Benthic Macroinvertebrates

























High water-quality group— Pollution intolerant

1 Stonefly

1/2–1 1/2 inches long, two hair-like tails, no gills on rear half of body, six legs, and hooked antenna

2 Caddisfly

Up to 1 inch long, three pairs of legs on upper third of body, two claws at rear end, may be found with its head sticking out of a case made of sticks, rocks, or leaves

3 Mayfly

1/4 –1 inch long, gills present on sides of lower body, six large hooked legs, most often found with three hair-like tails (sometimes only two)

4 Water penny beetle

1/4–1/2 inch long, flat, saucer-shaped body, six tiny legs, fluffy gills

5 Dobsonfly (Hellgrammite)

3/4–4 inches, six legs, stout body with large pinching jaws, short antennae, two short legs (tails) at the back end with claws

6 Riffle beetle

1/16–1/4 inch long, very small oval body covered with tiny hairs, six legs plus two antennae, walks slowly underwater

7 Gilled snail

1/4–1 inch long, opens to the right when the narrow end is pointed upward, opening covered by a thin plate, the operculum, gill breathing

Middle water-quality group— Somewhat pollution tolerant

8 Crayfish (Crawdad)

Up to 6 inches long, one large set of claws, eight legs, resembles small lobster

9 Sowbug

1/4–3/4 inch long, flat, segmented body, long antennae, armored appearance

10 Scuc

1/8–1/4 inch long, body higher than it is wide, swims sideways, resembles small shrimp

11 Alderfly

1 inch long, similar to dobsonfly, but with a long, thin, branched tail with no hooks, no gill tufts underneath

illustrations by Tommy Moorman



Middle water-quality group— Somewhat pollution tolerant

12 Flishfly

Up to 1/2 inch long, similar to dobsonfly with no gill tufts underneath, two short tube-like structures on the tail end

13 Damselfly

1/2–1 inch long, large eyes, six thin, hooked legs, three oar-shaped tails

14 Watersnipe fly

1/4–1 inch long, tapered body, caterpillar-like legs, two stout, pointed tails with feather hairs at back end

15 Crane flv

1/3–2 inches long, plump, caterpillar-like segmented body, four finger-like lobes at the back end

16 Dragonfly

1/2–2 inches long, large eyes, six hooked legs, stocky body without tails

17 Clams and Mussels

Up to 5 inches long, fleshy body enclosed between two clamped shells, when alive, the shells cannot be pried apart

Low water-quality group – Pollution tolerant

18 Aquatic worm

Usually 1 inch long, but can be up to 4 inches long, can be very thin and slender or look like earthworms, no legs or distinguishable head, segmented body

19 Midge fly

Up to 1/4 inch long, worm-like, segmented body, two tiny legs on each side

20 Black fly

Up to 1/4 inch long, body larger at the rear end, black head with fan-like mouth brushes, often curls up into U shape when held

21 Leech

1/4–2 inches long, slimy, segmented body, one suction pad at each end of the body

22 Pouch snail

Up to 2 inches long, usually opens to the left when the narrow end is pointing up, no operculum (breathes oxygen from air)