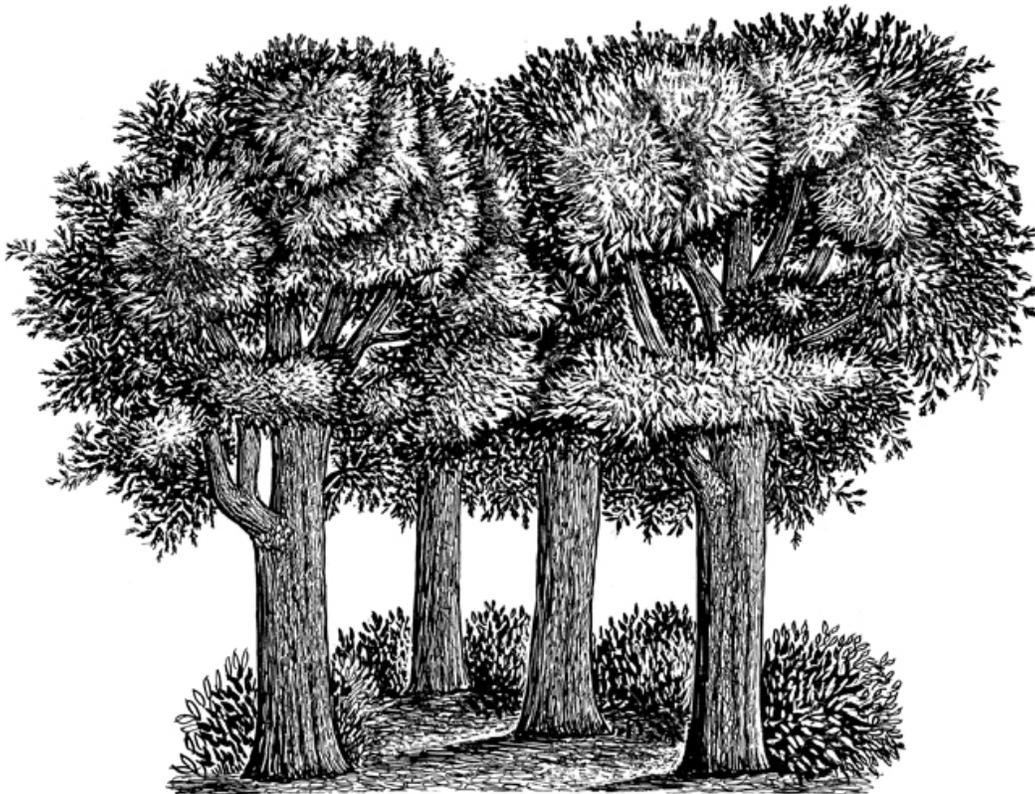


MANSFIELD CONNECTICUT

Parks & Recreation

FAMILY TRAIL ACTIVITIES



**Created by Sue Harrington, Naturalist and Member of the Mansfield Parks and
Natural Resources Committee**

This guide was written to be used on the trails in Mansfield Parks but it is general enough to be used on any trails in the area. It includes information, activities, and games that families can use in many different habitats found in our town. There are also follow-up activities that can be done at home. If you print it double-sided and staple it together it will give you a handy booklet.

Some of the activities apply to specific habitats that only occur in some of our parks.

If you want to do brook or river activities you might want to visit these parks:

- Shelter Falls Park
- Schoolhouse Brook Park
- Dunhamtown Forest
- Dorwart Preserve
- Sawmill Brook Preserve
- Merrow Meadow Park
- Mount Hope Park
- River Park
- Whetten Woods

If you want to do pond activities you might want to visit:

