

NATURALIST -- OUTDOOR GROUP

No matter where you live, there is a world of undiscovered secrets of nature still waiting to be explored. A naturalist is a student of natural history that includes the many found in nature. The Naturalist activity badge is concerned mainly with plants or animals. This badge helps the Webelos Scouts learn about the world of nature and develop an appreciation for it.

A naturalist stands like Columbus on the prow of his ship with a vast continent before him except that the naturalist's world can be at his feet...a world to be discovered. It could

be in the boy's backyard, a nearby park, the woods, fields or even a country roadside. It is inhabited with many kinds of insects, birds, plants, animals, trees, and other forms of life.

A boy's interest in this badge may lead him into a hobby or vocation. It will help him prepare for the new adventures in the world of nature which he will find in the Scout troop.

Pack and Den Ideas

- ✓ Make an insect study laboratory
- ✓ Make bird feeders of houses and observe the birds who use them
- ✓ Make terrariums
- ✓ Start a nature collection
- ✓ Invite a conservationist to visit den meeting and talk about some phase of nature
- ✓ Make a leaf collection... and some leaf prints
- ✓ Learn to identify poisonous plant and reptiles
- ✓ Take a bird watcher's hike. Identify birds. Make note about location, species, etc.
- ✓ Make a bird migration map
- ✓ Study wildlife homes
- ✓ Collect tadpoles; keep in aquarium and watch them grow
- ✓ Make a list of all plants in a given area
- ✓ Take a nature hike and look for animal tracks. Make plaster casts of the tracks
- ✓ Make a net and go insect hunting for an insect zoo
- ✓ Visit the zoo.
- ✓ Observe fish at night. Put a flashlight in a plastic bag and seal it. Attach a string and place in a stream or lake. Watch the fish that are attracted to it.

Skits

Hiking with Bugs

Personnel: 6 Cubs (Cub 2 should be the smallest).

Equipment:

A tent set up as in the out of doors,
2 small flashlights.

Setting: 4 very tired and dirty Cubs, are scratching and examining their bites

CUB 1: Boy am I glad to be back from that hike. I'm tired.

CUB 2: The mosquitoes must have called up all of their relatives and told them we were coming. I've been eaten alive.

CUB 3: They said a day hike, not an all day hike. Not only were we out near the river, but we were out all day. Gave those critters too much of a chance to eat at me.

CUB 4: I feel the same way. I couldn't feel worse if I'd been run over by a semi-truck.

CUB 1: Bugs! Bugs everywhere. I wouldn't mind if they didn't itch so much.

CUB 3: The blisters don't hurt as much as the itch itches.

CUB 4: Those insects hadn't seen human being in years. Here put some of this on all the spots. (Boys pass around a first aid ointment. Little lights start flashing in the dark, use 2 boys waving small flashlights)

CUB 2: We'd better get inside our tent now! The bugs are out looking for us with flashlights.

Games

Animals

You will need:

Drawing paper/chalkboard,
Markers/chalk, and
Prepared list of animals

- ✓ Divide the Den into two teams, which line up relay fashion.
- ✓ In front of each team is a large sheet of blank paper.
- ✓ On signal, the first boy on each team runs to a leader who whispers the name of an animal.
- ✓ The boy goes to the paper and draws his subject.
- ✓ When his team members recognize the animal he draws, the next player runs to tell the leader.
- ✓ If correct, that next player is given the name of another animal to draw.
- ✓ If not, the first boy continues his drawing until his team guesses right.
- ✓ Continue until all players have had a chance to draw.

Ani-mammal Conference-

Equipment: Construction paper; scissors

Formation: Pairs

Each person is given a cut-out piece of construction paper with the name of an animal (e.g. mouse; long tail).

The group is then put into pairs so that, for example, a rooster and a giraffe are together.

Each pair tries to figure out a name of their animammal (e.g. Giroosteraffe).

Pairs can then set out to try and guess the names of other ani-mammals in the group.

