



STREAM WATCH Trumbull Soil and Water Conservation District

Contact:
Amy Reeher, District Administrator/Watershed Coordinator
(330) 637-2056, ext. 8624 amy@trumbullohswcd.org
www.swcd.co.trumbull.oh.us

Trumbull Soil and Water
Conservation District



Stream Watch is a stream water quality monitoring and education program. Students from throughout Trumbull County collect macroinvertebrates, which are tiny organisms without a backbone that can be seen by the naked eye (insect larva, nymph, etc.). The organisms are collected into a three-foot square net by rubbing rocks in an area of fast moving water known as a riffle. Once the

macroinvertebrates are collected, participants sort and identify the organisms, record their results and assign a rating of stream health based on their sampling. This is a hands-on, interactive activity that meets academic content standards. If you do not have access to a stream, we can bring it to you! Contact us for more details.

Schedule an introduction program and/or a Stream Watch session:

Creek Critter Clues—Find out how tiny macroinvertebrates in our local streams and rivers give clues to the water's health in this **introduction to Stream Watch**, Trumbull County's stream quality monitoring program.



Where Does Your Water Shed? - Did you know Trumbull County has 3 main watersheds? This program utilizes a table-top watershed model called the *Enviroscape* to demonstrate the concept of watersheds as well as potential sources of pollution.

Stream Watch - Go *WILD* as we collect *BOGS* to determine the health of our local streams. Field collection, sorting, identifying and recording of biological & chemical data make this an unforgettable outdoor laboratory experience.

Have an idea for a water quality program? We can customize a program for your class!



STREAM WATCH

Trumbull Soil and Water Conservation District

Amy Reeher, DA/WC
(330) 637-2056, ext. 8624
amy@trumbullohswcd.org
www.swcd.co.trumbull.oh.us

Trumbull Soil and Water
Conservation District



What do the students monitor exactly?

The water quality of the stream is measured by looking at the number and variety of the macroinvertebrates or “stream bugs” living within it. These organisms lack a backbone and can be seen without the aid of a microscope.

The macroinvertebrates can be utilized to determine the health of the stream because not all bugs are “created equal”. The macroinvertebrates are separated into different tolerance categories which refer to their ability to tolerate pollution. The categories are sensitive (those that cannot handle pollution), intermediate (those that can handle some pollution), and tolerant (those that can survive the most amount of pollution). Examples of the macroinvertebrates students collect include stoneflies, water pennies, crayfish and leeches.

Students use a kick seine (shown by the blue arrow) to capture the macroinvertebrates. The kick seine is placed in the riffle and the students typically work a 3 ft by 3ft area by rubbing the rocks under the water and removing them to the side. When all the rocks have been rubbed the students then kick up the sediment (fondly known as the “river dance” or “stream twist”) by moving their feet on the stream bed. The net is held at a 45 degree angle to ensure that no macroinvertebrates flow back into the stream.

Kick Seine



Once the sampling is complete, students take the net to the streambank and begin sorting the insects. Once all the insects have been collected off of the net and sorted, the tallying is done to get a stream health score.

The U.S. Department of Agriculture (USDA) and Trumbull Soil and Water Conservation District (SWCD) prohibits discrimination in all programs and activities on the basis of race, color, national origin, age disability, sex, and where applicable, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or part of an individual's income is derived from any public assistance program. The USDA and SWCD are equal opportunity providers and employers.