

GRADE 3 SPRING NATURE WALK

Ponding

OBJECTIVES:

- Collect and observe pond creatures and investigate their habitat.
- Demonstrate respect for these tiny aquatic animals by using proper collecting habits.
- Identify common pond animals.
- Using printed information, discover how pond animals meet their life needs, especially food.
- Learn about interdependence in the pond community, especially food chains and food webs.
- Enjoy discovering in a pond community.

PREPARATION:

- Schedule the walk for May after the pond has warmed up.
- The ponding expedition will last about an hour, including time for recording.
- Classroom coordinators: Remind teachers to notify the school nurse one week ahead of the walk so the nurse can check for allergies in the classroom. Also remind teachers to send notices home to parents requesting that children come to school with waterproof footwear the day of the walk.
- Check with the teacher to see if children should bring pond plants and animals back to the classroom for further study.
- Gather materials before walk.

MATERIALS:

Based on a group of 6 children, EACH GROUP will need:

- 1 White plastic dish pan.
- 3 Kitchen strainers (1 per 2 children).
- 6 White plastic spoons (1 per child).
- 2 Hand lenses.
- 1 Observascope (magnifier on a stand with a removable sample tray and lens).
- 8 Clear plastic cups.
- 1 Bug box.
- 1 Bucket with a plastic bag and twist for lining the bucket (if needed to carry pond water and specimens back to school without sloshing).
- 1 thermometer.
- 1 Wetland Habitat Data Sheet.

ID Guides (can be shared by more than 1 group):

- 1 Pond Animal ID sheet, laminated.
- 1 “Guide to Aquatic Animals” (laminated pages).
- 1 Zim Golden Guide to Pond Life.

One per student:

- Worksheet: “My Pond Animal”/“Learning About My Pond Animal” (on the back).
- Blank sheet of paper for sketching the pond.
- Pencil.
- Clipboard (from classroom).

****It is useful to bring along several extra large plastic bags and rubber bands that children can use to protect their shoes if they are not wearing waterproof boots.**

ACTIVITIES:

- Observe the pond habitat. Sketch the pond and include features that might be important to life in the pond.
- Learn how to carefully collect pond animals.
- Discover the variety of tiny aquatic water animals, including a variety of immature insects.
- Identify the most common animals using ID sheets. Count legs first to decide which side of the ID sheet to look at.
- Using student worksheets, draw and record observations about one of the collected animals.
- Use the references to find out what each animal eats, (especially important if animals are collected for the classroom). If animals are taken for the classroom be sure to bring the food they need.
- Gently return all animals to their home in the pond unless teacher has requested that some are taken back to school. (They will be returned to the pond within 1-2 weeks.)
- Encourage children to clean equipment. Collect materials (strainers, cups, plastic spoons, etc.)
- Walk leaders check equipment. to see that it is ready for the next group before returning to the school.

AFTER THE WALK:

- Return clean equipment and other materials to BBY room.
- Leave wet things out to dry in the BBY room.

PRE-WALK ACTIVITIES: TO BE LED BY THE TEACHER**1. Curriculum Connection: Food Chains.**

Discuss the concept of habitat with children. A habitat is a place where a plant or animal has all it needs to survive—food, water, air, shelter and space. Ask: *Think of places where plants and animals are found near Estabrook School. What different types of habitats are there in Estabrook's Big Backyard?* (The playing field, the woods, the meadow, the pond, the wild edge of the playground, the lawn.) Tell students that they are going to observe the plants and animals in a pond habitat on their next Big Backyard walk.

Ask: *What kinds of animals do you think might live in the pond down the hill from the school?* Have them make a list. Students will probably mention fish, frogs, ducks, and other large animals. Remind them that most of the habitats around the schoolyard have tiny animals such as bees, grasshoppers, caterpillars, spiders and worms as well as some larger animals. Ask: *Do you think you will find any insects or other tiny animals in the pond? Do you know how you can tell if an animal is an insect?* (Insects always have six legs; spiders have 8.) *We may find insects in any stage of their life cycle. What do you know about the stages of an insect's life cycle* (larva, pupa, adult—for a butterfly: caterpillar, chrysalis, adult)? Add any other animals the children think of to their list.

2. Curriculum Connection: Water Cycle.

Another property of water: air can dissolve in it.

