

WATERBUG SURVEY Results Sheet

Chessman SIGNAL 2



Stream Pollution Index & Stream Quality Rating Calculation Table

USE THIS VERSION ONLY FOR: Alcove/edgewater habitat Murray Darling basin above 400 m elevation; coastal basins of Victoria and NSW; Tasmania

10m of EDGE HABITAT

Group Name:	Group Size:
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	
column 1 No of bug type	column 2 Weight factor
1 – 2	1
3 – 5	2
6 – 10	3
11 – 20	4
> 20	5

WATER BUG TYPE	Column 1 No 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				

INTERPRETATION CHART

SIGNAL score = $\frac{\text{total column 4}}{\text{total column 2}}$ = _____ = Bug types found that are not on list: = Total No. of bug types found =	SIGNAL score Above 5.5	Suggests toxic pollution or poor habitat	Suggests good habitat and water quality
	SIGNAL score Below 5.5	Suggests pollution	Suggests high salinity or nutrient levels (may be natural)
		0 - 7	More than 7
Number of bug types			

Comments/Observations:								
Air Temp:	°C	Water Temp:	°C	Turbidity:	NTUs	EC/TDS:	µS/ppm	pH: