



# Be a Citizen Scientist

**Level:** Great for ALL ages (with adult support for those who are not adults)

**Skills:** Math, Biology, Physical Education, Observation skills

Would you like to contribute meaningful data to interesting scientific projects? Anyone can get involved! There are many local, national, and international programs where you can collect data, submit it and learn from the collected information.

The programs listed below provide you with the training and resources you need to do the work. Most of them do require a smartphone or computer to enter the information. A few of them require purchases of equipment, like a rain gauge. But mostly, the programs just require that you have a desire to learn and curiosity about the world around you!

## Amphibians:

- Maine Amphibian and Reptile Atlas Project  
<https://www.maine.gov/ifw/fish-wildlife/wildlife/species-information/reptiles-amphibians/atlas-project.html>
- Frogwatch USA  
<http://frogwatch.fieldscope.org/v3/>
- North American Amphibian Monitoring Program – learn to survey frogs and toads through their calls  
<http://www.pwrc.usgs.gov/naamp/>

## Beaches

- Plastics (plastic pellets)  
<https://nurdlepatrol.org/Forms/Home/index.php>
- Marine Debris, NOAA program  
<https://marinedebris.noaa.gov/research/marine-debris-monitoring-and-assessment-project>

## Bird Counts

Bird data can provide important information about ecosystem health.

- Maine Bird Atlas  
<https://www.maine.gov/ifw/fish-wildlife/maine-bird-atlas/index.html>
- Heron Observation Network of Maine  
<https://www.maine.gov/wordpress/ifwheron/tracking-project/1-2/>
- Maine River Bird Project  
<https://ifw.citizenscience.maine.gov/programs/riverBirdProjec>
- FeederWatch: <http://www.birds.cornell.edu/pfw/>
- eBird – an online checklist project through the Cornell Laboratory of Ornithology and the National Audubon Society  
<https://ebird.org/home>
- Great Backyard Bird Count: <http://www.birdsource.org/gbbc/>
- NestWatch – a continent-wide effort to monitor nesting birds through the Cornell Laboratory of Ornithology and the Smithsonian Migratory Bird Center: <http://watch.birds.cornell.edu/nest/home/index>
- Woodcock Survey  
<http://www.fws.gov/birds/surveys-and-data/webless-migratory-game-birds/american-woodcock.php>

## Insects

- Maine Bumble Bee Atlas  
<https://www.maine.gov/ifw/fish-wildlife/bumble-bee-atlas.html>
- Maine Damselfly and Dragonfly Survey  
<https://www.maine.gov/ifw/fish-wildlife/wildlife/species-information/invertebrates/damselfly-dragonfly.html>
- Maine Butterfly Survey  
<https://www.maine.gov/ifw/fish-wildlife/wildlife/species-information/invertebrates/butterfly-survey.html>
- Monarch Larva Monitoring Project: <http://www.mlmp.org/>
- North American Butterfly Association's Butterfly Census  
[http://www.naba.org/butter\\_counts.html](http://www.naba.org/butter_counts.html)

## Invasives

Help gather data to enhance information for the strategic management of invasive species.

- Join Maine's participation in this nation-wide network to document invasives: <https://www.imapinvasives.org/>
- Global Garlic Mustard Field Survey: <http://www.garlicmustard.org/>

### **Light Pollution**

Light pollution has real impacts as it interferes with astronomical research, disrupts ecosystems, has adverse health effects and wastes energy.

- Document light pollution changes through the international program Globe at Night: <http://www.globeatnight.org/>

### **Space**

Who says you can't do rocket science? No telescope needed!

- Help NASA through Stardust@home by studying images for interstellar dust impacts: <http://stardustathome.ssl.berkeley.edu/>
- Galaxy Zoo – a project to help scientists classify galaxies by their shapes <http://www.galaxyzoo.org/>

**Water Monitoring** – Contribute to global water monitoring data.

- World Water Monitoring Day: <http://www.worldwatermonitoringday.org/>

### **Weather and Climate:**

- Community Collaborative Rain, Hail and Snow Network <https://www.cocorahs.org/Application.aspx>
- National Phenology Network's plant monitoring program <https://www.usanpn.org/>
- Project BudBurst: <http://budburst.org/>

### **Wildlife**

Document plants and animals anywhere and upload your photos and observations so they can be added to a global database of biodiversity to support local and global research projects.

- BioBlitz: <https://www.nationalgeographic.org/projects/bioblitz/>
- iNaturalist: <https://www.inaturalist.org/>