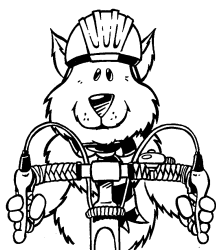




# JUMP



## Theme: Eco-Systems

A full month of FUN-filled theme based activities,  
plus tips on working with Cub-age children  
and program planning how-to's!!



## READ ME FIRST !!

### JUMPSTART Introduction

Welcome to the jungle world of Cubs! You have joined more than 46,000 other adults serving young people as leaders. This resource is designed to help you through the early stages of program planning for a Cub pack. As you read through the material, you will find answers to many of the program-related questions most Cub leaders ask.

Do you feel a bit unsure or overwhelmed with the task of thinking up interesting Cub programs?

This is normal. We all experience those same feelings.

The JUMPSTART program resource will give you enough background information, ideas and confidence to “jumpstart” your planning so you can begin having FUN with your Cubs.

### How To Use JUMPSTART

Scouts Canada developed JUMPSTART to help get you off and running with a fun-filled program as quickly as possible. Remember these tips:

- Be flexible when planning and delivering your programs. While this package gives you a starting point, unforeseen events can alter the basic plan. Flexibility will make the meeting more enjoyable and easier for both you and the children. Times found in JUMPSTART's weekly planning schedules are approximate only; change them to suit your needs.
- Shared leadership means sharing the workload. When every leader accepts a job, no one feels over-burdened with all the work. This makes running a pack more fun. JUMPSTART's weekly planning schedules provide space to record which leaders have responsibility for various activities.
- Keep notes. Was the program a success? What worked? What didn't work? At the bottom of every weekly meeting schedule, JUMPSTART provides space to record these details. Plan to stay after the meeting to discuss the program with your fellow leaders. Not only will this save time, but future programs will run smoother and you won't have to schedule a separate leader meeting to discuss program planning.
- Be creative. JUMPSTART material sets out a basic plan; don't feel tied to it. Your own creativity will add even more fun and excitement to your program. Use the extra planning sheets to put your own ideas into the theme.

### What Is Cubs All About?

Before planning a program, you need to know something about this age group. Your program should be fun and within the average Cub's abilities to participate. Cub-age children are at a special time in their lives. Full of curiosity and adventure, they love to be creative and explore nature; they are learning to work as a team and develop important social and leadership skills.

Scouts Canada sets out more formal guidelines for the Cub program. In Cubs, we emphasize activities which encourage the children to:

- express and respond to God's love in their daily lives
- do their best
- keep fit
- satisfy their curiosity and need for adventure and new experiences
- be creative and develop a sense of accomplishment
- make choices
- develop a sense of fair play, trust and caring
- work together in small groups and experience being a leader
- participate in outdoor activities
- learn about the natural world and their part in it.

The essence: We want Cubs to have lots of fun, while feeling good

about themselves, their friends and God, and the environment. At this stage in a child's development, it is extremely important for each Cub to acquire personal feelings of self-worth through doing their best. For a Cub, a good program includes the fun of trying new experiences where every child is appreciated and considered a member of the team. As a leader, you will be helping Cubs to develop the social skills and self-confidence necessary for them to try even more exciting experiences later on in life.

The simplest way for you to develop a program that creates these opportunities is through the use of imaginative, theme-based activities.

Before we get into the actual workings of some popular program themes, let's review how to plan a program. Once you know the process and how to involve Cubs, it won't be long until you are putting your own great ideas into action!

### Program Planning

Effective planning is the key to providing a program which meets the needs of Cub-age children. The time spent planning and preparing is reflected in the quality of the program and the experience that the youth receive.

Use the Cub program guidelines as an initial gauge for measuring whether a particular activity idea is appropriate for the program. The guidelines are also the tool for evaluating the design of the section program.

Planning makes all leaders fully aware of their commitments; it helps them equip themselves for the job ahead.

What else is important?

Plan more activities than you need. If one part of the program does not seem to be working, be flexible and switch to a backup activity. This will also help reduce discipline problems caused by boredom during lag times between activities.

### Who Plans?

Although group decision-making may sometimes be slow, when the leadership team shares planning responsibility, individual burdens are greatly lessened.

Before getting too carried away with planning, don't forget an excellent resource — the Cubs themselves! Ask them about their interests. Give the children an opportunity to brainstorm ideas and themes. Write these suggestions down for later use in picking programs.

Meet with your leadership team and develop common themes. They will more easily accept ideas that are generated by the children and packaged into themes. The team will see a purpose in their work; this will generate enthusiasm.

JUMPSTART plans break down into specific themes and meetings.

### Long, Medium, Short Range Planning

#### *Long Range*

Choose about 10 themes offering a good variety of interests, when planning for the entire year. Estimate how many meetings each theme requires.

On a calendar (the Scouts Canada calendar works well), mark down the following:

- regular meeting dates
- school vacation periods
- special holidays
- district events (e.g. Apple Day)
- special community events
- special weeks (Scout/Guide Week)
- hiking/camping activities
- dates when the meeting hall is not available.

Now add other special dates, e.g. religious celebrations that might pro-

...Continued on back cover



# Cub Jumpstart

## Theme: Eco-systems

*Thanks to Greenwing Program, Ducks Unlimited, Project WILD, Canadian Wildlife Federation*

*Designer: Roger Colborne*

### MEETING SCHEDULE: One Month

<i>Activity</i>	<i>Date: Week One</i>	<i>Date: Week Two</i>	<i>Date: Week Three</i>	<i>Date: Week Four</i>
Gathering Activity 10 mins.	Animal Charades	Helping Habitat	Ants on a Twig	Angleworm Relay
Opening Ceremony 5 mins.				
Game 10 mins.	Habitat Relay	Eat and Be Eaten	Migration Headache	What Animal or Plant am I?
Theme Activity 20 mins.	Too Close For Comfort	Litter We Know (Part 1)	Build duck nest boxes	Personal Environment Code
Game 10 mins.	Fox & Mouse	Oh Deer		Web of Life
Theme Activity 20 mins.	Ethi-thinking	Litter We Know (Part II)	Snake and Frog	Prepare for weekend
Song/Story 10 mins.	Songs: Little Green Frog/Hole in the Bottom of the Sea	Fish song	Ants on a Twig con't.	Story: If Only...
Six Meeting 10 mins.	Assign litter pick up			
Spiritual Fellowship 5 mins.	- Recite Law - Prayer	- Recite Promise - Prayer	- Recite Law - Prayer	- Recite Promise - Prayer
Closing Ceremony 5 mins.				
Leader Discussion time 15 mins.				

**DAY TRIP FOR CUBS - See pages 29-36**





## Cub Meeting Schedule: Week One

### Theme: ECO-SYSTEMS

**Date:** \_\_\_\_\_

<i>Time</i>	<i>Activity</i>	<i>Program Details</i>	<i>Leader Responsible</i>
10 mins.	Gathering Activity (See detail planning sheet)	Animal Charades	_____
5 mins.	Opening Ceremony (Details can be found in the <i>Cub Leader's handbook</i> )		_____
10 mins.	Game (See detail planning sheet)	Habitat Relay	_____
20 mins.	Theme Activity (See detail planning sheet)	Too Close for Comfort	_____
10 mins.	Game (See detail planning sheet)	Fox and Mouse	_____
20 mins.	Theme Activity (See detail planning sheet)	Ethi-thinking	_____
10 mins.	Song/Story (See detail planning sheet)	Songs: Little Green Frog/ Hole in the bottom of the Sea	_____
10 mins.	Six Meeting	Assign homework on "Litter We Know"	_____
5 mins.	Spiritual Fellowship	- Recite Law/Promise - Prayer	_____ _____
5 mins.	Closing Ceremony (Details can be found in the <i>Cub Leader Handbook</i> )		_____
15 mins.	Leader Discussion time	Review meeting & discuss next week's plans	_____

Badge Links:     World Conservation Badge #5

\_\_\_\_\_

Meeting Notes: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



## **ECO-SYSTEMS**

### **GATHERING ACTIVITY**

#### **Animal Charades**

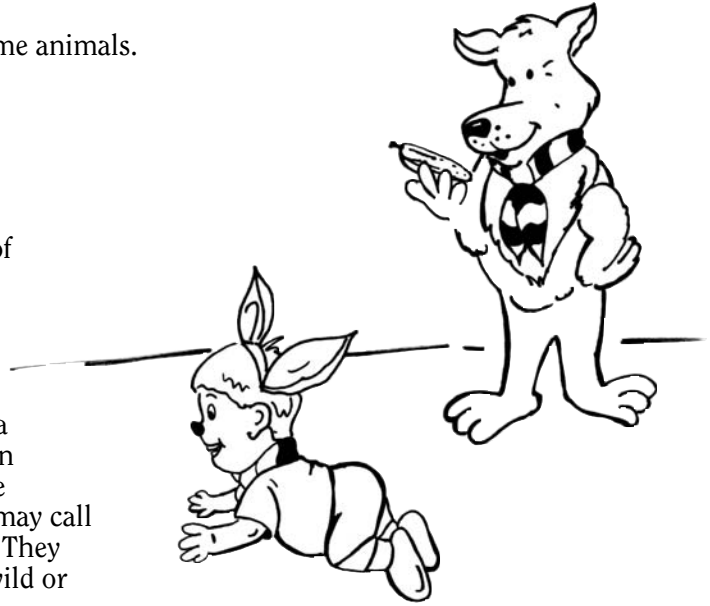
Cubs use “charades” to distinguish between wild and tame animals.

##### **Equipment:**

- Small pieces of paper, container

##### **How to Play:**

1. Before the meeting, write names of various types of wild and domestic animals on each piece of paper and put into a container.
2. As the Cubs arrive, they select a piece of paper with an animal on it which they must act out.
3. One Cub goes to the “stage”. A timekeeper, either a leader or another Cub, says “Begin” and the Cub on stage dramatizes the animal they have chosen. The charade should be guessed by the audience - who may call out their guesses - within a ten second time limit. They must guess what the animal is, and whether it is wild or domestic.
4. Follow the charades with a short discussion on the Cub’s definition about what is wild and what is domestic. Classify the animals into appropriate and inappropriate pets, with their reasons for their clarifications.



## **GAME**

### **Habitat Relay**

#### **READ THIS FIRST**

Topics: habitats; plants and animals; species diversity

##### **Objectives:**

1. To get youth to associate various species of animals with their individual habitat requirements.
2. To demonstrate the incredible diversity of species which depend (directly or indirectly) on wetland habitats for their survival.

##### **Background:**

People and other animals share some basic needs. Every animal needs a home. But that home is not just a house like people live in. Home for many animals, is a much bigger place and it's outdoors. The environment in which an animal lives is called habitat. An animal habitat includes food, water, shelter and adequate space in an arrangement appropriate to the animal's needs.

All things are interrelated. When we look at a biological community, we find interrelationships and interdependencies between plants and plants, plants and animals, as well as animals and animals. These relationships are important.



### ***Equipment:***

- Buckets; cards with animal names; cards with habitat types; two pylons

### ***How to Play:***

1. Divide the Cubs into two or three teams (depending on the size of the group) and get each team to sit down behind a starting line. Ask the youth what a habitat is and get them to provide you with a few examples. Then ask them what kinds of animals they would expect to find in each of those habitat types. Name some species that could exist in more than one type of habitat. Name some species that depend on one specific habitat.
2. At about 30 metres from the starting line, set up the buckets or boxes which will represent the various habitat types. On each bucket, tape the name of the habitat it is to represent. Include a variety of habitats such as grassland, wetland, your backyard, forest, a local lake and river.
3. About half way between the starting line and the habitats, spread out the cards which have the animal names on them. Instruct the youth that each team must stand up and when the start signal is given one member of each team races to the cards, chooses one and then must place that animal in its appropriate habitat (bucket) before racing back to their team to release the next person. The first team to have all of its members finished (sitting down) wins. Or have a complete set of animal cards for each team and the first team to have placed all their animals in habitats correctly wins.
4. After the race is over, get each team to retrieve some of the habitat buckets and review which animals were placed in the various habitats and why. Ask them to set aside any animals which they feel do not belong in a particular habitat. Discuss where they think the animals should have been placed and why. Which habitats seem to support the greatest diversity of animals?
5. Extension: include some common plant species as well.

