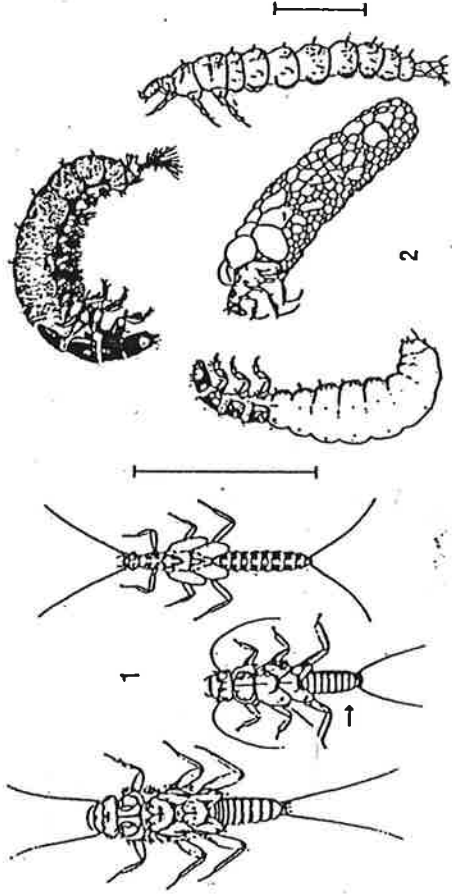


Stream Insects & Crustaceans

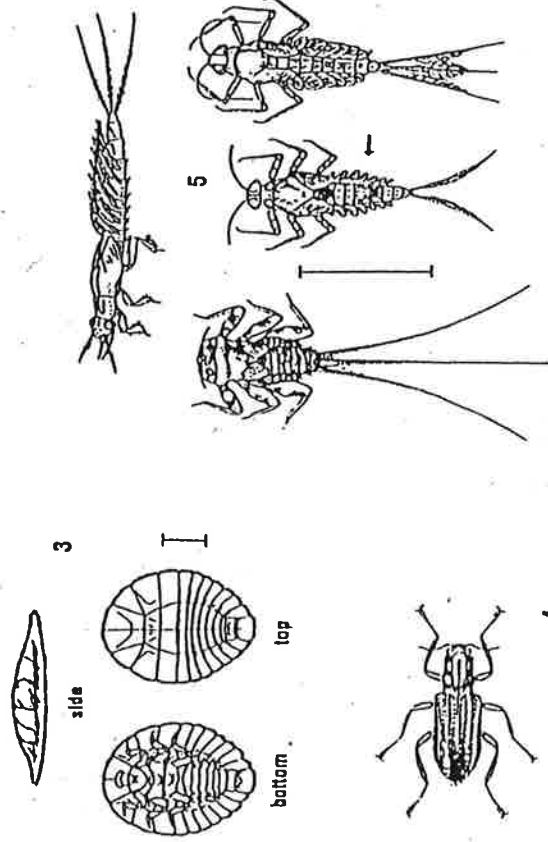
GROUP ONE TAXA

Pollution sensitive organisms found in good quality water.

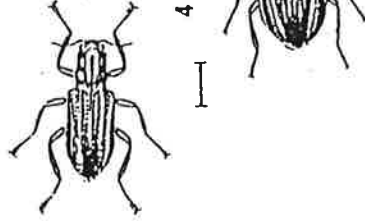
- 1 Stonefly: Order Plecoptera.** 1/2" - 1 1/2", 6 legs with hooked tips, antennae, 2 hair-like tails. Smooth (no gills) on lower half of body. (See arrow.)



- 2 Caddisfly: Order Trichoptera.** Up to 1", 6 hooked legs on upper third of body, 2 hooks at back end. May be in a stick, rock or leaf case with its head sticking out. May have fluffy gill tufts on underside.



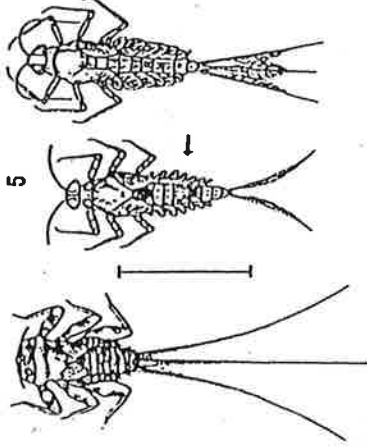
- 3 Water Penny: Order Coleoptera.** 1/4", flat saucer-shaped body with a raised bump on one side and 6 tiny legs and fluffy gills on the other side. Immature beetle.



