

## Environmental Activities

### Activity One

#### Game: Wells Fargo

#### Equipment

- Six silver or gold ingots (if budget restraints prevent the use of real ingots, pieces of 2x2 wrapped in silver or gold foil will do).
- Strips of paper 2 cm x 20 cm in two colours for "lives".
- Safety pins (one per player plus extras)

#### To Play (20 minutes)

Organize the Troop in two equal teams and assign each a "life" colour. Each player pins a life of the appropriate colour on his right shoulder.

Organize the play area into halves and assign each team one half to defend. Each team sets up a bank and a jail in its territory, marking out a ground area 3 m x 3 m for each with string or flour.

Give each team three ingots to deposit in its bank.

On signal, players try to sneak into their opponents' territory to steal their ingots and carry them to their own bank.

A player may carry only one ingot at a time.

A player is captured when an opponent tears his life from his shoulder. Captures may be made only in the opposition's territory (attacking zone).

If he is carrying one, a captured player must surrender the ingot to his captor, then go to the enemy jail, where he receives a new life but must stay until rescued by a team-mate. In order to make the rescue, the team-mate must run into the jail and tag inmates without being caught.

When time is up, the team with the most ingots in the bank is winner.

## Activity Two

### Discovery Scavenger Hunt

Give each Patrol a list and half an hour to see how many items they can locate within the boundaries of your play area. Remind Scouts of the importance of making minimum impact. They write notes on the items they observe in each category but do not collect specimens.

When the hunt is over, Patrols gather and compare findings. If their report includes particularly interesting observations, take the whole Troop for a walk to see them.

#### Patrol Instructions

As a Patrol, find as many of these natural items as you can within the designated area.

1. Two things with chlorophyll in them
2. Coniferous trees
3. Things that fly
4. Parasites
5. A natural object that is red
6. Plants with berries
7. Something you might use if you were fishing
8. Something that swims
9. Evidence of death
10. Insects
11. A natural object that is blue
12. Things that are part of the food chain
13. Evidence of disease
14. Mammals
15. An example of the interdependence of natural things

## Game: Poachers and Eco-Police

### Equipment

- 50 animal cards (8 cm squares cut from cardboard: draw an animal outline or write an animal name on each)
- Strips of paper 2 cm x 20 cm in two colours for "lives"
- Safety pins one per player and some extras

### To Play (15 minute rounds)

Hide the cards randomly throughout the play area. Explain that it is a wildlife reserve and hunting is prohibited.

Organize the Troop into two equal teams and assign a colour to each. Players pin a life of the appropriate colour to their right shoulder.

Name one team the EcoPolice (conservation officers), who ensure there is no hunting in the preserve. Name the other team the Poachers, who try to capture animals and take them back to their hunting lodge.

Designate a zone at one end of the play area the hunting lodge. Poachers begin the game at the lodge and EcoPolice scatter through the whole preserve area. Set a time of 15 minutes for the game.

On a signal, Poachers set out to hunt animals, capture them by putting the cards in their pocket, and return to the hunting lodge without being caught.

Poachers may capture only one animal on each trip from the lodge.

EcoPolice try to arrest Poachers with animals. They make the arrest by removing the life from a Poacher's shoulder.

If the Poacher has an animal, he must surrender it and return to the hunting lodge for a new life. If he isn't in possession of an animal, the arrest is unlawful and the EcoPolice must return the Poacher's life. Poachers may not capture EcoPolice.

When time is up, bring together the Troop and tally up the number of animals captured and the number saved by the EcoPolice. Gather up all the animal cards, including those still hidden in the area, send out leaders to hide them again, switch team roles, and play another 15 minute round.

## Project: Forest Inventory

Within your plot, select a rectangular zone for each Patrol and mark it with flagging (be sure to remove flags when the activity is over). The size of the plot will depend on the density of tree cover. Ideally, each area will contain 20 to 30 trees and include both conifers and deciduous varieties.

Make available source materials to help Scouts identify the trees: field guides for your area; publications prepared by your provincial parks ministry or forestry association.

### Instructions to Patrols

Examine the trees in the area assigned to you and answer the questions as best you can. You have 30 minutes to complete the task.