Tadpoles

Equipment: 1 ball, whistle

- ✓ The Group divides into two teams.
- ✓ Team A stands in a circle with one Scout in the center, holding the ball.
- ✓ Team B stands in line, like the tadpole's tail, coming from the middle.
- ✓ When the leader calls 'GO', the Cub in the center of the circle starts to throw the ball to his team, one by one. Meantime, the Scouts in Team B in turn run around the circle and back to their places.
- ✓ When the last Scout in Team B is back in his place, the leader blows the whistle and Team A stops.
- ✓ Team A says how many throws the Scout in the center has made and when the teams change places.
- ✓ Team B tries to beat Team A's score.

Crafts

Insect Zoo

In addition to the insects listed with the requirement in the Webelos Scout book, beetles, caterpillars, and termites may also be used. When setting up your "insect zoo" you should keep the following things in mind:

1. Make sure when collecting any of the suggested insects, that you collect and keep them during the months when there is plenty of food for them. During the winter months, it is difficult to keep them alive because of the unavailability of natural food.
2. Care should be taken not to allow the "zoo" to become contaminated with uneaten food and waste materials.
3. If soil is used, it should be kept moist not wet- by sprinkling or spraying many times a day.
4. Make sure you do not overcrowd. Make a Terrarium- An old fish tank makes a great terrarium. It doesn't matter if it leaks because you are not going to fill it with water. If you use an old fish tank, place a sheet of glass on top over rubber washers to allow air space between top and sides.

You can also make your own terrarium from window panes. Tape the panes together as a glass-sided box. Place this on a board and mark the outline of the glass sides. Cut ¼" groove in the board in which to set the sides. Tape a glass lid to the top on one side so that you can raise or lower it. Painting a scene on the back of the terrarium adds much to its appearance. You could cut appropriate scenes from a magazine and paste them on. Paint or paste scenes on the outside of the terrarium so that your pet will not scratch it off and ruin it.

Plants

Mosses are good plants to collect for terrariums.

Make sure you put enough water in the terrarium to prevent the moss from drying out.

It is every bit as important, that you do not put too much water in the terrarium or the plants will die from being rotted by molds and other fungal organisms.

Many kinds of grasses can be used in terrariums. Many times, the unusual or larger kinds of wild plants do not survive in a terrarium because the root may be injured during transplanting, or too much water, too rich soil, or too warm of temperature.

Animals

Frogs, toads, salamanders, and lizards are easy animals to keep in a terrarium (Toads do exude an offensive odor). Common insects can be placed in the terrarium with these animals for food.

Activities

Bug Match

- Have someone cut out a bunch of different insect pictures and mount them on paper to hang around the Pack Meeting room. (Make sure you know the names of the different bugs.)
- Label the pictures with letters or numbers.
- Hand out sheets of paper with the names of the different bugs listed in a mixed up order.
- Ask people to match the pictures with the names.
- After the opening ceremony, read off the answers and ask everyone how they did.
- Give an appropriate cheer/applause to the one(s) who got the most matches.

Rare Bird Facts

Fill in the correct answer(s).

1. What is the fastest flying bird?

2. How high can birds fly?

3. What is the Nebraska State *(Insert your state, please)* Bird?

4. What bird has become extinct in the last 75 years?

5. Why do all birds build nests?

6. Name three "major league" birds.

7. Which birds can fly backwards?

8. What bird is known for its famous deliveries?

9. What is the largest bird in North America?

10. What is the smallest bird in the world?

-
11. List three birds that cannot fly.
-
12. What color is a bluebird?
-

Answers - Rare Bird Facts

1. Swifts have been timed at 200 mph.
2. A vulture has been seen flying at 25,000 feet, but most birds rarely fly above 3,000 feet.
3. Western Meadowlark
4. Passenger Pigeon
5. Birds build nests to "house" their eggs while they incubate
6. Blue Jay, Cardinal and Oriole
7. Hummingbirds or any bird using fluttering flight
8. Stork
9. Trumpet Swan
10. Bee Hummingbird of Cuba - 2.25" long
11. Kiwi, Penguin, Ostrich, Emu
12. It appears blue because of reflection and diffraction of light due to the structure of feathers

Naturalist is spending time with nature. Take some time to explore nature's world around you along with your boys. Don't know the name of a particular kind of bird? Make one up and see if you can identify it later. The main thing is don't be afraid just have fun.

