**Taking Care of the World**

Nature is a very important element in the Beaver program. As an organization, Scouts Canada clearly states that:

- The outdoors provides an ideal setting for growth and recreation.
- Responsible citizenship imposes upon all of us an increasing obligation to live in harmony with the natural environment.

These beliefs mean that outdoor activities and a heightened awareness of nature are essential parts of all Scouting programs, including Beavers.

Real understanding develops from doing or experiencing something. When children have first-hand experience, they usually learn quickly. It’s essential to provide them with activities that promote greater understanding of ecological relationships; these activities should promote a sense of responsibility for improving the quality of the environment.

Whenever possible, link *indoor* learning about birds, for example, with outdoors activities. In a world growing increasingly sensitive to environmental issues, it’s more important than ever to help young people build a strong sense of understanding, appreciation and wonder.

Here’s an easy way to develop a series of programs with a nature theme. Choose a topic (e.g. astronomy), and build a series of evenings around it. Include stories, a film, games adapted to space themes, crafts (like making flying saucers or a space shuttle), and identify simple constellations on a clear winter night. Visit a planetarium if there is one in your area.

It’s also possible to plan a program on environmental quality for Beavers. Visit a water purification plant or a recycling centre. Ask these questions: How are lakes and rivers polluted? What kinds of environmental problems affect big cities? Why do people litter?

Organize a “litter chase” when you go on an outing in a community park. Help put up bird houses, and ask your group committee to inform your local newspaper in advance.

**Changing Seasons**

Although we outline a variety of specific program ideas later in this chapter, let’s look at seasonal patterns as a major program source. The variety of changes and the interrelationships of the seasons provide a rich store of material.

It’s fall when Beavers come together in their colonies. Take a look at the season. How do we know it’s here? What causes fall? Some animals are preparing for winter. How are they doing it?

Watch for and talk about migratory birds. If your community is on a major flight path, visit a local marsh at sunset. Talk about the effect weather has on birds. Take a walk to collect weed bouquets, seeds, leaves and caterpillar cocoons. You can adapt films, stories, songs, crafts and games to fit seasonal focuses very effectively.

As you plan a winter outing, develop a program around questions like: Where and how do insects and animals spend the winter? What causes the winter season? How do plants and trees survive the winter?

On your outing, separate into lodges and search for dry nests. Find other animal homes. Find tracks and follow them. Set up feeders for the birds that stay over winter in your area.
Prepare carefully for and closely supervise all outings (detailed information in Chapter 17). During winter, you need to pay a little extra attention to the health and safety of your Beavers, particularly in colder areas of the country and especially if you’ll be outdoors for some time.

Long underwear, extra sweaters, socks, mittens and scarves are necessary, as are hats that cover the ears. Hot or quick-energy food and drink is a good idea. Keep the level of activity high enough that the muscles are moving and producing heat, but not so high that your Beavers perspire.

As a final precaution, know what to do and where to go to find shelter or help in case of emergency. Careful planning will minimize any risk. Consult Scouts Canada’s Camping & Outdoor Activities, Section 10000 in B.P.&P., available on Scouts Canada’s web site (www.scouts.ca) for the necessary forms and appropriate information.
IDEAS

Area and council newsletters and resource documents have contributed some of the following ideas; others come from The Leader Magazine. Check your own council to see what may be available. Look for ideas you can apply to nature in Chapters 13 and 14 as well.

Growing Things

In the spring, buy one or two flats of summer annuals at a garden supply outlet. Ask Beavers to bring a milk carton to a colony meeting, and send each home with a plant and instructions for transplanting it into the ground or, if home is surrounded by concrete, into a pot.

Throughout the summer, Beavers can look after their own plants and learn something about taking care of God’s world. If you want to give them the extra thrill of growing their own food, send them home with a tomato or bean plant.

Grow a sweet potato vine. Select a firm sweet potato with a few sprouts (some potatoes have been treated to prevent growth). Place the sweet potato, narrow end down, into a jar so that it’s half in and half out. Hold it with toothpicks if necessary.

Fill the jar with enough water to just wet the end of the sweet potato. Set the jar in a cool dark place for 10 days, then bring it into a warm light place. Add water as necessary to keep up the level. When the vine is fairly young and shoots aren’t more than 5-7 cm long, remove all but three or four of the strongest ones.

Hanging Planters

You can use milk cartons of any size for this planter, which is particularly suited to beans or other plants with trailing vines. Glue or staple the cartons closed in a way that you can pass a loop of cord through the top for hanging. About 5-7 cm from the bottom, cut a round or oval window in each side. Decorate the planters with foil or coloured paper if you wish.

