Impact Project Report

Master Naturalist re-designs materials for a valuable monitoring program

Issue

Aquatic macroinvertebrates are animals without backbones, spend all or most of their lives in the water, and are visible to the naked eye. Their varying degrees of pollution tolerances makes documenting their abundance and diversity an important indicator of overall stream health. Biological monitoring is widely used as an assessment tool to track current stream conditions and trends.

Founded in 1982, the Haw River Assembly (HRA) has fought to restore and protect the health of the eight-county Haw River Watershed. One of HRA's longest-running programs is the River Watch (RW) Project which relies on citizen volunteers to help collect data in their local streams. Information from RW surveys, submitted quarterly by RW teams, is entered into an open database on the HRA website. Master Naturalist student Jeannie Ambrose took on a much-needed update to the RW volunteer training materials and assisted HRA staff as they re-started their Macroinvertebrate Workshop.

Project

Ambrose soon discovered the volunteer RW training materials, created nearly a decade ago, were not editable. So she undertook a complete redesign — organizing material to better complement current protocols and survey sheets used in the field. She participated in field trainings, workshops, and discussion groups to evaluate the RW training sessions. Ambrose also examined programs offered by other organizations during 2024's Creek Week.

Sharing her ideas and past experiences lead the HRA staff to restart an updated Macroinvertebrate Workshop. Using both desktop and portable handheld microscopes to look at live macroinvertebrates, volunteers learn the characteristic features of different kinds of aquatic macroinvertebrates. As a result, trainees improve their observational skills so they can more competently record what they find in their stream.

Ambrose summarized her experience saying, "it's all about getting out there, sharing real-world observations that will make a difference."



Ambrose examines samples. Photo: W. Ambrose

Student

This project is the work of Jeannie Ambrose.

Impact Projects

Beyond classwork, a key feature of the Master Naturalist Volunteer program are the Impact Projects students develop. These projects integrate course concepts and benefit a Partner Organization.

Highlight

Partner Organization

Haw River Assembly

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