

# Learning to See, Seeing to Learn | AWARD #1516149

A Sociotechnical System Supporting Taxonomic Identification Activities in Volunteer-Based Water Quality Biomonitoring

**Community Partners:** Carnegie Museum of Natural History, Stroud Water Research Center, Pittsburgh Parks Conservancy, Trout Unlimited, ALLARM

**PIs:** Marti Louw (Carnegie Mellon University)

**Co-PIs:** Kevin Crowley (Uni. of Pittsburgh)

**Evaluator:** Camellia Sanford, Rockman Evaluation

## Project Outputs

[Macroinvertebrates.org](http://Macroinvertebrates.org) [Pocket Macro App](#) & [MacroCards deck](#)

## Project Description

Macroinvertebrates.org tools aim to improve engagement, confidence and accuracy in taxonomic identification activities in a range of water quality monitoring and environmental education settings with diverse learners.

## Key Achievements

- The project has developed a highly used suite of tools - website, mobile app, print resources, flashcards, open source illustrations, imagery and scientific content for CreativeCommons use
- Extended codesign with community partners improvise the quality, relevance and usability of learning resources.
- Objects of scientific relevance and community science relevance may be different.
- Bridging scientific and vernacular ways of seeing nature for collective action requires deep design work.

## Audience & Settings

### Audiences:

Citizen/Community Researchers, Scientists, Educators/Trainers, Lifelong Learners

### Disciplinary Area:

Environmental education, freshwater science, water quality monitoring, entomology

### Learning Environments:

Streamside, rural/suburban/urban training sites, afterschool, summer camps and water quality biomonitoring programs

## Access & Inclusion

The iterative design and testing of project goals and materials were developed through an ongoing set partnerships that brought the needs of different demographic, geographic, cultural and ideological groups to the fore.



# Learning to See, Seeing to Learn AWARD #516148

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A project of [Macroinvertebrates.org](#)



The Atlas of Common Freshwater  
**Macroinvertebrates**  
of Eastern North America

[Demo Video](#)

