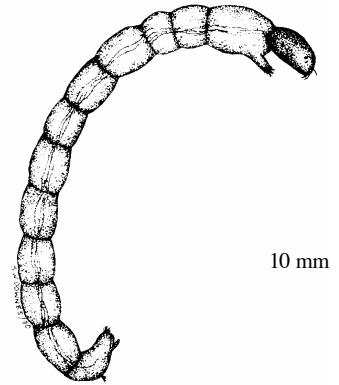


Group 3 ~ Fairly Tolerant to Pollution

(Average Actual Size)

Midge larvae

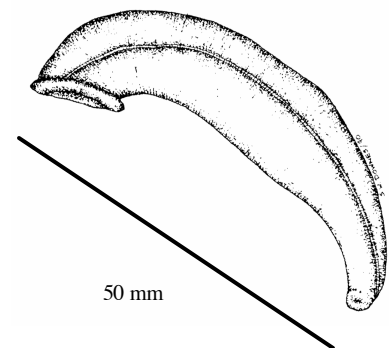
Order	Diptera (True Flies)
Family	Chironomidae
Where to find	Sediment, vegetation, leaf pack
Body shape	Cylindrical, thin, soft, and often curled
Size	2 - 20 mm
Feeding group	Gathering collector or grazer
Lifecycle	Complete metamorphosis



Distinguishing Characteristics	<p>No true legs, but very small anterior and posterior prolegs</p> <p>Hardened head capsule</p> <p><i>*Often confused with aquatic worms, but midge has small, but visible head and prolegs</i></p> <p><i>*Blood Midges (Very Tolerant to Pollution – Group 4) are a group of midges that are red in color – they are discussed separately on page 7</i></p>
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Leech

Phylum	Annelida
Class	Hirudinea
Where to find	Sediment, leaf pack, vegetation, attached to host animal (maybe you!)
Body shape	Flattened dorso-ventrally (top to bottom), many segments
Size	5 – 100 mm
Feeding group	Predaceous, collector



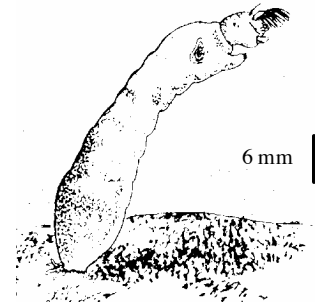
Distinguishing Characteristics	<p>Anterior and posterior suckers</p> <p>Usually much wider than aquatic worm</p> <p>Usually tan to brown in color, though can be patterned and brightly colored</p> <p><i>*May be confused with planarians but are usually larger with segments and suckers</i></p>
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Group 3 ~ Fairly Tolerant to Pollution

(Average Actual Size)

Blackfly larvae

Order	Diptera (True Flies)
Family	Simuliidae
Where to find	In swift current on rocks, and submerged vegetation Often attached by disk on end of abdomen
Body shape	Bowling pin shaped with sucker on wide end
Size	3 - 12 mm
Feeding group	Filtering collector
Lifecycle	Incomplete metamorphosis
Distinguishing Characteristics	Soft body Single proleg directly under head - no true legs Fan-like mouth bristles may be present Head usually black, less often brown, tan, or green Move downstream by drifting on silken threads extended from abdomen <i>*Distinguished from other fly larvae by swollen back end, which it will often stick to the bottom of your collection bin</i>



Planaria (Flatworm)

Class	Turbellaria
Order	Platyhelminthes
Where to find	Bottom of rocks, leaf litter
Body shape	Soft, flattened dorso-ventrally (top to bottom), arrow-shaped head
Size	Usually <1mm, range to 30mm
Feeding groups	Gathering collector, predator
Distinguishing Characteristics	Flat body Arrow-shaped head with white eyespots Body slides smoothly along surfaces <i>*May be confused with aquatic worms or leeches, but slides along surfaces rather than moving end to end (leeches) or by stretching part of body and pulling the rest (worms) also, planarians are unsegmented</i>

