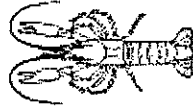
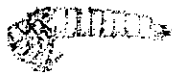


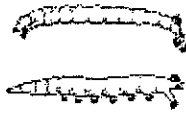
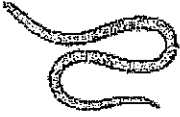
Dichotomous Key to Common Aquatic Invertebrates

1.

1-1 Having segments (jointed) legs. (Go to 2)

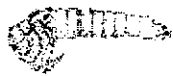


1-2 Does not have segmented legs. (Go to 15)

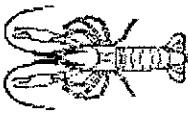


2.

2-1 Having only six segmented legs. (Go to 3)



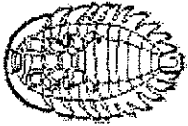
2-2 Having more than six segmented legs. (Go to 12)



3.

3-1 Body elongated (longer than it is wide); legs not concealed beneath the body. (Go to 4)

3-2 Body disk or oval shaped and very flat.



Order Coleoptera; family **Psephenidae** (Water penny)

4.

4-1 Two or three distinct tail filaments that may appear hair-like webbed or paddle shaped. (Go to 5)



4-2 No tail filaments; tail consisting of a single long filament; tail having hooks that may or may not have filaments. (Go to 7)



See acknowledgements on page eight

5.

5-1 Two or three hair-like tail filaments (may appear webbed); plate-like, filamentous or feathery gills attached to the sides of the abdomen.



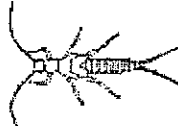
Order Ephemeroptera (Mayflies)

5-2 Two or three hair-like or paddle shaped tails; no gills attached to the abdomen. (Go to 6)



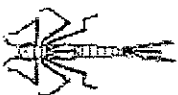
6.

6-1 Two hair-like tail filaments; no gills attached to the abdomen.



Order Plecoptera (Stoneflies)

6-2 Three broad paddle-shaped tails, which are actually gills; no gills attached to the abdomen.



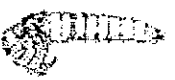
Order Odonata; sub-order Zygoptera (Damselflies)

7.

7-1 Abdomen is hardened; body is plated or skin is hardened. (Go to 8)

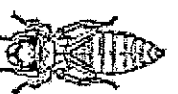


7-2 Abdomen is soft, not hardened or plated. (Go to 9)



8.

8-1 Wide abdomen; large eyes; scoop-like lower lip (labium) that covers most of the mouthparts; may have pointed structures on the end of the abdomen.



Order Odonata; sub-order Anisoptera (Dragonflies)

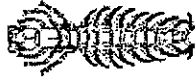
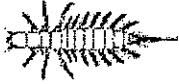
8-2 Entire body is hardened; tail may have tiny hooks or filaments.



Order Coleoptera; family Elmidae (Riffle beetle)

9.

9-1 Pairs of fleshy or thin filaments extending from the abdomen. (Go to 10)



9-2 No pairs of abdominal filaments. (Go to 11)



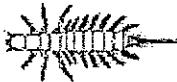
10.

10-1 Fleshy or thin filaments attached to the abdomen, may have tufts of gills beneath; short forked-tail; large chewing mouthparts on the head.



Order Megaloptera; family **Corydalidae** (Fishfly/Hellgrammite)

10-2 Fleshy or thin filaments attached to the abdomen; single filament-like tail extends from the end of the abdomen; large chewing mouthparts on the head.



Order Megaloptera; family **Sialidae** (Alderfly)

11.

11-1 Two forked hooks at the end of the abdomen, which may be very small; feathered or branched tail-like structures usually cover the hooks. The invertebrate may be inside a case built from streambed materials such as small pebbles, sand grain, leaves etc.



Order **Trichoptera** (Caddisflies)

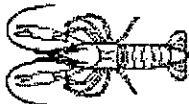
11-2 Soft abdomen; has pairs of caterpillar-like legs that may not be fully developed; abdomen may be smooth or may be covered by filaments or hairs.



Order **Lepidoptera** (Aquatic moth)

12.

12-1 Body is dorsally flattened (wider than it is high); has a thin plated fan-like tail. (Go to 13)



12-2 Body is dorsally flattened (wider than it is high); seven pairs of walking legs, the first is claw-like and may be slightly enlarged. Looks like the terrestrial pill-bug (roly-poly).



Order **Isopoda** (Aquatic sowbug)

13.

13-1 Body is long; has five pairs of walking legs, the first pair are usually enlarged forming claws; has a large fan-like tail. (Go to 14)



13-2 Body is flattened from side-to-side (higher than it is wide); seven-pairs of walking legs, first two are claw-like the remaining legs are simple. Has a habit of swimming sideways.



Order Amphipoda (Scud/sideswimmer)

14.

14-1 Body mostly dorsally flattened; five-pairs of legs, first three-pairs with hinged claws and the first pair of claws are greatly enlarged; abdomen terminates in a flipper-like structure.



Order Decapoda (Crayfish)

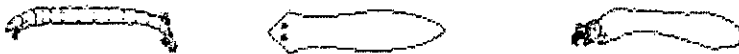
14-2 Body is flattened from side-to-side (higher than it is wide); five pairs of walking legs, the first are not enlarged forming a claw.



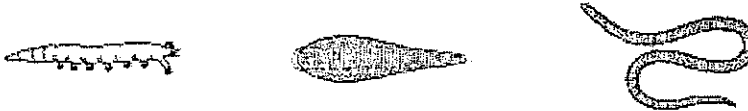
Order Decapoda; family Palaemonidae (Freshwater shrimp)

15.

15-1 Having a distinct head. (Go to 16)

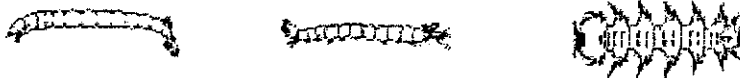


15-2 Does not have a distinct head. (Go to 20)



16.

16-1 Having a distinct head and one or more tiny pro-legs, which are leg-like appendages but are not segmented. (Go to 17)



16-2 Having a distinct head or the head region is obvious; no legs or pro-legs attached to the thorax. (Go to 19)

