

Study Guide – Aquatic Macroinvertebrate Quiz

Field Biology

1. Why are aquatic macroinvertebrates so useful for evaluating water quality? Why might you use aquatic macroinvertebrates for this as opposed to, for example, chemically testing the water?
2. Make sure you can correctly describe the defining features of the following aquatic macroinvertebrate taxa: Ephemeroptera (Mayflies), Diptera (true flies), Trichoptera (Caddies flies), Plecoptera (Stoneflies), Coleoptera (beetles), *Juga* (snails).
3. Using the sample data set below, calculate the water quality score by using the OWEB water quality tolerance method on page 12-11 – and INTERPRET this score using the same methodology.

Taxa	Description	Number
Caddis fly	Stone house	4
Mayfly	2 tails, big bulgy eyes	1
Midge	Red and worm like	14
True fly	Translucent and worm-like	2
Dragonfly	Looks like a hairy beetle	1
Water Mite	Round, red	3
Stonefly	2 tails, about 1 inch long	16
Mayfly	3 tails, long, slender, FAST	11
Caddis fly	Rock house	3
Snail	Hard shell	14
Beetle Larva	Long, thin, snouty with sharp mandibles	3
Beetle Larva	Short and fat with sharp mandibles	4
Stonefly	2 tails, short and fat	5