Hidden Nature Items

In the following sentences you will find hidden the 15 words listed below. They may be contained within one word or parts of several words. Circle each one as you find it. Example: The **grass**hopper jumped high.

grass	bee	tree	flower
fly	bug	leaf	carrot
lizard	garden	plant	
frog	acorn	leaves	
ant	worm	bush	

1. The antics of the clown made everyone laugh.
2. Lindbergh was a famous flyer.
3. Liz Arden was pale after being sick.
4. He didn't plan to leave so fast.
5. If Roger goes to the park I'll go also.
6. The camp lantern does not work.
7. The car rotates badly when driving through slippery mud.
8. Be easy on yourself, relax for a while.
9. The dune buggy went fast.
10. A corny joke can be so unfunny that it's funny.
11. The best reeds were picked for basket making.
12. When Mr. Van Gard entered the room everybody looked his way.
13. A light dew or mist helps water the greenery in the park.
14. He picked a bushel of apples from the orchard.
15. The lava flow erupted from the volcano.

Nature Theme Riddles

- ✓ When is a baseball player like a spider? (When he catches a fly.)
- ✓ How do bees dispose of their honey? (They cell-it.)
- ✓ Which insect eats the least? (The moth. It eats holes.)
- ✓ Why is a frog never thirsty? (Because in an instant, he can make a spring.)
- ✓ What kind of bird is present at every meal? (A swallow.)
- ✓ Why is the letter A like a sweet flower? (Because a B (bee) is always after it.)

Wildlife As Pets

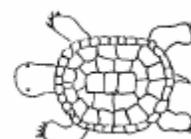
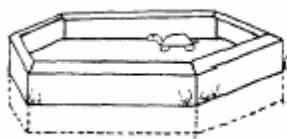
Keeping an animal is a tremendous responsibility. You are responsible for that animal's health and happiness. Not meeting those requirements for the animal can have tragic consequences. Be sure you have the time, the patience, and the resources to keep that animal healthy and happy before you take it home.

Generally speaking, wild animals do not make good pets. There are enough kinds of domestic animals to choose the right kind for your household. But you can learn a lot about animals by watching them as they eat and live. So, a good plan would be to keep them for a short time and then turn them loose so that they can go about the business of being wild animals taking part in the web of life. Now here are some animals that you could keep long enough to learn about them.

Just remember, they do not like to go without food or water any more than you do, and that they will be happier in a clean cage or aquarium. Also, be sure that they have a place to hide and feel safe.

Turtles

Nearly everyone finds turtles around their home each year. If you put scraps out in the same place every day, the turtle will show up for breakfast almost every morning during the summer. If you decide to keep one for a while, make sure that they have a place to sun, and a place to get out of the sun. A water dish sunk into the ground so that they can crawl in and sit in it is a good idea. A pen in the yard is usually the best place. Turtles love vegetables and fruit, tomatoes and melon rinds. They also need protein. Canned dog food should be fed to them first, with the vegetables for dessert. Do not keep them after Labor Day.



Bird Bakery

A simple bird feeder can be made out of two jar lids, a long nail and a donut. Find two lids about the same size as a donut. They can be either metal or

plastic. Use a nail with a large head, and pound it into the center of each lid. You may have to work it a bit to get it through. (Be sure pounding is done on a thick board or on the ground.) To put the bird bakery together, stick the nail through one lid, through the donut hole, then through the second lid. Using pliers, bend the point of the nail as flat against the bottom of the lower lid as you can get it. This will hold everything in place, and also prevent injury to the birds that will use it. You might want to put a strip of filament tape across the sharp point of the nail. If the nail is too thick to bend, wrap tape around the end several times or tap the nail into a small piece of wood. Tie a string to the head of the nail and the feeder is ready to hang. Then check every few days to see if the donut needs replacing. You can use another donut, a bagel, dry dinner roll or even an apple.

