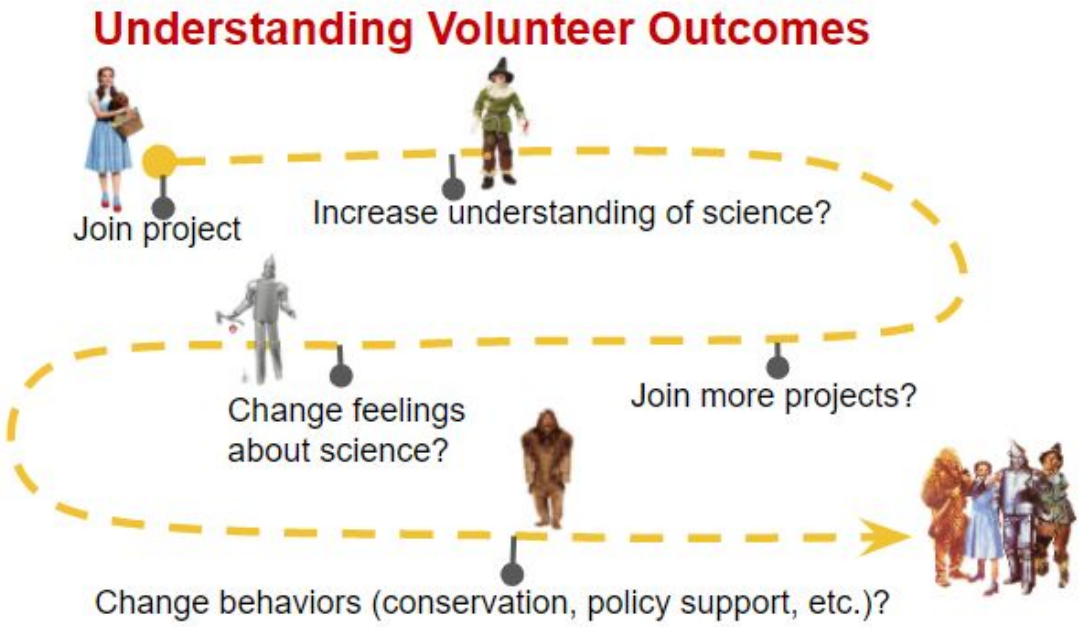
Researchers

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



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.

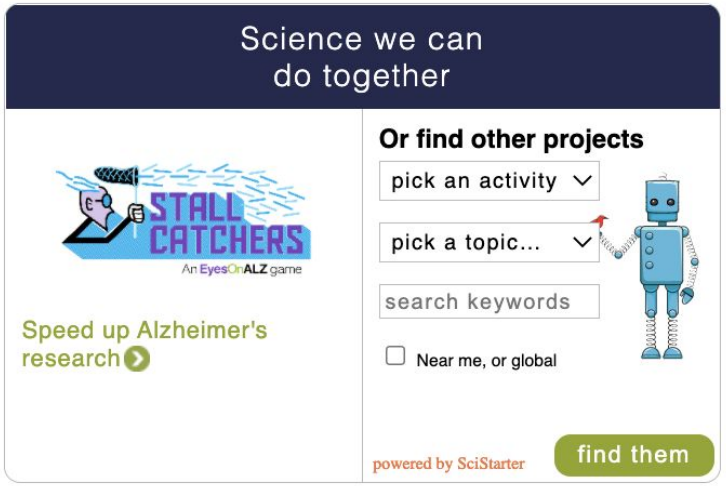
Our tools benefit everyone in citizen science!