Pour cold water from the faucet into a clear cup. Ask students to make observations on this water. (Clear liquid, cold.) Let this cup sit for an hour or two or overnight at room temperature. Pour a new cup of cold water for comparison. Ask students to observe the liquid in each cup. Tiny bubbles will appear on the side of the cup where the water has warmed to room temperature. Ask: *Where do you think the bubbles come from? Why do you think that?* (Varied answers, but since the bubbles are found throughout the liquid, not just the top, they are likely to come from the liquid.) *What do you think is in the bubbles? Why do you say this?* (Varied answers—it is definitely a gas, but it could be water vapor, or it could be air.) *Have you ever added salt to water? What happens?* (The salt dissolves and “disappears” into the water.) *Scientists tell us that gases such as those in air can also dissolve in water, especially if the water is cold. Gases don't dissolve as well in warm water. Use this information to explain the difference between the two cups of water; remember, one is cold and one is room temperature.* (Air was dissolved in the cold water. You could not see it, like salt dissolved in water. When the water warmed up, not as much air could be dissolved, and air bubbles formed inside the glass.)

3. Curriculum Connection: Food Chains.

Ask: *If YOU were the size of a tadpole and lived in the watery world of a pond, what would you need to survive?* Turn and talk with a partner to make a list. Discuss and make a class list of what all animals need to find in their habitat:

Food:

All animals are out searching for food and at the same time trying to avoid being food for someone else. Ask: *What food could animals find in a pond?* (Water plants are food for some animals. Many animals eat other animals too small to see without a microscope. Others,

however, eat larger water creatures such as insect larva, frog eggs, polliwogs, and small fish. Decomposing plants and animals provide food for some pond animals.)

Water:

Ask: *Why do pond animals need water?* (Water is important to pond animals not only internally, but is necessary as a total environment. The bodies of pond animals are designed to move around in water. Water surrounds and supports their bodies, keeps their bodies from drying out, and for some provides oxygen (see next item).)

Air: (oxygen)

Ask: *How can pond animals get air?* (Air is dissolved in the water--refer to previous activity). Some animals have special structures called gills that can take dissolved air out of the water. Other animals carry an air bubble on their body, like a scuba diver. These animals must come to the surface to get a fresh bubble of gaseous air every so often.)

Shelter:

Ask: *How can pond animals find shelter?* (In dead leaves, mud, plants.)

Protection:

Ask: *What other ways can pond animals protect themselves?* (Many pond animals protect themselves through camouflage—they can blend in through coloring or body shape. Some can swim fast. Some pond predators like giant water bugs have poisonous bites—not poison to humans.)

Important notes if you plan to have a pond aquarium in your classroom:

- If pond animals are taken back for class study, ONLY water from their HOME pond or spring water can be used in their temporary aquarium home. Home pond water with slimy leaves and mud is much preferred. Animals are to be returned to their HOME pond within a week or two (if an aerator is used in the aquarium). THESE PRECAUTIONS ARE NECESSARY TO AVOID THE POSSIBLE SPREAD OF DISEASE ORGANISMS FROM ONE POND TO ANOTHER. IT IS OUR RESPONSIBILITY TO CHANGE THE ECOSYSTEM AS LITTLE AS POSSIBLE WHILE WE STUDY POND LIFE.
- Aquatic animals have adapted to seasonal temperatures, as have land animals. The aquatic animals children may collect are all cold blooded. Pond animals, however, cannot tolerate sudden changes in temperature, a fact to be remembered before transferring animals from a pond to aquarium water at room temperature. Allow the pond water to come to room temperature before transferring it to the aquarium.

NATURE WALK: TO BE LED BY BIG BACKYARD VOLUNTEER

1. Arriving at the pond. Observe and discuss pond habitat. Sketch pond. Fill out Wetland Habitat Data Sheet.

- An important aspect of any pond field trip is to encourage children's sensitivity to living things and appreciation for the habitat in which they live. The wonder and excitement of discovering the unique variety of pond life is a building block toward appreciation of and respect for the balance of life in all habitats. The example the leader sets is critical in establishing these attitudes.

Before reaching the edge of the pond, assemble the group at a point where you can see the whole pond. Say: *This pond is a special habitat where many types of living things find what they need to stay alive. What makes up this pond habitat—what do you notice?* (water, plants and animals, air, shelter) *Are there things about this pond habitat that might be important, but which we can't see?* (Yes! Much of the activity in a pond habitat takes place under water!)

Have them imagine what the pond would look like if they were a bird flying over the pond and looking down. Ask them what shape the pond is from their overhead view (“map view”).

