STREAM WATCH

Trumbull Soil and Water Conservation District

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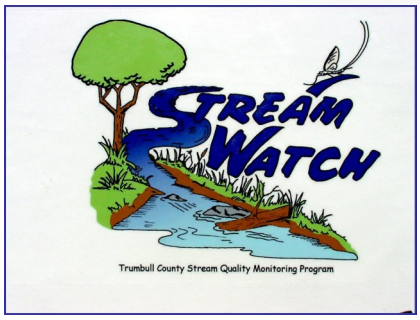

Stream Watch is a stream water quality monitoring and education program. Students from throughout Trumbull County collect macroinvertebrates, which are tiny organisms without a backbone that can be seen by the naked eye (insect larva, nymph, etc.). The organisms are collected into a three-foot square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

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.

What in the World is Your Watershed? - 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 BUGS 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!

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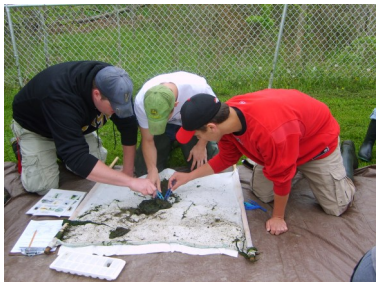
What do the students monitor exactly?

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.