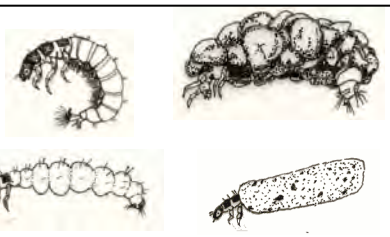
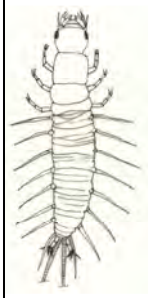
IOWATER BENTHIC MACROINVERTEBRATE KEY

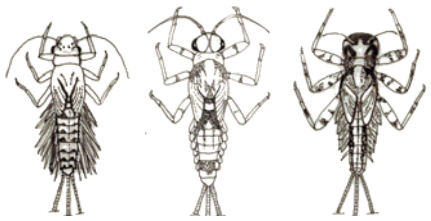
Pollution Intolerant (High Quality Group)



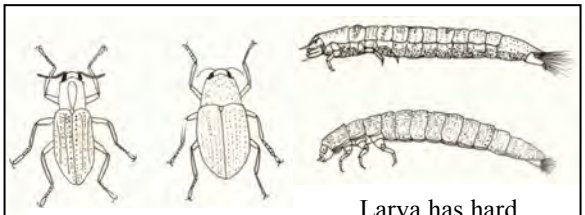
Caddisfly: 6 hooked legs on upper body, 2 hooks on end, may have stick, rock or leaf case, 2-40 mm in length.



Dobsonfly: 6 legs, 8 pairs of feelers and gill tufts on lower half of body, short antennae, 25-90 mm in length.



Mayfly: 6 legs, feathery or oval-shaped gills on lower body, 2 to 3 long tails, 3-30 mm in length.

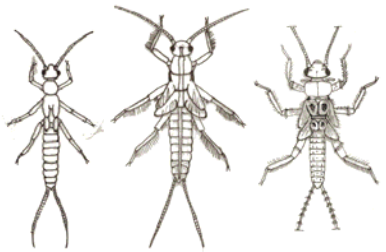


Riffle Beetle: Adult has 6 legs, body covered with tiny hairs, walks slowly underwater, 1-8 mm in length.

Larva has hard plates on each segment, 2-60 mm in length.

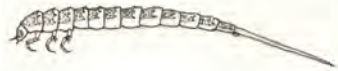
Snail (not pouch): When opening is facing you, shell opens on right, operculum (flap over opening) present.

Water Penny Beetle: Flat saucer-shaped body, 6 tiny legs and gills on underside, 4-6 mm.

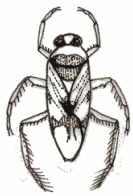


Stonefly: 6 legs with hooked tips, antennae, 2 tails, gill tuffs under legs or no visible gills, 5-60 mm in length.

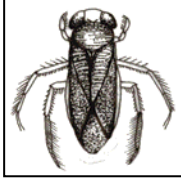
Somewhat Pollution Tolerant (Middle Quality Group)



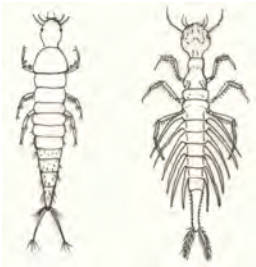
Crawling Water Beetle: Larva has one long tail and legs with one hook-like claw, 2-10 mm in length. Adult is often patterned or spotted, 2-6 mm.



Backswimmer: Forelegs not as spoon-shaped as Water Boatman's, swims upside-down, body is V-shaped, 5-17 mm in length.

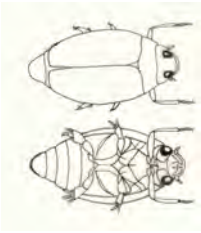


Water Boatman: Forelegs spoon-shaped and shorter compared to Backswimmer, 3-11 mm in length.



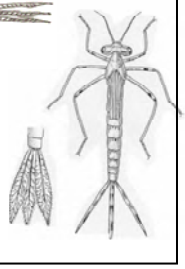
Predaceous Diving Beetle: Adults have an oval streamlined body, longer antennae than Whirligig Beetle, 1-80 mm in length.

Larva has many hairs on body, two feathery tails, large head, 5-70 mm in length.