- Mount Hope Park
- Moss Sanctuary
- Bicentennial Pond
- Southworth Preserve

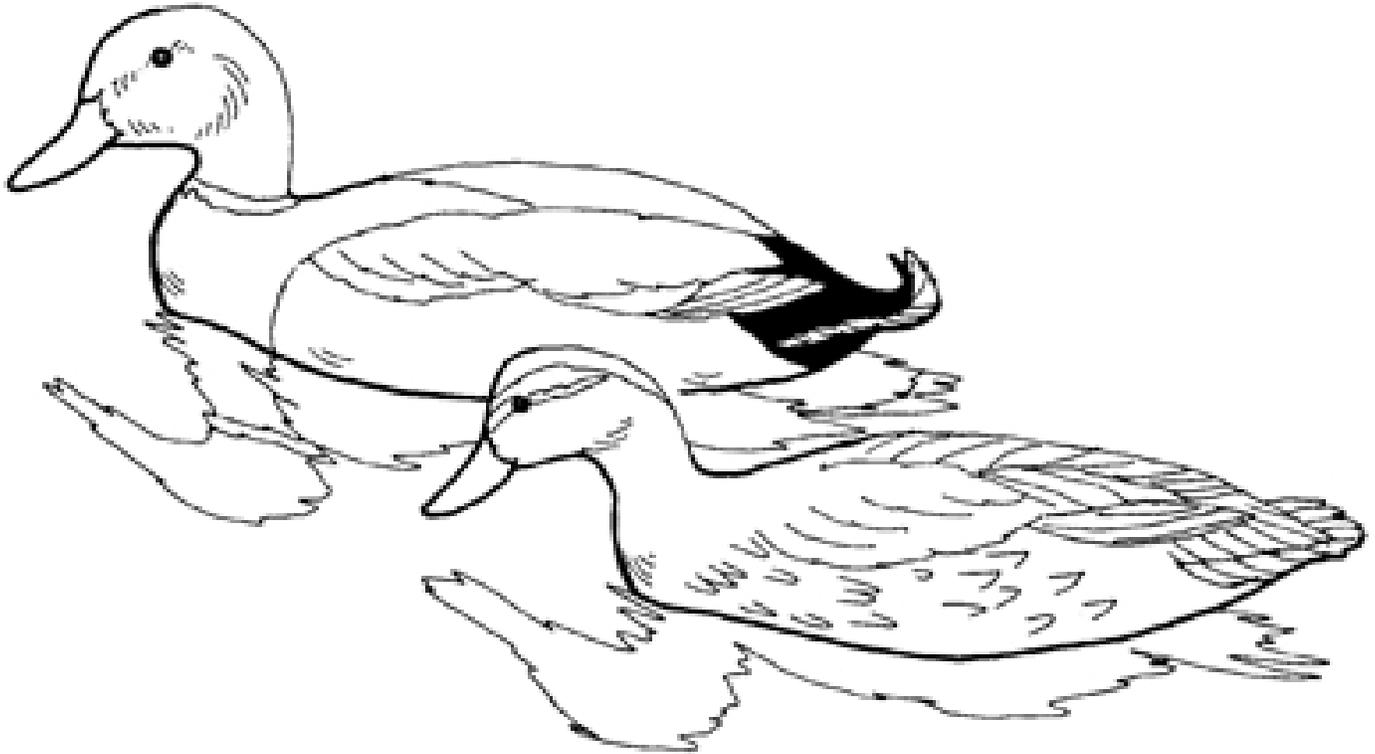
Some of my most treasured memories from childhood are Sunday afternoon walks in the woods with my brother and Dad. Weather permitting, we would meander through local forests looking at trees, flowers, bugs and whatever else caught our interest. My Dad called it “getting to know our neighbors”. When we got home, out would come the well-worn field guides and we would look up the new things we had observed. This had a powerful influence on my life and led to my lifelong interest in nature.

You can create those wonderful moments with your children while “getting to know your neighbors”. Just slow down and look around. Enjoy! *Sue Harrington*