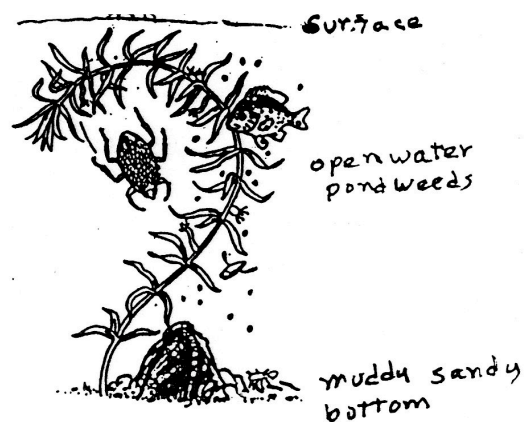
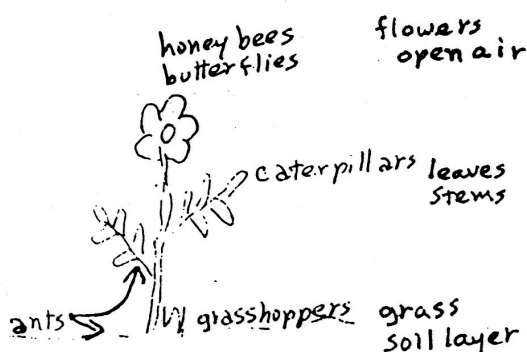
Pass out the clipboards, blank paper, and pencils. Ask each child to draw a quick sketch of the pond's shape. Ask them to add any important pond habitat features that they can see to the sketch. These features are ones that might be important for things that live at this pond. (Look for plants, visible animals, water coming in or going out of the pond, etc.) Have them list at least 4 words that describe the pond or a pond feature.

- Have children help you fill out the Wetland Habitat Data Sheet.
- Collect the clipboards, papers, and pencils.

2. Demonstrating how to observe and collect.

- Assemble:
 - A white basin.
 - 2 clear plastic cups.
 - A spoon.
 - A strainer.
 - An Observascope magnifier.
- Ask: *What is the first thing a pond animal will need in order to survive while you are observing it?* (Water.) Show how to collect clear water in the white basin and plastic cups to make comfortable temporary homes for the animals. Ask: *Where do you think we might find the most animals when we scoop with the strainers?* *How would you decide?* (Animals are more likely to be found where there is the most food and protection—around plants and in the top layer of mud and leaves.)

- Demonstrate how to use the strainer by scooping through the water into the mud and leaves at the bottom of the pond or near plants. After scooping, move the strainer through the water several times to rinse out some of the fine mud. Look in the strainer to see if a small animal can be seen moving around. If so, use a spoon to gently move the animal to a cup with water, or to an Observascope magnifier tray. If this is difficult, or if no animals are visible, tip the strainer upside down over the basin. Pour a cup of water through the bottom of the strainer to wash leaves and animals caught in the mesh into the white basin. Tell children they will need to be patient as the leaves and mud settle and the water clears.
- Point out the pond in zones or layers. Animals live in all pond layers. A pond is a little like a meadow with different habitats and different animals living at different levels. Similarly, in a pond some animals live on the muddy/sandy bottom, others live on the surface, while still other animals live in pond weeds or swim in the open water of the pond. Dragonfly and damselfly larvae and isopods are found in the muddy bottom, diving beetles and water bugs are found throughout the water and water striders are found on the surface.



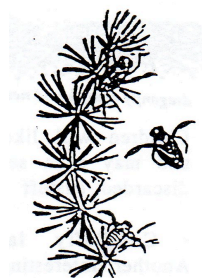
3. Collecting and observing

- Each group should start on a different part of the dock.
- Once a group arrives at their site, invite the students to look in the water to see if any animals are visible before collecting starts. The walk leader should then fill the basin with about two inches of water and set it down away from the pond edge on a relatively flat space. Leave spoons, cups, magnifiers and ID sheets near the basin.
- Hand out strainers, cups, and spoons to children. Encourage the children to dip from the shore whenever possible, rather than wading into the pond. Remind them that animals are found in all the pond layers, but most will be found where there is the most food and protection (i.e., in the “goop”). Each child should dip only 2-3 times. Use the analogy of fishing (sometimes you need to be patient to catch something!) Encourage children to explore each strainerful carefully, and not just scoop repeatedly, as too much scooping may disturb the life of the pond and muddies the water.

