

Assessing pollution

Pollution is the addition to the environment of something which causes harm. We can measure the amount of pollution in water by calculating a **Biotic Index**, which works by giving each type of animal a score. Animals which are sensitive to pollution have a high score, while animals that are tolerant of pollution have a low score.

Animal group	Score if present	Total
Water shrimp	4	
Water louse	3	
Mayfly nymph	4	
Beetle larva	5	
Leech	3	
Snail	3	
Water mites	5	
Adult beetle	5	
Non-biting midge larva	2	
Worm	1	
Cased caddis fly larva	8	
Uncased caddis larva	5	
All other animals	0	
TOTAL		

Key to score value	
0-4	Very poor water quality
5-10	Poor water quality
11-18	Moderate to poor water quality
19-24	Moderate water quality
25-29	Moderate to good water quality
30-35	Good water quality
36+	Very good water quality

The Biotic Index score for a pond is often different in the summer than in the winter. Why do you think this is? (Think of life cycles!)