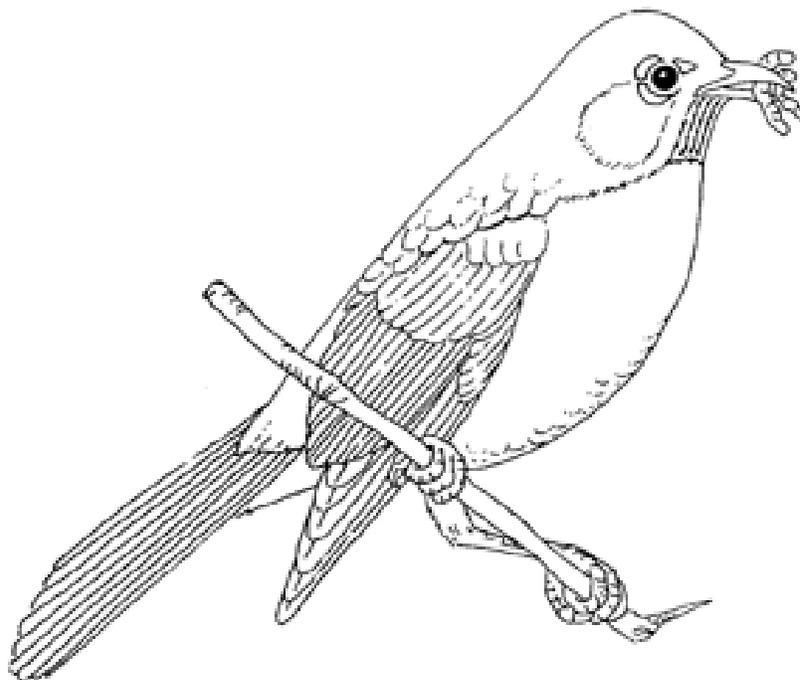


COLOR ME!

In many kinds of birds the males and females look very different. Use a bird book or the internet to find out how to color this pair of MALLARD DUCKS.



This ROBIN is one of our most common birds. It can be found in many different habitats.



GETTING STARTED

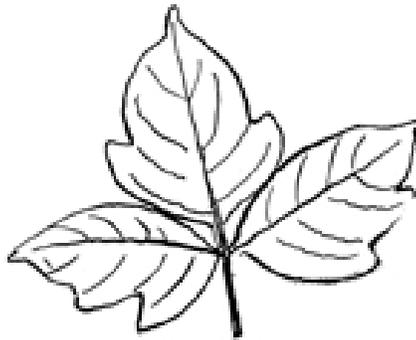
To get the most out of your woodland walk, make sure that you are using **ALL** your senses. Try these warm-ups at the beginning of the trail.

LOOK, LOOK, LOOK!

Your eyes are your best tools when you are in the woods. Keep them moving and alert.

- **Look above your head. What do you see? Can you see the sky or do the trees make a complete canopy over your head? Do you see any birds or insects flying around?**
- **Look down at your feet. Do you see anything moving on the ground?**
- **Find something smaller than a penny and study it closely. Practice looking at the fine details. You might even want to bring a magnifying glass with you next time.**
- **See how many different colors you can observe. Which color is the hardest to find in the woods? Will this change in different seasons?**

For your safety make sure you know what Poison Ivy looks like!



CAUTION : Poison Ivy

LISTEN, LISTEN, LISTEN!

The outdoors is full of interesting sounds if you just stop and listen to them.

- **Close your eyes. Listen! Can you hear at least four different sounds that are not man-made?**
- **Many animals communicate with sounds. Can you hear a sound made by a bird? A frog? An insect?**

TOUCH, TOUCH, TOUCH!

Your fingers will tell you things that your eyes and ears cannot. Use them to learn more about things you find.

- **Can you find something that feels soft? Something that feels smooth? Something that feels sharp? Something that feels squishy?**
- **Our fingers help us to tell temperatures. Can you find something that feels cold? warm?**

SNIFF, SNIFF, SNIFF!

Your sense of smell can trigger memories of places you have been and this is especially true of outdoor smells. The forest is full of wonderful smells (and others that are not so wonderful)!

- **Stop and take a deep breath. Does the forest smell different than your house? Does it smell different than your yard?**
- **Take a handful of decaying leaves from the forest floor. Can you describe their smell?**
- **Do all plants smell the same? Rub (but don't pick) several different leaves, twigs and bark to bring out their smells. Sniff them. Which is your favorite smell?**
- **If you see any flowers, give them a sniff (but check for bees first). Do all flowers smell good?**

TASTE, TASTE, TASTE!

Because there are many poisonous plants in the woods, tasting edible wild plants should be left to those who are experts in plant identification. If you want to enjoy some tastes from the forest, try these when you get home.

- **Taste some Real Maple Syrup, poured over crushed ice or drizzled over pancakes. Its natural flavor comes from the sap of the Sugar Maple tree, which is common in our woods.**
- **How about some Maple Walnut Ice Cream. Yummmmmmmmmmm!**
- **Birch Beer soda is made from the twigs of the Black Birch tree. Root Beer soda may contain Black Birch Bark, Juniper berries, Sarsaparilla root, Wild Cherry bark, Wintergreen leaves, and Sassafras root, all native plants. Try some for real woodland flavor. The flavoring in Wint-o-green Lifesavers or chewing gum comes from a small, local woodland plant.**

FOREST FACTORIES

When you are in the forest, you are walking among some very important "factories". In these factories, air and water are being mixed together, with the help of sunlight and a green substance called CHLOROPHYLL, to make the sugars that will feed all the living things in the forest. We call these factories, PLANTS.

