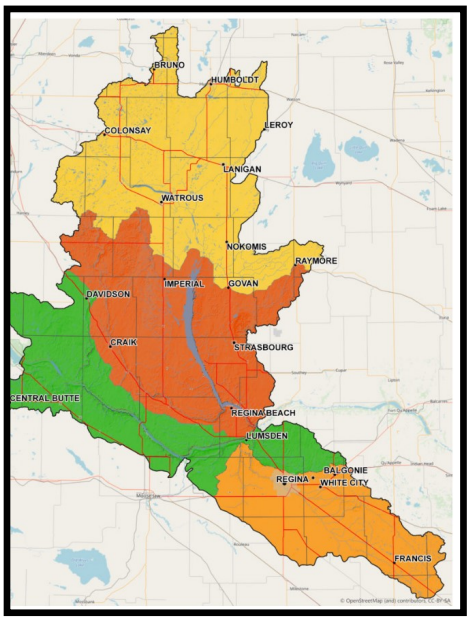
Pond Dipping in Regina



The waterways that run through Regina are a part of the Wascana Creek Sub-basin (orange) which is a part of the Wascana & Upper Qu'Appelle Watershed which includes 23,443 km². Find out more about our watershed at www.wuqwatr.ca

A healthy watershed encourages good water quality. The plants filter out yucky stuff like pollutants and provide a place for sediment (like sand and silt) to settle instead of running through to lakes and rivers.

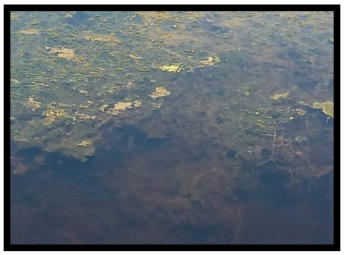
Cattails protect us by keeping the soil in place when it rains a lot. These plants love it when it floods! Marshes can absorb a lot of water so our homes don't flood.

Is that different than a cattail? Yes. When there is a lot of water in a marsh the stem of the spike rush is hollow to transport air to the roots. When it is dry the stem becomes filled with pith to make it stronger. Spike rushes also absorb water when there is a flood.

Buttonbush Food for ducks and waterfowl.

What is all that green stuff? Fish and birds eat this duckweed. Look closely they are actually little green pods. The smallest flowering plant known.

Duck weed is an important food source for aquatic waterfowl and fish.



Let's find out what is living in our streams, ponds, lakes and other waterways! Let's take a closer look...

Aquatic animals living in streams have adapted to survive in water which is 900 times denser than air! Pond dipping is an up close look at how they have adapted to survive, search for food, escape from predators and move to new areas in water.

NATURE REGINA

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Pond Dipping Guide

How do I pond dip?
www.wikihow.com/Pond-Dip

What you need?
A **bucket**, **long handled net** and **magnifying glass**

Ice cream pail, margarine container or any other white or clear container!

A magnifying glass helps you to take a closer look!

A white bucket works the best so you can see the aquatic animals!

What you need?
A **net** with a long enough pole to reach the water

What you need?
An **identification guide** so you know what you are seeing!

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Pond Dipping Guide

How do I pond dip?
www.wikihow.com/Pond-Dip

Crouch or lie on the edge of the water by some vegetation.

Dip the net into the water slowly.
We recommend pond dipping by lying on your belly (for water safety).

Swirl the net in a figure eight motion. Move the net slowly or you will scare the aquatic animals away!

Pull the net from the water and gently dump it into the tray.

Look at what you have found with a magnifying glass.

Use your identification guide to see what you have found.

Gently pour the contents of your container back into the water. Please remember that these are very small aquatic animals. Being dropped from tall heights can injure them. If they are not returned to the water they will not survive.

Rinse all of your equipment once you get home.

Try pond dipping in different months. You'll see different things every time!

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Pond Dipping Guide

You'll need:
-large bucket
-smaller buckets
-net
-magnifying glass

How do I pond dip?
www.wikihow.com/Pond-Dip

When you are finished, return the animals to the spot in the water where you found them. Gently tip the basin and allow the animals to swim away.

Once you've finished pond dipping spend some time looking at the water and **now see what you can find!**

Whirligig Beetle
Each eye is divided into two parts. One to see above water and one to see below at the same time!

