

## Macroinvertebrate Study

*This is an original Juniata County Conservation District Lesson and involves students handling samples of aquatic organisms and stream substrate preserved in an Ethyl Alcohol Solution (rubbing alcohol). It can also be taught as a simple introduction to Macroinvertebrates and the examination of preserved organisms can be skipped. Please contact our educator at [teddi-stark@juniataccd.org](mailto:teddi-stark@juniataccd.org) if you have any questions about this lesson, or 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 will learn about Water Quality and how it can be measured through assessing the biological life forms in a stream, especially aquatic insects and other small creatures referred to as Macroinvertebrates. Students will learn about different types of Macroinvertebrates before breaking into small groups examining a preserved sample of macroinvertebrates caught in a local stream. Students will identify and count up the types of macros they find in their sample, and pronounce the stream either as healthy or unhealthy at the end of the lesson. (Adaptable for grades 4 &5, this lesson will take either 2 separate 1 hour periods, or approximately 2 hours of class time.)

