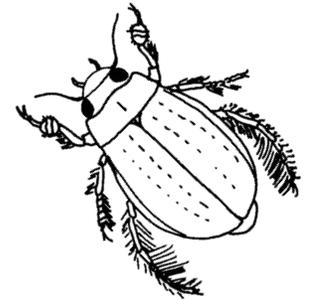
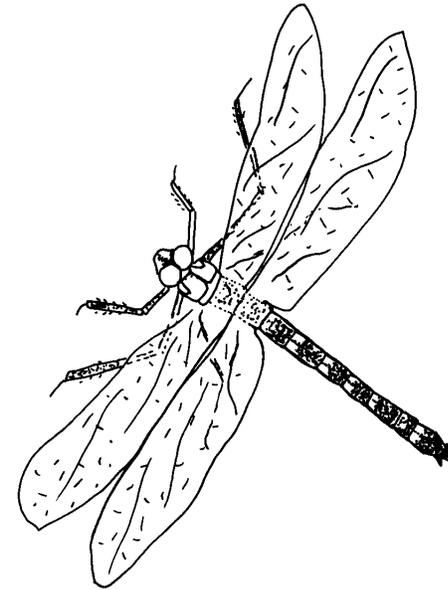


KANANASKIS COUNTRY POND LIFE DISCOVERY PACK

TAKE • HOME BOOKLET



WETLANDS: PLUNGE IN! A LOOK AT POND LIFE



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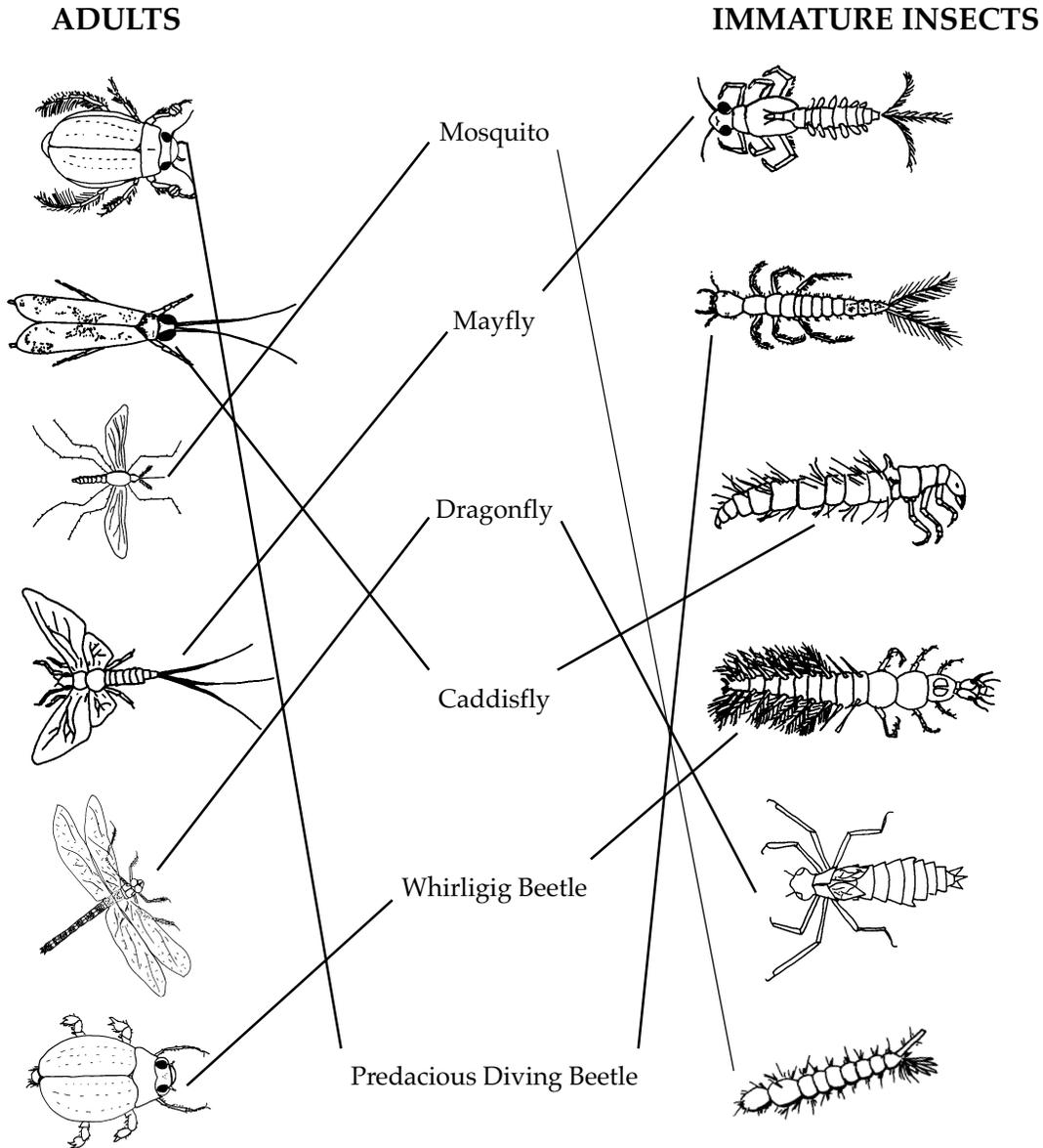
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WATERY WORLD WORD SEARCH

