SITE INFORMATION TABLE			
Date (dd/mm/yr):			
Collectors name:			
River name:			
GPS co-ordinate:	S	E	
Comments /			
Observations			

Co-ordinates as lat/long (e.g.  $29^{\circ}30'25''$  S /  $30^{\circ}45'10''$  E) <u>OR</u> as decimal degrees (e.g.  $29.50694^{\circ}S/30.75277^{\circ}E$ )









#### **Scoring**

- 1. On the table below, circle the sensitivity scores of the identified insects.
- 2. Add up all of the sensitivity scores.
- Divide the total of the sensitivity score by the number of groups identified.
- 4. The result is the average **score**, which can be interpreted below.

GROUPS	SENSITIVITY SCORE	
Flat worms	3	
Worms	2	
Leeches	2	
Crabs or shrimps	6	
Stoneflies	17	
Minnow mayflies	5	
Other mayflies	11	
Damselflies	4	
Dragonflies	6	
Bugs or beetles	5	
Caddisflies (cased & uncased)	9	
True flies	2	
Snails	4	
TOTAL SCORE		
NUMBER OF GROUPS		
AVERAGE SCORE		
Average Score = Total Score ÷ Number of groups		

**Interpretation of the miniSASS score**: Although an ideal sample site has rocky, sandy, and vegetation habitats, not all habitats are always present at a site. If your river does not have rocky habitats use the **sandy type** category to interpret your scores.

ECOLOGICAL CATEGORY	RIVER CATEGORY	
(CONDITION)	Sandy Type	Rocky Type
Unmodified (NATURAL condition)	> 6.9	> 7.9
Largely natural/few modifications (GOOD condition)	5.8 to 6.9	6.8 to 7.9
Moderately modified (FAIR condition)	4.9 to 5.8	6.1 to 6.8
Largely modified (POOR condition)	4.3 to 4.9	5.1 to 6.1
Seriously/critically modified (VERY POOR condition)	< 4.3	< 5.1



# Version 2.0 January 2009

miniSASS can be used to monitor the health of a river and measure the general quality of the water in that river. It uses the composition of macroinvertebrates (tiny insects) living in rivers and is based on the sensitivity of the various animals to water quality.

(Note: miniSASS does <u>NOT</u> measure the contamination of the water by bacteria and viruses and does not determine if the river water is fit to drink).

### **Equipment list**

- net
- white container / tray / ice-cream box
- pencil
- magnifying glass (optional)
- shoes/gumboots
- Hand wash / soap

# How to make your own net

Take any piece of wire, for example an old clothes hanger, and bend it into the shape of a net. Then tie the netting (which can be any porous material) to the wire with a piece of string. And you have a net!

## Method

The best sites are those with rocks in moving water. Not all sites have rocks (<u>rocky type</u> rivers), but may be largely sandy (<u>sandy type</u> rivers).

- Whilst holding a small net in the current, disturb the stones, vegetation, sand etc. with your feet or hands.
- You can also lift stones out of the current and **pick** insects off gently with your fingers or forceps.
- Do this for about 5 minutes whilst ranging across the river to different habitats (biotopes).
- Rinse the net and turn the contents into a plastic tray and identify each group using the Identification Guide (see centre page pull-out.
  - You could start with the Dichotomous Key and then use the Identification Guide for more detailed information).
- 5. **Mark** the identified insects off on the identification guide.
- 6. Fill in the site information and **Add up** the sensitivity scores to
  determine the average score (see
  scoring sheet on the back page).
- Remember to WASH your hands when done!