1. How many trees are there in your area?
2. How many are coniferous?
3. How many are deciduous?
4. List the different species of trees in your area and the number of each species.
5. Which tree in your area is tallest? How tall is it?
6. Which tree is shortest? What height is it?
7. Do any of the trees show evidence of disease? If so, record observed signs.
8. Do any of the trees show damage inflicted by people? If so, what sort of damage?
9. What evidence do you see that trees support other forms of life?
10. Which tree do you think is the oldest? Why?
11. Are there any zones in your area where no trees are growing? What do you think causes this?
12. Is the undergrowth near the base of all the trees the same throughout your area? If not, what differences do you observe?
13. Are the trees in your area equally spaced? If not, what factors do you think contribute to the irregular spacing?
14. Which tree contains the greatest volume of wood? What do you estimate as the number of cubic metres of wood it contains? The following formula for calculating the volume of a cylinder will help you make the estimation: volume equals 3.12 times the radius squared times the height.
15. Do you think your area would be improved if some or all of the trees were cut down? Please give reasons to support your answer.

## Activity Three

### Game: Quick Frozen Critters

From the Project Wild Activity Guide, this game focuses on the relationship between predators and prey. Use any set of predators and prey you wish (hawks and squirrels, wolves and deer, etc.).

#### Equipment

- Strips of paper 2 cm x 20 cm for prey
- Safety pins
- Predator identification (the simplest is to ask predators to tie their neckerchief around the right arm)
- Five small circles (one to two metres diameter) marked with string or flour com on the ground to serve as temporary shelters
- At least three food tokens per player (5 cm squares of cardboard work well)

#### To Play

Designate one end of the playing area permanent shelter for prey and the other end the prey's food supply where food tokens have been scattered on the ground.

Mark out five temporary shelters between the two ends of the play area. Organize the Troop into predators and prey - one predator for every five prey. Prey animals pin a life on the right shoulder. Predators tie on neckerchiefs.

Play a series of five minute rounds so that no prey languish too long in the cemetery and everyone has a chance to be a predator.

During each round, prey must collect food tokens and bring them to their permanent shelter. They may bring only one token each trip. Predators must capture at least two prey animals by tearing a life from the shoulder. Captured prey go to the prey cemetery on the sidelines. Prey are safe from capture when standing in the permanent or any of the temporary shelters, but predators may go anywhere else in the play area. Prey have one other defensive option. They may freeze whenever a predator approaches within two metres. In the freeze position, the only things prey may move are eyelids. As long as a prey animal remains frozen, a predator may not capture him. Once the prey moves, it is open season.

## Activity Four: Photo Essay

In this activity, Patrols prepare a pictorial record of some of the natural phenomena they've observed during past projects. Each Patrol needs a camera with flash and 20-24 exposure colour print film.

Patrols have a list of 12 subjects to photograph and must choose six other subjects. Before the next meeting, they must have their prints developed and mounted on cardboard for display.

### Patrol Instructions

Your task is to take 18 photographs in your area. The photos must include the 12 subjects listed below as well as six others of your own choice. The only criteria for the subjects you choose yourselves is that they must feature some natural phenomena or object in the area. As well as natural subjects, your photos must include members of your Patrol.

1. At least two pictures must include all Patrol members except one.
2. Each member of your Patrol must appear in at least three pictures.
3. At least four pictures must contain only one Scout.
4. At least two pictures must contain only two Scouts.

### Mandatory Photo Subjects

1. The most beautiful tree in the area
2. The most littered part of the area
3. The most colourful natural object
4. An example of old life providing for new
5. Your Patrol's favourite spot in the area
6. The spot where the presence of people is most noticeable
7. The best smelling spot
8. The ugliest nonhuman natural object in the area
9. Evidence of spring
10. A plant you cannot name
11. The spot containing the densest vegetation
12. The best Patrol in the area

## Activity 4: Un-nature trail

Activity Suitable for: ALL

### Purpose:

To develop observational skills and to raise awareness of the world around them.

### What to prepare

A selection Man Made items (at least 10!)

A list of the items that are going to be placed along the trail.

A Pre defined trail route...need suitable way of marking the route. Maybe neckerchiefs or maps.

### Time

Prep time 30mins

60 mins for activity

### How to run it

1. Before the activity starts mark a trail or use an existing trail.
2. Place unusual items along the route.
3. Vary the ease of seeing the items.
4. Give the list to the participants
5. Walk the participants along the trail and have them mark off the items as they see them.
6. Once all the groups have finished walk the trail all together and point out all the items and collect them as you go.

### Discussion points

How hard was it to find the items?

Where there any natural items of interest on the trail?

Did you notice anything else man made that wasn't on the list?

What the problems associated with litter?

### Variations

1. Try the trail but don't actually prepare a list but still place the items.
2. Try the trail with no list and no items, just the litter that is already there then pick it up when the activity is finished.
3. Try placing bonus items on trail, note on the list that there are bonuses to find