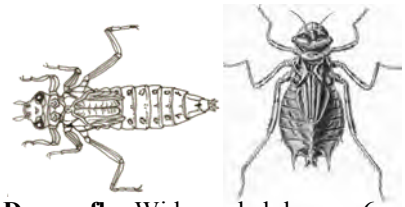


Whirligig Beetle: Flattened oval body, short, clubbed antennae, erratic swimmer, 3-15 mm.

Larva has many hairs on body, short tail or no tail, up to 30 mm in length.



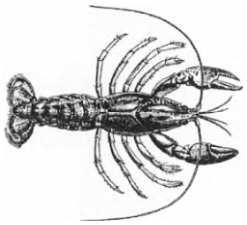
Damselfly: 6 thin hooked legs; large eyes; 3 broad oar-shaped "tails" (gills), 10-50 mm in length.



Dragonfly: Wide oval abdomen, 6 hooked legs, large eyes, 10-60 mm in length.

Somewhat Pollution Tolerant (Middle Quality Group) continued

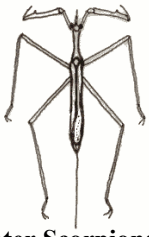
Crane Fly: Milky, green, or light brown color, caterpillar-like segmented body, 4 finger-like lobes at back end, no visible head, 10-100 mm.



Crawdad: 2 large claws, 8 legs, up to 6 inches long.

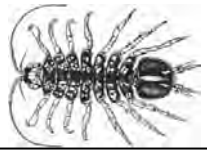
Mussels/Clams: Fleshy body enclosed between 2 clamped shells (bivalve), 2-250 mm.

Scud: White to grey, more than 6 legs, swims sideways, body higher than wide, 5-20 mm

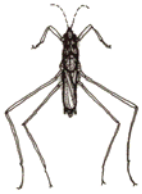


Water Scorpion: Raptor-like forelegs for catching prey, long breathing tube, stick-like long body, 15-45 mm.

Giant Water Bug: Raptor-like forelegs for catching prey, leathery textured, oval body, 15-65 mm in length.

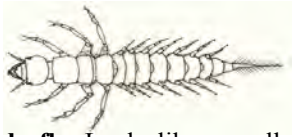


Sowbug: Gray body wider than it is high, more than 6 legs, 5-20 mm.



Water Strider: Slender body, long legs "walk" on water surface, 3-21 mm.

Orbsnail: One shell, coiled and flattened, a.k.a. rams-horn, 3-30 mm



Alderfly: Looks like a small Dobsonfly but has one long tail and no gill tufts, 10-25 mm.

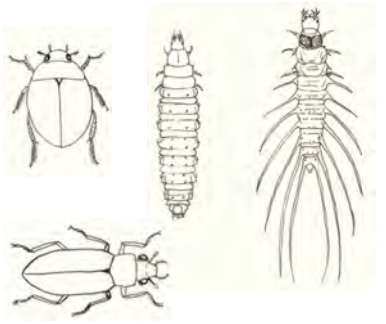
Water Mite: 8 legs, round body, may be brightly colored, 2-3 mm

Limpet: One shell, not coiled, shaped like a flat cone 3-7 mm

Pollution Tolerant (Low Quality Group)

Mosquito: Head has small mouth brushes and short antennae; abdomen has breathing siphon, surfaces for air, 4-12 mm.

Water Scavenger Beetle: Adult may or may not be streamlined, most have no hairs on legs, short clubbed antennae, 1-40 mm. Larva have short antenna, 8 soft body segments, 4 -60 mm.



Pouch Snail: When opening is facing you, shell opens on the left, no operculum (flap over opening).

Midge Fly: Small, dark head, 2 tiny legs on each end, 2-20 mm.

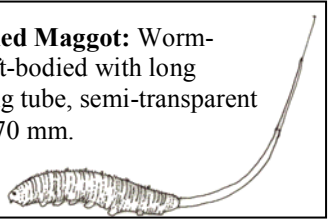
Bloodworm: One type of midge fly, has a red body due to hemoglobin.

Flatworm (Planarian)**:** Flat, soft-bodied worm with arrowhead-shaped head, 1-30 mm in length.

Black Fly: One end of body wider, black head and suction pad on other end, 3-12 mm.

Leech: Brown, slimy body, suction pads on body, 5-400 mm.

Rat-tailed Maggot: Worm-like, soft-bodied with long breathing tube, semi-transparent skin, 4-70 mm.



Aquatic Worm: Thin, worm-like, 0.5-700 mm.