- Move specimens from the strainers to cups with clear water for observation. Empty some leaves and mud from a strainer into the basin even if it seems as though nothing is moving. Empty cups with specimens that have been observed into the basin.
- Several children at once can look for animals in the basin once debris in the water has settled down. Sharp young eyes will soon spot moving specks in the water. Encourage children to gently catch animals with a spoon or medicine dropper and transfer them to the Observascope tray with some water or cup with water. Too much stirring with spoons will make the water cloudy again. Gentle poking at the sediments in the basin may reveal hidden creatures. How many are there in one strainerful of mud?
- Encourage children to take time to observe and learn about each animal they discover. To help with identification, ask children to observe the animal's body. Ask: *What color is it? What shape is the animal's body? Can you see its eyes? Can you see legs? If so, how many are there?* Use the laminated ID sheet to name the animal. If the animal has 6 legs, use the insect side of the sheet. Match each animal with its picture. If there is not a perfect match, ask which is the closest. (For example, there are many types of dragonflies, and the nymphs are somewhat different in size and shape.) Noticing an animal's size is also a help in identification. Note that the bar near each illustration indicates the actual size of the animal—there are some large pictures of small animals.
- Talk with children about the animal and ask questions such as:
 - How does it move?
 - How do you think it breathes? (Encourage children to look for a silver air bubble on diving insects—and watch the animal return to the surface to get a fresh breath.)
 - What part of the pond does it live in?
 - What do you think it eats?
 - What do you think might eat it?



Water Boatman



- Some questions can be answered by observation; some need to be researched. Look in the “Guide to Aquatic Animals” or the Zim book Pond Life to answer other questions about how these interesting creatures live.

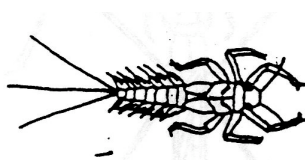
When scooping up pond weeds or scooping around plant stems, empty the strainer into a basin with clear water. Gently shake the pond weeds in the water. Damselfly nymphs and water boatmen eat pond weeds and also find shelter there. Examine plant stems and leaves carefully for tiny insects and for eggs (jelly masses, some quite small). Split open the stems to look for insects inside. Move all specimens to smaller containers in clear water for further study.

4. Observing and learning about immature insect nymphs.

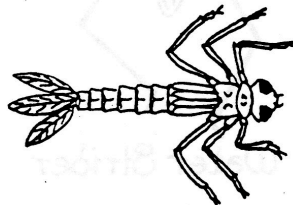
- Among the most common small creatures that are easily visible will probably be dragonfly, mayfly, and damselfly nymphs. A nymph is the immature stage of an adult insect and looks much like the adult without wings. (This type of life cycle differs from metamorphosis, the cycle children observe in butterflies, where there is a larva—caterpillar-- that changes into a distinctly different pupa—chrysalis-- before becoming an

adult.) Dragonfly and damselfly nymphs may have structures containing folded wings just behind their head. Nymphs that live in water obtain oxygen from gills located on their tails (damselfly) or on the sides (mayfly) of their body. Dragonfly nymphs have internal gills.

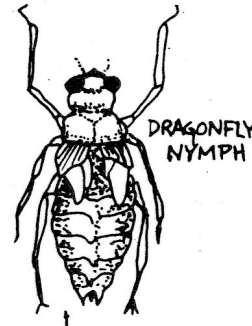
- Dragonflies suck in water and shoot it out their tail in a jet. Sometimes you can see a dragonfly shoot forward suddenly when this happens.



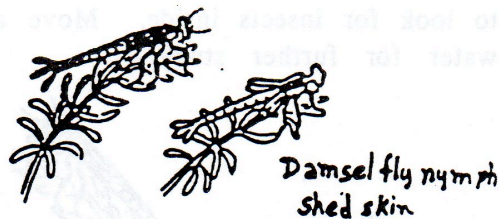
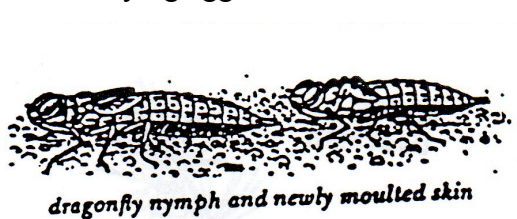
Mayfly nymph



Damselfly nymph 1



- Mayfly nymphs eat pond weeds and algae; damselfly and dragonfly nymphs hunt other small animals. Adult dragonflies and damselflies are called "mosquito hawks" and are voracious insect eaters.
- Sometimes children think they have found a "dead nymph." Look carefully, for it is likely the cast skin of that nymph, preserving in every detail the form of the insect. Like caterpillars, nymphs shed their skin repeatedly as they grow until they crawl up a stem above the water, shed their skin for the last time, and emerge as a winged adult ready for life in the air instead of submerged in the pond.
- Children will likely see adult damselflies and dragonflies around the pond, and may even see one of these fascinating insects emerge or discover the discarded castoff skin on a plant stem. A resting dragonfly holds its wings out; a damselfly folds its wings up over its back, like a butterfly. A dragonfly or damselfly that dips its abdomen into the pond is laying eggs!!