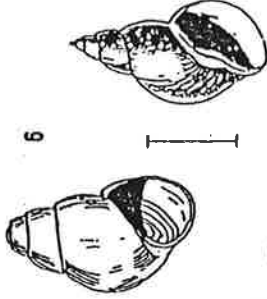
- 4 Rifle Beetle: Order Coleoptera.** 1/4", oval body covered with tiny hairs, 6 legs, antennae. Walks slowly underwater. Does not swim on surface.



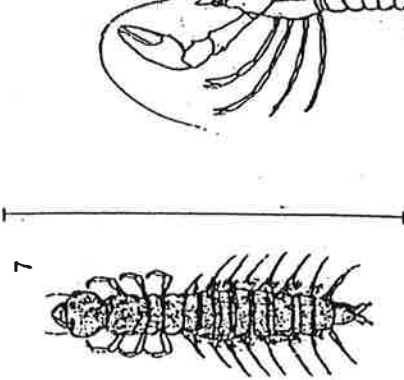
- 5 Mayfly: Order Ephemeroptera.** 1/4" - 1", brown, moving, plate-like or leathery gills on sides of lower body (see arrow), 6 large hooked legs, antennae, 2 or 3 long, hair-like tails. Tails may be webbed together.



- 6 Gilled Snail: Class Gastropoda.** Shell opening covered by thin plate called operculum. When opening is facing you, shell usually opens on right.



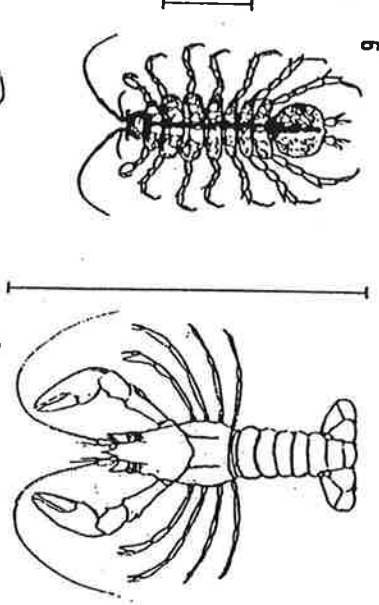
- 7 Dobsonfly (Hellgrammite): Family Corydalidae.** 3/4" - 4", dark-colored, 6 legs, large pinching jaws, eight pairs feelers on lower half of body with paired cotton-like gill tufts along underside, short antennae, 2 tails and 2 pairs of hooks at back end.



GROUP TWO TAXA

Somewhat pollution tolerant organisms can be in good or fair quality water.

- 8 Crayfish: Order Decapoda.** Up to 6", 2 large claws, 8 legs, resembles small lobster.
- 9 Sowbug: Order Isopoda.** 1/4" - 3/4", gray oolong body wider than it is high, more than 6 legs, long antennae.



Save Our Streams

Bar lines indicate relative size

Izaak Walton League of America
707 Conservation Lane
Gaithersburg, MD 20878-2983
1(800)BUG-IWLA