Fill the bottom 5-7 cm of the planters with soil and plant seeds, cuttings or small plants. If you use seeds or cuttings, tightly wrap clear plastic wrap around the windows to create a small greenhouse.

Treasure Hunt

Prepare instructions and conduct your hunt in lodges. If you hold your hunt in a school yard, you might say:

- Go to the place you might stand if you were holding a bat during a ball game. Under a rock are further instructions.
If you know what colour a beaver is, and combine it with the colour of milk, you'll find your next instructions under a flag of that colour along the fence to your right. (Include different coloured flags to add a little extra confusion.)

Make the instructions suitable to your location and the number of Beavers in the lodge so each child can find two clues. But what treasure can you plan to end your hunt? Cookies always work well.

Pomanders
Pomanders of oranges and cloves make closets and kitchens smell delicious. To make one, you need: a large orange for each Beaver, a knitting needle, whole cloves, cinnamon and orris root powder, paper, foil, and ribbons.

Have a leader or Keeo carefully punch holes at equal spaces all over the outer skins of the oranges. The Beavers fill the holes by pushing the stem of a clove into each one. Mix together equal amounts of cinnamon and orris root, and roll the oranges in the mixture. Make sure the spicy powder coats the orange well between the cloves.

Individually wrap the oranges in foil, and store in a dry place for two or three weeks.

The oranges will shrink as they dry. Before Mother's Day, remove the foil and wind a ribbon twice around each orange. Tie it firmly, and leave enough for a loop so you can hang the pomander.

You can also make pomanders from limes, lemons and apples.

Hummingbird Cafeterias
Canada has four species of hummingbirds. Of these, the most common and widely distributed is the ruby-throated hummingbird; it is less than 9 cm long from the tip of its beak to the tip of its tail.

Hummingbirds are constantly in motion, even while feeding, and they need lots to eat.

To help out the hummingbird, have your Beavers make feeders for this tiny creature. Combine 30 ml sugar with 230 mL of warm water. Dissolve the sugar. Pour the solution into small bottles (e.g. aspirin or vitamin containers), and tie yellow or red ribbons around the necks of the bottles. Hummingbirds love bright colours and will be attracted to the feeder.

Tell each Beaver to hang a hummingbird feeder on bushes or shrubs at home in time for spring blooming. Be sure to ask the Beavers to report the happenings at their hummingbird “cafeterias” as spring arrives.
More About Birds
Contact bird enthusiasts through your local bird watching societies. If your city has a zoo or a museum of natural science, you may find somebody there who is willing to spend an hour with the colony.

Even if you can’t locate an expert to visit, you can do some research at the local public library. Plan to familiarize the Beavers with a few birds common to your area; do some research so you know some answers.

Apart from the obvious fact that birds are unique because they are the only animals that have feathers, bird beaks are very distinctive. Different bird species have different sizes and shapes of beaks.

Explain to the colony that a bird’s beak is designed specifically to help the bird capture and eat its food. Come to the meeting equipped with appropriate household utensils to illustrate this point, and have your Beavers try to use each one as a bird would use its beak.

Parrots
The curved shape of a parrot’s beak is ideally designed as a nutcracker for breaking open the seeds and nuts that make up the main part of its diet. The short, stubby beak of a sparrow also is a kind of nutcracker for opening seeds.

Robins
Because these birds mainly eat insects they find on the ground, their beaks (like tweezers), help them to pick up things easily.

Woodpeckers
These birds also dine mainly on insects, but usually favour those found under the bark of trees. For this reason, the woodpecker’s beak resembles a drill and is used for making holes.

Hummingbirds
The hummingbird’s beak is a long hollow tube, which the bird inserts like a drinking straw to sip up nectar from flowers.

THE ONE MINUTE NATURALIST
Although some people might think that the only places to observe the natural world are designated parks, green spaces or zoos, in fact the grounds around a colony’s meeting hall will probably provide suitable locations.

Whether you meet in a rural school, suburban community centre, or inner city church hall, the yard just outside the front door is full of opportunities to make simple outdoor observations. It offers a safe area for leaders who have little knowledge of nature or experience in the outdoors.

To take an excursion into the yard, you still need to plan, but you can keep it quite simple and basic. Chances are, the Beavers are already familiar with the surroundings. They will enjoy discovering things that may have been right under their noses.

The length of time you spend outside varies with weather and your topic of exploration, but even 60 seconds exposure to nature concepts is worth 10 minutes of fun awareness. Following are some ideas for you and your Beavers to explore.
Weather
What was the weather like today? How is it different from the weather yesterday or last week? Did anyone hear the weather report for tomorrow? What causes weather to change? If you were a certain animal, how would you cope with today’s weather?