5. Living on the surface.

- Some pond insects live on the surface and extra care must be taken if collecting these animals. For example, although a water strider lives all its life on the water's surface, it will drown if pushed below the surface. These should not be collected for the classroom.
- Whirligig beetles however, although often seen on the surface, can dive under water (carrying an air bubble with them) to search for food and re-emerge with no difficulty.

- Children may notice small black specks hopping on the surface; these are spring tails, a close cousin of the snowfleas often seen in winter woods.

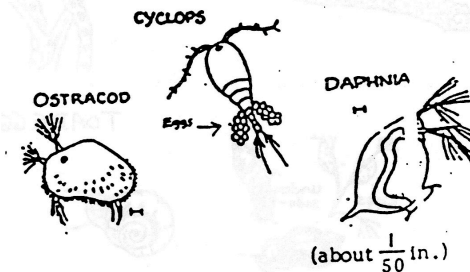
6. Pond creatures that are not insects.

- Children may find other interesting pond inhabitants, such as snails, scuds, tadpoles, leeches, flat worms, tiny pill clams, isopods, fish, and nematodes. Explore the undersides of rocks and leaves on the bottom for flatworms and snail eggs in jelly coverings.

7. Microscopic animals.

- Have students move the fine mesh net through the pond water just above the mud and leaves. Wash the contents of the strainer into a basin of clear water and wait until the water settles. Look at the "specks of dirt." Ask: *Are any of them moving?* If so, these are tiny micro-organisms and an important part of the food chain.
- Daphnia are tiny water fleas that feed on pond weeds. Cyclops have a distinctive pear shaped body and sometimes clusters of eggs attached near their tail can be seen. Kids think they look like tiny "Goldfish" crackers. Ostracods look like tiny clams. Children may enjoy looking at these tiniest of pond animals with a hand lens, and they are astounded that these tiny "specks of dirt" are living, breathing, moving animals.

Microscopic animals – daphnia, cyclops, and ostracods.



8. Recording in the field.

- When children have collected a number of different specimens, have the small groups gather their collecting pans and containers together in one place so they can see each other's findings. Ask: *How many different kinds of animals did you collect? What animals are most common? Which of your tiny creatures are insects? How can you tell?* Remember, insects have six legs.
- Hand each child a clipboard with a pencil and a "My Pond Animal"/"Learning About My Pond Animal" sheet. Have each student choose one of the captured specimens to observe carefully. The cups, Observascope, and the bug box or magnifiers are useful for this observation. Ask children to observe their creature carefully and then make a sketch.
- As time permits and using the "Guide to Aquatic Animals," and the Zim Pond Life book, as well as direct observation, have children answer the questions as best they can, and write any comments or questions they have about their animal. Help children by asking questions, pointing out interesting things about the creature, and guiding them to look at the identification pages. Making the connection between a living animal and its picture in a book is an important skill for children, and a great motivation to learn more. It will

be difficult to answer some of the questions, especially in the field. Encourage children to answer what they can and assure them they can finish later back at school.

9. If the teacher wants you to bring pond animals back to the classroom:

- As a group decide which animals you will take back to the classroom to observe for a week or two, before returning them to the pond. Ask: *What do these animals need to live and feel safe?* (Water, food, shelter.) In order to take an animal temporarily, you must know what it eats and provide this.
- In deciding which animals to take back to school consider the following:
 - Include some pond weeds and decaying leaves for both food and shelter.
 - Take more plant eaters or eaters of dead leaves than predators. 1-2 dragonfly nymphs, backswimmers, or other predators are plenty for a 10 gallon aquarium
 - Water striders must live on the surface. They will drown if they go under water during transport, and they escape easily. (Not a good choice!!)
 - Some animals can crawl up the side of the containers and would die if they crawled out onto land or the classroom floor.
 - Some animals move very fast and seem trapped in a small container. (Do not take fish or whirligig beetles.)
 - Some animals may eat another animal in the container; this is OK, as it is what happens in the pond.
 - Use a bucket to carry animals and plants back to school. If the bucket has a plastic liner bag, close the bag with a twist to avoid sloshing.

10. Preparing to return to school.

- Return all animals not being brought back to school to the pond. Carefully wash the nets and basins to be sure that even tiny animals are returned home.
- Count strainers, Observascopes, hand lenses, etc. to make sure none have been left at the pond.
- Ask: *What did you discover that surprised you? In what ways are pond animals and plants dependent on each other?* (Food, shelter, oxygen.) *What questions do you have about the animals that live in this pond?*
- Return to school. Give all worksheets to the teacher.