Trees are the most important plants in the forest. Not only do their leaves and seeds provide food for countless woodland animals, but they also produce WOOD. We use wood to build our home, make our furniture and produce our paper .

What other things can you think of that are made of wood?

Trees also add oxygen to the air we breathe, provide shade to keep us cool and make the world a more beautiful place, especially in the fall.

HAVE YOU THANKED A TREE TODAY?

Some kinds of trees have large, flat leaves, which turn colors and fall off in the autumn. These are called broadleaf or DECIDUOUS trees. These trees are adapted to withstand cold weather. They lose their leaves because the tree's roots cannot get water from the frozen ground. Since trees lose lots of water through their leaves, the tree would dry out and die if the leaves were on the branches during the winter.

Other trees have needlelike leaves and are evergreen or CONIFEROUS trees. Their needles are not lost because their waxy coating and narrow shape keep them from drying out during the winter.

Which of these tree outline is usually associated with a deciduous tree? which with a coniferous tree?



A KID'S TREE QUEST

When you visit the forest in the spring, look for tree **FLOWERS**. Most are small and may be hard to see, especially if the tree is tall, but **ALL** trees have them. Many tree flowers bloom before the leaves open.

If it is spring, can you find a tree flower? Try to draw it.

If a tree is pollinated (most tree are pollinated by the wind), it will produce a **SEEDS**. Some seeds, like those of the Maple tree, grow quickly and fall off the tree in early summer. Other seeds, like the acorns of the Oak tree, do not become ripe and fall off until autumn or may even take two years to mature.

Can you find some tree seeds on the ground?



Different kinds of trees have different shaped **LEAVES**. **Can you find these kinds of trees based on their leaf shapes?**



Oak



Maple



Hickory

A tree's **BARK** protects its trunk and helps it move food down to its roots. Trees have different colors and textures of bark.

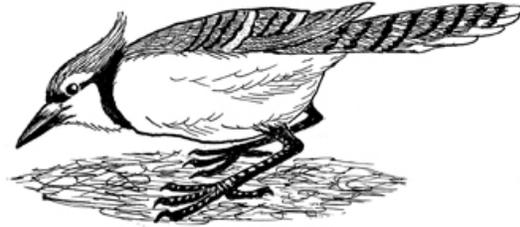
See if you can spot five different kinds of tree bark. Can you find two trees that have the same bark

FOREST ANIMALS

The trees in the forest provide homes and food for many different animals, from deer that browse on the twigs and leaves to the earthworms that turn the leaves back into soil.

In our forest, the larger animals that you are the most likely to see are BIRDS and SQUIRRELS. BLUE JAYS, ROBINS and CHICKADEES all make their homes in local trees.

Listen for the "Thief! Thief!" call if you are spotted by a Blue Jay or the "Chick-a-dee-dee-dee" call as the Chickadee scolds you.



The bushy-tailed GREY SQUIRRELS use the trees for their homes, food and highways. Their large tails help them balance as they jump from tree to tree so they can travel through the forest without ever touching the ground. Holes in the trunks of older trees as well as large leaf nests provide warm, dry sleeping quarters. They not only eat the seeds of trees but also, by burying them for winter, help to plant new trees. Tree buds, mushrooms, insects, and songbird eggs give the squirrels variety in their diet.

Another common but smaller squirrel is the brown, striped, ground-dwelling CHIPMUNK. **You may spot him sitting on a log shouting "Chip, Chip, Chip" at you.**



By far the most common animals in the forest are the ones you **can't** easily see. These are the many tiny **insects, mites, spiders, snails, centipedes and worms** that live on the forest floor. One square yard of may have as many as 30,000 of these busy creatures, feeding on the decaying leaves and each other.

Move some of the leaf litter (dead leaves) or a forest log and you are sure to see some of these small animals.

BE AN ANIMAL DETECTIVE

When we walk in the forest, we do not see many animals. Some are too small, some sleep during the day and others will hide when they hear us coming. Therefore we must be good detectives and search for clues that are left behind if we want to know what animals live in the area.

