2022 BIOTIC INDEX IDENTIFICATION GUIDE



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COMMON NAME	SCIENTIFIC TAXA	DIAGNOSTIC CHARACTERISTICS	IMAGES	Images Macroinve bugguide.net,
Hellgrammite (Dobsonfly)	Megaloptera, Corydalidae	elongated body that is slightly flattened; head is large with big jaws; filaments or hairlike fringes project from sides of abdomen; either one tail or two terminal (anal) prolegs		
Clubtail Dragonfly	Odonata, Gomphidae	semi-flattened body; the rear end of abdomen tapers to a blunt point (may have sharp stiff points at end of abdomen); 4 segmented antennae with enlarged 3rd segment		
Sensitive True Flies (water snipe fly, net-winged midge, dixid midge)	Athericidae, Blephariceridae, Dixidae	<u>water snipe fly</u> : worm-like with defined segments; front end tapers into cone; prolegs on segments; forked terminal <u>net-winged midge</u> : 6-7 segments; suckers on bottom of abdominal segments; stout body <u>dixid midge:</u> looks like regular midge but with a broken neck (head tilted up)	water snipe fly net-winged midge dixid midge	
Stonefly	Plecoptera	long, thin antennae; three pair of legs extend from thorax; two long thin tails with small gap between tails		
Caddisfly	Trichoptera	<u>case-making:</u> elongated, cylindrical body almost always found in a shell-like case with a head & 3 sets of legs peeking out <u>free-living</u> : elongated, cylindrical body with 3 sets of legs; tiny prolegs at end of abdomen; common-net spinner has 3 dark hardened thoracic plates; other free-living caddis may be translucent, orange, or green	casemakerfree-livingImage: second se	~
Mayfly	Ephemeroptera	wing pads present on thorax (body middle); three pairs of legs extend from thorax; usually three tails, though some two-tailed mayflies (but no gap between tails like stoneflies)	And the second	
Alderlfy		body is elongated and slightly flattened; head large with big jaws; the first seven abdominal sections have filaments or hairlike fringes; the end of the abdomen has a single, tapering hairy tail structure; distinct swimming pattern with head wiggling side to side		
Scud	Amphipoda	body is flattened on the side (called a side-swimmer), seven pairs of walking legs, antennae, when alive, color is translucent or gray		
Dragonfly	Odonata	long and stout or oval and flattened body; rear end of abdomen tapers to a blunt point (may have sharp stiff points at end of abdomen); labial (lower lip) mask covering chewing mouth parts		
Beetle	Coleoptera	<u>larvae:</u> most have a thick and hardened head and three pairs of legs; they can look very weird <u>adult</u> : very hard, oval-shaped body	larvae to the second se	D
Somewhat Sensitive True Flies (including craneflies, midges & blackflies)	Dipterans (those not	<u>cranefly</u> : worm-like with defined segments; blunt front end, no legs but may have nubby prolegs; posterior may have multiple appendages (dreadlocks) <u>midge:</u> tiny; worm-like; red or yellow-white; techno-dancing movement <u>blackfly</u> : worm-like; with bulbous bottom that sticks to hard surfaces	kt ktty	
Crayfish	Decapoda	cylindrical body that is thickened and hard; five pairs of walking legs; larger compound eyes; hinged claws on some ends of legs		
Bivalves/Snails	Pelecypoda, Gastropoda	<u>bivalve:</u> two shells that enclose the soft parts of a clam or mussel <u>snail:</u> freshwater mussel that has only one shell		
True Bug	Hemiptera	adults and larvae are almost identical except that larva lack fully developed wings; all possess piercing/sucking mouthparts; includes giant water bugs, water striders, water scorpions, water boatman, & backswimmers		
Damselfly	Odonata	body is slender and elongated; three pairs of legs; three tails but tails are thick (fan-blade or paddle-shaped)		(2)
Sowbug	Isopoda	flattened body; many legs (7 pairs); a pair of long (noticeable) and short (not as noticeable) antennae on head; a pair of posterior appendages that look like two stout tails		
Tolerant True Fly (mosquito, rat-tailed maggot & soldier fly)	Culicidae, Syrphidae, Stratiomyidea	<u>mosquito:</u> long worm-like body; weird hairs coming out of thoracic segments; short antennae; forked posterior area <u>rat-tailed maggot:</u> short, chubby worm with a long respiratory tube (long tail-looking thing) <u>solider fly:</u> worm-like; flattened leathery body	mosquito rat-tailed maggot solider fly	
Leech	Hirudinae	segmented (34 arranged in a row); dark in color; muscular body that is flattened top to bottom; suction cups at each end of body; slinky in movement		
Aquatic Worm	Oligochaeta	body is soft, elongated (could tangle itself), and cylindrical in shape; body consists of many round, ring-like segments arranged in a row; no suckers	S & D	