## ***THEME ACTIVITY***

### ***Too Close for Comfort***

#### ***READ THIS FIRST***

#### ***Objectives:***

Cubs will be able to:

1. Describe possible negative consequences for people and wildlife under conditions of crowding; and
2. Identify ways people can behave in order to reduce negative consequences of crowding for wildlife.

#### ***Method:***

Cubs experiment with physical distance and levels of comfort in humans, estimate appropriate distances between humans and wildlife under various conditions, hypothesize about indicators of animal discomfort, and summarize reasons to avoid animal discomfort through crowding.

#### ***Background:***

Sometimes wildlife seems to want to say, "Don't get too close!" From a tree branch a bird watches a person approaching; when he or she gets too close, the bird takes flight.

Animals are often threatened when crowded by humans, even though the humans may mean no harm and merely want to observe the animal. Animals may display their discomfort by fleeing, grinding teeth, coiling, hissing, stomping feet, snarling, coughing or woofing. Flight is the usual way of showing stress. Noises may come when an animal is ready or threatening to attack.

Wildlife photographers have learned that when the wildlife they are photographing begins to act strangely, they have probably got too close. Animals may run away if you are outside a certain distance. At a closer distance, they may charge or in other ways respond to the threat of human presence by aggressive behaviour.



One way of understanding the way wildlife acts is to recognize that many animals have certain distances that they keep from their own kind. Wolves may demand large areas of range, which no other wolf outside of their own pack (family) may enter. Studies show that certain kinds of finches will always leave a certain distance between themselves when they perch on a telephone wire or fence line.

When crowding occurs, many animals react with bizarre, aggressive, disordered behaviour and may develop skin diseases like mange. They may adjust to the crowded conditions, over time, by ceasing reproduction. Great blue heron rookeries have been disturbed by the mere presence of people. Rookeries are the birds' breeding grounds. Herons live most of the year as lone individuals; when they come together to breed - to go through courtship and nesting - they experience stress if disturbed by humans. Under circumstances of stress they may not breed, may lay few eggs, or may abandon the rookery, leaving eggs or young birds to perish.

At one heron rookery, wildlife managers have established a 300-metre limit; no human disturbance is allowed close to the rookery. They are not sure this limit will save the rookery from development pressures, but they know any closer range would certainly disrupt the rookery.

The major purpose of this activity is for Cubs to recognize the possible negative consequences for people and wildlife as a result of conditions of crowding.

### ***Equipment:***

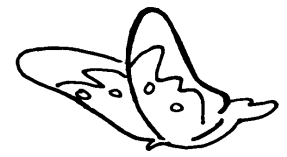
- None needed

### ***How to Play:***

1. Introduce the concept of discomfort from crowding by asking one Cub to stand in front of the pack. Approach the Cub slowly, asking the child to tell you when your closeness makes him or her begin to feel uncomfortable. Ask the Pack whether they allow strangers to approach them as close as they do their friends or family. How do they feel in the middle of strangers on a crowded bus or elevator? Discuss what physical reactions they have in some kinds of crowded conditions, like avoidance of eye contact, nervousness, sweaty palms, etc.
2. Introduce the idea that animals in the wild might also be uncomfortable when approached by strangers. Talk about why they might be uncomfortable; eg. fear of predation, need to protect young. Discuss what other conditions might increase or decrease wariness - such as ability to fly away, climb quickly, run fast, swim fast; animal size; whether the animal is alone or in a group, is on a nest, or has young.
3. Have the youth make a list of animals they are likely to encounter in the environment, and have them estimate what distance should be maintained from each animal species - both for reasons of personal safety and for the comfort and safety of the animals. Emphasize that these are just estimates. As a rule, it is better to stay farther away than you think might be necessary than to get too close.
4. Have the youth discuss such animal behaviours that might indicate discomfort, such as foot stomping, teeth grinding, raising up on hind feet, nervous looking around and eventually flight. The Cubs can mime or role play such situations and have their friends guess what animals they are, in what situation.
5. Discuss ways in which wildlife harassment might occur unintentionally, such as flying too close in small aeroplanes, getting too close to photograph, calling or heckling for animals to react (especially at zoos), hiking near a nesting site, and using loud vehicles near baby animals or in places where animals are unaccustomed to seeing them. Explain the possibility that there are certain times of the year when some animals are more sensitive to intrusion, such as at mating season and during severe climatic conditions, such as heavy winters or drought. What ways can communities minimize disturbances? What can individual people do? Summarize reasons it is important to minimize such disturbance from people for wildlife.







### *Extensions*

1. Draw life size outlines of some of the animals and mount them on an outside wall of the meeting place. Break into sixes; have each six establish a distance from each species which the group feels would be far enough for the animal not to be threatened by the pressure of a person. Using measuring tapes, each six should measure the established “comfort zone” for each species, under different conditions - and then present their suggested distances for the animal comfort zones. Verify the accuracy of these distances under these general conditions by contacting a wildlife resource person. Discuss whether a general rule is apparent about the relationship of the size of the comfort zone to conditions such as size of the animal, presence of young, ability to flee, single or group animal species, etc.
2. What are reasons it is important to minimize such disturbances for domesticated animals, like pets, dairy cows, etc?
3. What are reasons it is important to minimize such disturbances for people? What actions can we take to do so? With what consequences?

### *Aquatic Extension*

Since water is one of the essential components of habitat, areas where water is available in the natural environment are frequently visited by many species of wildlife. Some live in or near the water. Others come to the water as needed. As a result, ponds, lakeshores, riverbanks, ocean beaches, streams, reservoirs, canals, irrigation ditches, and even city fountains can sometimes be places where people get “too close for comfort” when it comes to wildlife. Think of three examples of situations where people can get “too close for comfort” in aquatic habitats, with possible negative consequences for wildlife. Think of three examples of people and wildlife being able to successfully coexist near and in water.

### *Evaluation*

1. What behaviours might indicate a person speaking in front of a group is nervous?
2. How might a mother dog let you know that you are getting too close to her and her pups?
3. Rank order the following, from animals you could get closest to without harming;
  - a heron rookery during breeding season
  - young racoons seen in a forest
  - a large garter snake in the grass of your yard
  - honey bees around their hive
  - frogs in a freshwater pond in summer.
4. Describe negative results of crowding for humans. Describe negative results of crowding for animals.



## **GAME**

### **Fox and Mouse**

#### **READ THIS FIRST**

Topics: animal characteristics; senses; predators; prey

#### **Objectives:**

1. To introduce Cubs to common wetland predators and prey species.
2. To highlight adaptations that help prey species to avoid becoming someone else's supper, and adaptations that help predators to catch their prey.

#### **Background:**

Every living creature has special or unique abilities (adaptations) that help it to survive. Predators must adapt successfully to catch food or they will starve. For example, bears must be able to judge the location of fish as they scoop the fish out of the water. Birds have keen eyesight to help them spot small insects and worms. Snakes use their sense of smell to locate their prey. Prey animals must also have special adaptations to help them avoid being eaten. Keen senses, especially hearing and sight, help prey get early warnings of approaching predators. Some prey species have also adapted special means of escaping capture once they detect a predator.

This activity focuses on the importance of hearing for the survival of both predators and prey.

#### **Equipment:**

- Blindfolds

#### **How to Play:**

1. Two Cubs stand in the centre of a circle formed by the Cubs. One of the two is a fox and the other is a mouse and both are blindfolded. Using their sense of hearing only, the fox tries to tag the mouse and the mouse tries to stay away from the fox. How important is the sense of hearing for the survival of some animals? What other senses are important? What kinds of strategies can prey use to stay alive? What kinds of strategies can predators use to catch food?

## **THEME ACTIVITY**

### **Ethi-Thinking**

#### **READ THIS FIRST**

#### **Objectives:**

Cubs will be able to:

1. Generate a list of activities done outside that are harmful to wildlife and the environment.
2. Discuss reasons these activities are inappropriate; and
3. Recommend alternative activities that are not harmful.

#### **Method:**

Cubs list activities that might be harmful to wild plants and animals and use photos or drawings to visualize, discuss, interpret, and evaluate these activities.

#### **Background**

The major purpose of this activity is for Cubs to discriminate between outdoor activities that are harmful to wildlife and the environment and those that are not.



### ***Equipment:***

- Art materials (crayons, construction paper, magazines for photos) to make discussion cards

### ***How to Play:***

1. Ask the Cubs to help you make a list of activities that people do that seems harmful to wild plants and animals. Ask them to think about things they've seen or know about that might be harmful. Some of these things could be:
  - picking up baby wild animals in the environment (birds, fawns, etc.)
  - carving initials into trees
  - driving vehicles (cars, motorcycles) over fragile environments
  - removing plants from environment, like digging up orchids or wild leeks
  - destroying bird nests
  - illegally killing, collecting, harassing, or possessing wildlife
2. Have students use cut-out photos or drawings to make these activities into cards showing pictures and describing what is happening. (Or, leaders can prepare cards in advance, laminate, and use again.) Older Cubs can dramatize the situation in skits, "commercials", songs, poems, etc.
3. Collect the cards. Count Cubs off to make groups of four each. Hand out one card to each group and ask them to discuss (or present the skits, poems, etc.)
  - What is happening?
  - Does it harm wildlife? How?
  - Does it seem to be appropriate or inappropriate behaviour? Why?
  - Is the person doing it having fun?
  - What else could he or she do that would satisfy his or her needs and interests without harming wildlife or the environment?
4. Ask each group to report to everyone else about:
  - a. their feelings concerning what is happening in the outdoor activity shown in the picture;  
*and*
  - b. their recommendation for an alternative activity the people could do that would not be harmful.

### ***Aquatic Extension***

Generate a list of activities that are sometimes or always harmful to aquatic species of wildlife and aquatic habitats. Discuss the ways these activities are harmful. Discuss ways these harmful activities can be prevented. Identify at least five examples of things people can do in aquatic environments that are not damaging to populations of aquatic animals or the long-term health of aquatic habitats.

### ***Evaluation***

1. Make a list of five things which people do that harm wildlife habitat.
2. Make a list of five things which people do that harm wildlife.
3. For each them listed, describe what you can do about it.
4. Make a list of ten things which people do that help wildlife.



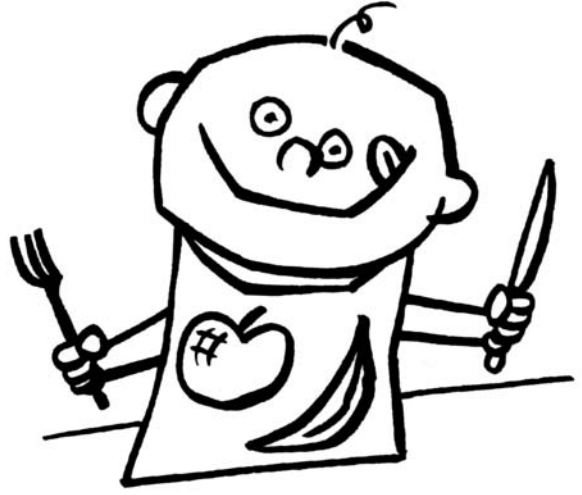
## SONGS

### *Little Green Frog*

*Scouts Canada's Campfire Book*

Ka yunk! went the little green frog one day,  
 Ka yunk! went the little green frog,  
 Ka yunk! went the little green frog one day,  
 And his eyes went yenk yank yunk!