Water Boatman
Long oar-like legs moves it through water. Eats algae and decaying plant material on the bottom of the marsh.

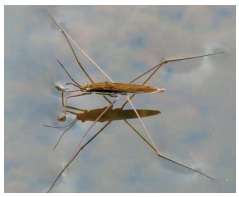
Dragonfly Nymph
When it changes into an adult dragonfly it climbs out of the water!

Caddisfly
These are important food for fish.

Water Mite
Very, very small and looks like a fat spider with a bright red, round body.

Caddisfly Larvae
They can resemble hermit crabs because they some-times surround themselves with a hard casing.

Water Flea
A healthy freshwater pond has a tonne of these! They are the lowest on the food chain so lots of creatures eat them. If there are lots then an ecosystem is doing well!



Water strider
They appear to stride over the water by distributing their weight evenly.

Snail
Frogs and smaller fish eat these. If you find one and look carefully you might spot a frog or fish.

Leech
Most pond leeches feed on decaying material and bottom sludge. These keeps the muck out of our rivers and lakes.

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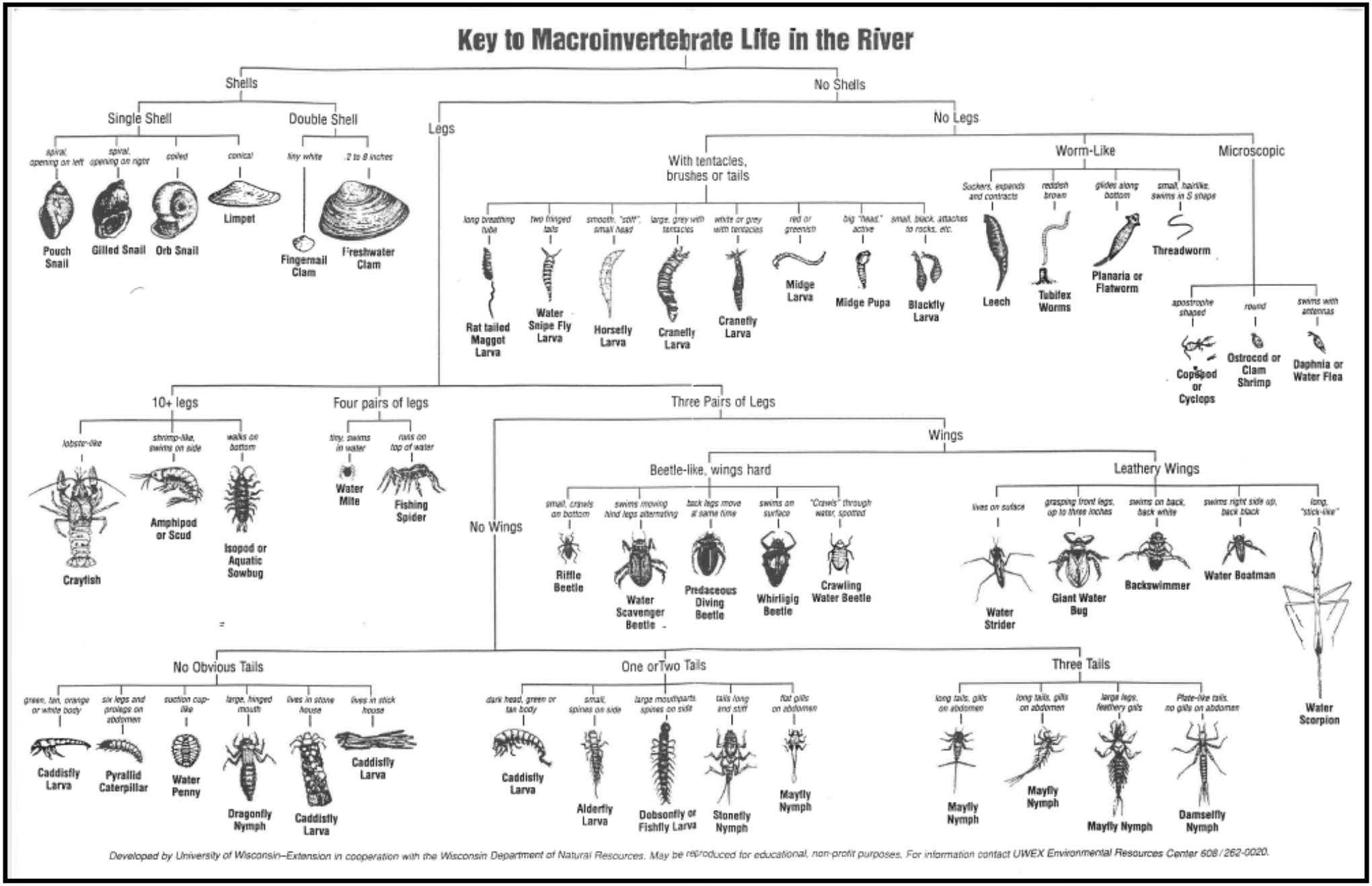
Key to Macroinvertebrate Life in the River



