

Impacts of Citizen Science* in Undergraduate Classes

Goal

Investigate how incorporating a citizen science unit into introductory biology courses impacts student learning and attitudes toward the environment.

Why?

While citizen science has been shown to be a powerful teaching tool in informal, primary, and secondary education settings, providing learning benefits such as knowledge gains and attitude changes towards science and the environment, there is limited research on its impact in higher education. Rigorous assessment is needed to determine whether the benefits observed in other contexts translate to the postsecondary classroom.

Instructors Needed

We are recruiting instructors who teach introductory biology (or similar courses) at postsecondary institutions and are willing to either implement a specific ecology/biodiversity focused citizen science unit in their course during at least one semester in the next academic year (Fall 2025 and/or Spring 2026) or to serve in a comparison group, in which they would not implement the unit but cover the same general set of learning objectives, and provide students the same assessments as the implementation group. Lecture courses are preferred but lab courses will be considered. Instructors from a range of institution types and sizes are welcome. Participants will engage in professional development, collaborate on activity planning, and participate in reflections together.

We will provide the citizen science unit for implementation in the study group but instructor feedback will be considered for making revisions. We will also provide the necessary assessments for the study and comparison groups, in addition to science content quizzes that participating instructors will make together during a series of planning meetings before the semester begins. Professional development meetings will continue occasionally after the semester starts. The unit is expected to take a few periods, with some potential homework assignments for students.

Instructor benefits

- \$1000 stipend per semester for instructors in the study group; \$250 for instructors in the comparison group
- Potential to co-author a manuscript
- Professional development and networking

Interested?

Complete the short interest form [here](#) by May 31st and we will follow up with you.

For more information, contact Hannah Moore (mooreha25@students.ecu.edu) or Heather Vance-Chalcraft (vancechalcraft@ecu.edu). Funding provided by NSF award #2120459.

*Note on terminology: In this document we use the term “citizen science” to refer to a branch of participatory sciences. We chose to use this name, though it has its limitations, to increase the visibility of our study, as it is currently the most commonly recognized name for this sort of science.