Now all the little frogs go  
 CLAP la-di-da-di-da, CLAP la-di-da-di-da, CLAP la-di-da-di-da  
 Now we all know frogs go  
 CLAP la-di-da-di-da, but they still go yenk yank yunk!



### *Hole in the Bottom of the Sea*

*Scouts Canada's Campfire Book*

There's a hole in the bottom of the sea,  
 There's a hole in the bottom of the sea,  
 There's a hole, there's a hole,  
 There's a hole in the bottom of the sea.

There's a log in the hole in the bottom of the sea,  
 There's a log in the hole in the bottom of the sea,  
 There's a hole, there's a hole,  
 There's a hole in the bottom of the sea.

There's a bump on the log in the hole in the bottom of the sea,  
 There's a bump on the log in the hole in the bottom of the sea,  
 There's a hole, there's a hole,  
 There's a hole in the bottom of the sea.  
 Continue to repeat and add a line each time.

Frog...Bump...Log...Hole

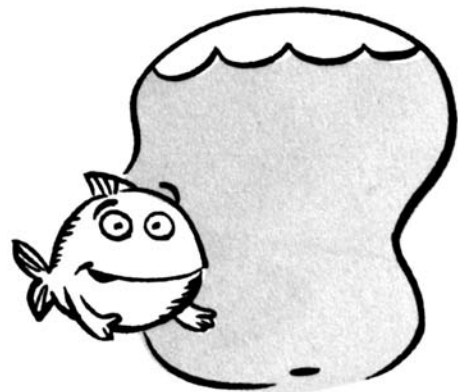
Tail

Wart

Hair

Flea

Germ





## Cub Meeting Schedule: Week Two

### Theme: ECO-SYSTEMS

**Date:** \_\_\_\_\_

<i>Time</i>	<i>Activity</i>	<i>Program Details</i>	<i>Leader Responsible</i>
10 mins.	Gathering Activity (See detail planning sheet)	Helping Habitat	_____
5 mins.	Opening Ceremony (Details can be found in the <i>Cub Leader's handbook</i> )		_____
10 mins.	Game (See detail planning sheet)	Eat and be Eaten	_____
20 mins.	Theme Activity (See detail planning sheet)	Litter We Know (Part 1)	_____
10 mins.	Game (See detail planning sheet)	Oh Deer	_____
20 mins.	Theme Activity (See detail planning sheet)	Litter We Know (Part II)	_____
10 mins.	Song/Story (See detail planning sheet)	Fish Song	_____
10 mins.	Six Meeting		_____
5 mins.	Spiritual Fellowship	- Recite Law/Promise - Prayer	_____ _____
5 mins.	Closing Ceremony (Details can be found in the <i>Cub Leader Handbook</i> )		_____
15 mins.	Leader Discussion time	Review meeting & discuss next week's plans	_____

Badge Links:     World Conservation Badge #7

\_\_\_\_\_

Meeting Notes: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



## **ECO-SYSTEMS**

### **GATHERING ACTIVITY**

#### **Helping Habitat Puzzle**

1. As Cubs arrive, distribute Helping Habitat puzzle and pencils. Ask Cubs to draw a line between the problem and the solution. Provide picture for Cubs to observe the problems.

##### **Problems for Habitat**

Cattle in streams cause pollution.

Trees cut along shoreline.

Dam blocking migrating fishes.

Soil from construction site washes into stream.

Garbage dumped into stream.

##### **Habitat Solutions**

Put up sign saying "No dumping allowed".

Build fishways to allow migrating fishes to go around the dam and reach the spawning areas.

Properly plough and plant at stream bank.

Build fences to keep cattle away from the stream.

Plant shrubs and trees near the stream.

2. Can the Cubs think of any other solutions for the problems. Are there similar problems where the Cubs live that they have observed in their community?





## **GAME**

### ***Eat and Be Eaten***

#### ***READ THIS FIRST***

Topics: producers; consumers; food chains and webs; communication; survival

#### ***Objectives:***

1. To introduce the concepts of producers and consumers (primary, secondary, tertiary) to Cubs.
2. To identify a few typical wetland food chains and food webs.

#### ***Background:***

All ecosystems contain producers and consumers. The producers are our plants, which get energy from the sun and produce their own food. Consumers are divided into groups based on what they eat. Plant eaters are called herbivores (primary consumers). A cow is an example of a herbivore, but the plant sucking and chewing insects consume the most plants. First level carnivores (secondary consumers) feed on plant eaters. First level carnivores include frogs eating insects, a giant water bug eating a tadpole, coyotes or foxes eating mice, and birds eating insects or worms. Second level carnivores (tertiary consumers) are animals which prey on and eat first level carnivores. They tend to be larger, more fierce and fewer in number (within each species) than the first level carnivores. Omnivores eat both plants and animals. Scavengers eat dead and decaying plants and animals. The following activity focuses on carnivores, although it can be adapted to include herbivores and omnivores.

#### ***Equipment:***

- Blindfolds, noisemakers (optional)

#### ***How to play:***

1. Select a food web of some sort. For example, a typical wetland food web could include mosquitoes, frogs, toads, snakes, foxes or coyotes, racoons, fish, crayfish, a heron and a hawk. Briefly review how these animals could be arranged in a food web (make a diagram).
2. Each person plays a particular animal in the food web. Depending on the total number of people, several Cubs may play the same animal. Discuss who eats whom.
3. The group decides what type of noise each animal should make (whenever possible try to imitate the real animals as closely as possible (e.g. mosquitoes “buzzzzzzzz”, foxes “bark”, snakes “hissssss”.) Animals of the same species make the same noise. All noises must be distinct and easily recognizable. Cubs should practise making and listening to the noises for a few minutes because the noises are all they will use to find prey, avoid predators and find mates.
4. The game should be played in a cleared, safe area. Cubs must move slowly to minimize the chance of some one getting hurt. The leader, and other adults should act as spotters to prevent stragglers from straying from the playing area.
5. The goal of the game is to stay alive as long as possible. All players wear blindfolds. Begin the game with players scattered about in the playing area. Each time a player moves, they must make the sound (call). When a player encounters a mate, they must link arms and stay together. Prey animals must leave the game if they are tagged by a predator. Who stays alive the longest? Who catches the most prey? Who finds a mate? How can a mate be a problem? What are important factors for survival?
6. Playing the game again allows the Cubs to develop and try out new survival strategies.

#### ***Extension***

7. Repeat the game but decrease the size of the playing field to simulate the loss of wildlife habitat (like the draining of the wetlands). How does this effect survival?
8. Introduce other elements into the game such as the impacts of humans, disease or fire.



## **THEME ACTIVITY**

### **Litter We Know (Part 1)**

#### **READ THIS FIRST**

##### **Objectives:**

Cubs will be able to:

1. Identify and evaluate ways that litter pollution can endanger wildlife; and
2. Propose ways they can help eliminate these dangers.

##### **Method:**

Cubs collect and evaluate litter, making collages.

##### **Background:**

Environmental pollution affects all forms of life. Litter is unsightly. It also exposes wildlife and other animals to illness, injury, and death.

Monofilament fish line may get tangled on legs and beaks of water birds like geese and herons. Some of these birds need to run short distances to take off when they fly. The fish line prevents this. It also interferes with their swimming. Birds with long bills often get line wrapped around their bills and cannot open them to eat. They starve to death. The line also gets tangled in their wings, preventing the birds from flying.

Sometimes fish or birds get into the loop portions of plastic six-pack can holders. The animal continues to grow, but the loop won't stretch. A slow death results. These loops can also get tangled around the feet of waterfowl.

Half-open cans are a problem. Animals, like deer, can cut their tongues on the cans. Sometimes smaller animals get their heads stuck inside such cans and they can't eat. Starvation is the result. Mice and chipmunks crawl into opened bottles and get trapped inside, unable to get a footing on the slippery glass to push themselves out through the small opening.

Shiny bottle caps or pop tops may be eaten by wildlife, including fish, injuring or killing them. Cigarette butts, cellophane wrappers, and styrofoam cups, eaten by deer, can cause internal problems. Broken glass from bottles and other glass objects can injure people, pets and wildlife.

You can contact local fish and wildlife agencies or other agencies for additional information about problems resulting from litter, including local examples. Such personnel and others, including representatives of private environmental, conservation, and animal welfare organizations may also be available to assist you in considering alternatives for reducing litter problems.

The major purpose of this activity is to alert youth to the dangers of litter pollution and to consideration of responsible actions people can take to minimize consequences of litter pollution.

##### **Equipment:**

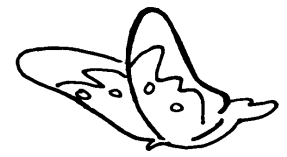
- Large sheets of paper for mounting collages, glue, different types of litter

##### **How to Play:**

(Part 1)

1. Divide the pack into sixes or three to four teams.
2. Ask each team to bring a collection of litter to the meeting in a paper bag. Suggest they look in parks, camping areas, or school grounds. NOTE: They should not take items out of garbage cans.
3. Have the teams make and display collages of these items.





## GAME

### Oh Deer / Oh Muskrat

#### READ THIS FIRST

Topics: habitat, predator, prey, population dynamics, limiting factors

#### Objectives:

1. Introduce Cubs to the three essential components of habitat: food, water, and shelter.
2. Show that certain factors may limit animal populations and that some fluctuations in wildlife populations are natural, as ecological systems are constantly changing.

#### Background:

A variety of factors affects the ability of wildlife to successfully reproduce and maintain their populations over time. Disease, predator/prey relationships, varying impacts of weather, accidents, pollution and habitat destruction and degradation are some examples. Some naturally caused and human induced limiting factors serve to prevent wildlife populations from reproducing in numbers greater than their habitat can support. The most fundamental of life's necessities for any animal are food, water, shelter and space in a suitable arrangement. Without these essential components, animals cannot survive. Wildlife populations are not static. They continuously fluctuate in response to a variety of stimulating and limiting factors.

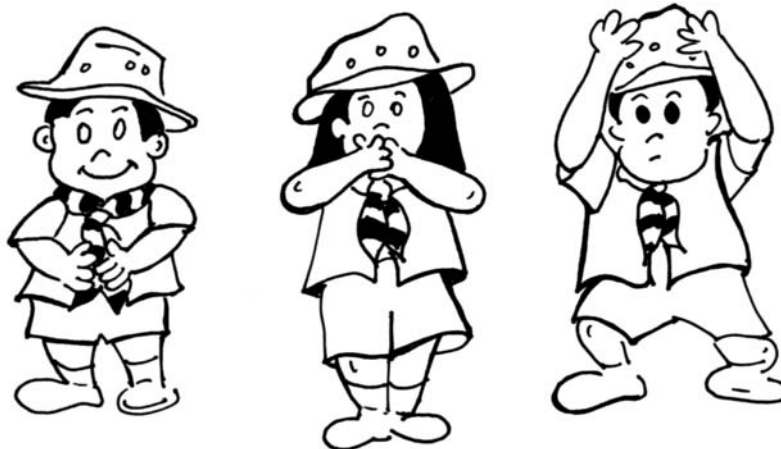
This activity is intended to be a simple but powerful way for Cubs to grasp some basic concepts. Everything in natural systems is interrelated, populations of organisms are continuously affected by elements of their environment. Populations of animals do not stay at the same number year after year in their environment and are continually changing in response to the availability of resources. The main purpose of this activity is for Cubs to understand the importance of suitable habitat, as well as factors that may affect wildlife populations in constantly changing ecosystems.

#### Equipment:

- Four pylons, playing field, whiteboard and markers.