11. Caring for the equipment back at school.

- Thoroughly clean all equipment used at the pond.
- Spread wet things out in the BBY room to dry before putting them away.
- Throw away any cracked or broken cups or spoons

**POST-WALK CURRICULUM INTEGRATION OPPORTUNITIES:
TO BE CHOSEN AND LED BY THE TEACHER**

1. Curriculum Connection: Pond Food Chains--Classroom aquarium.

- Be sure animals brought back to class are housed where they are safe and cannot escape. If you are keeping animals for more than two days, you will need an aquarium with a pump and airstone. But for two days, the animals should be all right if they cannot crawl out and if there is enough water and some pond weeds. If you need more water, be sure it comes from the home pond, or use bottled spring water or dechlorinated tap water. Do not use water from another pond or stream, as it may contain disease causing organisms.
- If several animals are housed together, one may eat another animal. This is OK, as this is what happens in the pond. Just be sure children are prepared that it may happen. This is like watching a food chain in action. Put magnifiers near the aquarium and have children keep a log of what is happening and which animals they see.
- Have children do a more polished sketch and, using their notes and pond life books, finish the “My Pond Animal”/“Learning About My Pond Animal” sheets they started in the field. Some children may want to complete a worksheet about a different animal in the classroom.
- Add any animals they discovered in the aquarium to the class list of pond animals.
- Have children draw a cross section of a pond, either individually or as a class mural, showing the layers of the pond. Draw pictures of both aquatic animals and pond weeds and put them where they live in the pond. Using tape and string, connect each animal to what it eats.
- Be sure animals are safely returned to their home pond after a few weeks.

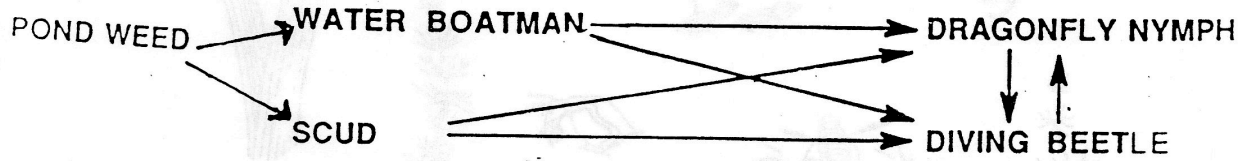
2. Curriculum Connection: Pond Food Chains.

- Have the children make pond food chains. Write the names of all pond animals on cards. Also make a pond weeds card. The object is for children to learn that a food chain always includes a plant, a plant eater, and an animal eater. In a habitat, plants and animals are interdependent.
- Using their “My Pond Animal” sheets, have children divide the names of animals they discovered in the pond into two groups: plant-eaters and animal-eaters. They also discovered pond weeds, which aquatic animals use for both food and shelter.
- They can now construct some pond food chains. Using their “My Pond Animal” sheets, have children in small groups make a three step food chain such as

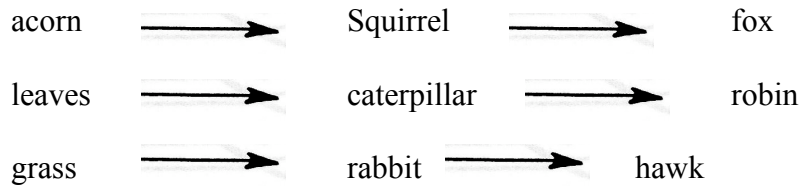
pond weed → scud → dragonfly nymph

pond weed → damselfly nymph → sunfish

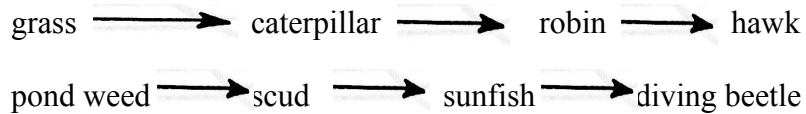
- If as a class they combine several food chains they could make a food web for their pond.



- Challenge children to come up with simple food chains for other habitats, such as the woods or the meadow. Always a food chain has a plant, a plant eater, and an animal eater.



- Can anyone come up with a four step food chain?



3. Literacy Connection:

Gather "pond words" from the ones children chose as they were sketching the pond. Ask students to recall how they felt at the pond (emotions) and what they were thinking then. Invite students to weave these words and feelings into poetry. Try Haiku or Diamante structures.

