

# 10 STEP PROGRAM TO TAKING A RIVER BUG SAMPLE PROPERLY

A Surber sampler is a square metal grid with an attached net which is used to collect stream bugs (sometimes called macroinvertebrates).

1. Place the Surber in the shallowest, fastest flowing part of your stream, ideally where the water ripples and barely covers the streambed.
2. Set the Surber with the net upright, water flowing into the net. Work the base of the net into the streambed.
3. Hold the Surber in place while turning over stones within the metal grid and either use a brush or hand-rub all the stones to dislodge bugs that clinging to them. Bugs cling tight so take your time. Make sure all bugs end up in the net.
4. Stir up remaining gravel/ sand/ debris with your hands to dislodge bottom-dwelling bugs.
5. Hand-pick snails and other heavier bugs that are not picked up by the current.
6. Once sample is taken, tip the net into a white tray. Rinse the net with stream water if you need to and make sure all animals on net end up in the tray.
7. Pick out any big stones and big bits of debris from tray. Once you are sure any bugs clinging to them are picked off and put in tray, then these big stones / debris can go back in the stream.
8. Place bugs and any small bits of stone/debris/plant into a plastic pot with a screw lid.
9. Preserve the whole sample in 70% ethanol (alcohol) or methylated spirits. This is 7 parts ethanol to 3 parts water. Ensure all the sample in the pot is covered by preservative. Only use enough preservative to cover the sample, so don't fill the pot. Seal the lid and make sure it is secure. The sample will keep for months if preserved properly.
10. Label the pot with RIVER NAME, SITE NAME, DATE, TIME, WHO TOOK SAMPLE and WHAT SAMPLE IS - i.e. 'MACROINVERTEBRATES IN 70% ETHANOL. Make sure label is secure and writing won't wash off. A paper label written in pencil can also be placed in the pot itself.

next sample and repeat 1-10.