Wormy Experiment

Try this experiment to show your den how worms work. Put four to five inches of rich soil in a large glass jar with a half-dozen earthworms. On top of the soil, put an inch of light sand. Sprinkle corn meal on the sand. Wrap black paper around the jar to shut out light. At your next den meeting, take off the paper and see what has happened. The worms will have moved dark soil up into the sand and sand down into the soil. You will see tunnels along the glass marking their travels. Explain that the worm's tunnels bring oxygen and nitrogen to nurture life and that the tunnels help the soil hold water.

More Outdoor Observation

Following is a list of things you can ask boys at an outdoor meeting. Or maybe you would like to use one or more of these questions or activities in a short den opening or closing at each den meeting this month.

1. What is the farthest thing you can see from here?
2. Find a seed that floats in the breeze.
3. Find a seed with wings.
4. Find a seed that sticks to you.
5. Find 3 things made by man.
6. Listen! Do you hear –
 - a. a bird
 - b. a cricket
 - c. distant car
 - d. Anything?
7. Can you find 2 things that are white or any color besides green?
8. Look at moss through a magnifying glass.
9. Find a picture in the clouds.
10. How many different shapes of leaves can you find? Round, oval, long, heart shaped smooth edges, toothed edge, etc.

Nature Lore Trail

Make up your nature lore trail using the features of your site. The trail outlined here could be laid out in a park, picnic area, or wooded area. Before you begin, - tell the boys this is not a speed contest. Give each boy

a score card, listing each station. The den leader at each station marks the boy's score card. Although the stations are numbered, they need not visit them in order, as long as an adult is there to mark the score.

Station 1: "Be quiet for 2 minutes. Listen to all the sounds of nature. Write them on a piece of paper and give it to the leader when the time is up. (Boys should hear such things as buzzing insects, wind in the trees, bird songs, etc.)
Scores 1 point for each valid noise.

Station 2: The Cubmaster has not slept for 3 days. His doctor says that he needs a sleeping potion made up of the following: 10 dandelion seeds, a bird feather, a fly, an oak leaf, 2 caterpillars, a maple twig, 5 pine needles, etc. (List about 10 items in your area within 20-30 paces)
Scores 1 point for each valid item seen.

Station 3: Within 15 paces, you will find some items of an unnatural nature. For example, leaves on trees that don't belong there, oak leaves on tulip tree, pine cones on an oak, etc.
Score 1 point for each freak discovered.

Station 4: Within 10 paces of this spot is an insect home. Find it, and tell what the insects are.
Score 5 points for discovery.

Station 5: Pick up a leaf or bit of grass and the toss it in the air. What is the wind direction?
Score 2 points for correct answer.

Nature Demonstration



1. Nature is Beautiful.

Show the beauty of the leaf; its shape, its veins and symmetry.

2. Nature is Useful.

Have several small sticks of wood. Tell how wood has many times saved men's lives by either providing warmth, fire for cooking or shelter.

3. Nature has Mystery.

Show the mystery of a bird's nest. Why do different birds build different nests?

4. Nature has Magic.

Cut into an apple crosswise and show the "star" shape that holds the apple seeds. Hold up a seed and explain the magic that this small seed can grow into a large apple tree and bear fruit we can eat.

5. Nature is a Teacher.

Prepare a model of a kite. Explain Ben Franklin's experience when he discovered electricity with his kite and key.

6. Nature has History.

Secure a stone with a fossil in it and talk about how this happens.

7. Nature is Fun.

Show a fishing pole. Tell a 'Whopper' of a fish story.

8. Nature is Life itself.

Very simply and without much flourish, drink a glass of water.

9. Nature is the Future of Mankind.

Prepare 2 cardboard boxes in advance: s One box has soil in it, the other has a piece of healthy sod it. Using the box which had only soil, tilt it up and pour water into it, showing that the water will run off and leave gullies in the dirt. Using the other box to demonstrate that the water does not runoff the sod retains the water.

**All mankind is separated from oblivion
by 3 inches of top soil.**

Bees. Bugs and Butterflies

Have you ever walked through a park or meadow on a bright sunny day feeling like you are the only one around. Well, when we are outdoors, we are never alone.

There are thousands of tiny animals, called insects, surrounding us at all times.

