

Macroinvertebrate Study

A Juniata County Conservation District Lesson, it involves students handling samples of aquatic organisms and stream substrate either live or preserved in an ethyl alcohol solution (rubbing alcohol). Please contact mindy-musser@juniataccd.org if you have any questions about this lesson, if you would like it to be adapted to a different grade level than those listed, or if you are interested in the introduction to macroinvertebrates only and not the examination of the stream sample.

Students learn about water quality and its measurement by assessing the biological life forms in a stream; specifically aquatic insects and macroinvertebrates (macros). Students learn about different types of macroinvertebrates before breaking into small groups to examine a preserved or live sample of macroinvertebrates caught in a local stream. In a live sample, students identify and count the types of macros they find in their sample and pronounce the stream as healthy or unhealthy at the end of the lesson. (Adaptable for grades 4 &5; this lesson will take up to 2 hours of class time.)

This lesson can also be adapted as an outside stream activity if access to a stream is nearby and proper permission slips are secured. Students will witness and/or participate in catching the macroinvertebrates for examination and immediate return to the stream.



Photo Source: Juniata County Conservation District