#### How to Play:

1. Tell the Cubs that they are about to participate in an activity that emphasizes the most essential things that animals need in order to survive. Review the essential components of habitat (food, water, shelter and space). This activity emphasizes three of those components of habitat (food, water, and shelter) but the Cubs should not forget the importance of the animals having sufficient space to live.
2. Ask the Cubs to count off in fours. Have all the "ones" go to an area, and the rest go to another area. Using the pylons, establish two lines about 20 metres apart and have the "ones" line up along a line and the remaining Cubs along the other line.





3. The “ones” become deer. Deer need good habitat to survive. Tell the Cubs that the four essential components of habitat are food, water, shelter and space in a suitable arrangement. For this activity we will assume that deer have enough space in which to live. The deer need to find enough food, water and shelter in order to survive. When a deer is looking for food, it holds its hands over the stomach. When it is looking for water, it puts its hands over the mouth. When looking for shelter, it holds its hands together over the head. A deer can choose to look for any one of its needs during each round or segment of the activity. However, once it has chosen something it cannot change what it’s looking for after it sees what is actually available. It can change what it’s looking for in the next round, if it survives.
4. The other group (twos, threes and fours) are food, water and shelter, components of habitat. Each Cub chooses at the beginning at each round which component they will be during that round. The Cubs depict which component they are in the same way the deer show what they are looking for.
5. The game starts with all players lined up on their respective lines (deer on one side; habitat components on the other side) and with their backs to the Cubs on the other line. The leader begins the first round by asking all the Cubs to make their signs; each deer deciding what it is looking for, each habitat component deciding what it is. Give the Cubs a few moments to get their hands in place and when they are ready, count them down and when you say “Go” they both turn to face each other, continuing to hold their hands in place.
6. When deer see the habitat component they need (the same hand sign), they run to it. Each deer must hold the sign of what it is looking for until getting to the habitat component person with the same sign. Each deer that reaches its necessary component takes the food, water or shelter back to the deer side of the line. This is to represent the deer successfully meeting its needs and reproducing as a result. Any deer that fails to find its food, water or shelter dies, and sits down to become part of the habitat. In the next round, the deer that died is a habitat component and is available as food, water, or shelter to the deer who are still alive.

When more than one deer reaches a habitat component, the Cub who gets there first survives. Habitat components stay in place on their line until a deer needs them. If no deer needs a particular habitat component during a round, the habitat component just stays where it is. However, the habitat person can change which component it is from round to round.

7. The leader keeps track of how many deer there are at the beginning of the game, and at the end of each round. Continue the game for approximately 15 rounds. Keep the pace brisk.
8. At the end of the game gather the Cubs to discuss the activity. Encourage them to talk about what they experienced and saw. They may have watched a small herd of deer begin by finding more than enough of its habitat needs. The population increased over two or three rounds, until the habitat was depleted and there was not sufficient food, water, and shelter for all the members of the herd. At that point, deer starved or died of thirst or lack of shelter and they returned as part of the habitat. Just like in nature.
9. Use the whiteboard to graph the data on deer population size which you collected during the game. The number of deer at the beginning of the game and at the end of each round represent the number of deer in a series of years. That is, the beginning of the game is year one and each round is an additional year. This becomes a visual reminder of what the Cubs experienced during the game and the deer population fluctuated over a period of years. This is a natural process, as long as the factors that limit the population do not become excessive to the point where the animals cannot successfully reproduce. The populations will tend to peak and rebuild, peak and rebuild as long as there is good habitat and sufficient numbers of animals to successfully reproduce.
10. In discussion, ask the Cubs to summarize some of the things they have learned from this activity. What do animals need to survive? What are some of the limiting factors that effect their survival? Are wildlife populations static or do they tend to fluctuate as part of an overall balance of nature? Is nature ever really in balance or are ecological systems involved in a process of constant change?
11. Variation: Do the activity in the same fashion, except substitute a species which is common in a wetland environment (frog, muskrat, or garter snake).



## **THEME ACTIVITY**

### ***Litter We Know (Part II)***

4. Discuss the effects of litter. **OPTIONAL:** Ask a wildlife expert to join the Pack for the discussion. If available, show a film or read brochures on the subject.
5. Ask the Cubs to assign a numerical value to each kind of litter. The item potentially most harmful to wildlife has the highest score, least harmful has the lowest score.
6. Have the team figure a total score for their collage based on the numerical values of each piece of litter.
7. Propose and evaluate ways that people can eliminate litter pollution. Can manufacturers make cans with openings other than pop tops? Could they devise another method of packaging six-packs? How could people fishing have more control over losing their fishing line? How can individuals be instructed about the dangers as well as the unsightliness of littering? What can the students do personally - as individuals, as groups, or as family units - to eliminate or reduce their own litter?

### ***Aquatic Extensions***

1. Focus specifically on litter that can be potentially harmful to aquatic wildlife.

### ***Evaluation***

1. Name four ways that litter can harm wildlife. List three things you can do to eliminate these dangers.
2. Propose what you consider to be one of the most effective ways to eliminate or reduce litter.

## **SONG**

### ***A Fish Song***

*Tune: On the First Day of Christmas*

On the first day of summer, my muskie brought to me  
some algae to put in my tea.  
two duckweed plants  
three fish larvae  
four fing- er-lings,  
five caddis flies  
six shiners swimming  
seven darters darting  
eight brook trout leaping  
nine catfish splashing  
ten walleye diving  
eleven pike a-dancing  
twelve lake trout chasing.

[illegible]



## Cub Meeting Schedule: Week Three

### Theme: ECO-SYSTEMS

**Date:** \_\_\_\_\_

<i>Time</i>	<i>Activity</i>	<i>Program Details</i>	<i>Leader Responsible</i>
10 mins.	Gathering Activity (See detail planning sheet)	Ants on a Twig	_____
5 mins.	Opening Ceremony (Details can be found in the <i>Cub Leader's handbook</i> )		_____
10 mins.	Game (See detail planning sheet)	Migration Headache	_____
40 mins.	Theme Activity (See detail planning sheet)	Build duck nest boxes	_____
10 mins.	Game (See detail planning sheet)	Snake and Frog	_____
10 mins.	Song/Story (See detail planning sheet)	Ants on a Twig con't.	_____
10 mins.	Six Meeting		_____
5 mins.	Spiritual Fellowship	- Recite Law/Promise - Prayer	_____ _____
5 mins.	Closing Ceremony (Details can be found in the <i>Cub Leader Handbook</i> )		_____
15 mins.	Leader Discussion time	Review meeting & discuss next week's plans	_____

Badge Links:     World Conservation Badge #6

\_\_\_\_\_

Meeting Notes: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



## **ECO-SYSTEMS**

### **GATHERING ACTIVITY**

#### **Ants on a Twig**

As Cubs arrive, meet them outside and ask them to find some ants. Check sidewalks, near the cafeteria, around windows. Look on trees, in flower beds and in vacant lots. Working in teams of two or three, ask them to observe the ant's behaviour. Have one Cub be the recorder, writing down their team's observations of how the ants take care of their basic needs, and describing how the ants move in a line. Provide pieces of bread and watch what the ants do when they discover this source of food. When it's time for the meeting to start, collect the recorder's notes for use later in the meeting.

## **GAME**

### **Migration Headache**

#### **READ THIS FIRST**

Topic: Cubs role-play migrating water birds travelling between nesting habitats and wintering grounds and are subject to hazards at either end of the migration path, as well as along the way.

#### **Background:**

Migration is a mysterious topic. How do birds, fish, mammals and insects travel the immense distances they do with such exactness? Some travel at night, some during the day, some in the skies and other deep within the sea. Yet they locate habitats necessary for their survival. Scientists have proposed that they use the stars, the sun and even the earth's magnetic field for guidance. Some animals, such as salmon, seem to use smell to guide them home from the sea. Most migrating species probably use a combination of means to guide their journeys.

There is a variety of remarkable migrating birds - ducks, geese, swans, cranes, herons, gulls, terns and shorebirds for example, that require the presence of wetlands in their breeding habitat and on their wintering grounds. Since these two regions are often thousands of kilometres apart, they also need wetlands to provide them with food and rest in-between.

The populations of some species of water birds are healthy; however, populations of many are showing long-term downward trends. Examples of populations of species that appear to be healthy in most areas are Canada Goose, Goldeneye and Gadwall. Examples of species that have experienced some decline but are now increasing are Wood Duck, Snow Goose, Mallard and Tundra Swan. Examples of species that are officially listed as endangered in Canada are Piping Plover and Whooping Crane.

The primary threat to the survival of migratory water birds is the disappearance and degradation of wetlands and associated nesting areas. Without wetlands, dozens of species of ducks, geese, swans and other water-birds face loss of the necessary habitat for survival.

The migration routes, or fly-ways, of North American waterbirds are the Pacific, Central, Atlantic and Mississippi flyways. Key wetlands and river systems act as the main guide posts and resting places for birds moving up and down these major flyways.

Wetland habitats - usually found in low, fertile plains along water courses - were historically prized for conversion to farmland and settlements. Today, the journeys of waterbirds take them over lands on which human influences are ever-increasing in scope and magnitude. Economic development and urbanization are reducing the availability of natural wetlands. Pollution; through pesticides, effluents and soil erosion, reduce the health and safety of wetlands for both wildlife and people. There is new evidence to suggest that acid precipitation may be affecting insect populations, which in turn affects the birds that depend on insects for food. Species like carp and purple loosestrife, that have been introduced from other continents have upset the natural balance of many wetlands. Natural conditions such as predators, weather, disease and fire also influence both the animals and their habitat and when combined with human impact can be even more devastating.



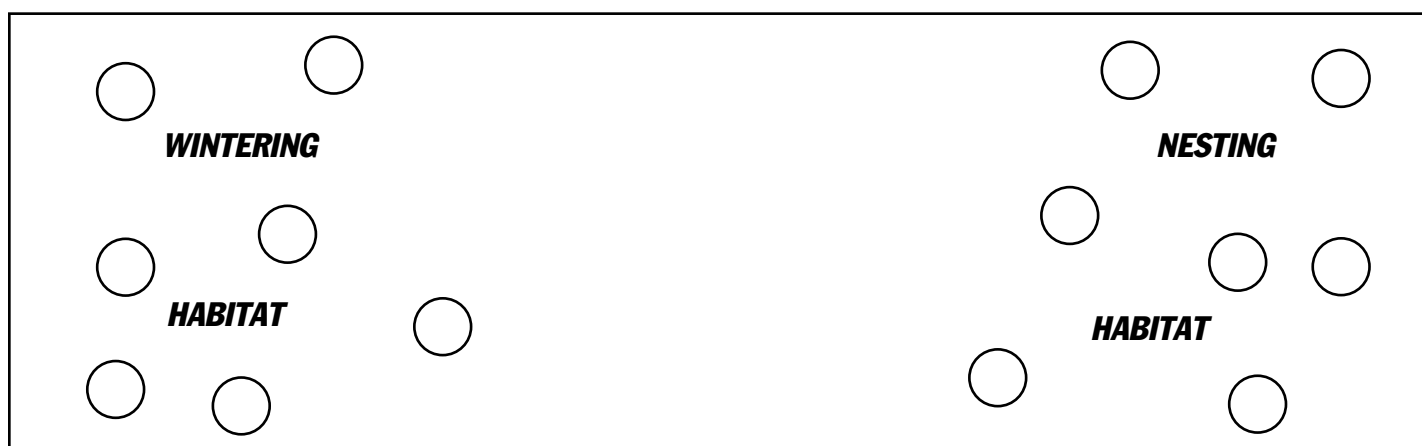
### *Equipment:*

- Large playing field, two reusable markers for every three Cubs (eg; frisbees, plywood, carpet pieces, etc.) Clearly mark the markers to indicate the top from the bottom.

### *How to Play:*

1. Select a large playing area about 20 metres in length. Randomly place the habitat markers in two patches on the playing field as shown below.

