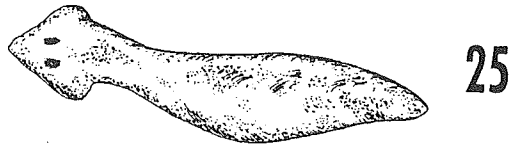
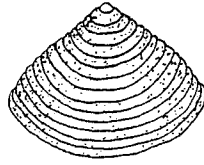


25. Planaria: Class Turbellaria
5-30 mm long.
Soft, flat body, crosseyed, spade shaped head.

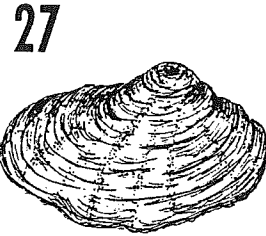


25

26. Asiatic Clam: Class Pelecypoda
10-50 mm long.
Hard limestone shells with toothed hinge. Ridged triangular shaped shell. Filter feeder.



26



27

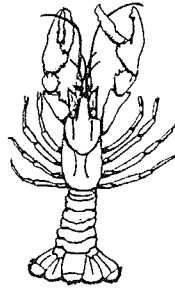
27. Native Clams and Mussels: Class Pelecypoda
2-250 mm long.
Shell with membranous hinge.

28. Biting Midge: Order Diptera, Family Ceratopogonidae
2-15 mm long.
Very slender, hairlike body. Often wiggling horizontally.



28

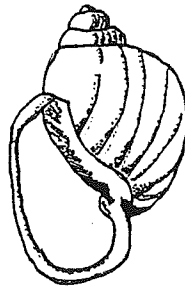
29. Crayfish: Class Crustacea, Order Decapoda
10-150 mm long.
8 legs, 2 large claws, resembles lobster.



29

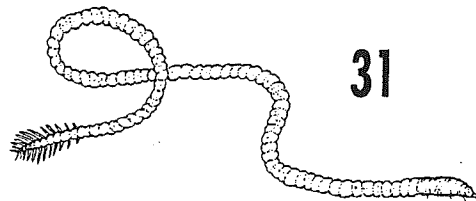
GROUP IV TAXA: Very tolerant to low DO levels and increased levels of organic nutrients.

30. Left Handed/Pouch Snail: Class Gastropoda
10-25 mm long.
No operculum, shell usually opens to the left.



30

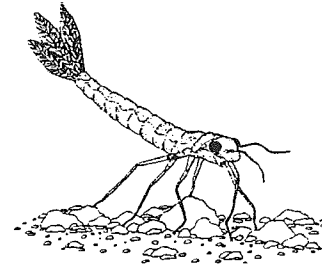
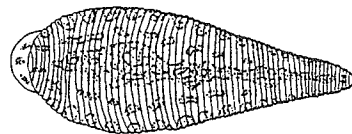
31. Segmented Worm: Class Oligochaeta
1-30 mm long.
Often red; looks like aquatic earthworm. Can be very tiny, thin segmented body.



31

32. Leech: Class Hirudinea
5-50 mm in length.
Segmented, suckers on posterior and anterior ends.

32



COLORADO RIVER WATCH NETWORK

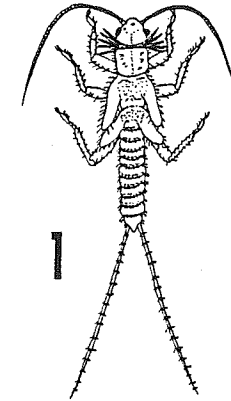
MACRO KEY CARD

List of common aquatic benthic macroinvertebrates found in Central Texas

GROUP I TAXA: Very intolerant to pollution

1. Stonefly: Order Plecoptera.

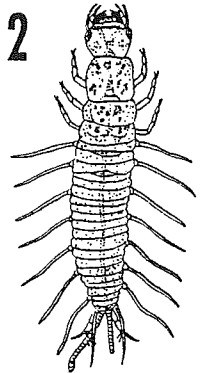
5-35 mm in length.
6 legs with hooked tips, antennae, 2 hairlike tails, smooth, no gills on abdomen.



1

2. Dobsonfly: Order Megaloptera, Family Corydalidae.

25-90 mm long.
6 legs, large pinching jaws, tuft-like gills on underside, short antennae.



2

3. Snipe Fly: Order Diptera, Family Athericidae.

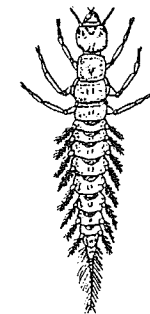
10-18 mm long.
Elongated, cylindrical, with head mostly retracted into thorax, spiny prolegs, two fringed filaments at end of abdomen.



3

4. Mayfly: Order Ephemeroptera, Family Leptophlebiidae.

5-15 mm long.
Platelike or feathery gills on side of abdomen, 2 or 3 long hair-like tails.

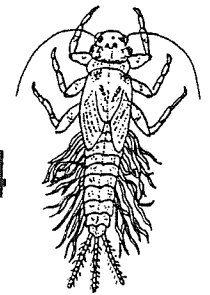


5

GROUP II TAXA: Somewhat intolerant to pollution and lower DO levels.

5. Alderfly: Order Megaloptera, Family Sialidae.

10-25 mm long.
Light colored, single projection on abdomen, no hooks, filaments on side of body.



4

6. Crane Fly: Order Diptera, Family Tipulidae.

10-50 mm long.
Short prolegs, ridges on top of bulbous abdomen, no distinct head.