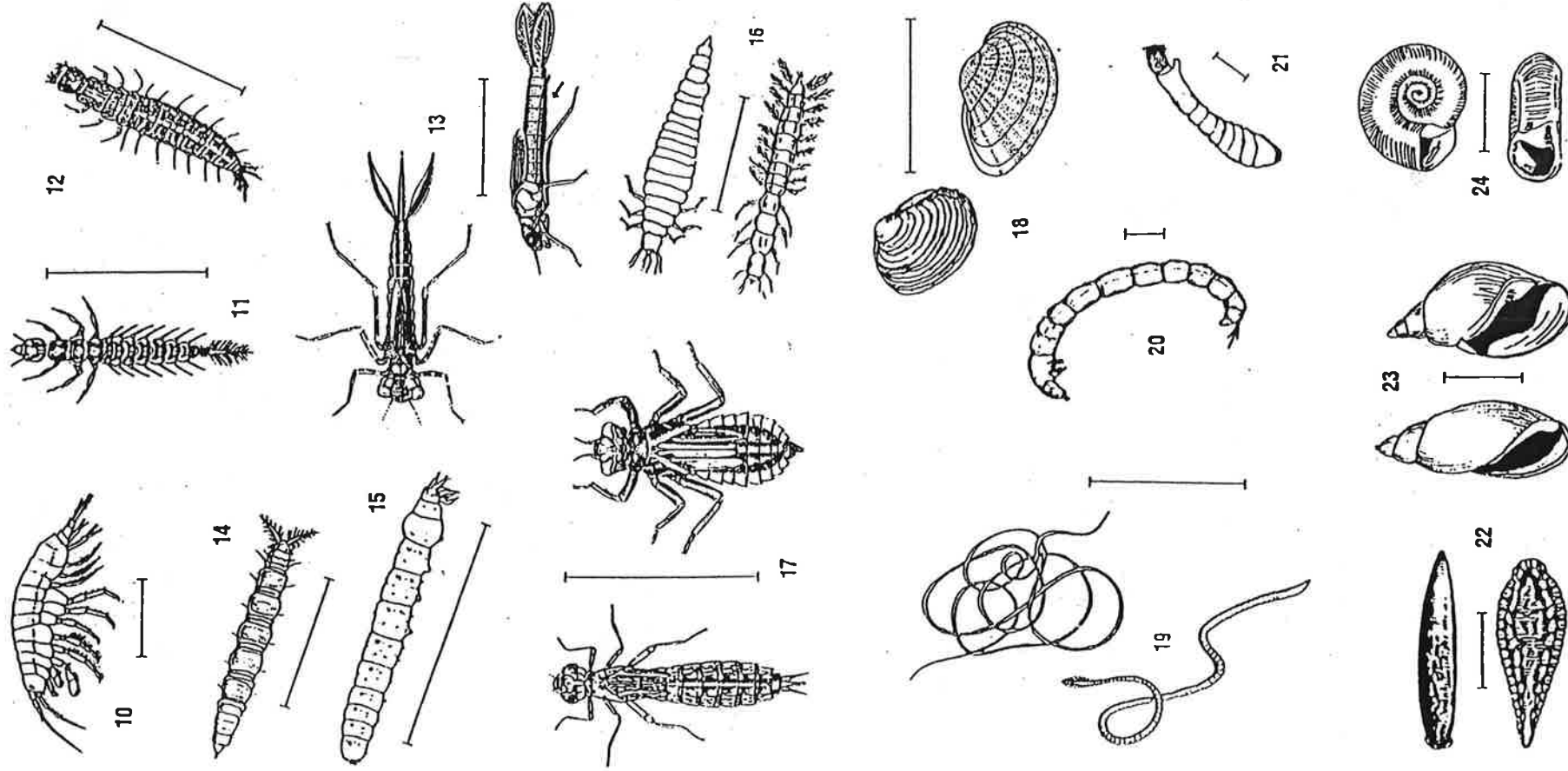
GROUP TWO TAXA CONTINUED

- 10 **Scud: Order Amphipoda.** 1/4" - 1/4", white to grey, body higher than it is wide, swims sideways, more than 6 legs, resembles small shrimp.
- 11 **Alderfly Larva: Family Sialidae.** 1" long. Looks like small hellgrammite but has 1 long, thin, branched tail at back end (no hooks). No gill tufts underneath.
- 12 **Fishfly Larva: Family Corydalidae.** Up to 1 1/2" long. Looks like small hellgrammite but often a lighter reddish-tan color, or with yellowish streaks. No gill tufts underneath.
- 13 **Damselfly: Suborder Zygoptera.** 1/2" - 1", large eyes, 6 thin hooked legs, 3 broad oar-shaped tails, positioned like a tripod. Smooth (no gills) on sides of lower half of body. (See arrow.)
- 14 **Watersnipe Fly Larva: Family Althericidae (Atherix).** 1/4" - 1", pale to green, tapered body, many caterpillar-like legs, conical head, leathery "horns" at back end.
- 15 **Crane Fly: Suborder Nematocera.** 1/3" - 2", milky, green, or light brown, plump caterpillar-like segmented body, 4 finger-like lobes at back end.
- 16 **Beetle Larva: Order Coleoptera.** 1/4" - 1", light-colored, 6 legs on upper half of body, feelers, antennae.
- 17 **Dragon Fly: Suborder Anisoptera.** 1/2" - 2", large eyes, 6 hooked legs. Wide oval to round abdomen.
- 18 **Clam: Class Bivalvia.**

GROUP THREE TAXA

Pollution tolerant organisms can be in any quality of water.

- 19 **Aquatic Worm: Class Oligochaeta.** 1/4" - 2", can be very tiny, thin worm-like body.
- 20 **Midge Fly Larva: Suborder Nematocera.** Up to 1/4", dark head, worm-like segmented body, 2 tiny legs on each side.
- 21 **Blackfly Larva: Family Simuliidae.** Up to 1/4", one end of body wider. Black head, suction pad on other end.
- 22 **Leech: Order Hirudinea.** 1/4" - 2", brown, slimy body, ends with suction pads.
- 23 **Pouch Snail and Pond Snails: Class Gastropoda.** No operculum. Breathe air. When opening is facing you, shell usually opens on left.
- 24 **Other Snails: Class Gastropoda.** No operculum. Breathe air. Snail shell coils in one plane.

