

Lesson number	1.3
Title of activity	Calculating a Biotic Index from Stream Macroinvertebrates (streamside activity)
Time	20-30 minutes at the stream
Student group size	1-3 students
Resources required	<p>Field-based activity:</p> <ul style="list-style-type: none"> ● Kick net (one per class) ● White or clear collection trays (one shallow trays or ice cube tray per group) ● Copies of Macroinvertebrate ID Chart and Macroinvertebrate Biotic Index Student Sheet (one set per group)
Venue	<p>At a stream</p> <p>(Recommended to do Classroom biotic index activity in a previous class as preparation for this field activity).</p>

Instructions:

1. Do the [Classroom biotic index activity](#) as preparation for the field experience.
2. Gather resources required for macroinvertebrate sampling in the field listed above.
3. Good video [here](#) on how to conduct a stream sample in the field
4. Can use one kick net to collect a sample, can divide up and distribute macroinvertebrates to multiple groups consisting of two to four students for identification and biotic index calculation.
5. Important notes:
 - a. Make sure to brief students on safety guidelines prior to departure and at field site.



- b. Safety is paramount. Make sure you choose a section of stream that is safe and brief your students on safety rules. Follow all relevant safety procedures from your school for field trips.
- c. Make sure that macroinvertebrates are as unharmed as possible and returned to the stream upon completion of the activity. Make sure that no macroinvertebrates are accidentally transported to or from the site in the nets or trays.
- d. Local Trout Unlimited chapters have experts on macroinvertebrate identification and other stream health indicators and are often happy to partner with teachers on a field experience like this. Click [here](#) to find your local TU chapter.