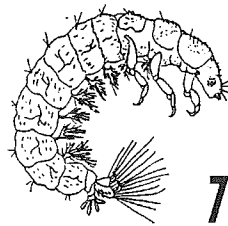
6

7. Caddisfly: Order Trichoptera

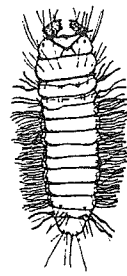
2-40 mm in length.

Hooked legs on upper third of body, 2 hooks on back end.

May be in a stick or rock case.



7



8

8. Aquatic Moth: Order Lepidoptera

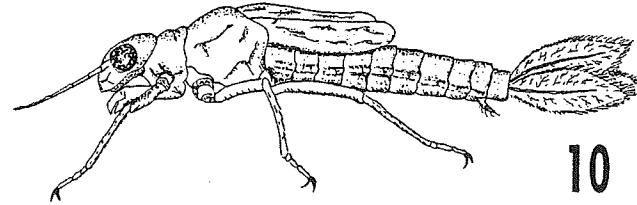
20-25 mm long.

Body with 5 paired knobs on underside of abdominal segments, legs on first 3 segments.

9. Dragonfly: Order Odonata, Suborder Anisoptera

15-45 mm long.

Lower lip is large and covers other mouthparts, large eyes, 3 pairs of legs on thorax.

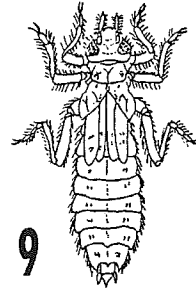


10

10. Damselfly: Order Odonata, Suborder Zygoptera

10-30 mm long.

Large eyes, 6 hooked legs, wide oval to round abdomen.



9

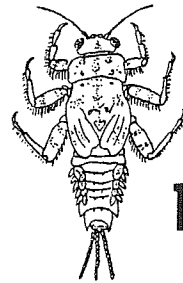


11

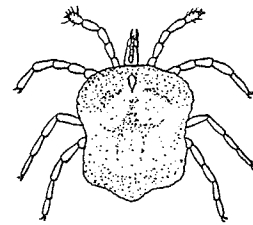
12. Mayfly: Order Ephemeroptera, Family Caenidae

2-8 mm long.

Small hair like gills on abdomen, found in detrital sediments or on thick algae.



12

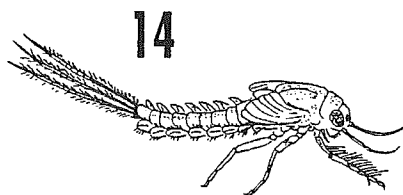


15

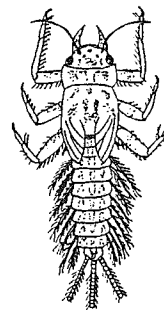
13. Mayfly: Order Ephemeroptera, Family Ephemeridae

12-32 mm long.

Feathery abdominal gills and tusks. Lives in silt deposits.



14

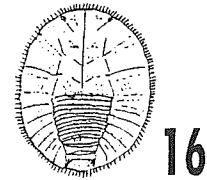


13

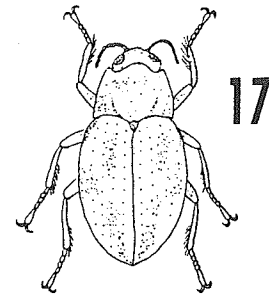
15. Water Mites: Class Arachnida, Hydracarina

Less than 3 mm long.

Body compact, spider like with 4 conspicuous pairs of legs.



16



17

16. Water Penny: Order Coleoptera

4-6 mm long.

Flat saucer shaped, 6 tiny legs on ventral side.

17. Riffle Beetle: Order Coleoptera, larva and adult

1-8 mm long.

Oval body covered with tiny hairs. 6 legs, antennae.



18



19

18. Scud: Class Crustacea, Order Amphipoda

5-20 mm long.

Resembles a small shrimp. Eyes, if present, seen as spots on side of head

GROUP III TAXA: Fairly tolerant to low DO levels and organic nutrients.

19. Black Fly: Order Diptera, Family Simuliidae

2-8 mm long.

One end of the body wider. Black head, suction pad on opposite end.



20

20. Deer Fly: Order Diptera, Family Tabanidae

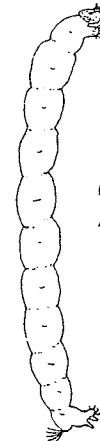
15-40 mm long.

No distinct head, cylindrical maggot like body with fleshy rings.

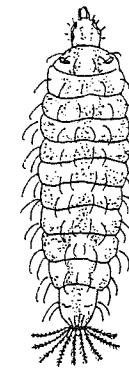
21. Midge: Order Diptera, Family Chironomidae

2-30 mm in length.

Narrow wormlike body with distinct head. One pair of prolegs at each end. Characteristic 'wiggler' movement.



21



22

22. Soldier Fly: Order Diptera, Family Stratiomyidae

10-50 mm long.

Distinct head, somewhat flattened body. Often appearing stiff and lifeless.

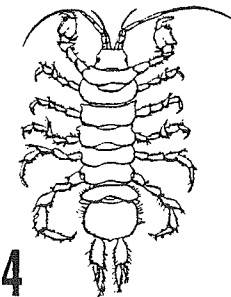
23. Gilled Snail: Class Gastropoda

10-40 mm long.

Shell opening to the right, covered by a thin operculum.



23



24

24. Sowbug: Class Crustacea, Order Isopoda

5-20 mm long.

Gray oblong body, more than 6 legs, long antennae.