CLUE 1- Holes in trees- Large holes in dead trees are often made by WOODPECKERS as they search for food or make their nests. Squirrels, chickadees, nuthatches, or starlings later use these holes for their homes. Tiny holes in dead wood may be made by carpenter ants, termites, or bark beetles as they tunnel, using the dead wood for food.

Find a dead tree or stump. Walk around it and look high and low for holes that might tell you animals have been there.

CLUE 2- Nests of all sorts- Shelter is one of the basic animal needs. Squirrels make warm nests from large balls of twigs and leaves in the highest branches of the trees. Many birds make cup-shaped nests of grasses, twigs and sometimes mud to shelter their young. **Nests are the easiest to spot in the fall when they are not hidden by leaves but you can see them any time if you look carefully. Can you find one?**

Some insects make nests in the forest also. Hornets chew up wood to make a paper-like material, which forms their large, round hanging nests. **If you spot one, be sure to observe it from a safe distance!**

CLUE 3- Holes in the ground- Some forest animals live underground. From tiny ants to moles and chipmunks, they leave evidence of their presence in little piles of dirt next to their holes or soil that has been pushed up by their burrows. **Check the ground as you walk along for signs of these burrowers.**

CLUE 4- Left over food- As forest animals enjoy their food, they leave behind signs that we can observe. Many insects use leaves for food. **Find several leaves that have been eaten. Did the insect eat around the edge? Did it take bites out of the middle? Did it burrow into the leaf and leave a trail?**

Squirrels and mice eat seeds, nuts and pinecones and often leave the outside covering behind. **Can you find a place where a squirrel has had its dinner?**



THE WONDER OF MOVING WATER

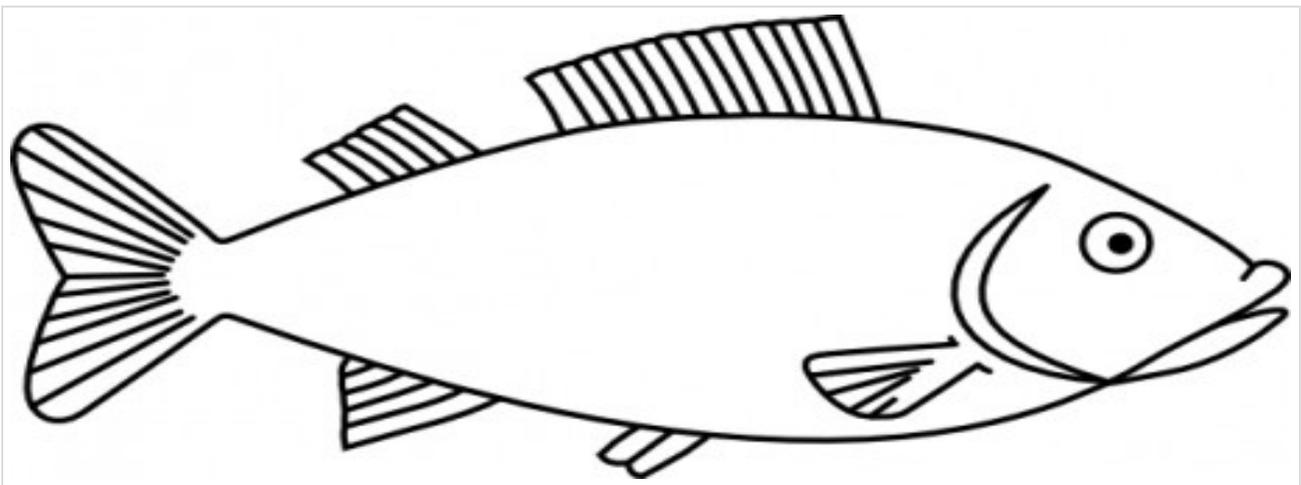
Many of the town's nature trails will take you near a brook or river. The most important aspect of these bodies of water is that the water is moving. Moving water can push or carry objects that are in it, the faster the water, the larger the objects that it can transport. Therefore, where the water is moving swiftly, only large rocks have been left on the bottom. As the current slows, smaller and smaller particles are dropped. Where the water is moving very slowly, such as inlets and backwaters, very fine silt is deposited, forming a muddy streambed.