Choose the number of markers so that you have one for every three Cubs at each end of the field. Designate one of these areas as the “wintering habitat”, and the other as the “nesting habitat”. This means you have two sets of markers; one set at the nesting habitat and one set at the wintering habitat.



2. Explain to the Cubs that they are waterbirds and will migrate between these two areas at your signal. Tell them that the markers represent “wetlands”. These wetlands provide suitable habitat for water birds. At the end of the journey, the Cubs must have one foot on a marker in order to be allowed to continue. If they can not get their foot on a marker, that means they have not found any suitable habitat. They “die” and have to move - at least temporarily - to the sidelines and watch. During migration, the birds may want to “flap their wings”, moving their arms like birds in flight.
3. Explain to the youth that many factors will limit the survival of populations of migrating waterbirds. Some involve changes in the wintering and nesting habitats. There will be times of abundant food, water, shelter and space suitably arranged to meet the habitat requirements of the birds. There will be other times when the habitat is stressed, with many factors limiting the potential for survival. Sometimes the area of available habitat is reduced. Tell the Cubs that for purposes of this activity only three water birds can occupy a “habitat haven” (marker) at any one time.
4. Begin the activity with all of the Cubs at the wintering habitat. Announce the start of the first migration. Have the Cubs migrate in slow motion until they become familiar with the process. Then they can speed up. On the first try, all the birds will successfully migrate to the nesting habitat.
5. Explain that there has been no loss in the area of available habitat. Thus, a successful nesting season is at hand.
6. Before the Cubs migrate toward the wintering habitat, turn over one marker from the wintering region. Explain that a large wetland area has been drained to build a condominium. Repeat the instruction to migrate and send the birds to the wintering habitat. Have the three Cubs who will be displaced stand on the sideline. Tell the Cubs that these three died as a result of loss of habitat. Remind any “dead birds” that they will have a chance to get back into the activity. They can come back as surviving hatchlings when favourable conditions prevail and there is habitat available in the nesting ground.

**Note:** The series of migration cycles can be graphed. The “Y” axis can represent thousands, or hundreds of thousands of ducks, geese or any other migratory bird. Populations rise or decline as changes in habitat occur over the years. Drought or flood conditions can have large scale impacts. Habitat destruction or conservation programs by people can also have affects on a local or continental scale.



7. Before the next migration to the nesting region, turn over four markers in the nesting habitat. This represents a catastrophic loss. Tell the Cubs that this is the result of an oil spill in the local river, severely damaging shoreline habitat. Instruct the students to migrate.

*Note:* This results in a large number of Cubs waiting on the sidelines to re-enter in the nesting habitat. Before many cycles are repeated, provide them with an opportunity for re-entry. Each time, give the Cubs examples of changes in the habitat conditions that could have taken place making it possible for them to survive. Two youth can be made permanent monitors to turn the markers over as you instruct them.

8. Repeat the process for eight or ten migration cycles to illustrate changes in habitat conditions with resulting effects on the birds. Give examples of positive and negative factors that might influence the bird's survival.

Some limiting factors are a natural and dynamic part of any environment (eg. floods, drought, disease, predation, etc.) This is true of factors favouring survival as well. However, the significant difference in the case of the survival of populations of migratory aquatic birds seems to be the loss or degradation of huge areas of suitable habitat, much of it as a result of human intervention, eg. draining wetlands, destruction of nesting cover, pollution of water supplies, introduction of carp or purple loosestrife, etc.

Be sure to create one or more "disaster" years to illustrate catastrophic loss of large areas of available habitat. Remember that overall, the availability of suitable habitats for migrating aquatic birds is diminishing. (The activity should end with fewer areas of available habitat that can accommodate all the birds.) There is a general agreement that the greatest long-term threats to the survival of populations of migratory water birds are the loss and degradation of habitat.

Introduce some positive factors such as creating new wetlands, restoring damaged ones, putting up nest boxes, planting nesting cover, setting aside land for a park, removing purple loosestrife and carp, etc.

9. During the discussion, ask the Cubs to identify the apparent causes of the bird's population decline from year to year. Ask them to try to imagine what seems to be the major factors contributing to habitat loss and degradation. Ask them to make predictions about the effects of these factors. Distinguish between catastrophic effects and gradual changes. Ask the Cubs to support their hypotheses with evidence, seeking additional information through research, if necessary.
10. Ask the Cubs to summarize what they have learned about some of the many factors that affect the success of aquatic bird migration. List and discuss human-caused factors and environmental factors. Compare similarities and differences between these limiting factors. Highlight those that the students identify as posing the most significant long-term threat to the survival of migrating water birds.
11. What kinds of things can and should be done to protect and restore habitats for migrating water bird populations? Discuss potential trade-offs related to any recommendations.
12. **OPTIONAL:** Give a couple of Cubs nerf balls and have them stand on the sidelines. As the birds are migrating, the Cubs throw the nerf balls. If birds are hit, they are out of the game. The nerf balls represent "fatal" factors that affect birds while migrating, eg. the weather, t.v. towers, telephone lines, hunters, high-rise buildings that leave their lights on at night, airplanes, etc.

## **THEME ACTIVITY**

### **Build a Duck Nest Box**

Wood ducks, Barrow's goldeneyes, common goldeneyes, hooded mergansers, common mergansers and buffleheads are all cavity nesting ducks. They build nests in abandoned woodpecker holes or natural tree cavities caused by disease, fire or lightning. These ducks will also use a man-made nesting structure. Here are plans for a nest box that you can build, install and maintain. The design, which is used by the Ducks Unlimited Greenwing program, may even attract other cavity nesting birds such as kestrels, flickers, woodpeckers or screech owls.

Cedar lumber is recommended because it is naturally resistant to weather and insects. You can also use any materials you have available such as pine or plywood. The box pictured uses 10.5 linear feet of 1" x 10" (3/4" thick by 9 1/4" wide) lumber that is rough on one side (for the inside of the box).

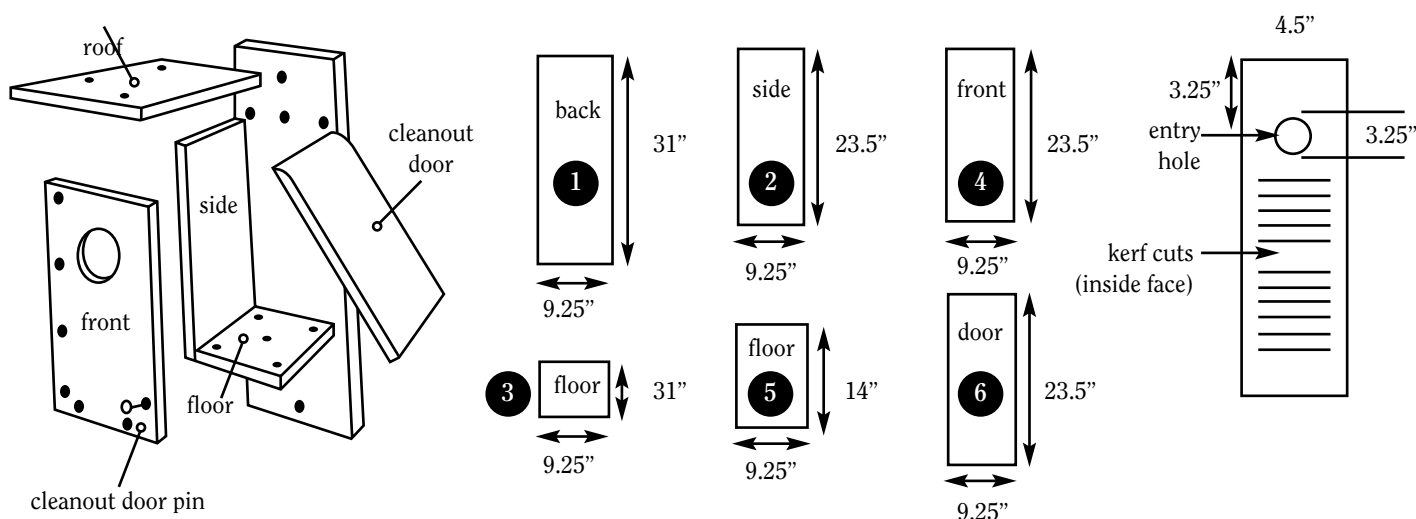
If you decide to apply a finish to your nest box, use a nontoxic wood preserver or a light shade of an earth tone paint. The ducks will find your box by seeing the contrast in colour caused by the entry hole. Do not apply the finish inside of the box.





The nest box can be installed over water or land. Boxes on land should be within 200 metres of water. Avoid poplar trees because they are a favourite of beavers. Try to mount the box 15 feet off the ground and tilt it slightly forward to help the ducklings climb out.

Cavity nesting ducks do not carry nesting materials. It is important to place four to six inches of wood chips, shavings or coarse saw dust in the bottom of the box. Replace the old materials once a year to reduce parasites. Do all your maintenance and cleaning before nesting season begins. Good luck! Plans can also be found on Duck's Unlimited home page at [www.ducks.ca/nestboxes](http://www.ducks.ca/nestboxes).



### Tools needed

- handsaw or table saw
- jig saw
- drill and 1/2" bit
- hammer & nail
- 23 screws, screwdriver

### Procedure

1. Measure and cut your wood to produce the six pieces. Number the pieces as shown. See material measurements.
2. Attach the back (1) to the side (2) using four screws fastened from the back of the box. See exploded view.
3. Drill five 1/2" drainage holes in the floor (3). Attach the floor by fastening two screws through the back and two through the side.
4. Draw the entry hole on the front (4) using a pencil (4 1/2" x 3 1/2" oval). Drill a pilot hole and cut out the entry hole using a jig saw. See detailed view.
5. Score the inside face of the front (4) using a saw. The horizontal slots will provide toeholds when the ducklings climb out. See detailed view.
6. Attach the front (4) using six screws.
7. Round the top, outside edge of the door (5). See exploded view. Fasten the door at the top with one screw from the front and one from the back. The two screws form the hinge and allow the door to open. Pin the door shut with a nail from the front.
8. Attach the roof (6) using four screws from the top and three screws from the back (be careful not to screw into the door). The box is now ready to install.



## **THEME ACTIVITY**

### ***Snake and Frog***

#### ***READ THIS FIRST***

Topics: animal characteristics; predators; prey

#### ***Objectives:***

1. To introduce Cubs to common wetland predators and prey species.
2. To highlight adaptations that help prey species avoid becoming someone else's supper.

#### ***Background:***

Every living creature has special or unique abilities (adaptations) that help it to survive. Predators must adapt successfully to catch food or they will starve. For example, bears must be able to judge the location of fish as they scoop the fish out of the water. Birds have keen eyesight to help them spot small insects and worms. Snakes use their sense of smell to locate their prey. Prey animals must also have special adaptations to help them avoid being eaten. Keen senses, especially hearing and sight, help prey get early warnings of approaching predators. Some prey species have also adapted special means of escaping capture once they detect a predator. This activity focuses on the abilities of the snake and the frog.

#### ***Equipment:***

- Three balls or bean bags. One has to be smaller or distinct in some way from the other two.

#### ***How to Play:***

1. Participants stand or sit in a circle. Begin passing the snake balls from player to player in the circle. Direction doesn't matter. With a bit of practice the Cubs should be able to get the balls moving at top speed. Try a few sudden reversals.
2. Introduce the frog ball and explain that the Cubs can only pass the snakes to an adjacent player, but the frog can be thrown to someone across the circle. The object of the game is for the snakes to catch the frog by tagging who is holding the frog ball with one (or both) of the snake balls. To keep everyone alert and to make the game more interesting, get the Cubs to call out "snake" or "frog" or have them "hisssssss" or "ribbit" each time they pass a ball.
3. Was it easy for the snakes to capture the frog? Why or why not? What special adaptations helped the frog stay alive? Get the Cubs to suggest some other wetland predator and prey species and discuss some of their special adaptations.

