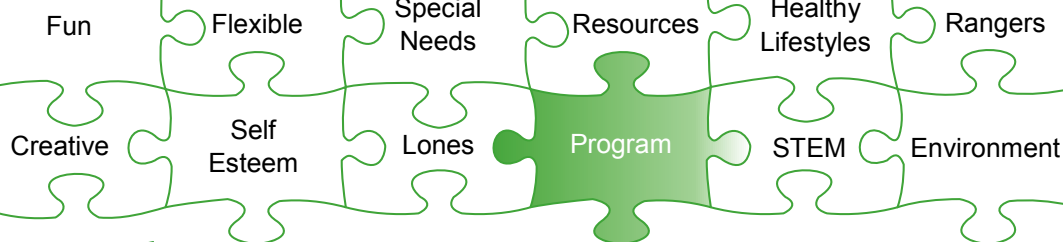




Girl Guides of Canada  
Guides du Canada

BC PROGRAM COMMITTEE



# FunFinder

May 2014

## Nature Nut Issue

The January issue of the FunFinder resource about the Operation Earth Action Challenge was such a hit that we decided to continue with the Nature themed ideas - especially since spring and camping season have arrived. In

this issue you'll find a ton of great nature activity ideas, a set of Instant Meetings for the ECO PAK Challenge, as well as program connections for Sparks through Pathfinders.



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## Getting Outside: Making the Most With Very Little

Going outside, you are generally faced with a couple of choices: games, activities and discovery. Many of the ideas will be able to span age ranges and locations but some activities or games may require a particular venue. But use your imagination and creativity and you may be able to make anything work!

While we are always looking to learn about our environment and we tout

the benefits of camping and getting back in touch with nature, all too often we do so from the warmth and comfort zone of our meeting place. If we are to be most effective, we need to get ourselves and the girls outside. But what to do? How do we go about it? Well, hopefully, here are some guidelines and some activities that will get you going outside instead of wondering how!

Barb Wilson (Arts

Specialist on the BC Program Committee) recently attended a conference in Ontario, the Super Brownie Program, and enjoyed the "Toadstools and Pixie Dust" session, its focus on just this very topic. Be sure to check out the document on Ontario's website:

<https://www.guidesontario.org/index.php/adult/unit-guides/brownies/26-adult-members/1183-program-super-program-event-resources-for-brownie-guiders>



The BC Program Committee is a busy and rewarding committee to be a part of. We create challenges, produce the FunFinder, provide trainings for Guiders and host Girl Events. We work as a team for many of our activities, but also have individual responsibilities based on our positions.

We are currently looking to fill a number of positions on our team with dedicated Guiders who are passionate about the program.

Please see the last page for more information.

## Establish the "Norm"

1. Either establish a regular date or give notice so girls are prepared to be outside.
2. Make your expectations clear as to what is acceptable wear: i.e. coats, hats and mitts for winter, sunscreen and hat for sunny days, etc.
3. Follow through - a little bit of rain or cold or wind will not hurt the girls and can add to the experience if approached with the right attitude.
4. Plan for success - if you plan an activity involving snow and there is a sudden downpour, have the means to make a rainy day just as fun.



## Simple Hiking Activities

Okay, you've made the plunge and you have got the girls outside your meeting place - now what?

How about some simple "hiking" activities?

Get the girls invested into the hike! Tell them a story about the walk they are to take - if necessary, prep ahead of time to make the walk interesting, with the following ideas...

### Paint Chips

Give paint chip samples to the girls and have them try to find the colour on their card. If the girls are buddying up, after they have found their first match, have the girls exchange their paint chips and find a new match.



### "Pin"terest



Give the girls a clothespin to choose to pin on an object they encounter on their walk that they find interesting. On the way back, tell the girls they must look for clothespins they did not place, getting each girl to unpin one clothespin only. Have the girls who originally pinned tell what they found interesting about that object.