Website Owners

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

SciStarter.org/widget/new

Widget preview

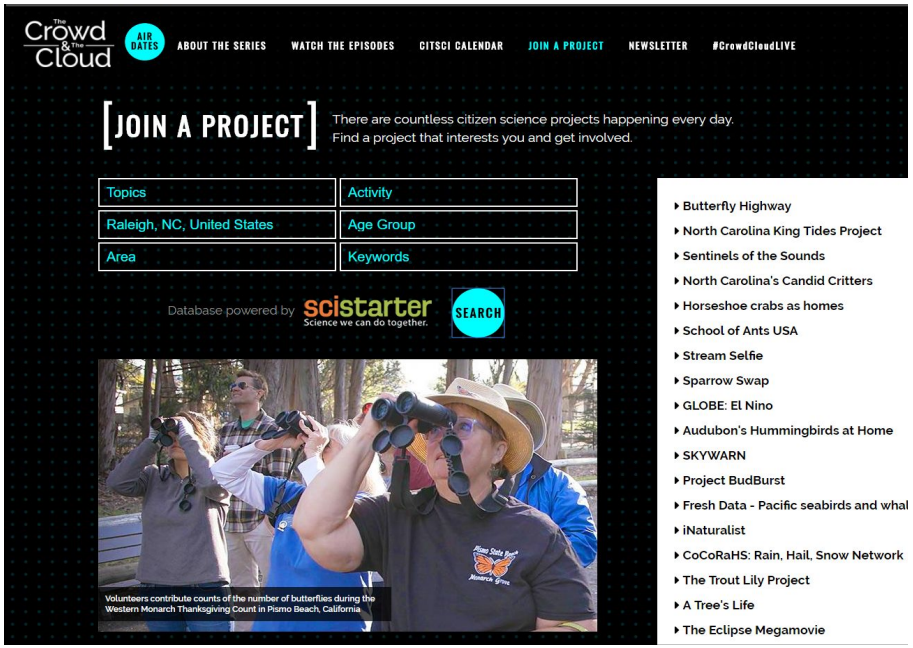


Widget embed code

```
<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”



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

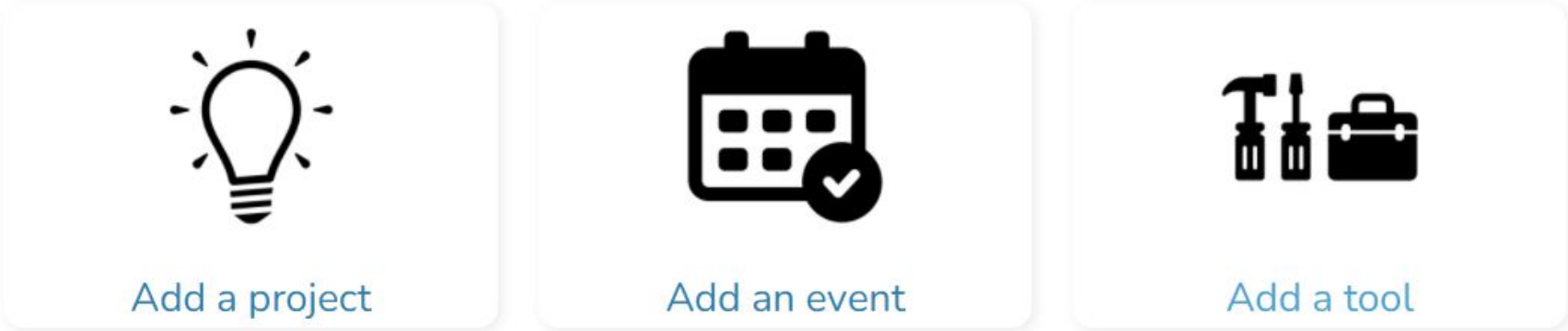
Citizen Science Story Time
02/10/2022 to 03/10/2022
Online only

"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

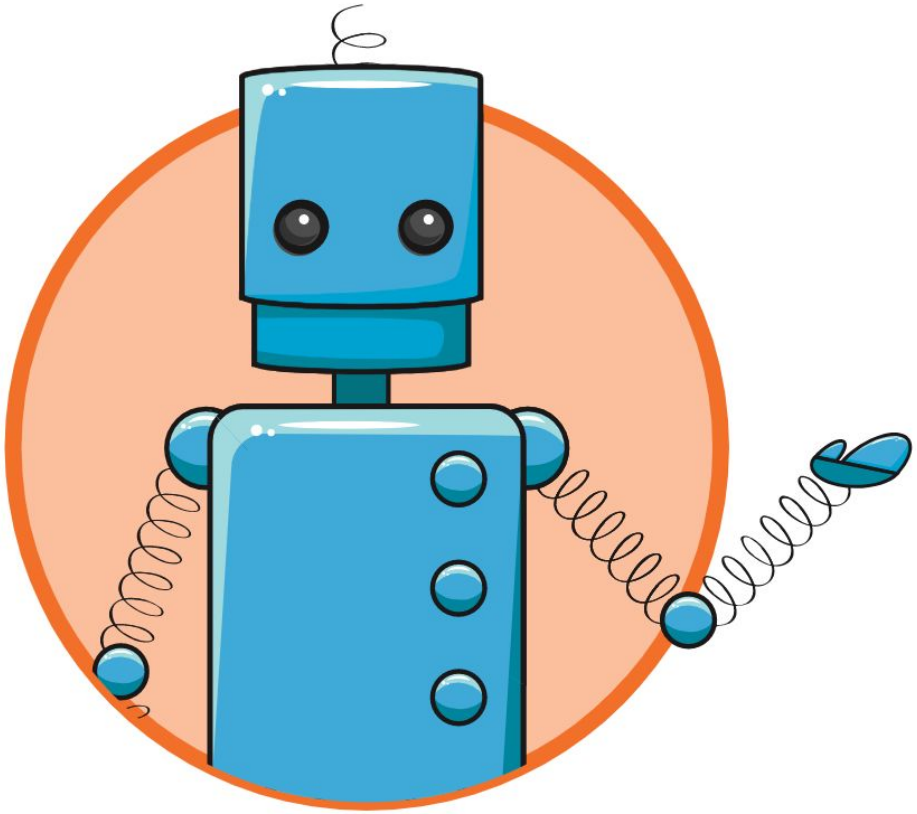
