

Community Science

What is it and Why Participate?

Community science is research conducted with participation from the general public, amateur/nonprofessional researchers, or participants for science, social science, and many other disciplines. There are different applications and functions of community science in research projects. Community science can be used as a methodology where public volunteers help in collecting and classifying data, improving the scientific community's capacity. It can also involve more direct involvement from the public, with communities initiating projects researching environment and health hazards in their own communities. Participation in community science projects also educates the public about the scientific process and increases awareness about different topics. Some schools have students participate in community science projects for this purpose as a part of the teaching curriculums. Plus it's FUN!

Below are some ideas of places where you can find projects:

<u>E-Bird (Cornell Lab of Ornithology)</u>: The goal is to gather information in the form of checklists of birds, archive it, and freely share it to power new data-driven approaches to science, conservation, and education. Your sightings contribute to hundreds of conservation decisions, peer-reviewed papers, and thousands of student projects, and help inform bird research worldwide.

<u>Merlin Bird ID</u>: Merlin Bird ID is a free application you can download to your phone to help you identify birds you see and hear. Merlin is unlike any other bird app—it's powered by eBird, the world's largest database of bird sightings, sounds, and photos.

<u>iNaturalist</u> – simply download the application on your phone, go outside, and begin observing and recording your findings. Every observation can contribute to biodiversity science, from the rarest butterfly to the most common backyard weed. iNaturalist shares your findings with scientific data repositories like the <u>Global Biodiversity Information Facility</u> to help scientists find and use your data. All you have to do is observe.

Bio-Blitz- Hold an event where people try to find as many species as possible using iNaturalist.

<u>City Nature Challenge</u>: is an international effort for people to find and document plants and wildlife in cities across the globe. It's a bio-blitz-style competition where cities are in a friendly contest with each other to see who can make the most observations of nature, who can find the most species, and who can engage the most people.

<u>Adventure Scientists</u>- contribute to science while you spend time outside. When a scientist is conducting research that requires people on the ground, they post their project on the Adventure Scientists platform, describing where and when they need help, and what their research is all about.

Volunteers (adventurers) browse scientific projects by geography, time, or activity, and if they find one that they want to participate in, they can apply to join the project. Likewise, they can post where they are going on an expedition to let scientists know when they are available.

Scientists and adventurers then coordinate on all of the training and logistics.

<u>Nature's Notebook:</u> Track changes in the timing of plant and animal seasonal activity with the *Nature's Notebook* program. Become a backyard observer and track the seasonal events of plants and animals where you live.

Phenology is nature's calendar—when cherry trees bloom, when a robin builds its nest and when leaves turn color in the fall. Learn why phenology is vital to many aspects of ecology and society. Phenology is also a leading indicator of climate change.

<u>Citizen Science.Gov</u>: CitizenScience.gov is an official government website designed to accelerate the use of crowdsourcing and citizen science across the U.S. government. The site provides <u>a catalog</u> of federally supported citizen science projects. In citizen science, the public participates voluntarily in the scientific process, addressing real-world problems in ways that may include formulating research questions, conducting scientific experiments, collecting and analyzing data, interpreting results, making new discoveries, developing technologies and applications, and solving complex problems.

<u>SciStarter.org</u>: One Million Acts of Science, Citizen Science Month April 1-30th. SciStarter helps connect people to projects and events all year long, but during Citizen Science Month, we work with many partners to reach people we're not reaching throughout the year. Too many people are unaware that they are both needed and invited to take part in helping to shape the future through science.

SciStarter.org is the place to find, join, and contribute to science by providing people access to more than 2,000 searchable formal and informal citizen science research projects, events, and tools. The SciStarter website also offers a dashboard or coordinated place for members to track and earn credit for contributions across citizen science projects and platforms.

If you are aware of other citizen science initiatives, please let us know so we can update our list!