## **GATHERING ACTIVITY CON'T.**

### ***Ants on a Twig***

Now it's time to demonstrate ant behaviour. Ask each recorder to read their team's observations. How many were similar? Ask the Cubs to get into two equal lines facing each other in a narrow area (about one third of a metre wide) - as on top of a fallen log, between two lines of chalk or tape, or on a low wall. The two lines of ants must pass each other without falling off! The Cubs are to simulate ant behaviour, using their hands and arms as antennae, for example, touching as they pass each other.



## Cub Meeting Schedule: Week Four

### Theme: ECO-SYSTEMS

**Date:** \_\_\_\_\_

<i>Time</i>	<i>Activity</i>	<i>Program Details</i>	<i>Leader Responsible</i>
10 mins.	Gathering Activity (See detail planning sheet)	Angleworm Walk	_____
5 mins.	Opening Ceremony (Details can be found in the <i>Cub Leader's handbook</i> )		_____
10 mins.	Game (See detail planning sheet)	What Animal or Plant am I?	_____
20 mins.	Theme Activity (See detail planning sheet)	Personal Environment Code	_____
10 mins.	Game (See detail planning sheet)	Web of Life	_____
20 mins.	Theme Activity (See detail planning sheet)	Prepare for Weekend	_____
10 mins.	Song/Story (See Pack Resource Book, pg 6-5)	Story: If only...	_____
10 mins.	Six Meeting		_____
5 mins.	Spiritual Fellowship	- Recite Law/Promise - Prayer	_____ _____
5 mins.	Closing Ceremony (Details can be found in the <i>Cub Leader Handbook</i> )		_____
15 mins.	Leader Discussion time	Review meeting & discuss next week's plans	_____

Badge Links:     World Conservation Badge #8

\_\_\_\_\_

Meeting Notes: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



## **ECO-SYSTEMS**

### **GATHERING ACTIVITY**

#### **Anglemorm Walk**

After a few Cubs have arrived, ask them to sit in a line. Players sit down, knees bent and feet tucked as close to buttocks as possible, then reach back and grasp the ankles of the player behind them. On signal, the Cubs raise their buttocks off the floor and move around the meeting hall without breaking their hand hold.

As other Cubs arrive, they can join in the anglemorm walk!

## **GAME**

### **What Animal or Plant am I?**

#### **READ THIS FIRST**

Topics: classification; communication; animal characteristics

#### **Objectives:**

1. To teach Cubs how to ask questions so they can discover nature facts.
2. To familiarize Cubs with common wetland plants and animals.

#### **Background:**

One word answers to specific questions are the clues Cubs get in this plant and animal guessing game. This activity combines reasoning and questioning skills, knowledge of plant and animal names, and awareness of details. It can be as sophisticated or as simple as you wish. For example, the mystery creature might be a duck or it might be a specific species of duck such as the Mallard. The sky is the limit.

#### **Equipment:**

- Recipe cards, each with a picture or the name of a common wetland plant or animal. Attach a loop of string to the card so it can be worn around the neck (to the back) or use a pin to attach the cards.

#### **How to play:**

1. Pin the name of an animal or plant on everyone's back. The group begins to mingle. Cubs must guess what they've become by walking from person to person and asking each person only one question about the animal or plant. The only answers allowed are yes or no. How long does it take before everyone in the Pack has guessed their new identity?
2. Variation: One Cub from the Pack is singled out and asked to move away briefly while the leader whispers the name of a plant or animal to the group. The chosen Cub returns and must ask questions to determine what type of plant or animal they are. For example: Am I a plant or animal? Do I have fur? Do I live in the water? Can I fly? Am I a tree? The group can only respond yes, no or maybe. The group can also add charades to the game to make it more of a challenge or to enable the Cub to guess a specific plant or animal. How long does it take for the person to guess his or her identity?

## **THEME ACTIVITY**

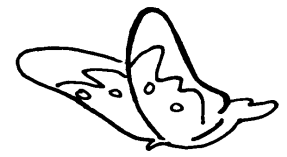
### **Create a Personal Environment Code**

#### **Equipment:**

- Flip chart paper, markers, *Fieldbook for Canadian Scouting* (contains a Personal Environment Code, pg. 129)

#### **Directions:**

- Have each Six devise a Personal Environment Code. Give them some ideas to get them started and write everyone's ideas down on flipchart paper. Allow enough time for the Pack to get together and share their Six's ideas with everyone. Once that is done, create a Personal Environment Code for the Pack.



## **GAME**

### **The Web of Life**

#### **READ THIS FIRST**

Topics: food chains; food webs; interdependency and interaction

#### **Objectives:**

1. To introduce Cubs to some typical wetland food chains and food webs.
2. To demonstrate how the various components of an ecosystem are interrelated.

#### **Background:**

The food source upon which all living creatures depend is the green plant. A green plant obtains its energy from the sun. It makes its own food through photosynthesis. The plant is eaten by an animal, which in turn is eaten by another animal, and so on. The direct line from the plant to the final animal-eater is called a food chain. Examples of food chains are: nectar/butterfly; clover/rabbit/fox; algae/plankton/dragonfly/frog/snake/hawk. Many food chains have only three or four links; rarely are there more than five or six links because a great deal of food energy is lost going from one link to another. Most animals have several sources of food. Therefore, food chains aren't distinct, but interconnect to form a food web. Each food chain is also part of a cycle for which the sun provides the energy. Abiotic elements are used by producers (plants), producers are eaten by consumers, consumers are decomposed by decomposers, and the abiotic elements are then returned to the ground and used again by producers.

#### **Equipment:**

- Plant and animal name tags, a ball of string

#### **How to Play:**

1. Prepare a variety of name tags (or picture cards) which each depicts one component of an ecosystem (eg. sun, soil, water, air, grass, cattails, duckweed, pondweed, muskrat, beaver, rabbit, ground squirrel, hawk, duck, fox, raccoon, skunk, human, snail, crayfish, earthworm, bacteria, algae). Each Cub picks a name tag and becomes that component.
2. Everyone sits in a circle to symbolize the ecosystem. Begin with a few simple food chains. For example, the sun person holds the end of the string and you ask who needs the sun? Algae, so the ball is thrown/rolled to the algae person. Who eats algae? Snail, so the ball gets passed to the snail and so on until the chain is complete. Try a few different chains.
3. Now form a web. Starting with any one component, use the ball of string to connect the component to another related component. The relationship may be that the second component eats the first like a plant connected to a rabbit. Or, the relationship may be that the first component needs the second to survive like a plant connected to soil.
4. Connect the second component to a third such as rabbit eaten by fox or rabbit needs water. Continue in this way until everyone is connected to several Cubs in several ways. As you go along, discuss what each connection or relationship is. Also, discuss interdependence.
5. Once everyone is connected, remove one component of the web (there is no water because of a drought). The water person shakes his or her strings. All members who feel the shake then shake their strings as well. This continues until it's demonstrated that every component is affected. Discuss how the various components are affected.
6. Variation: Use the web to show energy flow in an ecosystem. Producers should turn over all their strings to consumers who in turn give up their strings to other consumers which eat them. Eventually, the energy becomes concentrated in one or two components representing the top of the food pyramid.
7. Variation: Web the components in a particular ecosystem like the wetland and then web components from a possible adjoining habitat such as prairie or oak bluff and see how each habitat's components may be interrelated.



## Story

### ***If Only... (Pack Resource Book, pg. 6-5)***

Won Lee was a stone cutter who lived in ancient China. He cut large stones and he cut small stones. He made them into ornaments for gardens. Some he cut to build houses. He was proud of his work, but sometimes he would think, "If only I had more money", or "If only I had less work".

One day, Won Lee was walking home from work. The sun was very hot and he was tired, so he sat down at the side of the road. He felt the heat of the sun and thought, "It's the sun that gives us the daylight, the warmth to grow our crops. Surely the sun must be the most powerful of all things".

Won Lee said quietly to himself, "God, if only I could be the sun. I would love to feel what it is like to be the most powerful, the greatest of all things."

God answered Won Lee. "You may become the sun." He said. And Won Lee became the sun. He felt wonderful; so strong and powerful. He shone down on the world far below.

After a few days, a puffy white cloud appeared in the sky. It drifted about and, when it came near Won Lee, it blotted out his rays and cast a shadow on the world. Won Lee was sad. Surely this cloud was more powerful than he? "If only I were the cloud. That would make me the greatest of all things," he said.

God heard, and again He answered: "Won Lee, you may become the cloud." So Won Lee floated about the sky feeling very grand.

One day, Won Lee saw a great black cloud coming his way. Soon it surrounded him, and he saw the black cloud dripping droplets of water. The drops fell on the earth and made a mighty river.

Won Lee thought that this black cloud must be very powerful to swallow up a cloud and turn itself into a river, so he said, "If only I were the river. How mighty I would be! Then I would be truly happy."

Again God heard and answered: "Okay. You may be the river."

So Won Lee flowed along, feeling the mighty rush of water. Then he came to a bend in the river. There was a boulder jutting out into the river. The great boulder held the river, swirling it back onto itself.

Won Lee thought, "The rock! The rock! At last I have found the mightiest of all things. If this rock can hold back the raging river, then it is the greatest. If only I were this great big rock, I would be happy."

So God made Won Lee into the boulder, and he stood there, holding back the water and feeling very great and happy. Then, one day, along came a man who cut a large piece off the boulder. Won Lee was sad. No longer was he the greatest if this man could come along and cut him up.

"If only I could be the man who cut up the stone, I would surely be the greatest," Won Lee thought.

And God said to Won Lee, "But you are the stone cutter!"



## DAY TRIP FOR CUBS

### Theme: ECO-SYSTEMS

This event will be the culmination of the focus on Project WILD and Greenwings activities. The best site for this event will be an area that would have a large playing field, a source of water (tap or natural water feature, and an area to hike through (fields, forest, wetlands). A location to have a snack or lunch would also be useful. Recruit some parent volunteers or Scouts to help run the activities and provide supervision. Before the event, make sure you have completed all necessary paper work, permission forms and safety considerations.

<i>Time</i>	<i>Activity</i>	<i>Person Responsible</i>
9:00 am	Cubs arrive at the gathering area where the event is to take place. Recap safety tips: need for hats, sunscreen, drinking water, staying with buddies, etc.	_____
9:15	Amoeba Race (See detail planning sheet)	_____
9:35	Seed Need Hike (See detail planning sheet) Take drink and snack for along the way.	_____
11:00	Return to gathering area. Complete Seed Need.	_____
11:15	Ecosystem Tag (See detail planning sheet)	_____
11:30	Deadly Links (See detail planning sheet)	_____
11:50	Quick Frozen Critters (See detail planning sheet)	_____
12:00	Lunch break. Good time to discuss waste in packaging and protecting the environment by selecting foods with fewer packaging.	_____
12:30 pm	Install song bird or wood duck nesting boxes.	_____
1:30	Water Cycle Relay (See detail planning sheet)	_____
2:00	Arrange for everyone to be picked up and site cleaned.	_____

\* Completes World Conservation Badge requirements, #1, 2, 3, 4, 6.



## **Amoeba Race**

### ***READ THIS FIRST***

Topics: microorganisms; cell structure

### ***Objectives:***

1. To teach Cubs about the components of a cell.
2. To introduce them to a common freshwater microorganism.

### ***Background:***

All living organisms - large and small, plant and animal - are made up of cells. All cells are quite similar to each other, having many structural features in common. It's one of the marvels of nature that the endless variety of living organisms on earth are constructed of or depend on such similar units. It's easiest to understand what a cell is if you compare a living organism to a building. The rooms of the building are like the cells of an organism. Both rooms and cells have boundaries with exits and entrances, rooms have walls, floors, ceilings, doors and windows; whereas cells have walls or membranes with pores of various sizes. Both rooms and cells come in a variety of shapes and sizes, with various contents. Each kind of room and each kind of cell has its own particular use, function or speciality. A building may consist of only one room or many rooms; organisms may be composed of many cells or only one cell.