Can you predict the weather? How? Can you smell rain or snow before it comes? What do certain kinds of clouds mean: hail, rain, snow? What does a red sky at night suggest tomorrow’s weather will be like?

Geology
What is your meeting place building made from: natural or manufactured rocks? Can you find any real rocks in your meeting space? Can you find the building’s cornerstone? Are there any fossils in the limestone walls or steps? How are rocks used outside your meeting place? Look in walls, roads and monuments.

Look at the ground after a rain. Can you find tiny river valleys being eroded? If the weather is fine, can you use a bucket of water to show soil erosion and river valleys forming?

What kinds of soil can you find? What makes soil?

Water
Collect rainwater from an eavestrough and show what is in it. What things (i.e. objects) can water move? How does rain clean the air? What does it smell like after a rain? What plants around the meeting place show signs of needing water?

What sound does rain make when it lands on a cup, pot, cookie tray or garbage can? Can you make a “rain band”?

Plants
Where do plants grow? Are the plants in a field different from the plants that grow around a building or fence edge? How strong are plants? Can you find any plants pushing up sprouts in the sidewalk or playground?

Find a tree and give it a special pond name. Visit it in each season and notice what the tree is doing. Can you find any seeds? How do seeds travel: by air, bird, even in the mud carried on cars or a Beaver’s shoes?

Seasonal Change
Can you find a plant sprouting? What will it look like when it is fully grown? Check back to see if you’re right. What do flowers turn into? Can you find a leaf bud or a small emerging leaf? How large will it grow? What colour will it become in the fall? Can you find a green pine cone?

What shape is the moon tonight? What will it look like next week? Is the old man in the moon smiling at you? When do the stars come out? Do dandelion flowers close up at night? What time?

Can you find something rusting or disintegrating? Bury a leaf and dig it up again in a week or two weeks. What is happening to it? What clothes do you need to wear to go outside? How has this changed from last week? Who got a haircut lately? Why?

Spatial Awareness
How big is your step? How many steps long and wide is the play area? Can you draw a map of the place you are in? How high can you reach? What things around you are shorter or taller than you? How many of you standing on each other’s shoulders would it take to reach the top of the building?
Where is your shadow? Is it longer than you are? Can you make shadow body letters? What other things make shadows?

How tall is your leader? Can you trace the leader’s body with chalk while he or she lies on the parking lot? Can you trace other Beavers’ bodies on the ground with chalk?

Here are several keys to becoming a successful one minute naturalist.

1. Try to consider commonplace things special. The Beavers in your colony have only been on earth for 5-7 years. They have not yet experienced or closely examined things that are now routine to adults.

2. Ask questions and seek simple answers. To a young child, nature is like a giant jigsaw puzzle. Every realization, from the recognition that pine cones make pine trees to the smell of rain, helps a child add another piece to a sometimes confusing world.

3. Don’t try to give everything a name. Your aim is to stimulate recognition that something exists, and the desire to find an interesting quality in it.

4. Use Beavers’ discoveries to help build a theme or awareness of other meeting programs. This will carry forward any learning to other activities.

5. Have fun and revel in a young child’s ability to see things we adults have forgotten even to look for.

**NATURE HIKES**

Here are some ideas you can build into a Saturday outing or even a short ramble in the vicinity of your pond on a regular meeting night.

- What do you smell?
- What do you hear?
- What type of ground do you walk on?
- What did you see on your way to your destination?
- Build a beaver dam, lodge, etc., with twigs and mud.
- Scavenger Hunt: Say the name of a plant or bird. Find something from nature that starts with each letter of the word (e.g. “daisy”: d-dirt, a-ant, i-insect, s-sand, y-yellow). For Beavers who can’t read, draw pictures of things to find.
- Find something pretty.
- Find a tall tree.
- Find something that shouldn’t be there.
- Find something of a certain colour.
- Collect dead objects and make a list.
- What colours do you find in nature?
- Collect nature objects (e.g. grass, twigs). Close your eyes and feel different things.
- Snip an evergreen sample. Notice how it is different from the leaves of other trees.
- Give the Beavers a leaf. Tell them to find one to match it.
- Study flower petals under a magnifying glass.
- Give Beavers a film canister; how many things from nature they can put inside it?
- Show Beavers an item from nature – make sure they are plentiful – then ask each to find a similar item, and return to the pond. Show another item, and send them off again.
- Find insects.
**Listening**

On a spring day when the grass is dry, ask your Beavers to lie down with an ear to the ground. What can they hear? What do they think is going on under the surface?

