

Foundations of Citizen Science

What is it, and how can you get involved?



Today's Agenda



Introductions



What is Citizen Science?



How to Get Started



Taking a Closer Look



Wrap-up





What comes to mind when you hear the phrase citizen science?



What is citizen science?





Citizen Science

A collaboration between scientists 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!



Imagine this tree in your neighborhood.

What do you notice?

- How many leaves do you see in relation to flowers?
- Do you see buds on the branches?
- Are the flowers in full bloom or are some wilted?

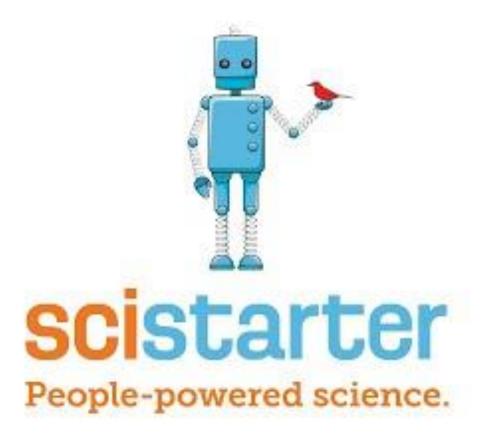




You just participated in citizen science!

You just shared observations that scientists can use to research climate change or the appearance of destructive invasive species, and that city planners might use to better understand tree canopies and heat effects.





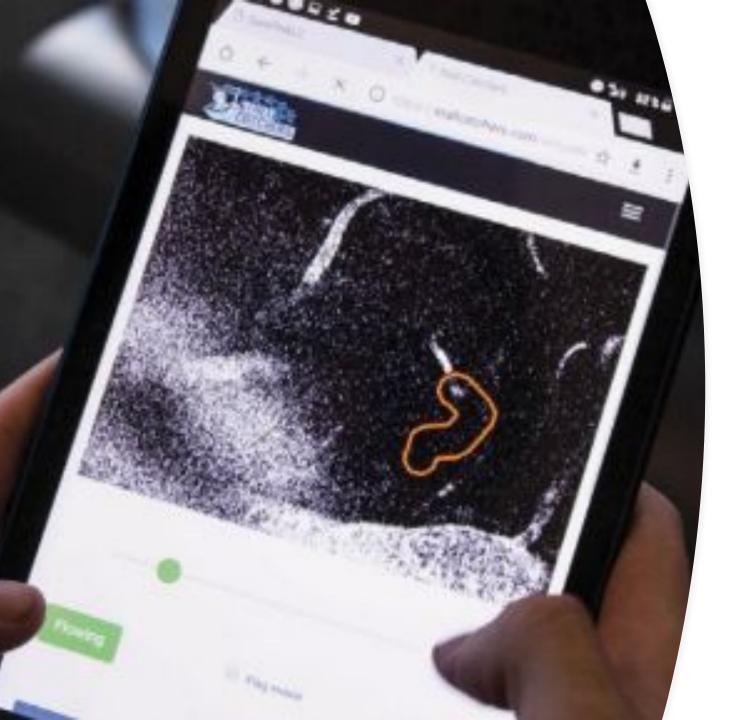


Why is it important?

Because of citizen scientists, we now know...

- Bird populations have declined by 50%
- Birds are breeding earlier
- 50+ types of bacteria live in your belly button
- The first flowering of 19 species of plants has moved 9 days earlier over the past decade
- There's a new type of aurora in the night sky (and the citizen scientists named it Steve!)
- There's another Jupiter-sized planet
- Invasive mosquito species have arrived in Germany





Plus!

In one weekend in 2019, citizen scientists accomplished 2,566 research hours, or 3.5 months of lab-equivalent research time, for an Alzheimer's research project.



Who can do citizen science?



Citizen scientists are typically people without specialized training who participate in scientific research to help answer questions that cannot be answered without their help.





The answer is anyone!