SECRET MESSAGE: How many mini-beasts did you find?

WHOSE KID IS THAT? INSECT MIX-UP

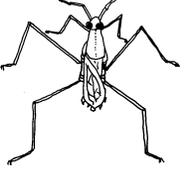
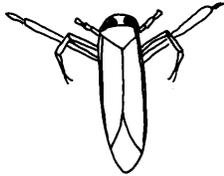
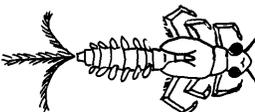
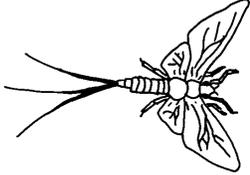
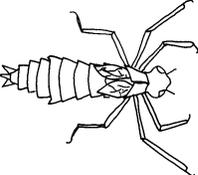
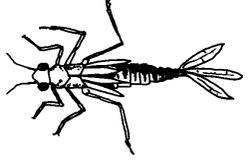
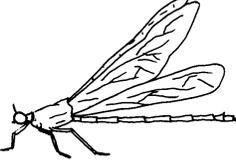


HELLO!

This Take-home booklet provides you with an Aquatic Invertebrate Quick Reference Guide and checklist to help you keep track of the aquatic invertebrates (pond animals) you have seen in Kananaskis Country. The booklet also contains puzzles for you to do at home, as well as space to do the activities recommended in the *Plunge In! – A Look At Pond Life Activity Booklet*.

Many of the pond animals found in Kananaskis Country can be found elsewhere. To look at them, try making your own dipnet from a nylon stocking and a clothes hanger. Margarine containers make excellent collecting jars for observing your catch. Be gentle with the pond animals. Keep them cool and return them to their home in the pond. For safety, always explore ponds with a friend.

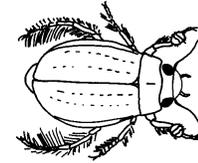
HAVE FUN!

<p>SPRINGTAIL</p> <p>actual size 2-6 mm</p> 	<p>WATER STRIDER</p> <p>actual size 10-15 mm</p> 
<p>BACKSWIMMER</p> <p>actual size 10-15 mm</p> 	<p>WATER BOATMAN</p> <p>actual size 5-15 mm</p> 
<p>MAYFLY nymph</p> <p>actual size 15 mm</p> 	<p>MAYFLY adult</p> <p>actual size 5-15 mm</p> 
<p>DRAGONFLY nymph</p> <p>actual size up to 50 mm</p> 	<p>DRAGONFLY adult</p> <p>actual size 40-80 mm</p> 
<p>DAMSELFLY nymph</p> <p>actual size 30 mm</p> 	<p>DAMSELFLY adult</p> <p>actual size 30-40 mm</p> 

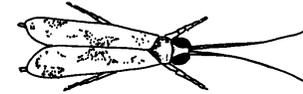
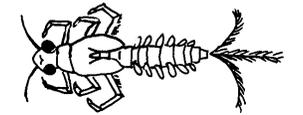
See if you can match the adult and immature stages with the names of the insects. The insects are not drawn to scale. Use the Aquatic Invertebrates Quick Reference Guide in this booklet if you need help. Answers are on page 13 of this booklet.

