

Freshwater Macroinvertebrate Sampling Technique

for Gravel and Sand

Field Guide

In the Field

1. Lay the quadrat on the sand or gravel and place the D-net downstream (if moving water) inside and along one side of the quadrat.
2. One student holds the net while another uses a trowel or shovel to lift the top 4 cm of the substrate and place it into the net. Move the net next to where the student is digging until the whole quadrat is sampled.
3. Slowly lift the D-net partly out of the water. Move the bottom of the net back and forth in the water to wash out the finer sediments.
4. Lift the net out of the water and as the water flows through, make sure no organisms escape by climbing out. One student should hold the net itself underneath to prevent the net from ripping since the sample may be heavy. This is one sample.
5. Use the sieved water in squirt bottle to concentrate all organisms and debris at the bottom of the net.
6. Grab the bottom of the net and overturn the net carefully to release all of its content into a bucket. Use the squirt bottles to make sure that all organisms and debris have been transferred to the bucket.
7. Place the bucket(s) in the shade until you are ready to sort, count and identify organisms.
8. Repeat steps 1-7 until you have collected the number of samples you need for this habitat type.