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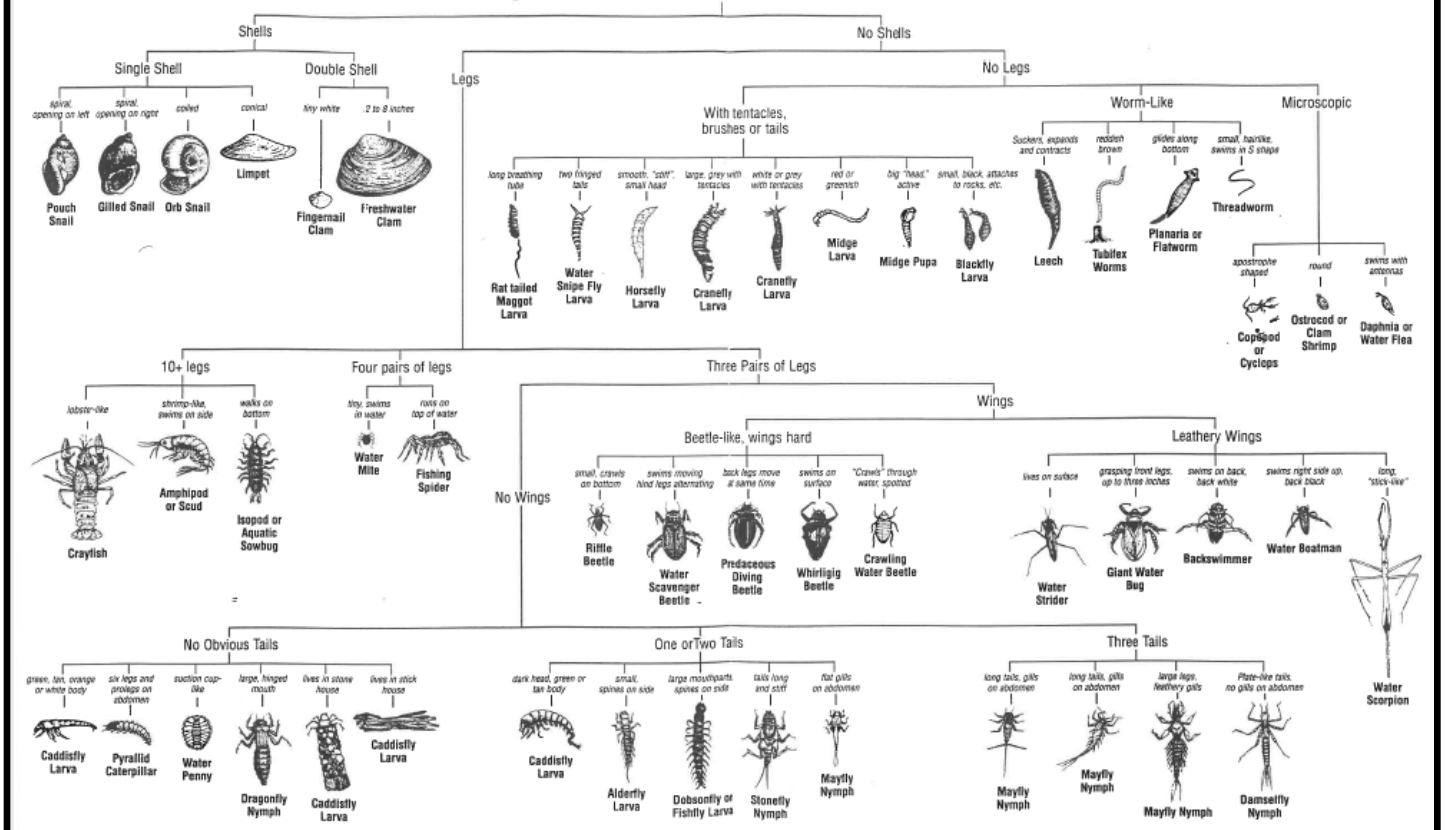
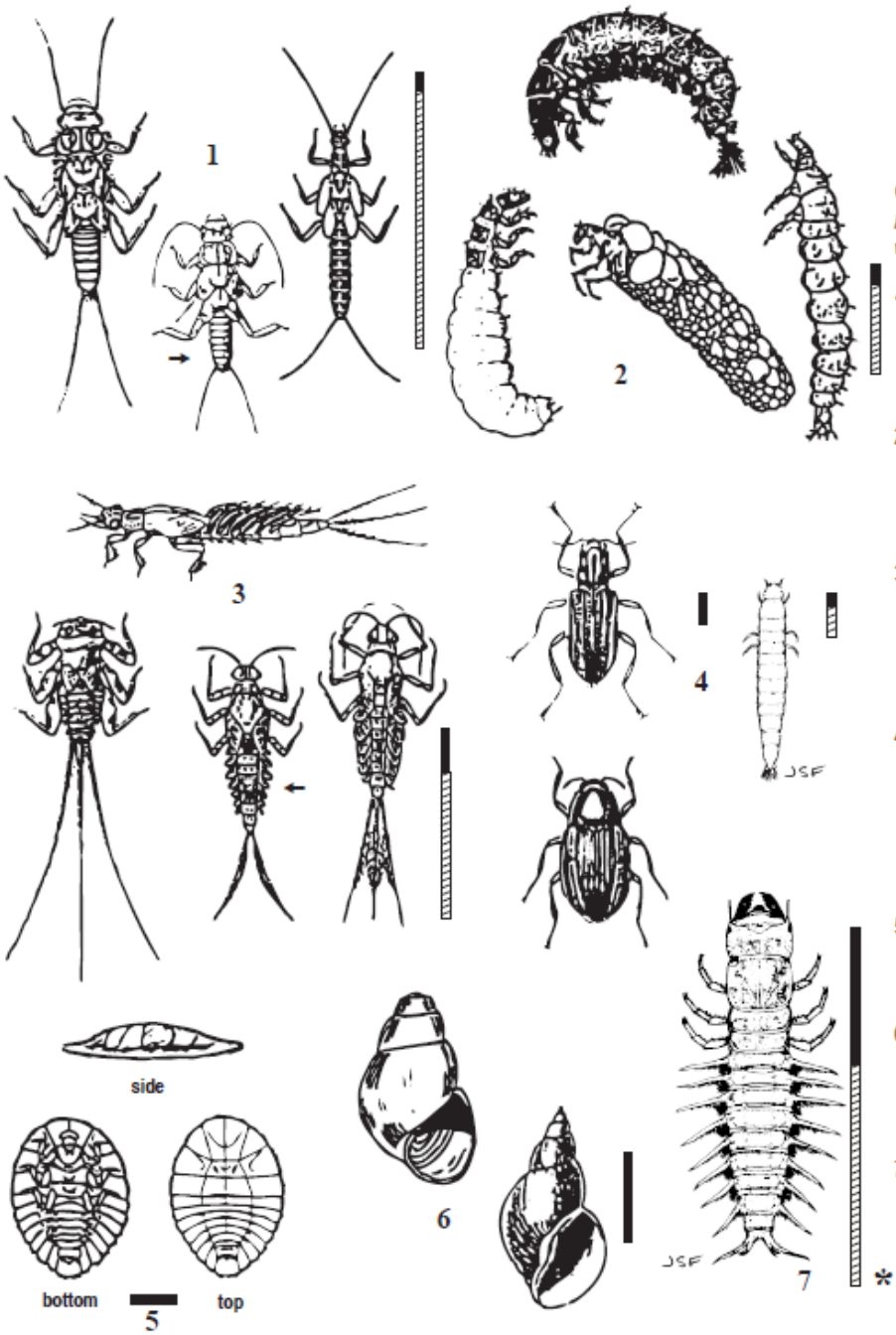