Look at the bank of the river or brook. Can you find evidence that soil and rocks have been removed from the edge by the moving water?

Animals that live in the brook are also pushed or carried by the water. To prevent themselves from being swept along into a larger river or lake and eventually even the ocean, they have found ways of staying in one place.

- Some fish and insects constantly swim upstream, which allows them to keep a constant position in the brook.
- Crayfish and some insects hide underneath rocks or burrow into the bottom of the stream so they won't be washed away.
- Many brook dwellers have hooks or suction cups that grasp rocks or sticks in the water. They often have flat, smooth bodies so the water is not able to push them.

Look into the water. Can you see any small fish swimming against the current? Do you see insects on the surface of the water?



COLOR ME!

TAKE A LOOK AT A BROOK

Find a place where you can easily get down to the edge of the water. Toss a small stick into the stream. Watch how it moves. It will probably move faster in some areas than others. What does the bottom look like where the stick moves the fastest? Is it muddy, sandy, pebbly or rocky?

A brook is actually a difficult place for an animal to live. Look in the brook for things an animal could eat. Has all the food been washed away?

Forest animals depend on the brook for clean water to drink and bathe in. Find a muddy spot along the edge of the stream. Look for tracks of visiting animals. Tracks commonly found are:



White-tailed Deer



Raccoon

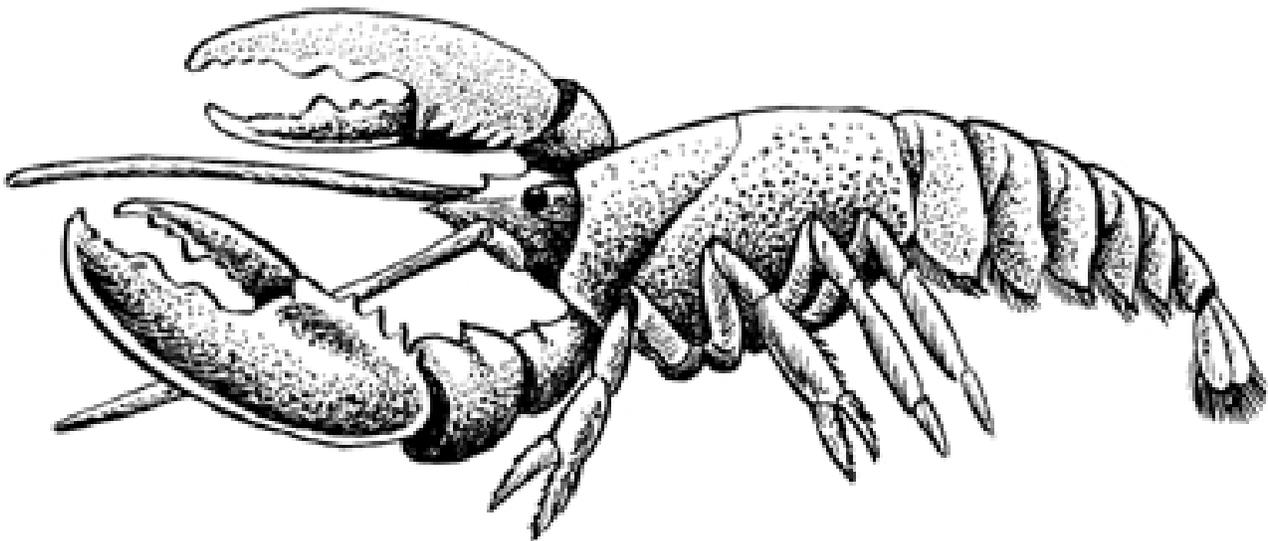


Dog or Fox



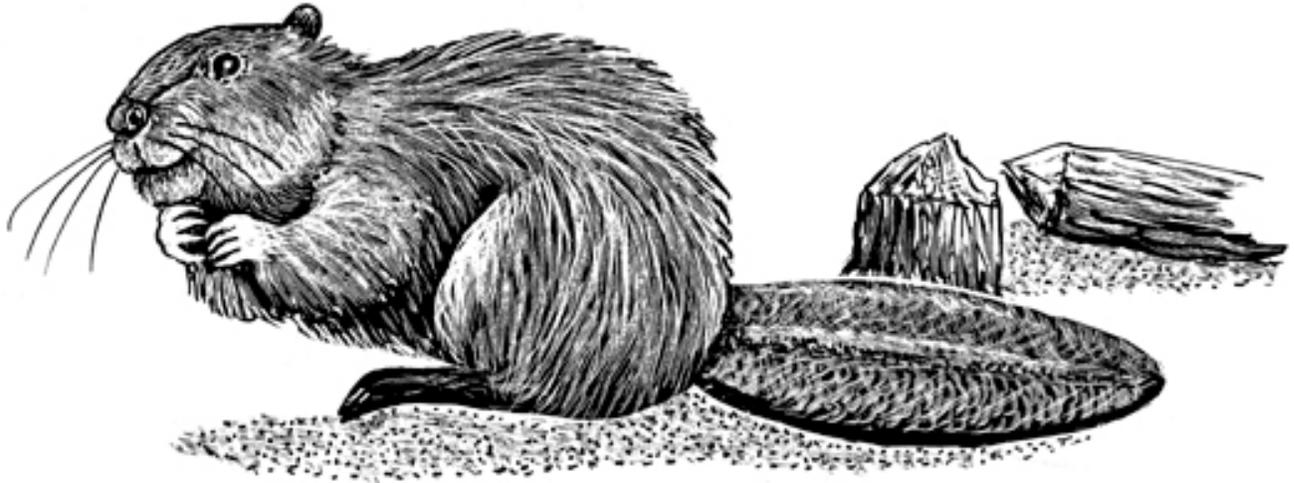
Bird

CRAYFISH are lobster relatives that live in fresh water. They may be common in areas of the stream where there are rocks or logs for them to hide under. Look into the water where there are large stones or logs and see if you can spot a crayfish claw sticking out. You can color this crayfish when you get home.



ENJOYING A POND

Ponds form where there is a natural or man-made dam to restrict the flow of a stream or in a low-lying area where water collects. Some ponds in our area were formed where people built dams to collect water to run different types of mills. Other ponds were formed where a beaver dammed up a brook to make a place for its home or **lodge**.