Retired people



Community Groups



Busy working adults



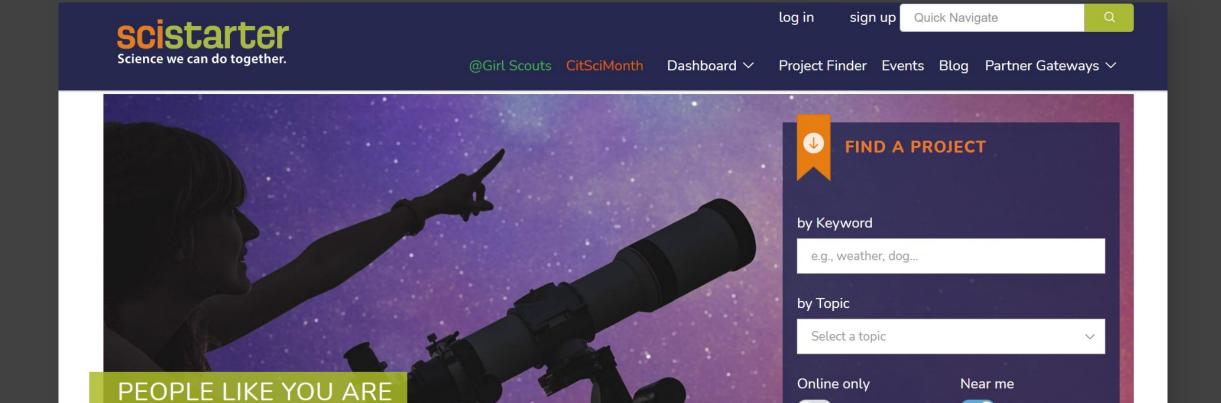
Youth groups





How do you get started?





Step 1: Join SciStarter.org

DISCOVERING

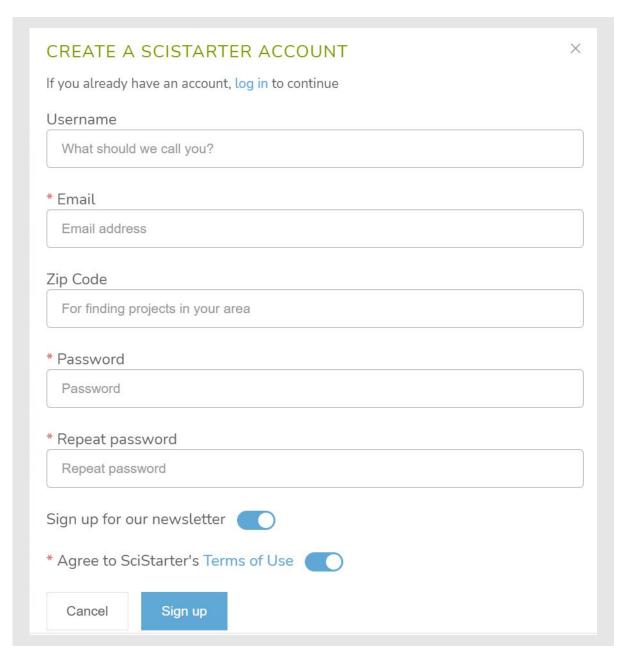
NEW WORLDS

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!

Find a Project



Create an account





Find projects that interest you!



The Great Sunflower Project

Document pollinators in your community.



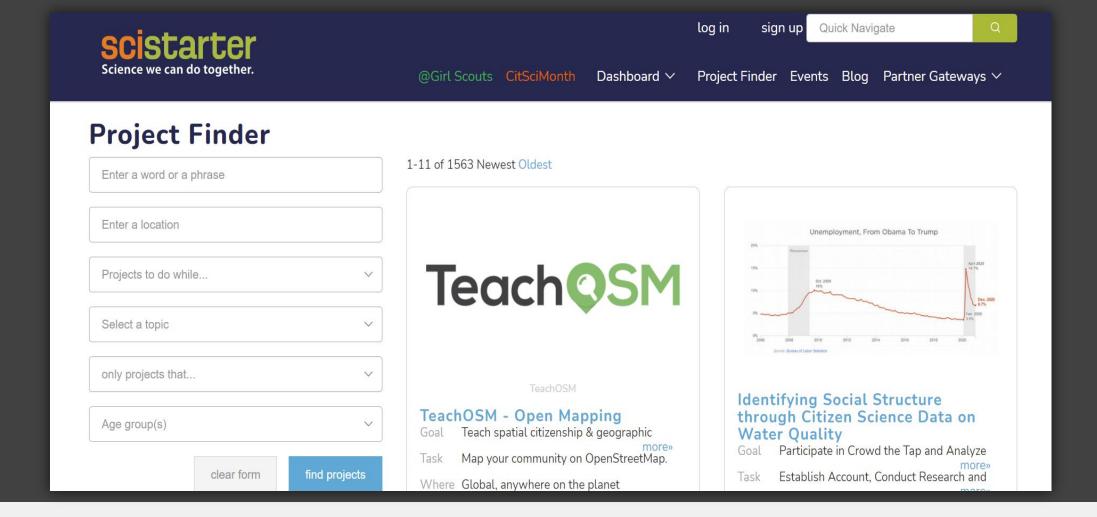
Caterpillars Count!