There are more than 800,000 types of insects with more being discovered all the time. Butterflies, bees and ladybugs are only a few of the more commonly known insects.

All adult insects have three main parts to their bodies the head, thorax and abdomen. All insects have antennae, also. Most of them have one or more sets of wings. But, one way to tell an insect from any other type of animal is to count it's legs. Adult insects always have six legs, no more and no less. This way we know that spiders are not insects because they have eight legs.

Insects make good pets. They do not require much space and are easy to care for you will find insects almost anywhere. Look in f lowers, on leaves of trees and plants, under bark, stones or logs, and in under ground burrows.

Make an insect cage and catch an insect to observe. Here are a few feeding tips.

Ants - drops of honey or bits of raw meat, apples, and bananas

Grasshoppers - fruit and vegetables

Praying Mantis - aphids and fruit flies

Lady Bugs and Beetles - aphids, fruits and boiled potato

Crickets - raw vegetables, fruit, dog biscuits and crackers

Bees and Butterflies - Should be set free to find flower nectar.

All insects need water. Place a few drops of water on a leaf, inside the cage, daily.

Insect cages can -be made from large glass jars and netting material. Oatmeal boxes, using a piece of nylon screen, also works well. Always place some grass, leaves or twigs inside your cage for the insects to climb on. In an insect cage, you can watch your insect's life cycle. Admire its beauty and see how it changes.

Games

Mother Nature's Housing Developments:

- ✓ People don't build homes in parks, but many creatures do. How many animal homes can your den find?
- ✓ Look for bird nests, cliff or barn swallows' nest, squirrel nests, cocoons, insect galls, spider webs, paper wasps nests, mud dauber wasps' nests, woodchuck burrow.
- ✓ It's fair to count the evidence of homes, too, such as the little mud casts made by earthworms and a long raised mound across a lawn made by a burrowing mole.
- ✓ A hollow tree might be the home of several animals: woodpeckers, owls, bats, or white footed mice.
- ✓ If your park has a pond, look for mud chimneys of crayfish built near the shore.
- ✓ Award a prize to the one who finds the most animal homes.
- ✓ Caution the boys not to remove or destroy these homes.

Mixer Nature Game:

Have a list of familiar birds, animals, trees or insects and write the name of each on a card. Each week pin a card from one of these groups to the back of each Webelos Scout as he enters the meeting. Each boy must guess who he is by asking questions that can be answered with a yes or no. When he has successfully guessed the card is then pinned to the front of his chest.

Measuring Worm Race:

In this race all contestants line up at the starting line,

On Go, they fall forward to start and rest their weight on their hands.

Next they draw their legs up under them and then fall forward again on their hands,

This method of movement continues until the winner reaches the finish line.

DEN MEETING ACTIVITIES

- Make insect cages
- Make ant houses
- Learn how to identify outdoor hazards
- Take a nature hike
- Have boys keep a nature notebook, jotting down discoveries while on field trips
- Make charts showing life cycle of an insect
- Collect tadpoles and watch them grow
- Go on bird watching hike
- Make birdfeeders
- Make a leaf or nut collection
- Make a leaf print
- Invite a naturalist or conservationist to your den meeting to talk about nature

PLACES TO GO

- Museum of Natural History
- Fish hatchery
- Zoo
- National Wildlife Refuge

RESOURCE

There is a great magazine called Ranger Rick's NATURESCOPE. It is published by the National Wildlife Federation. It has wonder ideas for teaching and providing activities for school age children. You don't have to be an expert to teach, the activities are simple and easy to understand as well as FUN!

Books that are available from Ranger Rick include:

Incredible Insects	Digging into Dinosaurs
Wild About Weather	Birds, Birds, Birds
Discovering Deserts	Trees Are Terrific
Astronomy Adventures	Amazing Mammals 1 & 2
Wading into Wetlands	Geology: The Active Earth
Endangered Species	Reptiles and Amphibians

Diving into Oceans
Rain Forests

Wild and Crafty

Check them out at your local library for free or you can write for ordering and pricing information. Prices are subject to change, but at Pow Wow time in 2004 they were \$6.00 each -

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Poison Ivy... COLOR IT ITCHY!