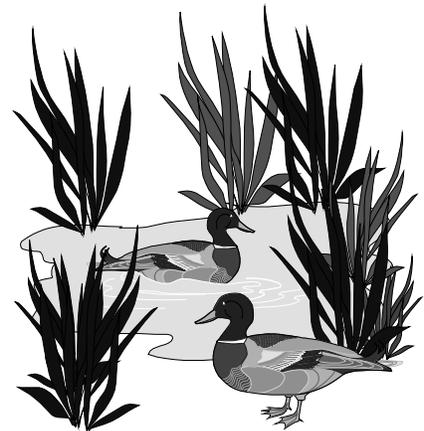


The water in ponds moves very little or not at all. Also, because ponds are usually not completely shaded by trees, they are warmed by the sun. This warm, still water makes a pond an easier place for animals to live than a stream and we will therefore find a much greater variety of living things.

When a group of plants and animals live together in a particular area, such as a pond, we refer to them as a **COMMUNITY**. Within the community, plants produce the food while animals consume or eat it. Some animals, called **HERBIVORES**, eat only plants. Others, called **CARNIVORES**, eat only other animals while still others eat both plants and animals and are called **OMNIVORES**. **Can you think of examples of each? Which one are we?**

In this pond community, some of the food is supplied by the green plants that live in the water, such as the hair-like algae and the small, round duckweed that you often see on the surface. Other food comes from the vast quantity of dead leaves and twigs that fall into the pond from the surrounding forest, especially in the autumn. This forms a thick layer on the bottom and serves as food for many immature insects, crayfish, worms, tadpoles, snails and even freshwater clams. These animals in turn feed the adult insects, fish, turtles, frogs and birds that hunt here.

Sitting by a body of water can be very relaxing. **Find a comfortable spot to sit and watch the pond quietly.** There always seems to be something going on at a pond; insects flitting about; fish and turtles swimming; birds flying overhead. **See how many different kinds of animals you can spot. Listen for the sounds of birds or frogs.**



POND ANIMALS

Pond animals must have specialized adaptations to help them survive in the water. Gills or special structures for carrying air bubbles allow animals to breathe underwater. Webbed or paddle-like feet help animals move in their watery home. Body coverings of waterproof scales, oiled feathers or hard shells keep them from getting that prune look that we get if we have been in the water too long. Look for these special designs as you look for the ponds residents.

