

Citizen Science and Social Justice Projects

Grades 9-12

The Lost Ladybug Project: Did you know that the Nine-spotted Ladybug is the New York State insect? [The Lost Ladybug Project](#)



The Nine Spotted Ladybug, (New York's official state insect) was once one of the most common ladybugs in North America, but over the past 20 years, sightings of this insect have become increasingly rare. Recording and restoring populations of this lovely little beetle is the inspiration for creating the Lost Ladybug Project.

NY state residents can participate in the nine-spotted ladybug restoration project. Go to [Ladybug Larvae Sales](#) to purchase Ladybug Larvae.

Big Ideas of Sustainability:

- *Equilibrium*
- *Change over Time*

Here are two related citizen science projects available at Cornell University's Lab of Ornithology

- Project Feeder Watch, <http://feederwatch.org/>
- Celebrate Urban Birds, <http://celebrateurbanbirds.org/>

USA National Phenology Network: Did you know wood frogs can freeze solid in the winter, and are unharmed when they thaw in the spring?



Joining the *USA National Phenology Network*, gives students the opportunity to record observations of natural phenomenon that help inform scientific discovery and political decision-making. The [USA NATIONAL PHENOLOGY NETWORK](#) includes an online tool to record these observations called *Nature's Notebook*.

This place-based, hands-on, program promotes cross-curricular connections. The website also describes how teachers and students can start a local Phenology project in their community.

Big Ideas of Sustainability

- *Cycles*
- *Systems*
- *Diversity*
- *Change Over Time*

LifeStraw: STEM & Service Learning: Did you know that each year, children miss 443 million of school due to water-related illness?



Safe drinking water for everyone is essential to promote a just and sustainable future. CEL F long-standing partnership with Vestergaard Frandsen, maker of the LifeStraw water filtration system, inspires students to learn about this global issue and empower them to make change. Through CEL F's LifeStraw program, your school community can bring safe drinking water to children and communities around the world. So far, CEL F's water campaign has provided LifeStraw community water filtration systems to 84 communities in Kenya, Haiti and Nepal. To learn more, please visit our website: <http://www.celfeducation.org/lifestraw-stem-service>. High School Students can also participate in our Student Ambassador program, which includes learning how to demonstrate the LifeStraw, to school communities. <http://www.celfeducation.org/student-ambassador-program-sam>

Big Ideas of Sustainability

- *Fairness/Equity*
- *Place*
- *Long-Term Effects*

Day in the Life of the Hudson River*: Did you know that one of the Native American Names for the Hudson River, *Mahicantuck*, means the “river that flows both ways.”



The Hudson River is a major natural feature in NY; an important waterway for recreation and commerce and an ecologically and economically important estuary. It is also the site of a yearly Citizen Science event called The ‘Day in the Life of the Hudson River’ run by the Lamont-Doherty Earth Observatory, the NY State Department of Environmental Conservation and the Hudson River Estuary Program. This place-based event involves sampling the physical, biological and chemical aspects of the Hudson River on a specific date in October. The data collected informs scientists on how the Hudson River estuary is changing over time. For more information on how your class can participate, go to <https://www.ideo.columbia.edu/edu/k12/snapshotday/>

Big Ideas of Sustainability

- *Diversity*
- *Community*
- *Interdependence*



**CEL F Professional Learning in
Education for Sustainability**

Another Hudson River project you may want to engage your students in is *The Glass Eel Project* through the NY DEC [Hudson Rive Glass Eel Project](#)

Don't see anything here that fits into your curriculum?

Scistarter, <http://scistarter.com/finder>, has over 1500 vetted Citizen Science and Social Justice projects organized by location and topic.