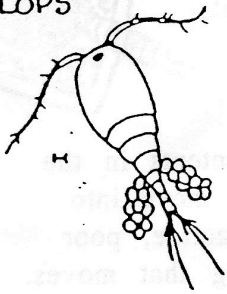
Small Freshwater Animals and What They Eat

Golden Guide, Pond Life book used as a reference...

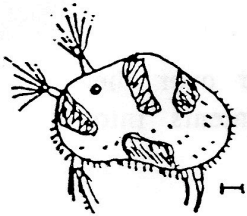
Amphipod or Scud (sideswimmer) - a scavenger, eating dead plants and animals ... page 91
Backswimmer - eat small crustaceans ... page 104
Caddisfly - larvae feed on both animals and plants ... page 107
Cyclops - feed on algae, bacteria and organic debris ... page 90
Daphnia - ("water fleas") eat algae, microscopic animals and organic debris (detritus) page 88
Diving Beetles - adults and larvae, called Water Tigers, feed on insects or other small water animals ... page 105
Dragonfly and Damselfly Nymphs - feed on insect larvae, worms, small crustaceans or even small fishes. Both are important source of food for fish... page 98, 99
Giant Water Bug - feed on other animals including insects, tadpoles, and small fish. ...page 103
Isopod - eats decayed plant matter ... page 91
Mayfly - feed on small plants and animals and on organic debris. Important fish food...page 96
Snails - feed mainly on plants though some eat dead animals ... page 114
Stonefly - some species feed on animals, other on plants. Important food source for fishes and other animals... page 100
Sunfish - eats daphnia, insects or other small water animals ... page 124
Tadpole - eat plants and small animals
Water Boatman - feed on algae or decaying plant and animal material... page 103
Water Mites - feed on worms, small crustaceans and insects, some are parasites... page 113
Water Scorpion - eat other animals by grabbing them with front legs ... page 103
Water Strider - eat other insects or small crustaceans ... page 102
Water Strider - eat smaller animals ...page 102
Whirligig Beetle - voracious carnivores... page 105

CRUSTACEANS

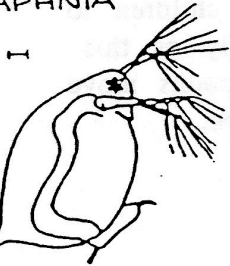
CYCLOPS



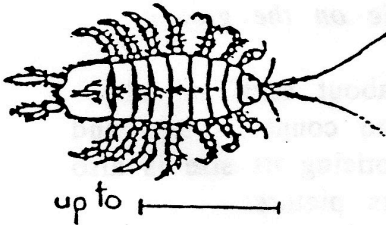
OSTRACOD



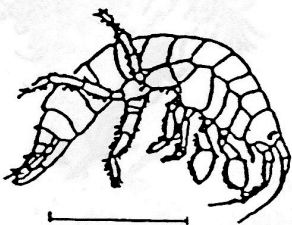
DAPHNIA



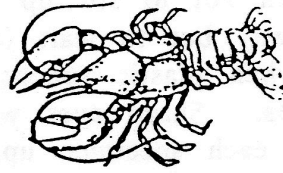
ISOPOD



AMPHIPOD (SCUD)



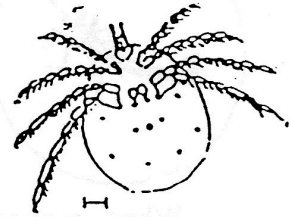
SOME POND CREATURES
AND THEIR SIZES



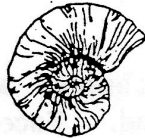
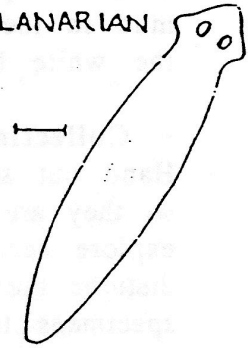
Crayfish (Crustacean)

OTHER

WATER MITE



PLANARIAN



Snail

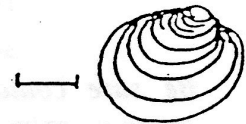


Tadpole



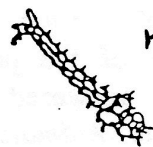
Leech

"PILL CLAM"

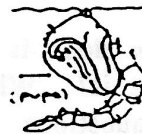


Does it have 6 legs?
Look on the other side....
It's an insect!!!!!!