Stream Insects & Crustaceans

GROUP ONE TAXA

Pollution sensitive organisms found in good quality water.

1 Stonefly nymph: *Order Plecoptera*. 1/8" - 1 1/2"; 6 legs with hooked tips; 2 hairlike tails. Smooth (no gills) on abdomen (see arrow). May have gills on thorax under the legs.

2 Caddisfly larva: *Order Trichoptera*. Up to 1"; 6 legs on thorax; 2 hooks at end of abdomen. May be in a stick, rock, or leaf case with its head sticking out. May have fluffy gill tufts on lower half.

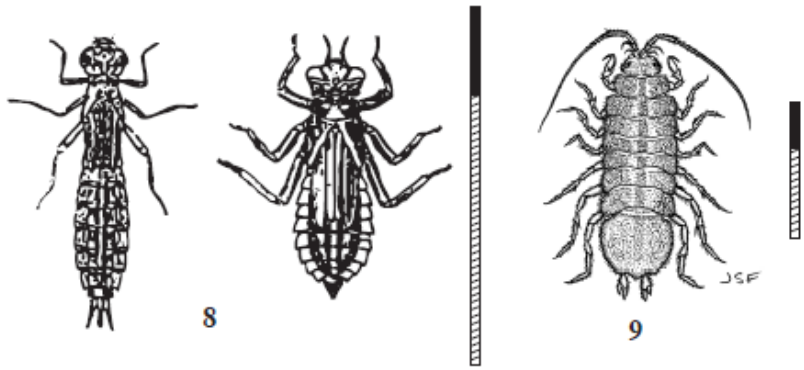
3 Mayfly nymph: *Order Ephemeroptera*. 1/4" - 1"; moving, platelike, or feathery gills on abdomen (see arrow); 6 large hooked legs; antennae; 2 or 3 long, hairlike tails. Tails may be webbed together.

4 Riffle Beetle: *Order Coleoptera*. Adult: Tiny, 6-legged beetle; crawls slowly on the bottom. Larva: Entire length of body covered with hard plates; 6 legs on thorax; uniform brown or black color. Combine number of adults & larvae when reporting total counts.

5 Water Penny larva: *Order Coleoptera*. 1/4"; flat saucer-shaped body, like a penny; segmented with 6 tiny legs underneath. Immature beetle.

6 Gilled Snail: *Class Gastropoda*. Shell opening covered by thin plate called operculum. When pointed up and opening facing you, the shell opens to right. Do not count empty shells.

7 Dobsonfly larva (hellgrammite): *Family Corydalidae*. 3/4" - 4"; dark-colored; 6 legs, large pinching jaws; eight pairs lateral filaments on lower half of body with paired cottonlike gill tufts along underside of lateral filaments; short antennae; 2 pairs of hooks at back end.



