

Cornell Citizen Science Collaborative Request for Applications

Program Overview

Citizen science—partnerships between scientists and the public that advance real-world research—puts youth in the driver's seat to create new knowledge, take informed action in their communities, and develop a sense of belonging in a community of science practice. The Pathways to Science Through Nature (PtStN) project provides curricula and professional development for educators to support youth observations and investigations through citizen science projects. The K-12 team at the Cornell Lab of Ornithology (CLO)—a leading institution in the field of citizen science—has extensive experience working with educators to connect citizen science opportunities with learning priorities. The CLO *Habitat Connections* curriculum (http://www.birdsleuth.org/habitat-connections-2/) brings science concepts to life and directly connects youth to their local habitats in order to build their scientific and environmental literacy.

Through three years of pilot work with 4-H and with financial support from the Noyce Foundation, PtStN has established communities of educators using citizen science in out-of-school settings to support goals related to STEM learning. This includes facilitating inquiry-based learning, habitat improvement projects, and youth development aspects of the NGSS Standards Science and Engineering Practices.

Learning through citizen science can inspire youth to see science as an approachable and useful tool for making a difference in their lives and in their communities. Coupled with the hands-on curricular activities and opportunities for engaging with scientists, participation can also inspire students toward a personal interest in science.

Master Training & the National Girls Collaborative Project

Over the 2015-2016 year, the Cornell Lab of Ornithology is partnering with the National Girls Collaborative Project (NGCP) to bring citizen science professional development and curriculum resources to more youth development educators and organizations, with a particular focus on educators who reach young people in grades 3-8. Two Master Trainers from each of five NGCP Collaboratives will be selected to take part in a workshop held in Seattle in early December of 2015 (two days within the December 3-5 timeframe). This training will be part of the NGCP Collaboration Institute. Two NGCP representatives have already taken part in a three-day BirdSleuth Educator's Retreat at the Cornell Lab of Ornithology, and will inform the December workshop activities to bring NGCP youth development expertise and sensibilities to bear on BirdSleuth professional development materials and resources.







After the December training, Master Trainers will host full-day Citizen Science Educator Workshops and train educators in their Collaborative networks. Each Collaborative must train a minimum of 20 educators*, and serve as a regional point person for the PtStN team to contact, encourage, and support educators as they become active in a community of practice for citizen science. The Cornell Lab of Ornithology will provide curriculum materials, monthly support materials in the form of webinars, activities, and newsletters, and resources to assess youth learning outcomes.

Project Timeline

- 1. Request for Application Submissions Due: September 15, 2015
- 2. Selection of Collaboratives Completed: September 23, 2015
- 3. Orientation Webinar: October 14, 2015
- 4. Master Trainer Workshop: December 3-5, 2015, Seattle, WA
- 5. Follow-up Webinar and Implementation Plans due: December 15, 2015
- 6. Collaboratives host Workshops for Educators: February-March 2016
- 7. Evaluation Activities: March 2016-June 2016
- 8. All Educator workshops must be completed by the end of March, 2016.

Benefits of Being an Official Cornell Citizen Science Collaborative Master Trainer

- Travel and lodging for two Master Trainers from each of five Collaboratives to attend the Master Trainer Workshop in December of 2015;
- Development of a Citizen Science Educator Training network in your Collaborative
- Curricula and supporting materials valued at over \$100/educator;
- Access to experts in the fields of citizen science and ornithology;
- Leadership in efforts to support youth development through citizen science;
- Opportunities to participate in future Citizen Science Collaborative projects.

Requirements of being a Cornell Citizen Science Collaborative

To participate, we ask the following items of your Collaborative:

- 1. Identify two Master Trainers for your Collaborative to facilitate Educator Training Workshops in the 2015-2016 school year;
- 2. Send two Collaborative Master Trainers to the Master Trainer Workshop this December in Seattle offered as part of the NGCP Collaboration Institute. The workshop will be within the December 3-5 timeframe (final schedule to be confirmed by September 9, 2015):
- 3. Participate in the Orientation Webinar on October 14, 2015;
- Provide feedback to the PtStN and NGCP teams on training materials, sustainable support structure, and other curriculum and programmatic items as requested throughout the project.

*Funding is available for 20 kits only for each region. Collaboratives may choose to train more than 20 educators; distribute kits to teams, etc. If Collaboratives have more demand, we will work with you to identify ways to obtain additional materials.







How to Apply

Collaboratives interested in applying to be included in this project for five Cornell Citizen Science Collaboratives should submit the following materials via e-mail to Karen Peterson, kpeterson@ngcproject.org, no later than September 15, 2015:

- 1. A Letter of Intent with the following information:
 - a. Names and Organizations of the two Master Trainers for your Collaborative.
 - b. Information about existing infrastructure for potential Citizen Science Educator Training Workshops that answers the following:
 - i. What niche can citizen science fill in the programming your Collaborative offers?
 - ii. What partnerships or local organizations could you leverage to support citizen science work in your region? Please list specific examples.
 - iii. List some potential locations where these Educator Workshops might be held.
 - iv. How many educators (particularly those who reach youth in grades 3-8) could be reached through your trainings?
 - v. If materials were available in Spanish, would this benefit your efforts? If yes, how?
- 2. CV or Resume for each Master Trainer
- 3. Letters of support from the organizations for each Master Trainer as well as the Collaborative Convening Organization