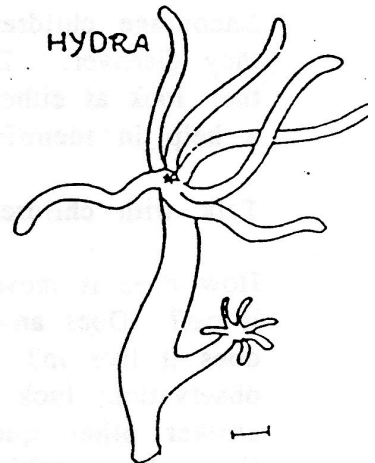
Mosquito larva



(this is an insect)

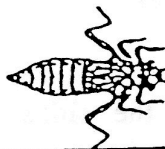
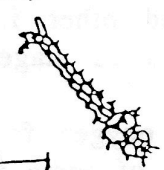
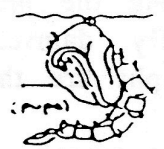
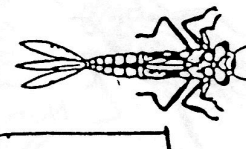
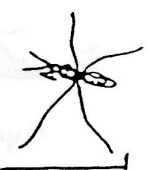
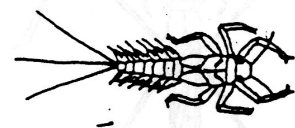
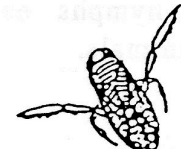
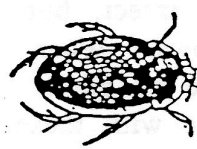
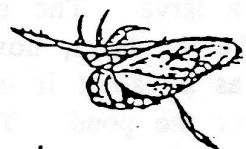

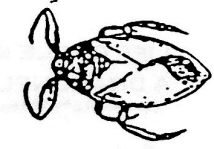
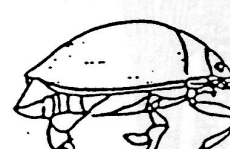
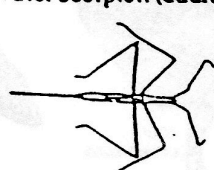
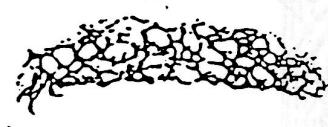
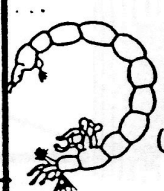
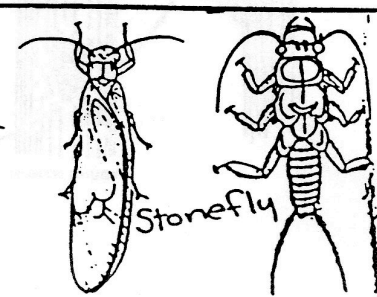


HYDRA



From Massachusetts Audubon

WATER INSECTS (6LEGS)

<p>Dragonfly nymph</p> 	<p>Mosquito larva</p>  
<p>Damselfly nymph</p> 	<p>Water strider (adult)</p> 
<p>Mayfly nymph</p> 	<p>Water boatman (adult)</p> 
<p>Water scavenger beetle adult</p> 	<p>Backswimmer (adult)</p> 
<p>Whirligig beetle larva</p> 	<p>Giant water bug (adult)</p> 
<p>Whirligig beetle adult</p> 	<p>Water scorpion (adult)</p> 
<p>Caddisfly larva</p> 	<p>Midge Larva (Blood worm)</p>  <p>Stonefly</p> 

NAME _____

DATE _____

MY POND ANIMAL

LOOK CAREFULLY AT YOUR POND ANIMAL.

1. Does it have a head?
2. Does it have legs? How many?
3. What shape is its body?
4. Does it have antennae?
5. Does it have eyes?

DRAW A PICTURE OF YOUR POND ANIMAL. Remember to draw all its body parts and label them.



Draw a line below the picture to show its real size.

NAME _____ DATE _____

LEARNING ABOUT MY POND ANIMAL

Answer as many questions as you can by observing your pond animals and by reading about it. You can finish the questions back in the classroom.

1. The name of my animal is:
2. Is it an insect? How do you know?
3. How does it move?
4. What color is it?
5. How does it get oxygen?
6. What does it eat? How does it find its food?
7. How does it keep safe? Does it hide or move fast?
8. Do other animals hunt it for food?
9. Where in the pond does it live?

Wetland Habitat Data Sheet

Name _____ Location _____

Weather _____ Date _____

Air temperature _____

Water temperature _____

Type (river, stream, pond, marsh) _____

Bottom (sand, mud, plants, branches, rocks, etc.) _____

Water (clear, cloudy, muddy) _____

What color is the water? _____

Is the water flowing? _____ Where does it come from or go to? _____

Do people use this wetland? _____ If yes, how do they use it? _____

What plants do you see? _____
