

ENVIRONMENTAL EDUCATION

Community Science Resources

A list of resources that enable you and your community to contribute nature observations in support of scientific research.

Projects for Elementary/Middle School/ High School:

Butterflies and Moths: https://www.butterfliesandmoths.org/

Butterflies and Moths of North America (BAMONA) is an ambitious effort to collect, store, and share species information and occurrence data. You can participate by taking and submitting photographs of butterflies, moths, and caterpillars.

Great Sunflower Project: https://www.greatsunflower.org/homepage

Take counts of the number and types of pollinators visiting specific plants. This project is a way to gather information about our urban, suburban, and rural bee populations and t give you the tools to learn about what is happening with the pollinators in your yard.

Journey North: https://journeynorth.org/

Track the migration of different species, such as monarchs, as well as the changing of the seasons by recording and comparing data with others across N. America.

Bumble Bee Watch: https://www.bumblebeewatch.org/

Bumble Bee Watch is a collaborative effort to track and conserve North America's bumble bees.

U.S. National Native Bee Monitoring: http://www.usnativebees.com/

There are more than 4,000 native bee species in the United States, with many species yet to be described. The project, supported by the U.S. Department of Agriculture, will train members of the public to look for and track wild bees.

The Lost Ladybug Project: http://www.lostladybug.org/

Over the past twenty years native ladybugs that were once very common have become extremely rare. Help scientists collect data on ladybugs by recording observations. Also includes lesson plans, information, and ladybugs by mail.

Firefly Watch: https://www.massaudubon.org/get-involved/citizen-science/firefly-watch

Are firefly populations growing or shrinking, and what could lead to changes in their populations? Mass Audubon has teamed up with researches from Tufts University to track the fate of these amazing insects. With your help, we hope to learn about the geographic distribution of fireflies and what environmental factors impact their abundance.

Bud Burst: http://www.budburst.org/

Budburst citizen scientists work together with research scientists, educators, and horticulturists to answer research questions by making careful observations of the timing of plant life cycle events, also called <u>phenophases</u>. As a Budburst citizen scientist, you may invest as much or as little time as you like. You may observe and report on one or more plants over one season or over many years, or report on one plant observed for one day. All data contributions are valuable.

NY Audubon: https://ny.audubon.org/birds-0/citizen-science-programs

Listing of several projects related to birds: <u>The Great Backyard Bird Count</u>, <u>eBird</u>, <u>Hummingbirds at Home</u>

iNaturalist: https://www.inaturalist.org/projects

The worldwide database for nature observations. Join a specific project by region or by species, such as the New York City Butterfly Count or NYC Bees!

Day in the Life of the Hudson River: <u>https://www.ldeo.columbia.edu/edu/k12/snapshotday/</u>

Each autumn, thousands of students take part in the annual "Day in the Life of the Hudson and Harbor" event. Students collect data to create snapshots of the river at more than 90 sites. They share their data online so they can see how their piece of the river fits into the larger Hudson ecosystem. "A Day in the Life" is a joint effort of DEC's Hudson River Estuary Program and the Lamont-Doherty Earth Observatory (LDEO) of Columbia University.

Projects for High School and Beyond:

Monarch Larva Monitoring Project: https://monarchjointventure.org/mlmp

Our mission is to better understand the distribution and abundance of breeding monarchs and to use that knowledge to inform and inspire monarch conservation. Requires visiting or growing a milkweed habitat.

Monarch Watch: https://www.monarchwatch.org/

Information about monarch butterflies and research projects that best suit a high school science classroom.

NY Phenology Project: https://www.nyphenologyproject.org/

The New York Phenology Project is a networked community science initiative focused on climate and urbanization impacts on plants and pollinators.

Nature's Notebook: https://www.usanpn.org/natures_notebook

Record specific observations from a list of 1,389 plant and animal species or check out the targeted species in the Nature's Notebook campaigns. These observations contribute to larger scientific studies related to phenology, the timing of life cycle events.

The River Project: https://www.riverprojectnyc.org/citizens-water-quality-testing-1

Community members and scientists testing New York City's waterways for indicators of sewage pollution.