GROUP TWO TAXA

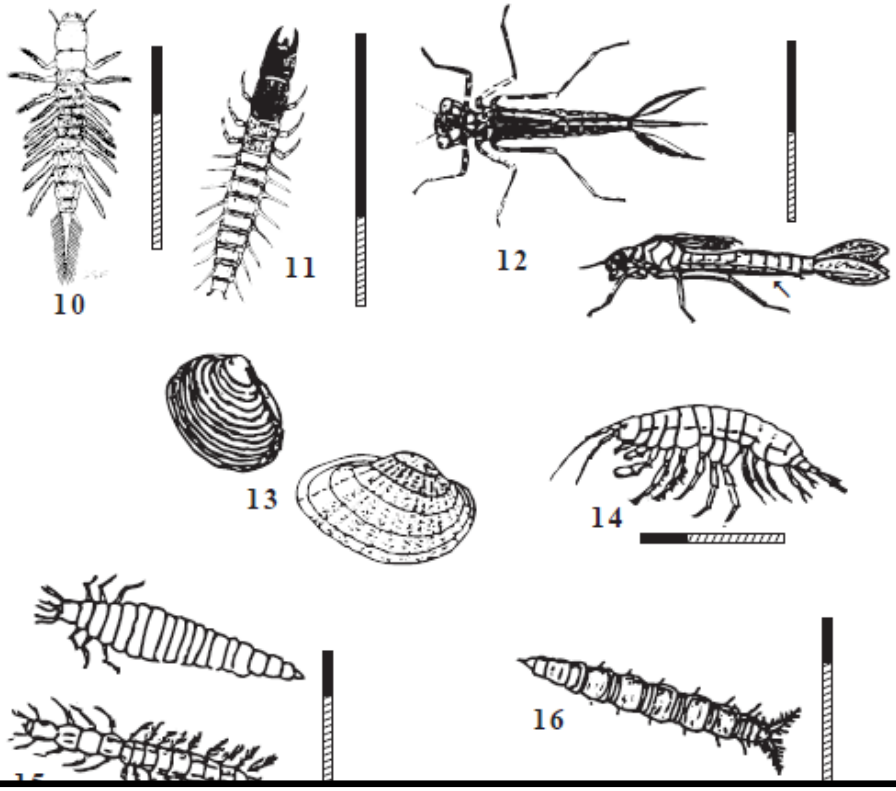
Somewhat pollution tolerant organisms can be in good or fair quality water.

8 Dragonfly nymph: *Suborder Anisoptera*. 1/2" - 2"; large eyes, 6 hooked legs. Wide oval to round abdomen, masklike lower lip.

9 Sowbug: *Order Isopoda*. 1/4" - 3/4"; gray oblong body wider than it is high, more than 6 legs, long antennae, looks like a 'roly poly.'

*** May be larger.**
~Solid bar indicates approx. minimum size. Combined solid and striped bar is approx. maximum size.~

Save Our Streams



GROUP TWO TAXA continued

10 Alderfly larva: *Family Sialidae*. 3/8"- 1"; looks like small hellgrammite but has 1 long, thin, branched tail at end of abdomen (no hooks). No gill tuft underneath the lateral filaments on abdomen.

11 Fishfly larva: *Family Corydalidae*. Up to 1 1/2"; lateral filaments on abdomen. Looks like small hellgrammite but often a lighter reddish-tan color, or with yellowish streaks. No gill tufts underneath.

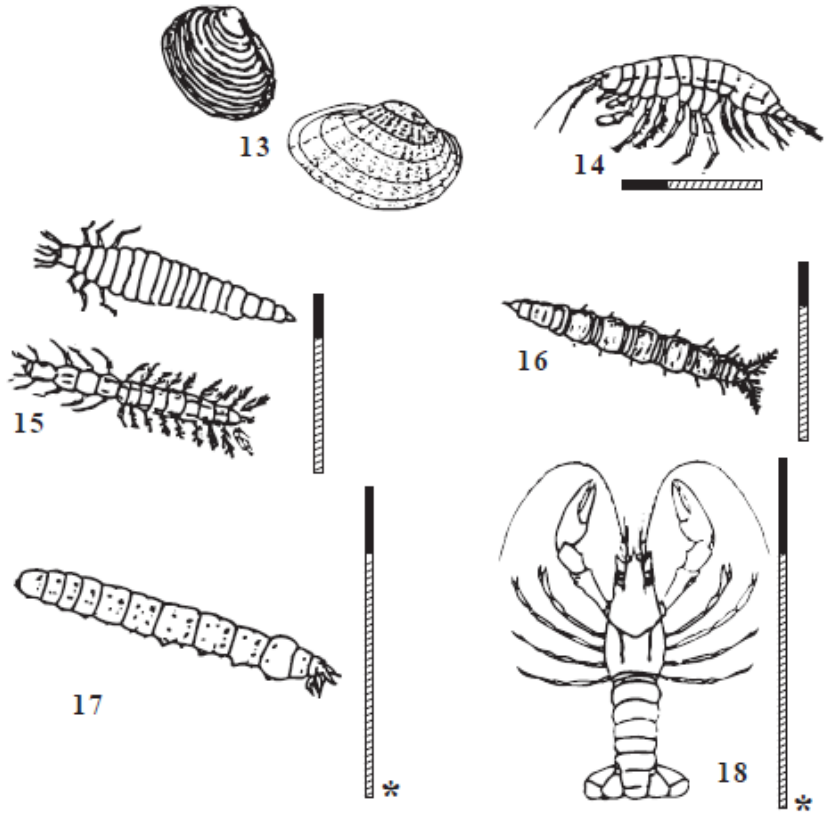
12 Damselfly nymph: *Suborder Zygoptera*. 1/2"- 1"; large eyes; 6 thin hooked legs; 3 broad oar-shaped tails (gills); body positioned like a tripod. Smooth (no gills) on sides of lower half of body (see arrow).