ADULTS

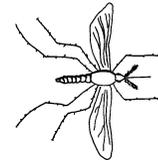
IMMATURE INSECTS



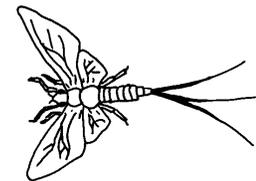
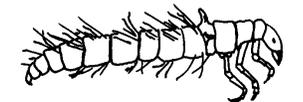
Mosquito



Mayfly



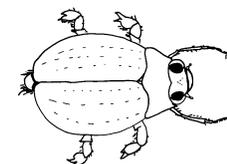
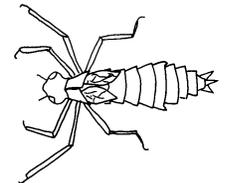
Dragonfly



Caddisfly



Whirligig Beetle



Predacious Diving Beetle



11 WATERY WORLD WORD SEARCH

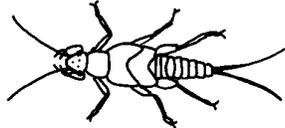
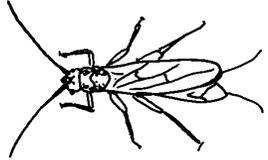
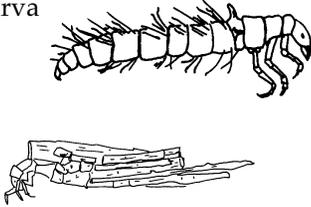
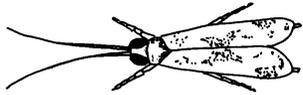
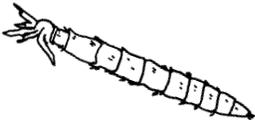
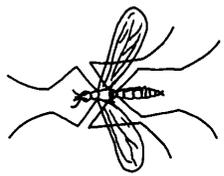
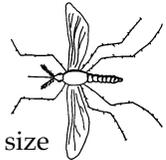
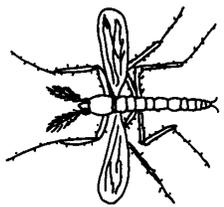
See if you can find all the words hidden below. They may run forwards, backwards, horizontally, vertically, or diagonally. Circle the letters of each word carefully. When you have found all the words on the list, read through the word search from left to right, top to bottom and place all the unused letters you find in sequence in the spaces below. These letters will spell out a secret message. The answer is on page 13 of this booklet.

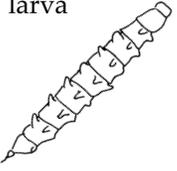
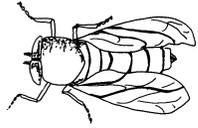
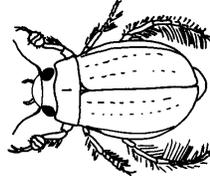
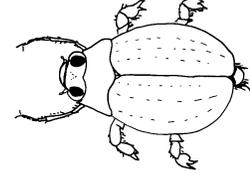
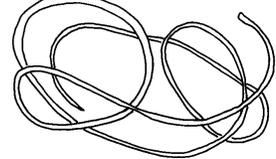
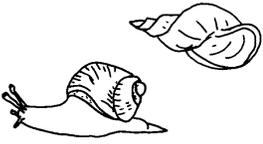
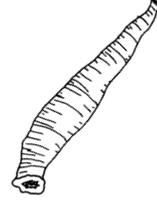


- | | |
|--------------|-----------|
| AIR | MEAL |
| AQUATIC | MITE |
| BACKSWIMMER | MOIST |
| BUG | MOSQUITO |
| CADDISFLY | NYMPH |
| CAMOUFLAGE | POND |
| CREEK | PREY |
| DAMSELFLY | PUPA |
| DIPNET | SCUDS |
| DRAGONFLY | SMALL |
| FAIRY SHRIMP | SPLASH |
| FISH | STREAM |
| FLOAT | SUN |
| FLOW | SURFACE |
| GILLS | TENSION |
| HABITAT | SWIM |
| ICE | WATER |
| INSECT | STRIDER |
| LAKE | WET |
| LARVA | WHIRLIGIG |
| LEGS | BEETLE |
| MAYFLY | WINGS |

SECRET MESSAGE: _____ / _____ / _____ - _____ /
 _____ / _____ / _____ ?

AQUATIC INVERTEBRATE QUICK REFERENCE GUIDE 4

<p>STONEFLY nymph</p>  <p>actual size up to 40 mm</p>	<p>STONEFLY adult</p>  <p>actual size 15 - 40 mm</p>	
<p>CADDISFLY larva</p>  <p>actual size up to 50 mm</p>	<p>CADDISFLY adult</p>  <p>actual size 18 mm</p>	
<p>CRANEFLY larva</p>  <p>actual size 10 - 50 mm</p>	<p>CRANEFLY adult</p>  <p>actual size body 20 mm</p>	
<p>MOSQUITO larva</p>  <p>actual size 3 - 15 mm</p>	<p>MOSQUITO pupa</p>  <p>actual size 3 - 15 mm</p>	<p>MOSQUITO adult</p>  <p>actual size 15 mm</p>
<p>MIDGE larva</p>  <p>actual size 2 - 30 mm</p>	<p>MIDGE adult</p>  <p>actual size 5 - 10 mm</p>	