The animals that you are most likely to see in or around a pond in our area are:

Water Striders- These small insects skate about on the surface of the water on their 4 long, back legs while they catch other insects with their two, strong frontlegs.

Dragonflies- Baby dragonflies, called nymphs, live in the pond while the adults fly in the air and feed on small insects, especially mosquitoes. (Yeah!!)

Watch for the amazing variety of colors on the Dragonflies body and wings.



Fish- You may see Bass swimming near the surface of deep water on warm days or a male Bluegill guarding his gravelly nest near the shore.

Frogs- Bullfrogs, Green Frogs and Pickerel Frogs all call their pond home all summer. Others like the Toad and Spring Peeper just come to lay their eggs in the spring. The males of all the frogs attract their mates with loud calls that are unique to their kinds.

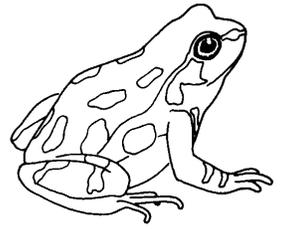
Listen for the deep "Jug-o-Rum" of the Bullfrog, the banjo-like "plunk" of the Green Frog, the slow snoring sound of the Pickerel Frog and the high pitched trill of the American Toad.

Turtles- Painted Turtles are often spotted sunning themselves on exposed logs. Being cold-blooded, they must sit in the sun to warm their bodies before they can be active enough to catch their food.



Ducks and Geese- Mallard Ducks are common nesters in our area and can be seen swimming on our ponds until they freeze solid. Large numbers of Canada Geese migrate through our area while only a small number stay in the area to nest.

A POND WORD SEARCH



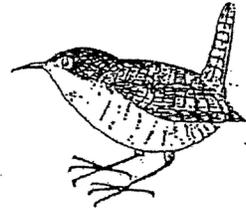
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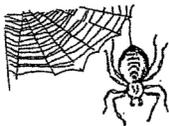
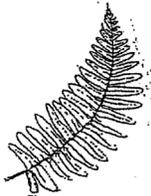
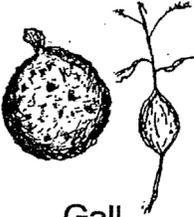
ALGAE
BACKSWIMMER
BASS
BEAVER
BULLFROG
CATTAIL
CLAM
CRAYFISH
DAMSELFLY
DIVINGBEETLE
DRAGONFLY
GOOSE

HERON
KINGFISHER
MALLARD
MAYFLY
MINK
RACCOON
SNAIL
SUNFISH
TOAD
TURTLE
WATERSNAKE
WATERSTRIDER

Can you find the names of these common pond plants and animals hiding in the word search?
Words may be across, up and down or diagonal.

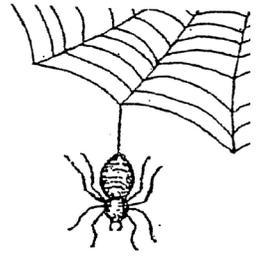
NATURE BINGO



| | | | | |
|---|---|---|--|---|
|  |  |  |  |  |
| Spider Web | White Flower | Squirrel's Nest | Maple Leaf | Bird |
|  |  |  |  |  |
| Acorn | Live Insect | Moss-covered Log | Grass Flowers | Insect Damage |
|  |  |  |  |  |
| Fern | Hickory Nut | Animal Hole | Gall | Pine Cone |
|  |  |  |  |  |
| Mushroom | Woodpecker Hole | Oak Leaf | ANIMAL FOOTPRINT | Stone Wall |
|  |  |  |  |  |
| A SHINY ROCK | Ruffled Lichen | Animal Sound | Compound Leaf | Seeds |



Nature Scavenger Hunt



- a leaf with three different colors
- something soft
- a live ant
- a Y-shaped tree
- spider web with a spider on it
- some evidence of a bird
- 1 green and 1 gray lichen on a tree trunk
- a hole in a tree
- something that smells good
- 3 different shaped mushrooms
- ferns
- moss on a rock
- a hole in the ground made by an animal
- an insect sound
- a plant with thorns
- two different kinds of insect damage
- one tree leaning on another
- a flower
- something the color of your shirt
- a tree that takes two people to reach around
- an animal dining table (place where a squirrel has left nut shucks)
- red berries