13 Clam/Mussel: *Class Bivalvia*. Do not count empty shells.

14 Scud: *Order Amphipoda*. 1/4"- 3/4"; white to gray, body higher than it is wide; swims sideways; more than 6 legs; resembles small shrimp.

15 Other Beetle larva: *Order Coleoptera*. 1/4" - 1"; light-colored; 6 legs on upper half of body; feelers; antennae; obvious mouthparts. Diverse group.

16 Watersnipe Fly larva: *Family Athericidae (Atherix)*. 1/4" - 1"; pale to green; tapered body; many caterpillar-like legs; conical head; two feathery 'horns' at back end.



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17 Crane Fly larva: *Suborder Nematocera*. 1/3" - 4"; milky, green, or light brown; plump caterpillar-like segmented body. May have enlarged lobe or fleshy fingerlike extensions at the end of the abdomen.

18 Crayfish: *Order Decapoda*. Up to 6"; 2 large claws, 8 walking legs, resembles small lobster.

GROUP THREE TAXA

Pollution tolerant organisms can be in any quality of water.

19 Aquatic Worm/Horsehair Worm: *Class Oligochaeta/ Phylum Nematomorpha*. Aquatic worm: 1/4"- 2"; can be very tiny, thin wormlike body. Horsehair Worm: 4"-27"; slender, can be tangled.

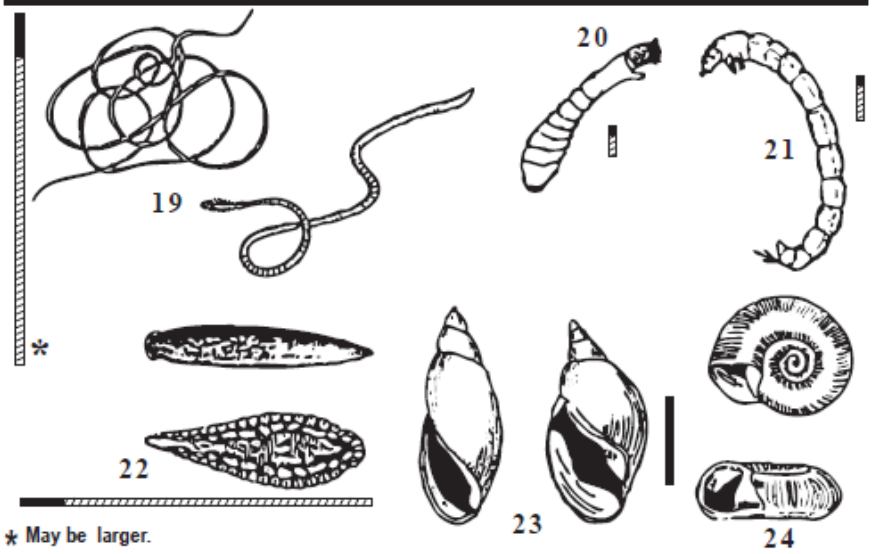
20 Black Fly larva: *Family Simulidae*. 1/8"- 3/8"; one end of body wider. Black head, suction pad on end.

21 Midge Fly larva: *Suborder Nematocera*. Less than 1/4"; distinct head; wormlike segmented body; pair of tiny prolegs under head and tip of abdomen.

22 Leech: *Order Hirudinea*. 1/4" - 6"; flattened muscular body, ends with suction pads.

23 Pouch Snail and Pond Snails: *Class Gastropoda*. No operculum. Breathe air. Shell usually opens on left. Do not count empty shells.

24 Other snails: *Class Gastropoda*. No operculum. Breathe air. Snail shell coils in one plane. Do not count empty shells.



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