‹ 1 2 3 4 5 6 ›

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



SciStarter.org/add

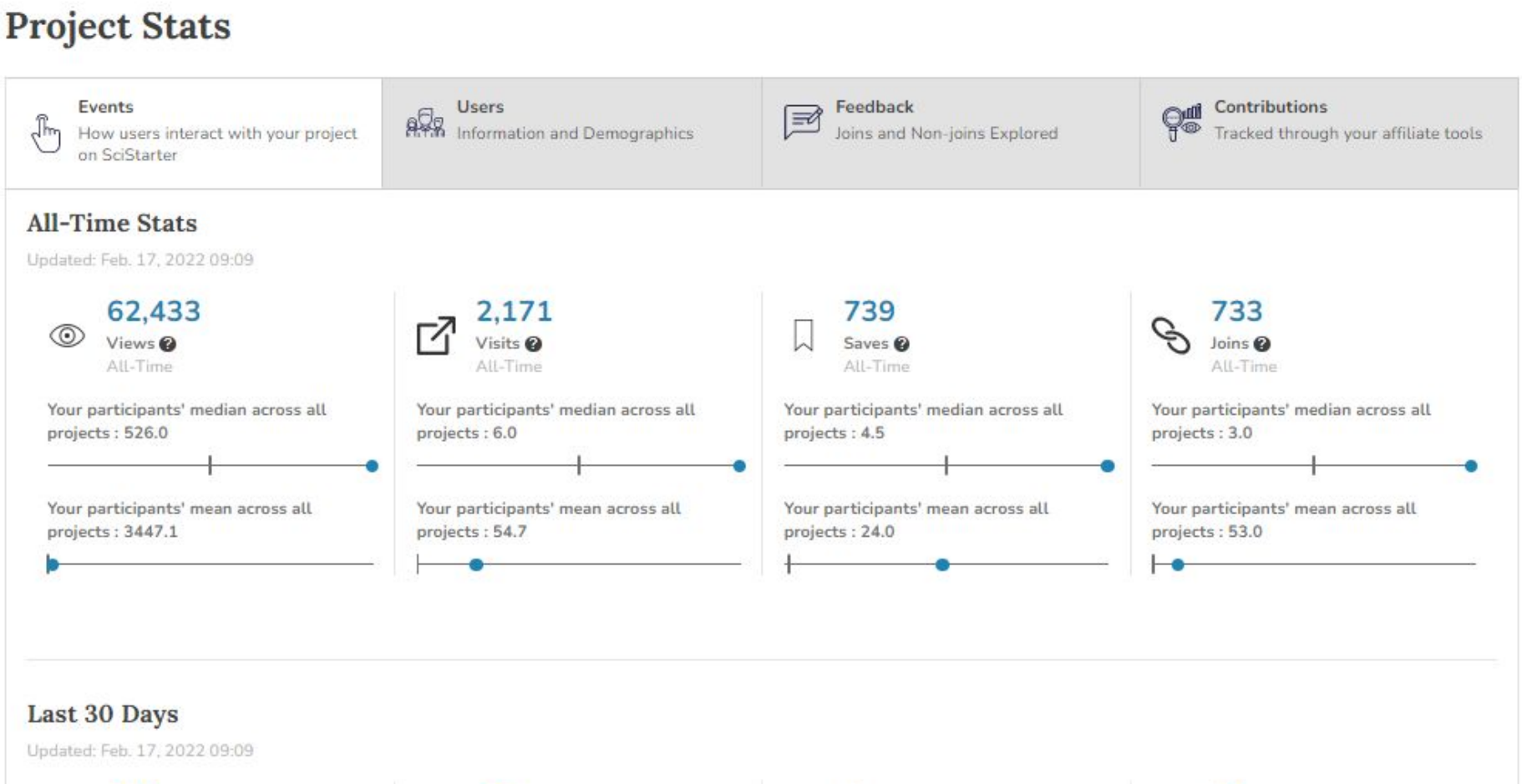
Let’s demonstrate:
How To Become an Affiliate



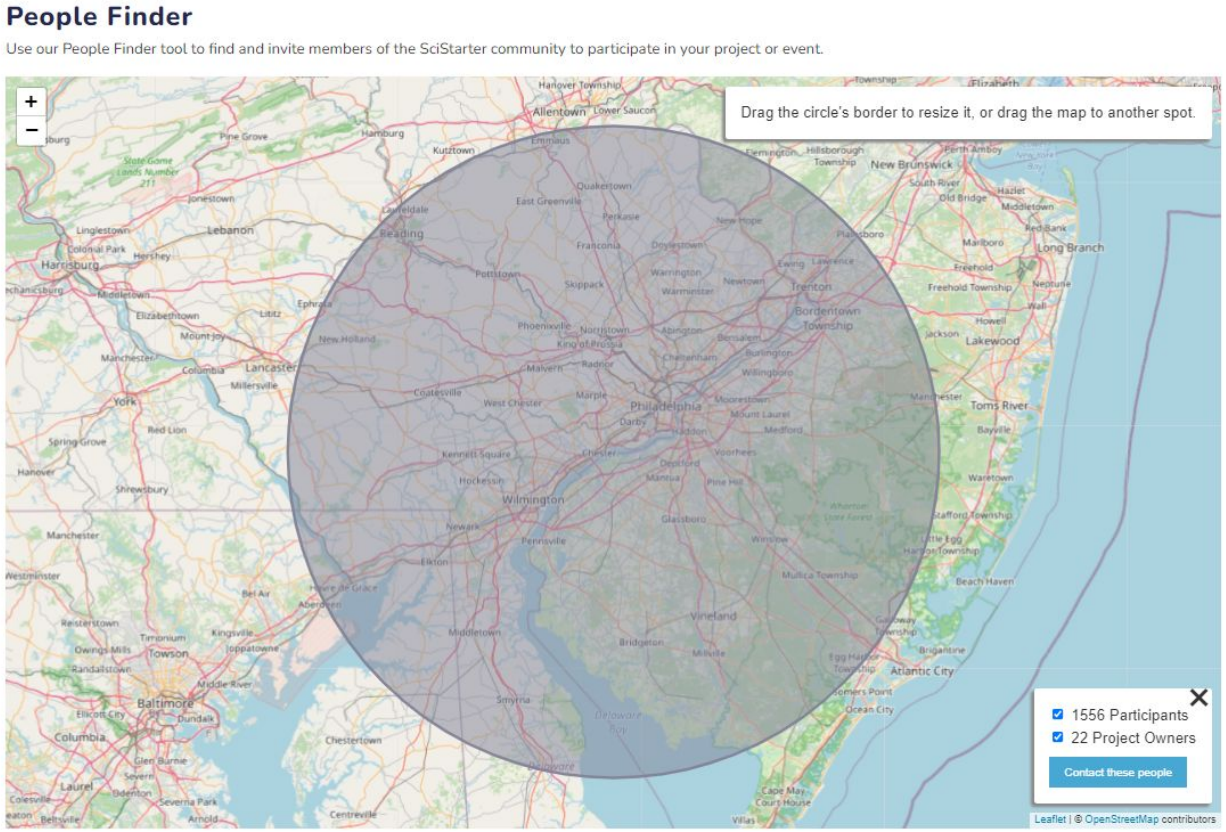
Various options:

- 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



Let’s demonstrate:
How To Use the People Finder



SciStarter.org/people-finder

Tools for educators and facilitators!

- SciStarter.org/education
- SciStarter Lists
- Citizen Science Month Programming