<p>HORSEFLY larva</p>  <p>actual size 15 - 40 mm</p>	<p>HORSEFLY pupa</p>  <p>actual size 15 - 40 mm</p>	<p>HORSEFLY adult</p>  <p>actual size 10 - 25 mm</p>
<p>PREDACIOUS DIVING BEETLE larva</p>  <p>actual size 25 mm</p>	<p>PREDACIOUS DIVING BEETLE adult</p>  <p>actual size 10 - 40 mm</p>	
<p>WHIRLIGIG BEETLE larva</p>  <p>actual size 3 - 7 mm</p>	<p>WHIRLIGIG BEETLE adult</p>  <p>actual size 3 - 7 mm</p>	
<p>FLATWORM (Planaria)</p>  <p>actual size 20 - 25 mm</p>	<p>HORSEHAIR WORM</p>  <p>actual size up to 300 mm</p>	
<p>SNAIL</p>  <p>actual size 2 - 70 mm</p>	<p>LEECH</p>  <p>actual size up to 100 mm</p>	

Ponds, lakes, streams, and rivers provide many aquatic plants and animals with the shelter, food, and water they need to survive. Many aquatic forms of life cannot live anywhere else. While large animals such as birds and mammals can move elsewhere, pond animals and plants die if the pond dries up or becomes polluted. If they die, then an important source of food for fish and birds disappears. An abundant clean supply of water is essential for all life, including ours.

Here are a few ways in which you can conserve water and keep it clean:

Decrease the Volume of Water You Use

- Place a water-filled plastic container or a brick in your toilet tank to reduce the amount of water used for each flush.
- Take a short shower instead of a bath.
- Take a sailor shower by turning off the tap while you shampoo or soap-up.
- Turn the tap off while you brush your teeth, shave, or wash vegetables.
- Keep a jug of cold water in the fridge so you don't have to run the water in the tap until it feels cold.

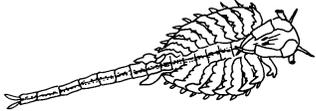
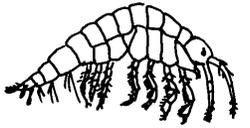
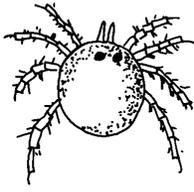
Help Keep Your Waste Water Clean

- Place fresh and moldy food scraps in the compost or in the garbage rather than down the garburator.
- Throw paper diapers, dental floss, and hair in the garbage to avoid fouling up sewage treatment plants.
- Take used car oil to an Oil Drop for recycling.
- Use soap rather than detergent.
- Handle hazardous products wisely. Do not throw paints, paint thinners, medicines, and other wastes down the drain.

9 **SKIMMING THE SURFACE**

Design a device which would allow you to move through water. What problems would you have to overcome? Can the features of any of the pond animals you have seen be adapted to suit your needs?

AQUATIC INVERTEBRATE QUICK REFERENCE GUIDE 6

<p>FAIRY SHRIMP</p> <p>actual size 10-17 mm</p> 	<p>WATER FLEA (Daphnia)</p> <p>actual size 0.2-3 mm</p> 
<p>COPEPOD</p> <p>actual size 0.3 mm</p> 	<p>SIDESWIMMER, SCUD or FRESH WATER SHRIMP</p> <p>adult size 5-20 mm</p> 
<p>WATER MITE</p> <p>actual size 2.5-5.0 mm</p> 	
<p>DRAW YOUR OWN DISCOVERIES IN THESE SPACES.</p>	

Keep track of the pond animals you have seen in Kananaskis Country by checking them off on this chart. The animals may be seen in the following zones of the pond or stream:

1. On the bottom or under rocks (bottom)
2. Amongst the plants (plants)
3. In the open water or on the water surface (open)
4. In the air above the pond or alight on an object beside the pond (air).

INSECT		BOTTOM	PLANTS	OPEN	AIR
Springtail					
Mayfly	nymph adult				
Dragonfly	nymph adult				
Damselfly	nymph adult				
Stonefly	nymph adult				
Water Strider					
Backswimmer					
Water Boatman					
Caddisfly	larva adult				
Crane fly	larva adult				

INSECT		BOTTOM	PLANTS	OPEN	AIR
Mosquito	larva pupa adult				
Midge	nymph adult				
Horsefly	nymph adult				
Predacious Diving Beetle	nymph adult				
Whirligig Beetle	nymph adult				

OTHER AQUATIC INVERTEBRATES

Flatworm				
Horsehair Worm				
Snail				
Leech				
Fairy Shrimp				
Water Flea				
Copepod				
Sideswimmer				
Water Mite				