An amoeba is a one celled, microscopic animal. It is one of the tiniest and simplest animals on earth, found in fresh and salt water. The amoeba consists of protoplasm ( a jelly-like substance) which constantly changes shape as the organism moves and engulfs food. The amoeba's protoplasm - like the protoplasm of other cells - has two key parts; a nucleus (a large spherical structure which acts as the cell's control centre) and cytoplasm (everything else in the cell other than the nucleus).

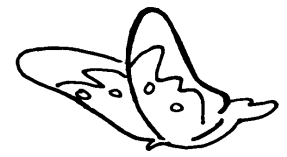
### ***Equipment:***

- None

### ***How to Play:***

1. To make an amoeba, you need a lot of protoplasm, a cell wall and a nucleus. Protoplasmic Cubs are those who don't mind being close. Cubs who like to contain themselves (and others) make a good cell wall; they should surround the protoplasm Cubs, facing outward and link elbows. A Cub with good eyesight and the ability to keep on top of things should be the nucleus, seated on one of the protoplasm's shoulders (or piggy back).
2. Get the amoeba to move around and emphasize that they must move as group without pushing or shoving or else part of the amoeba can get hurt. A rhythmic chant might help to coordinated movements (what kind of sound does an amoeba make?) Make two amoeba and have a race.
3. Extension: try a little cell division. The amoeba should move to some target area, divide itself into two new amoebae (each with all the necessary components) and then race back to the finish line.





## **Seed Need**

### **READ THIS FIRST**

Objectives: Cubs will be able to explain how seeds are carried by animals; and evaluate the importance of wildlife in contributing to ecological systems, based on the example of seed dispersal.

### **Background:**

Wildlife contributes to the diversity and balance of ecological systems. One compelling example is in the process of seed dispersal. Many seeds are carried by animals - whether in the coats of fur bearing animals or in seeds carried and dropped by some birds.

The major purpose of this activity is for Cubss to understand one example of wildlife as contributors to healthy ecological systems.

### **Equipment:**

- One large fuzzy sock per Cub, or masking tape segment per Cub (optional: one shoe box filled with planting medium per Cubs, cookie sheets or trays in which to place shoe boxes used as planters.)

### **How to Play:**

1. Ask each Cub to bring a large, old fuzzy sock from home - or try to find an inexpensive or free source to obtain a sock for each Cub. Old socks with holes in them are fine for this activity. Ask each Cub to put on a sock over one shoe. Wearing the socks over their shoes, go on a walk through a grassy area or field - particularly one that is abundant in seed-bearing plants. (Masking tape over the foot or around the leg sometimes has more sticking power!)

Option for older Cubs: Different Cubs walk in different locations. Contrast seeds found in each location. Create an “environmental map”. What ecosystem differences exist in the neighbourhood, city, etc.?

2. After walking through the area, look carefully at the socks. What has happened? Discuss briefly the seeds and other things that are attached to the socks. If the distances are not too great, the Cubs should keep their socks on their feet until they return. If the distance is too great - they may lose too many seeds along the way!

**NOTE:** Wildlife drop seeds too, that’s how they get dispersed!

3. The Cubs should carefully remove their socks. They’ve gathered their “data” - seeds and other things attached to their socks. Removing the seeds and other particles from the socks - they should examine what they’ve brought back. Talk with the youth about the major kinds of things they seem to have - like seeds, grass, small bits of twigs. Next, discuss the seeds in more detail, talking about the different kinds of seeds they have found: round, skinny, big, small, etc.
4. Each Cub should record - with words and small drawings - the kinds of things on the sock. Tally the number of each kind of thing on a sock as well.
5. Ask the Cubs how different animals’ fur might be similar to their socks. Has anyone ever brushed seeds, stickers, and things out of a dog’s or cat’s fur? Talk with the Cubs about how, so often in nature, seeds are carried by animals almost like the way they carried seeds and things on their socks. Seeds may stick to an animal’s fur in one location and fall off in another. Discuss why such a process is an important one. Evaluate the consequences. How does wildlife contribute to environmental diversity?

**OPTIONAL:** Each Cub can plant his or her seeds in one of the shoe boxes filled with planting medium (soil or a commercial mix). Be sure the Cubs put their names on their boxes. Water and care for the shoe-box gardens regularly - and see what grows!

**NOTE:** Many wild plant seeds require freezing before they will germinate. If there is a question, put some seeds in ice-cube trays and freeze them for several days. Then plant them.



## **Ecosystem Tag**

### **READ THIS FIRST**

Topics: ecosystems; decomposers; producers; consumers; interdependency and interaction

### **Objectives:**

1. To introduce the concepts of producers, consumers and decomposers and to illustrate how they are interrelated with one another.

### **Background:**

All life is connected in delicate balances called ecosystems. Living things do one of three different jobs to maintain ecosystems - they are either producers, consumers or decomposers. Producers are green plants. They use the sun's energy to manufacture their own food from abiotic (nonliving) elements and this process is called photosynthesis. Green plants provide food and oxygen for other living things. Consumers are living things that eat other living things. Some consumers eat producers; they are herbivores, which means plant eaters. Some consumers eat other consumers making them carnivores, which means meat eaters. Decomposers break down dead plant and animal materials into abiotic elements. Decomposers are recyclers and the abiotic elements return to the soil, water and air for use again. Decomposers include bacteria, fungi, earthworms, and snails. It's important to note that decomposers can also be consumers (eg. snails and crayfish also eat plants).

### **Equipment:**

- Beanbags, pinnies, 2 to 4 hula hoops and 4 pylons

### **How to Play:**

1. Divide Cubs into three groups: decomposers, consumers (about twice the number of decomposers) and producers (about twice the number of consumers). To establish the groups, have the Cubs line up and count off to seven. All the ones become decomposers, the "twos" and "threes" are consumers and the rest ("fours" to "sevens") become producers. Each group wears a different colour pinnie.
2. Set up a boundary for a large playing area in which the participants must remain. Use beanbags to represent abiotic components. The number of beanbags equals the number of producers. Place beanbags in two or more piles inside the hula hoops within the playing area.
3. The game involves the basic chain of abiotic components to producer, producer eaten by consumer, and consumer broken down by decomposer to return abiotic components to the environment. The overall idea is to maintain the ecosystem, while each group fulfills its goal.
4. Producers are the only players who can take beanbags from the piles. A safety zone (one foot inside the hula hoop) around the pile protects a producer from being tagged while he or she is picking up an abject. The goal of the producers is to get all the beanbags (or as many as possible) out of the safety zone and hold onto them.
5. Consumers get beanbags by making a two handed tag on a producer holding one. The goal of consumers is to get as many beanbags as possible from producers and keep them.
6. Decomposers can only get beanbags by making a two handed tag on a consumer holding one. When decomposers get the beanbag, they return it to the safety zone. The goal of the decomposers is to get all the beanbags (or as many as possible) back to the safety zone.
7. Players can only hold one beanbag at a time. When players are tagged, they must give up their beanbag. Players can toss and pass beanbags to other members of their own group.
8. Producers start the game by running to collect beanbags. Consumers are allowed onto the playing area a few moments after producers. Decomposers enter the area last. Play continues as long as you wish (producers keep taking beanbags, decomposers keep returning them). Adjust the number of beanbags used in the game or players in each group if play is not progressing smoothly.
9. How are all the groups dependent on one another? How does each group contribute to the continuous functioning of the ecosystem? Can the ecosystem function without decomposers? Try the game without decomposers and see what happens.



## **Deadly Links**

### **READ THIS FIRST**

Topics: food chain; pesticides; herbicides; accumulation

#### **Objectives:**

1. To show how chemicals (pesticides and herbicides) enter food chains.
2. To show how chemicals are concentrated as you move up a food chain and to discuss the possible consequences of these chemicals.

#### **Background:**

People have developed pesticides to control organisms. Herbicides are used to control weeds, insecticides to control unwanted insects. When these pesticides involve the use of poisons, the poisons frequently end up going where they are not wanted. Many toxic chemicals have a way of persisting in the environment and often get concentrated in unexpected and undesirable places, from food and water supplies to wildlife and people too. For example, a pesticide called DDT used to be applied regularly to crops as a means of controlling insects that were damaging the plants and trees. Then it was discovered that DDT entered the food chain with damaging results. For example, fish ate insects that were sprayed with the chemical; hawks, eagles and pelicans ate the fish. The poisons became concentrated in the birds, sometimes weakening and killing them directly and over time resulting in side effects like eggshells so thin that the eggs would not hatch or were crushed by the parents in the nesting process. Impact on species including the bald eagle and the brown pelican has been well documented. Use of DDT has now been prohibited by law in Canada. However, it has not been prohibited worldwide and therefore still enters the food chain.

#### **Equipment:**

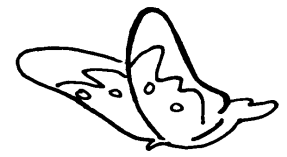
- Coloured cat food (Tender Vittles has three colours), 30 of these items per Cub is recommended (no need to count); one plastic cup per grasshopper, pinnies of three different colours.

#### **How to Play:**

1. Tell the Cubs that this is an activity about food chains. Familiarize them with the term by getting them to think of some examples of wetland food chains.
2. Divide the Cubs into three groups - shrews, hawks and grasshoppers. Work with three times as many shrews as hawks and three times as many grasshoppers as shrews. Identify the three groups by giving each a coloured pinnie to wear. Hand each grasshopper a plastic cup which represents the stomach of whatever animal is holding it.
3. With the Cubs' eyes closed, or with their backs turned, place the food in the playing area by distributing the coloured cat food. The grasshoppers are the first to go looking for food. The hawks and shrews sit quietly on the side watching the grasshoppers; after all the hawks and shrews are predators and are watching their prey! At a given signal, the grasshoppers are allowed to enter the area to collect food and place it in the stomachs (cups). The grasshoppers have to move quickly to gather food.
4. After about 30 seconds the shrews are allowed to hunt the grasshoppers. The hawks remain on the sidelines watching quietly. Hunting time for the shrews depends on the size of the playing area. On a large playing field, 60 seconds is probably best. Each shrew should have time to catch one or more grasshoppers. Any grasshopper tagged or touched by a shrew must give up its cup of food to the shrew and then sit on the sidelines.
5. The next time period (from 15 to 60 seconds or greater) is time for the hawks to hunt. The same rules apply. Any shrews still alive may hunt for grasshoppers, grasshoppers are hunting for food and the hawks are hunting the shrews. If a hawk catches a shrew, the hawk gets the food cup and the shrew goes to the side lines. At the end of the designated time period, ask all the Cubs to come together and bring whatever food cups they have with them.



6. Ask the Cubs how many of the grasshoppers and shrews were eaten. Next ask the hawks to empty their stomachs and count the number of brown and yellow food pieces and the number of red food pieces. The remaining grasshoppers and shrews should do the same.
7. Inform the Cubs that there is a pesticide in the environment. This pesticide was sprayed onto the crop the grasshoppers were eating to prevent a lot of damage by the insects. This particular pesticide is one that is poisonous, accumulates in food chains and stays in the environment a long time. In this activity, the red cat food pieces represent the pesticide laden food. All of the grasshoppers that were not eaten by shrews may now be considered dead if they have any red food pieces in their stomachs. Any shrews for which half or more of their food supply was red are also dead. The one hawk with the highest number of red food pieces will not die at this time, however it has accumulated so much of the pesticide in its body that the egg shells produced during the next nesting season will be so thin that the eggs will not hatch successfully. The other hawks are not visibly affected at this time.
8. Discuss what the Cubs experienced. Ask for their observations about how the food chain seems to work and how toxic substances can enter the food chain, with a variety of results. Ask for further examples of food chains which could be affected in a similar way.
9. Extension: discuss possible alternatives to uses of chemicals such as organic farming techniques, crop rotation, companion planting, biological control (predatory insects) and genetic approaches (releasing sterile males of the pest species).