scistarter
People-powered science.

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.

SciStarter.org/education

scistarter®
Science we can do together.

SciStarter Team | Quick Navigate

@Girl Scouts | Dashboard | Project Finder | Tools | Events | Podcast | Blog | Partner Gateways

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!

STALL CATCHERS
An EyesOnALZ game

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

Crowd the Tap

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

SciStarter.org/dashboard/lists

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!

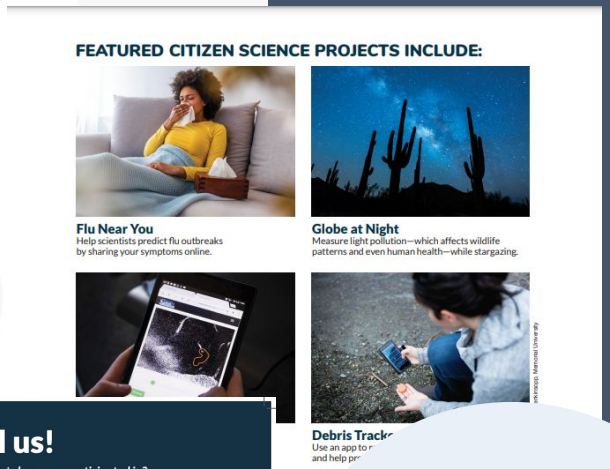
Add your own event and use free resources to plan and promote it

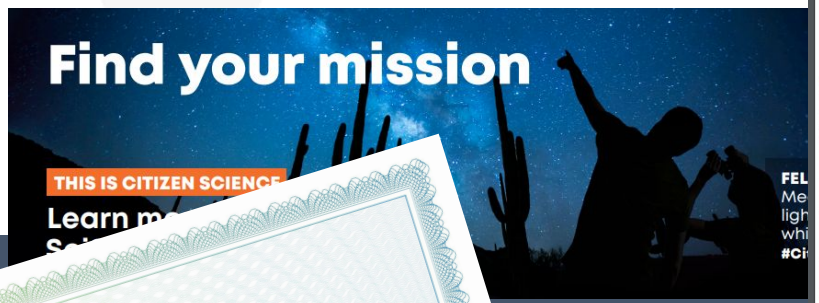
FREE RESOURCES:

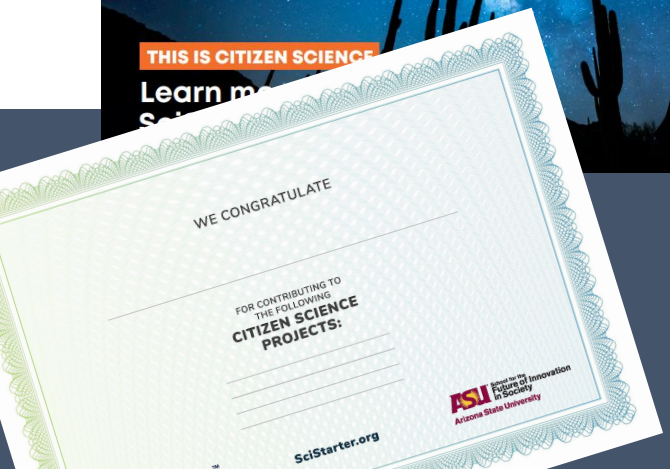
CitizenScienceMonth.org

CITIZEN SCIENCE MONTH

CitizenScienceMonth.org/Resources







CitSciMonth: April 2022

- **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**