Stream Insects and Crustaceans ID Card

Lines under picture indicate the relative size of organisms

Aquatic Worm:
Class Oligochaeta
¼” - 2”, can be very tiny; thin, wormlike body, tolerant of impairment

Flat Worm:
Family Planaridae
Up to ¼”, soft body, may have distinct head with eyespots, tolerant of impairment

Leech:
Order Hirudinea
¼” - 2”, segmented body, suction cups on both ends, tolerant of impairment

Crayfish: Order Decapoda
Up to 6”, 2 large claws, 8 legs, resembles a small lobster, somewhat tolerant of impairment

Sowbug: Order Isopoda
¼” - ¾”, gray oblong body wider than it is high, more than 6 legs, long antennae, somewhat tolerant of impairment

Scud: Order Amphipoda
¼”, white to gray, body higher than it is wide, swims sideways, more than 6 legs, resembles small shrimp, somewhat tolerant of impairment

Stonefly: Order Plecoptera
½” - 1 ½”, 6 legs with hooked tips, antennae, 2 hair-like tails, no gills on abdomen, very intolerant of impairment

Mayfly: Order Ephemeroptera
¼” – 1”, plate-like or feathery gills on abdomen, 6 hooked legs, 2 or 3 long hair-like tails, tails may be webbed together, very intolerant of impairment

Dragonfly and Damselfly: Order Odonata
½” – 2”, large eyes, 6 hooked legs, large protracting lower jaw, 3 broad oar-shaped tails OR wide oval to round abdomen, somewhat tolerant of impairment

Hellgrammite, Fishfly, and Alderfly:
Order Megaloptera
¼” - 4”, 6 legs, large pinching jaws, 8 pairs of feelers along abdomen, 2 hooks on tail end OR 1 single spiky tail, somewhat tolerant of impairment

Common Netspinners:
Family Hydropsychidae
Up to ½”, 6 hooked legs on upper 1/3 of body, 2 hooks at back end, underside of abdomen with white tufts of gills, somewhat tolerant of impairment

Most Caddisfly:
Order Trichoptera
Up to 1”, 6 hooked legs on upper 1/3 of body, may be in stick, rock or leaf case, no gill tufts on abdomen, intolerant of impairment

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#### Beetles: Order Coleoptera
- ¼" – 1", disk-like oval body with 6 small legs and gill tufts on underside OR small black beetle crawling on streambed OR comma-like brown "crunchy" body with 6 legs on upper 1/3 and possibly gill tuft on back end, OR (miscellaneous body form – rare), somewhat tolerant of impairment

#### Midge: Family Chironomidae
- Up to ¼", distinct head, worm-like segmented body, 2 leg-like projections on each side, often whitish to clear, occasionally bright red, tolerant of impairment

#### Black Fly: Family Simuliidae
- Up to ¼", end of body wider (like bowling pin), distinctive head, sucker on end, tolerant of impairment

#### Midges: Family Chironomidae
- Up to ¾", shell opening covered by a thin plate called an operculum, with helix pointed up shell opens to the right, intolerant of impairment

#### Clams: Class Bivalvia
- Up to ¼", fleshy body enclosed between two clamped together shells (if clam is alive, shells cannot be pried apart without harming clam), somewhat tolerant of impairment

#### Glossary:

- **Abdomen**: The rear part of the body. It contains the digestive and reproductive organs.
- **Thorax**: The middle part of the body, containing the heart and lungs.
- **Head**: The front part of the body, containing the eyes, mouth, and antennae.

**Tails**: There are many different kinds of macroinvertebrate tails. The thin thread-like tails found on stoneflies and mayflies are called cerci. The oar-shaped tails found on a damselfly are not really tails - they are actually gills called caudal lamellae.

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