

AS3 – Macroinvertebrate Study

This activity is a field work exercise in which you will study the small invertebrate animals living in a waterway near your school

Syllabus references:

Outcomes

Core Content: 4.8.2 classification a) classify living things according to structural features
b) identify a range of animals using simple keys

Skills: 4.10 a) describe some adaptations of living things to factors in their environment
4.15 a) make and record observations and measurements accurately

Time: 90 minutes

You will need

Water bug detective guide
Data logger or Streamwatch kit or other water testing kit
Macroinvertebrate nets
Hand lenses
White trays
Ice cube trays
Paint brushes

Activity

This study can be performed at a local waterway or at one of the field trip sites described in this kit.

Examine Water Bug detective Guide and Key to Macroinvertebrate Life in the River (from Streamwatch Manual see www.streamwatch.org.au/bugs/index.html if you do not have a copy).

Fieldwork Activities

Use the Waterbug Detective Guide and/or the Streamwatch Manual to:
collect water bugs at a local creek.
identify types collected by use of a key (see Streamwatch Manual)
complete Water Bug Survey Recording Sheet

Use a Streamwatch Kit or schools data logger or other kit to:
test pH, temperature, total dissolved solids and turbidity at site where water bugs are collected

choose a water bug studied in the field
draw the water bug to scale preferably from a live specimen
label 3 adaptations of the water bug
define producers, consumers and decomposers using a dictionary
identify some producers, consumers and decomposers in the local watercourse
explain food web links between water bugs found in the field

Waterwatch NSW conducts state-wide water bug surveys in March and October each year, the autumn and spring bug surveys see www.bugsurvey.nsw.gov.au . If you test at these times of year results can be entered via the website.