

SciFri Resources for Community Science

Get inspired to do science to improve your community with these educational resources, audio stories, and more.

Educational Resources

Investigate Biodiversity As You Design A Frog

Design a frog species of your own as you learn about the many ways frogs and toads adapt to their environment. All ages.

<https://www.sciencefriday.com/educational-resources/design-a-frog/>

Down The Drain: How Water Journeys Through City Sewers

Investigate how water travels through city sewers and impacts the environment. Then, experiment to address urban flooding and pollution. Grades 3-8.

<https://www.sciencefriday.com/educational-resources/water-journeys-through-city-sewers/>

Rewards And Neurotransmitters: How Games Can Affect Your Brain

Discover the ways reward systems like games, puzzles, and escape rooms can encourage positive or negative behaviors. Grades 6-8.

<https://www.sciencefriday.com/educational-resources/rewards-and-neurotransmitters/>

Mission Rehydrate: Water For A Thirsty Planet

Discover how astronauts recycle water on the ISS, then build and test your own filter to address real-world environmental issues. Grades 6-8.

<https://www.sciencefriday.com/educational-resources/recycle-water/>

Solve Real-World Soil Science Problems With Math

Learn the secrets to good soil and what helps plants grow. Then, use science and math to analyze dirt and develop your own custom blend. Grades 6-8.

<https://www.sciencefriday.com/educational-resources/soil-science-math/>

Life Under a Rock: Bacteria in Extreme Environments

Explore the dry, dim world of hypolithic or “under rock” cyanobacteria and measure and compare colony growth in deserts around the world. Grades 9-12.

<https://www.sciencefriday.com/educational-resources/life-hidden-beneath-the-rocks/>

Build A Groundwater Model

Make an affordable aquifer model then conduct a lab experiment to explore the effects of groundwater pollution. Grades 9-12.

<https://www.sciencefriday.com/educational-resources/diy-groundwater-model/>

Environmental Justice: Evaluating Zip Codes And Pollution Burdens

Who bears the pollution burden? Use data to determine the pollution burden for a community and the systems that contribute to environmental injustice. Grades 9-12.

<https://www.sciencefriday.com/articles/environmental-justice-classroom/>

See also: *SciFri Extra: Bringing Environmental Justice To The Classroom*

<https://www.sciencefriday.com/articles/environmental-justice-classroom/>

Live Online Discussion: Bringing Climate Science Into the Classroom

On Tuesday, April 5, 2016, Science Friday hosted a live online web panel to discuss challenges and approaches to teaching climate change science in the classroom. Led by passionate educators who are committed to best practices in climate education, this discussion provided strategies for bringing climate change data into the classroom and climate change instructional resources that any educator can use.

<https://www.sciencefriday.com/educational-resources/science-friday-discussion-beyond-the-debate-climate-change-in-the-classroom/>

Project Collections

Celebrate Biodiversity for Citizen Science Month

April is Citizen Science Month and Science Friday is an official partner! Join us for crowdsourced science projects celebrating biodiversity.

<https://www.sciencefriday.com/articles/celebrate-biodiversity-for-citizen-science-month/>

Science For Everyone Spotlight

You can do science anywhere. Crowd, collaborative, community and citizen science opportunities for anyone to participate in, contribute to, and lead scientific research.

<https://www.sciencefriday.com/spotlights/science-for-everyone/>

It's A Pollinator Palooza For Citizen Science Month

Science Friday is an official partner for Citizen Science Month! Join us this April to participate in a crowdsource science project.

<https://www.sciencefriday.com/articles/pollinator-citizen-science-month/>

How To Participate In Citizen Science During A Pandemic

Science Friday is an official partner for Citizen Science Month! Join us online throughout April to become a citizen scientist yourself.

<https://www.sciencefriday.com/articles/citizen-science-month-science-friday/>

You're Invited: Citizen Science Parties!

It's Citizen Science Month, and Science Friday is an official partner to help you become a part of the community! Join us for our livestream series.

<https://www.sciencefriday.com/articles/citizen-science-parties/>

Audio Stories and More

Show Off Your Backyard Birds And Bugs

Get involved in Citizen Science Month and take on the City Nature Challenge. 5 minutes

<https://www.sciencefriday.com/segments/backyard-city-nature-challenge/>

Citizen Science Projects To Soothe And Distract

Citizen science platform Zooniverse has not one, but four projects you can help with: data analysis tasks that will hopefully calm, soothe, distract, and divert you from life's stress. 8 minutes

<https://www.sciencefriday.com/segments/soothing-citizen-science-projects/>

Cooped Up At Home? Try These Citizen Science Projects

Caren Cooper, co-author of the book *A Field Guide To Citizen Science: How You Can Contribute to Scientific Research and Make a Difference*, joins Ira to talk about what makes a good citizen science project, how to get involved, and suggestions for projects. 17 minutes

<https://www.sciencefriday.com/segments/citizen-science-quarantine/>

Citizen Science: Help Document Your Changing Planet

Ira talks to Julia Kumari Drapkin, the CEO and founder of ISeeChange, about how citizen observations about rainfall, new spring flowers, and even how you feel can be valuable data for climate science—plus, how tracking that data benefits you. 7 minutes

<https://www.sciencefriday.com/segments/citizen-science-i-see-change/>

Beech Leaf Disease Is Spreading Rapidly in Massachusetts

Scientists are working to understand the tree disease caused by a microscopic worm. 5 minutes

<https://www.sciencefriday.com/segments/beech-leaf-disease/>

See also: *Explore The Outdoors For Beech Leaf Disease With SciFri Outside*

<https://www.sciencefriday.com/articles/beech-leaf-disease-community-science/>

Crowdsourced Data Identifies 126 'Lost' Bird Species

Researchers analyzed photos, videos, and audio from crowdsource platforms to identify bird species that have not been spotted in over a decade. 16 minutes

<https://www.sciencefriday.com/segments/126-birds-found-through-crowdsourced-data/>

Citizen Scientists Will Capture DNA From 800 Lakes In One Day

The project aims to find unnoticed species by sampling the waters of hundreds of lakes worldwide for environmental DNA. 8 minutes

<https://www.sciencefriday.com/segments/citizen-science-edna-global-lakes/>

Who Owns The Night Sky?

As space fills with satellites, how do we weigh the value of a dark night over the benefits of a connected world? 17 minutes

<https://www.sciencefriday.com/segments/track-satellites/>

How Citizen Science Can Speed Up Alzheimer's Research

A citizen science game uses the power of the crowd to identify stalled blood cells. Learn how Stall Catchers can help find new Alzheimer's treatments. 8 minutes

<https://www.sciencefriday.com/segments/how-citizen-science-can-speed-up-alzheimers-research/>

Make It Easier To Be Green. Show Frogs Some Love

Make your spaces safer for frogs or contribute to citizen science projects. 17 minutes

<https://www.sciencefriday.com/segments/building-frog-friendly-habitats/>

Protecting A Flickering Symbol Of Summer Nights

Researchers used citizen science observations and machine learning to understand where fireflies are and what they need to thrive. 12 minutes

<https://www.sciencefriday.com/segments/citizen-science-saving-fireflies/>

To Stop Spotted Lanternflies, These Dogs Are Sniffing Them Out

A citizen science project is turning canines into crop protectors, and challenging what researchers know about dogs' powerful noses. Digital Article.

<https://www.sciencefriday.com/articles/invasive-spotted-lanternfly-sniffer-dogs/>