Measure seasonal variation by counting arthropods.



Globe at NightMonitor light pollution.





Step 2: Search SciStarter.org/finder

The projects and events on SciStarter.org represent a wide array of topics and research programs that participants from diverse communities and backgrounds can engage in anywhere, anytime, just once or on an ongoing basis.

What skills do I need to do citizen science?





When you do citizen science you are using science process skills.



Taking a Closer Look



PROJECT SQUIRREL

Help scientists better understand tree squirrel ecology.





Let's Reflect

What skills did you practice while completing Project Squirrel?



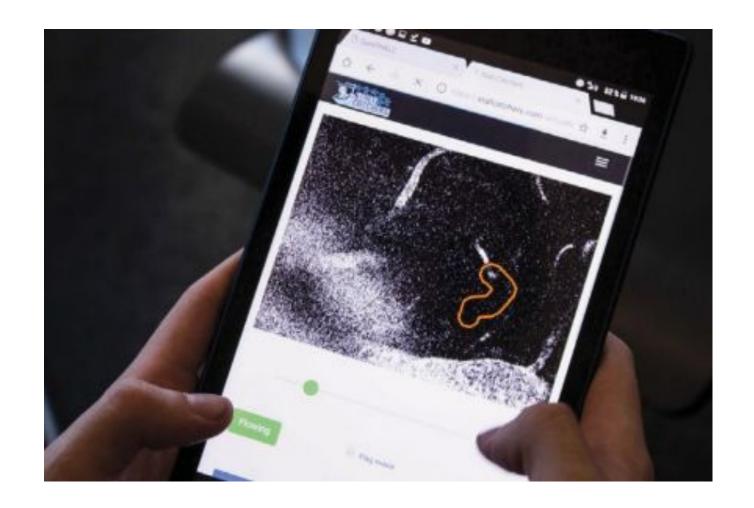
Let's Reflect

What skills did you practice while completing Project Squirrel?



Let's try a project!

https://media.scistarter.org/ stallcatchers-demo/SCDemo _p1.html



Play a game to accelerate Alzheimer's research. Let's try!



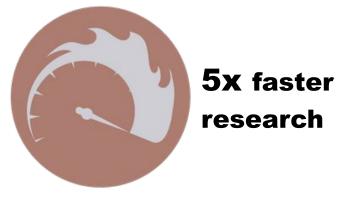
Enter Stall Catchers!



>28 000 catchers



50-100 play every day





1-2 months per research question





Many libraries across the country are becoming hubs for citizen science, where you can access books, field guides, computers, Wi-Fi, subject matter experts, telescopes and other citizen science resources.

Some libraries are even housing Citizen Science Kits with specialized tools to check-out that can help you complete a project!

Visit **SciStarter.org/Library** for more information.





BROADENS THE SCOPE OF WHO CAN CONTRIBUTE TO SCIENCE.



ENABLES PARTICIPANTS TO ENGAGE IN DATA COLLECTION, ANALYSIS, AND INTERPRETATION.



ENABLES PARTICIPANTS
TO LEARN ABOUT THE
NATURE OF SCIENCE
AND SCIENTIFIC
REASONING.



ACCELERATES IMPORTANT RESEARCH AND DISCOVERY.

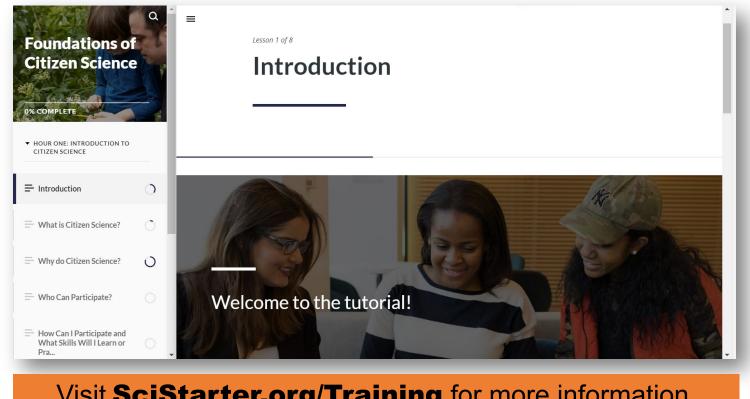
Benefits to Science & Society

Citizen science enables people from all walks of life to actively learn more about the world and address issues they are curious or concerned about.



Now you're ready!

Complete the Foundations of Citizen Science Training and earn a badge.



Visit SciStarter.org/Training for more information.



Questions?