### Pipe Cleaner Woozles

*(Credit to Girl Guides Ontario-Super Brownie Program)*

Give the girls two pipe cleaners - one brightly coloured and the other more "nature" coloured. Have the girls shape each into a unique shape that makes it a "woozle". Then the girls are to leave the woozles in spots along their walk. On their return they are to look for the woozles made by other girls - the coloured ones should be easier to spot and should lead into a discussion of camouflage.

### Experiential Hike

Try an "experiential" hike with the girls - create a list of experiences for the girls to do as they take their walk: hop over cracks, walk a log, skip stones, listen for a bird, count stumps or fences, etc.



### "Out of Place" Walk

Before the walk, place a large number of small items scattered throughout the walk area that are unusual or out of place--a toy Superhero, a fridge magnet, an old TV remote, whatever comes to mind or hand...just tell the girls to look for something that doesn't "fit".

## Walks With Benefits

These walks require a bit more prep work, but the girls will reap the benefits!

Plan walks where at certain stops along the way girls are able to gather specific materials that, as a leader, you know are naturally available in that location or you have placed there in preparation. Examples could be:

### An "Egg"cellent Adventure

Create areas where, as the girls walk along, they are able to find: a piece of egg carton, an eggshell, dirt, grassseed, water, sharpie marker. Girls are able to plant grassseed, give it a bit of water, personalize their egg with a face and their name and take it home to watch the grass "hair" grow.

### "Tweets" for the Birds

As the girls walk they find pinecones, string, lard, honey and birdseed. They end the walk at a stand of trees where they can hang their birdfeeders.

### The "Fairy-est" in the Land

Girls find a piece of cardboard, a peat pot, and spots where the girls can gather leaves, flowers, grasses, twigs, tiny rocks, etc. At the end of the walk girls have scissors and tacky glue and create a fairy house to be left in a small area.



## Nature Nut Scavenger Hunts

Take advantage of the outdoors and go play outside! Send the girls off on a nature scavenger hunt. Following are some scavenger hunt ideas.

Have the girls do a scavenger hunt with different themes:

- ♦ Find something that starts with **each letter of the alphabet**.
- ♦ Find things for each of the **colours in the rainbow** (ROYGBIV): red, orange, yellow, green, blue, indigo,

and violet.

- ♦ Find **different types of plants** in a field of a forest: mosses, ferns, flowers, evergreens, etc.
- ♦ Find things with **different shapes** (e.g. round, triangular, rectangular, twisted, etc.).
- ♦ Find things with **different textures** (e.g. sharp, fuzzy, soft, smooth, rough, prickly, hard, sticky, etc.).
- ♦ Find things using your senses (e.g.. touch, smell, hearing, and sight). Do

not use your sense of taste.

- ♦ Listen for things that make **different sounds** (e.g. leaves rustling, water running in a stream, birds chirping, etc.).
- ♦ Find things in a particular location (e.g. in the forest, at the beach, etc.).

As an alternative, do a **PHOTO Nature Scavenger Hunt** instead. Have the girls take a picture of the items on their list.

## Five "Sense"-ible Scenarios

Have the girls name off on one hand the five senses they should be using to experience the outdoors - sight, sound, taste, touch and smell. Talk about when it is appropriate to use some of these senses and when it would not i.e. berries that may be poisonous should not be tasted...

Talk about which animals rely most on one of the senses and play a game or try something new:

### Sight



Give the girls a plain wooden clothespin and ask them to pin it to a spot where they are outside. Have the other girls point out the pegs. Now have the girls colour the peg with felts or sharpies, trying to hide the peg in plain sight. Discuss how animals will do this, such as snowshoe hares or leaf bugs.

### Sound/Hearing

The Bat and Moth game in the



Eco Pak (page 6) courtesy of CPAWS is an easy one - all that is needed is a blindfold and two shakers. The one player who becomes a bat is blindfolded, the moth player is not. Both are given shakers and when the bat shakes, the moth must respond. The rest of the group forms a protective ring around the two players and will gently redirect the bat into the middle of the circle if they stray too much away from the circle. Players switch when the bat catches the moth. This game reinforces how bats use echolocation to find their food instead of sight.