Invite the Beavers to sit or lie on the ground in a good “listening” position, close their eyes, and listen for bird songs. Tell them to raise a finger when they hear a bird singing and to raise another finger each time they think they hear a different song. After about a minute, compare numbers of fingers and, together, try to identify different songs and the birds who are singing them.

As part of this exercise, ask your Beavers to sit with eyes closed and see if they can count to 10 without hearing a bird sing.

**Looking**

With the Beavers, lie under a tree and look up at the patterns made by leaves against the sky. If you’re lucky, you’ll spot a bird or squirrel making a nest. Watch the animals. Show the Beavers how to cup their hands around their eyes to make “hand field glasses” to help them focus their attention. What things are the animals using to build their homes? Where are they building them? Why do you think they are putting them in those places?

Take a close look at the branch of a tree or bush. Talk about the new buds, how buds are arranged on the branch, whether all trees have the same arrangements of buds. Find the scars of old buds and leaves.

**Stake-out**

Help Beavers mark out a piece of ground with a circle of string, and tell them to take a close look at the territory within the boundary to see how many living things, or how much evidence of life, they can find. Encourage them to lift pebbles and look closely at leaves and stems. Pass out some magnifying glasses to your Beavers to help them explore.

Have the Beavers follow a crawling insect to find out how fast it moves, what it eats, and where it lives.

If Beavers pick up an insect (and they will), ask them to handle the bug gently and look carefully. What colour is the bug? How many legs does it have? Can they find its mouth and eyes? How many segments does its body have?

Make sure you tell the Beavers to put their critters back as close to where they picked them up as possible.

**Be Crafty**

Take paper and wax crayons, charcoal or pastels outdoors so your Beavers can make rubbings of the leaves and bark on different kinds of trees.

If there’s a tree stump in the area, let your Beavers make a stump rubbing. For this, you need a piece of sturdy paper large enough to stretch over the stump with some to spare so you can tack it firmly around the sides. Using the broadside of a piece of charcoal or a wax crayon, rub over the paper in one direction only. From the number of rings that show on the rubbing, you can tell approximately how old the tree was when it died, and you will see evidence of wet years (wide rings) and dry years (narrow rings).

Use the sun to make leaf prints. Pin different kinds of leaves on a piece of coloured construction paper and set it in bright sunlight for at least an hour. The prints will show not only leaf outlines, but also the vein patterns.
Fly A Kite

When you feel the wind on your face and see it move the grass and the leaves of the trees, it’s only natural to want to play with it. Nothing invites a person to go fly a kite more than a beautiful spring day. The Beavers can make a simple kite from one square sheet of heavy paper and some string. Hold a kite-flying session at your local park and try to catch the wind.

Winter Painting

On a mild winter day, fill old detergent bottles (ones that squirt) with food colouring and water. Give a bottle to each Beaver, find a large expanse of clean snow, and let them paint snow pictures.

More Ideas

Here are a few more nature ideas to explore:

- Pet parade (care of pets)
- Sleigh ride with parents
- Marshmallow roast
- Paper folding (make snowflakes)
- Pet shop visit
- Leaf collection
- Movies on nature
- Fishing trip
- Learning about your body
- Family picnic
- Forest nursery visit
- Beaver pond visit to see real dams and lodges
- Sugar bush outing (maple syrup operation)
- Waste disposal plant visit
- Sawmill visit
- Snow sculptures and snow forts
- Tobogganing and skating
- Plaster casting animal tracks
- Building a giant snowball with the whole colony
- Finding signs of spring
- Water safety
- Farm visit

FARM VISIT

A farm visit offers an example of how much learning an outing can provide. The objectives for the visit might be to help Beavers gain some insights into the complex tasks involved in operating a farm and the interdependence of the farmer and people who buy food.

Before making the visit, sit down with the Beavers and brainstorm a list of questions they would like to ask. Here are some examples:

- What size is this farm?
- What does the farmer grow or raise on the land?
- How many animals live here? What types of animals?
- When does the farmer harvest the crops?
- Where does the farmer sell the products?
- What kinds of help does the farmer get from machinery or other people or animals?
What conservation practices does the farmer use? Why?
Is the farmer troubled by predators or pests?
How does the farmer control them?
How does farming help us in the city?

As you can see, a simple idea like this visit might easily generate a great many new program ideas. When you choose activities, keep in mind that Scouting aims to increase the Beavers’ knowledge and understanding of their natural surroundings.