## **Quick Frozen Critters**

### **READ THIS FIRST**

Topics: predators; prey; adaptations

#### **Objectives:**

1. To introduce Cubs to common wetland predators and prey species.
2. To highlight adaptations that help prey species to avoid becoming someone else's supper and adaptations that help predators to catch their prey.

#### **Background:**

Animals display a variety of behaviours in predator/prey relationships. These are adaptations to survive. Prey behaviours include signalling to others, flight, posturing in a fighting position, scrambling for cover and even freezing on the spot to escape detection or capture by predators. The behaviour exhibited partly depends on how close the predator is when detected by the prey.

Each animal has a threshold for threat levels. If a predator is far enough away for the prey to feel some safety, the prey may signal to others that a predator is near. If the predator comes closer, the prey may try to run away. If the predator is too close to make running away feasible, the prey may attempt to scurry to a hiding place. If the predator is so close that none of these alternatives is available, the prey may freeze in place. This freezing occurs as a kind of physiological shock in the animal. Shelter or camouflage may also make them invisible to the predator when they freeze. The main purpose of this exercise is for the Cubs to recognize the importance of adaptations to both predator and prey.

#### **Equipment:**

- Food tokens (dog kibble; enough for three per Cub); pinnies to mark predators; four or five hula hoops to serve as cover markers; pylons; pencil and paper to record number of captures, if desired.

#### **How to Play:**

1. Select a pair of animals which are in a predator/prey relationship such as snake/frog; fox/mouse; mink/muskrat; hawk/ground squirrel; American kestrel/dragonfly. Identify Cubs as either predators or prey for a version of freeze tag, with about one predator for every four to six prey. Predators should wear a coloured pinnie.
2. Mark off a playing area and identify one end of the field as the food source and the other end as shelter. Randomly place four or five hula hoops between the shelter and the food to represent additional areas of cover for the prey.
3. Food tokens (dog kibble) are placed in the food source zone on the ground. Allow three food items for each prey.
4. Use a whistle to start each round. When a round begins, prey start from their shelter. Their task is to move from the shelter to the food source, collect one food token per trip, and return to the primary shelter. To survive, prey must obtain three pieces of food. However, their travel is hazardous and they need to be alert to possible predators. If they spot a predator, they can use various appropriate prey behaviours including warning other prey that a predator is near. Prey have two ways to prevent themselves from being caught by predators; they may freeze any time a predator is within two metres of them or they may run to cover (at least one foot within one of the hula hoops). Frozen prey must have one knee and one hand touching the ground and be silent.
5. Predators start the game anywhere in the open area between ends of the field and are randomly distributed between the prey's food and primary shelter. Predators attempt to capture prey to survive, by tagging moving prey. Predators must each capture two prey in order to survive. Captured prey are taken to the sidelines by the predator who caught them. Limit the duration of each round of the game to five to seven minutes. Allow the Cubs to be both predator and prey.
6. Discuss how the prey escaped the predators? Which ways were easiest? Which were most effective? How did the predators capture their prey? Which ways were best? How did predators respond to a frozen prey? How are adaptations important to both predators and prey?
7. Variation: play the game for three or four rounds and record the number of captures each playing period. Have the Cubs that are captured become predators and each predator not getting enough food become a prey animal in the next round. This quickly leads to the concept of dynamic balance as prey and predator populations fluctuate in response to each other.



## **Water Cycle Relay**

### ***READ THIS FIRST***

Topics: water cycle, precipitation, evaporation, runoff

### ***Objectives:***

1. To remind Cubs that the earth's water moves in a never ending cycle.
2. To stress water conservation and responsible use of our water resources.

### ***Background:***

Every living thing on earth needs water to survive. Our earth has sometimes been called the watery planet since between two-thirds and three-quarters of its surface is covered by water. Water occurs on the earth in a variety of forms. In lakes, streams, creeks, rivers, wetlands and oceans, locked in the polar icecaps, making its way through cracks underground as groundwater, drifting across the sky as clouds or falling to the earth as rain, snow, sleet or hail. All these forms of water are part of an interconnected system called the water cycle.

About 97 per cent of the earth's water is in the oceans, around two per cent is frozen in icecaps and glaciers and the rest is in groundwater, freshwater lakes, inland seas, soil moisture, in the atmosphere and in rivers. An oversimplified explanation of the water cycle is as follows: water in the oceans (or anywhere else at the surface) evaporates, rises, cools and condenses into clouds. Clouds move and eventually drop precipitation to the earth where it becomes runoff, enters wetlands, lakes, rivers, streams, groundwater, plants and animals and eventually finds its way back to the ocean.

We humans often take water for granted. We forget that there is a limited amount of water on this earth and that it's our responsibility to conserve water, use it wisely and protect its quality. Water is important to the health of wetland habitats and the many different species of plants and animals.

### ***Equipment:***

- Large buckets; large margarine containers; small sponges

### ***How to Play:***

1. Divide the Cubs into sixes and get each team to sit down in a line behind a starting line. Ask the Cubs if they know what a water cycle is and go over a general overview of how it works. Ocean/evaporation/ clouds/ precipitation/to the earth as runoff, into lakes, wetlands, rivers and streams. And eventually back to the ocean.
2. At the front of each line you have a large bucket full of water. That's your ocean. Each bucket has a small sponge in it. They are your clouds. About 20 metres away you place an empty margarine container that represents dried up wetlands.
3. When the start signal is given the first member of each team picks up the sponge and races to the dried up wetland to get as much rain in it as possible before racing back to release the next person. The first person to overflow the wetland wins.

vide themes for your planning. (See your leader's handbook for further details.)

Write in the themes you want to do with your section, keeping in mind the need for flexibility. You may need to change some things to suit others.

Be realistic when you estimate budget costs. The group will have to raise whatever funds your section needs. Prioritize your list in case you cannot do some things. Keep in mind, the budget is subject to the group committee's approval.

Now that you have a long term plan, use it as the basis for a medium and short term plan.

#### *Medium Range*

A medium range plan covers a period of two or three months. Its purpose is to:

- decide on community resources you need, and make necessary contacts
- gather necessary equipment
- set goals related to themes
- determine needs/interests of youth members
- designate specific program responsibilities to all leaders
- communicate with parents
- evaluate past programs and make necessary changes
- brainstorm so as many activities as possible occur outside.

When developing your monthly programs, use a combination of program elements (the kind of combinations you will discover in JUMP-START) to ensure variety in how activities are presented. These elements include: games, crafts, music, storytelling, playacting, outdoors, and spiritual fellowship. Use these elements to avoid a boring program and to hold your children's interest.

#### *Short Range*

You are now ready to prepare detailed plans for a specific time period — a month or a weekend event. Sit down with the entire team to prepare the meeting plan. During this meeting the team may want to “pre-view” the theme by doing such things as:

- making the crafts
- practising ceremonies
- learning new songs.

This “practice” prepares the whole team to help implement the activity and ensures any of them are ready to fill in if needed. After the meeting, check back to see if your program activities met the guidelines for the Cub program. These guidelines help you evaluate whether your program fulfils the needs of Cub-age children. If your Cubs are having fun, you can bet it meets their needs.

Remember... plan your work, then work your plan, and HAVE FUN!!!!

### **Discipline In The Pack: Helpful Tips**

Discipline is a topic Cub leaders are always considering. Here are some tips to help you establish and maintain the necessary degree of control while encouraging acceptable behaviour.

1. Recognize that establishing discipline is different from being a disciplinarian. Try to help Cubs develop self-control, not blind obedience to authority.
2. Set and explain to your Cubs pack rules and routines; then follow them consistently. Help Cubs draw up a list of behaviour rules that they think are necessary to make the pack more fair for everyone; create a Pack Code of Conduct. Apply this Code to everyone.
3. Set a personal example for Cubs to see and learn from. Your attitude sets the tone and limits for acceptable pack behaviour.
4. Give ample warning when routines and activities are about to change. This will prevent Cubs from feeling rushed and allow time

to make the activity switch mentally.

5. Watch for warning signals that Cubs are losing interest; at this point, change activities.
6. Use praise to reinforce positive behaviour. Let Cubs know you notice and appreciate their efforts to be good or improve.
7. Deal with problems calmly, quietly, and without causing embarrassment to the Cub. Never use humiliation or name-calling.
8. If things seem to be getting out of hand, call a “time out”, stop the activity and sit everyone down until order is restored. Explain to the Cubs what is going wrong and what is needed to correct their behaviour. Give the Cubs a chance to air their feelings. They may tell you something that was overlooked in the planning. Too often we assume children are aware or capable of knowing what we want, when in reality no one has ever told them.
9. Prepare you meetings in advance so you can show confidence in what you are doing. Have backup activities ready when Cubs get restless. Lag time between activities invites boredom and mischief.
10. Talk with other leaders and parents about discipline concerns that need special attention.
11. Have a Kim. A Kim is an older Scout who becomes part of your leadership team. Kim's role is to help find out what Cubs like to do, assist in planning and leading activities, and serve as a role model.

### **Further Program Help**

#### *Theme Program Resources*

If you would like more ideas and information on theme activities and program planning, look for these resources.

- *The Wolf Cub Leader's Handbook* — tells you everything you need to know about Cubs and the Cub section, ceremonies, working with children, nature, planning, etc.
- *The Leader magazine* — published 10 times a year, features program-related stories, tips and resource information.
- *Games from A to Z* — jam-packed full of games.
- *Best of the Leader Cut Out Pages* — more tips and program ideas from the Leader magazine.
- *The Campfire Book* — to help spark the fun in your campfire programs.
- *Scouts Canada's Song Book* — full of both traditional and fun songs for all occasions and theme programs.
- *The Pack Resource Book* — more program ideas.
- *The Kim Book* — written for Kim, it will give you ideas on how a Kim can help out in your Pack. If you have a Kim make sure she or he has a copy of this book.
- *Campfire Program CD/Cassette* — two actual campfire programs to use as is, or to help learn some great campfire songs.
- *Fieldbook for Canadian Scouting* - looking for adventure? This is where it begins. Lots of great tips and information on how to safely enjoy the outdoors.
- *Camping/Outdoor Activity Guide* — helpful information, outdoor policies, Scouts Canada's “Accepted Practices”, forms and applications required to plan outdoor activities.
- *www.scouts.ca* — visit our website to keep current with program changes, tips and new information.

Scout Councils offer many training courses. Find out when they plan to run the next course. Call your local Service Scouter or Field Executive for assistance and information.

## JUMPSTART Video Now Available



### Video for use with JUMPSTART theme packages.

#### This video provides:

- ☛ Self-help, how-to information on program planning and using the packages.
- ☛ A program planning resource for Cub Woodbadge Training and JUMPSTART sharing sessions.
- ☛ Resources that help include the outdoors in the Cub program through theme programming.
- ☛ Other Beaver information such as basic ceremonies.

This video highlights the planning process and uses an “Emergency Preparedness” theme to cover a month’s program in detail: gathering activities, opening ceremony, games, theme activity explanations, and the closing ceremony.

The video also highlights a variety of other themes.



“A Howling Success!” — *Akela*



“The Jungle Law is JUMPSTART!” — *Baloo*

**Running Time: 30 minutes.**    Video Cat. # 20-215

### Videos Available at Your Local Scout Shop!