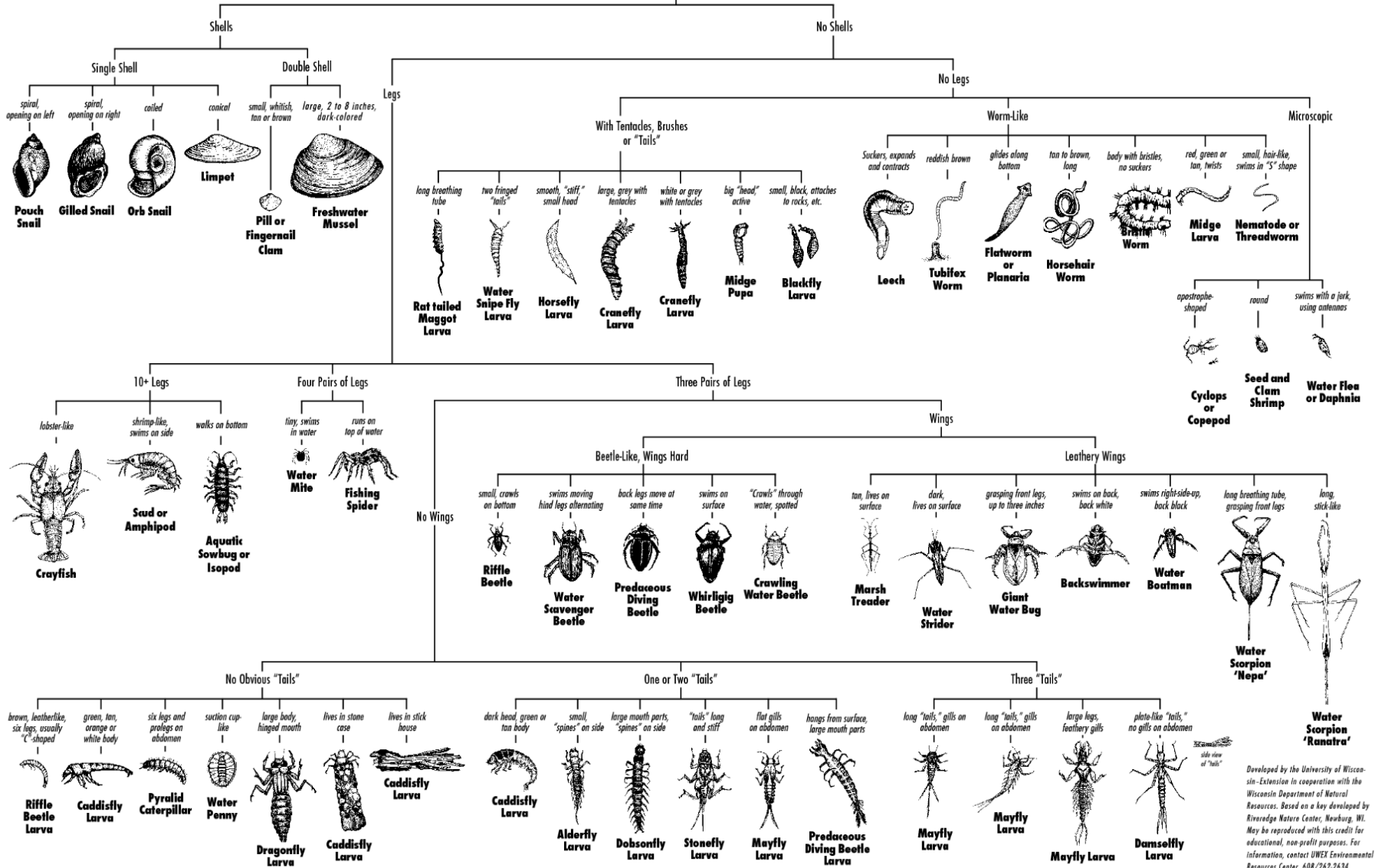


Bar lines indicate relative size



Key to Macroinvertebrate Life in the River

(Sizes of illustrations are not proportional.)



Developed by the University of Wisconsin-Extension in cooperation with the Wisconsin Department of Natural Resources. Based on a key developed by Riverside Nature Center, Brookings, WI. May be reproduced with this credit for educational, non-profit purposes. For information, contact UNEX Environmental Resources Center, 608/262-2634.