WATER BUG SURVEY RESULTS SHEET

USE THIS VERSION ONLY FOR:
Alcove/edgewater habitat
Murray Darling Basin above 400 m elevation; coastal basins of Victoria and NSW; Tasmania
(See http://www.waterwatch.org.au/publications/module3/monitoring.html for further advice)

Group name: _____ Site Code: _____

Survey site: _____ Date sampled: _____

Step 1: Enter the number of specimens (i.e. how many) of each bug found in column 1
Step 2: Refer to the weight table for the correct weight factor for the number found
Step 3: Enter the correct weight factor for each bug in column 2
Step 4: Multiply the weight factor (column 2) by the bug grade (column 3) and enter the answer in column 4
Step 5: Add up column 2 (weight factors)
Step 6: Add up column 4 (bug value x weight factor)
Step 7: Divide total column 4 by total column 2 to calculate your SIGNAL score
Step 8: Add up the total number of bug types you found (NOT specimens)
Step 9: Use the interpretation chart to get an indication of the likely condition of your sampling area

WEIGHT TABLE	
Number of specimens of bug type (Column 1)	Weight factor (Column 2)
1-2 →	1
3-5 →	2
6-10 →	3
11-20 →	4
>20 →	5

WATER BUG TYPE	Column 1 Number of specimens	Column 2 Weight factor	Column 3 Bug grade	Column 4 Weight factor x bug grade
VERY SENSITIVE TO MOST POLLUTANTS				
Stonefly nymph			10	
Mayfly nymph			9	
Alder fly larva			8	
Caddis fly larva			8	
SENSITIVE TO MOST POLLUTANTS				
Horsehair worm			6	
Water mite			6	
MODERATELY TOLERANT OF MOST POLLUTANTS				
Beetle or beetle larva			5	
Yabby or shrimp			4	
Dragonfly or damselfly nymph			3	
Fly larva or midge			3	
Mussel or clam			3	
Nematode			3	
Side swimmer			3	
VERY TOLERANT OF MOST POLLUTANTS				
Flatworm			2	
Freshwater slater			2	
Moth caterpillar			2	
Segmented worm			2	
True bug or true bug nymph			2	
Leech			1	
Snail			1	
TOTALS				

SIGNAL SCORE = $\frac{\text{Total of Column 4}}{\text{Total of Column 2}}$ = _____ =

Bug types found that are not on the list:

Total number of bug types found =

Signal Score	Interpretation chart	
Above 5.5	Suggests toxic pollution or poor habitat	Suggests good habitat and water quality
Below 5.5	Suggests pollution	Suggests high salinity or nutrient levels (may be natural)