### Taste

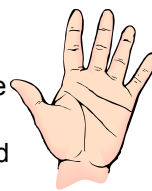


We don't recommend trying strange items but... in winter, sprinkle some Jello powder or maple syrup over fresh, clean snow and hand the girls a spoon...or steep some pine or cedar needles in hot water, add a little sugar and have the girls try "wild tea". Just be sure to explain to girls that they

must always know exactly what they are putting into their mouths.

### Touch/Feel

Have the girls find a stone or rock or something similar. Tell them to spend a bit of time using just their sense of touch to get to know the rock - have them close their eyes. Then put all the rocks into a bag and see if the girls can pick their rock out by touch. Not so easy, but the girls will have fun trying!



### Smell

Soak cotton balls in essential oils such as vanilla, orange, mint and rose. Place the cotton balls in various locations, with an object hidden near one of the smells, and let the girls know which scent they must hunt out in order to find the hidden object. See how well they do.



## Mosquito, Salmon, Bear Game

### Supplies

- something that can be used as boundary markers such as branches, bandanas, backpacks, ropes, etc.

### Directions

1. Arrange the girls into two teams.
2. Establish a safety area behind a marked line for each team. The two safety lines should be parallel, and a fair distance apart, to allow for running.
3. Each team huddles up to decide if they want to be a bear, a salmon, or a mosquito.
4. Each team then comes up to face the other in two parallel lines close to the center.
5. On the count of three, each team then holds their stance of what they chose:  
**Bears** put their arms up and growl

**Salmon** put their hands together and mimic swimming

**Mosquitos** point their index finger from their nose and buzz.

6. If both teams chose the same, they start over.
7. If one team chooses a creature that would eat the other, that team then chases the other back to their safety area.
8. If someone gets tagged before making it back to safety, they leave their team and join the other.

Practice the stance of each creature so that everyone can do it the same and recognize the other team's stance.

- Bear eats salmon
- Salmon eats mosquito
- Mosquito eats bear

## Nature Bingo!

Create nature Bingo cards for the girls. You could have stickers for the girls to place on their Bingo cards, or use pebbles, dry beans, etc. Randomly call out items shown on the cards. The first girl to get a complete row (either diagonally, vertically, or horizontally) wins.

You can find premade Bingo cards online, or create your own. <https://www.google.ca/search?q=nature+bingo&tbm=isch>





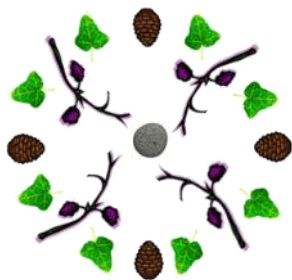
## Nature's Kaleidoscope

### Supplies

- ♦ any small nature objects you find (pinecones, pebbles, leaves, blades of grass, small sticks, acorns, berries, etc.)
- ♦ area of ground that you can draw a circle in the soil (or on a piece of paper, section of sidewalk & sidewalk chalk etc.)
- ♦ camera
- ♦ bag to collect nature items

### Directions

1. Explain ahead of time that you're going to make a symmetrical art piece and that you need to collect items in groups of 4 or more - e.g. 4 small leaves, 4 small twigs, etc.
2. Go for a walk to gather your nature items. When you get to a place in the trail where you're going to stop for a while, find a flat place on the ground and, using a twig, draw a circle about 18" in diameter. Each girl can draw her own, or the girls can work in small groups of two or three.
3. Start with one type of item at a time, e.g. the small sticks. Lay them out inside the circle in a nice pattern. Add a 2<sup>nd</sup> group of items to the pattern (e.g. the pebbles). Keep going until you've created a pattern using as many of the items you've collected as you want.
4. If working in groups, have each girl choose one group of items. She has total control of how that group of items is laid out within the circle.
5. When you're done, take a picture of your Nature Kaleidoscope pattern.



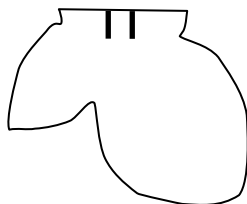
## Nature Hike Butterfly Puppet

### Supplies

- ♦ cardstock
- ♦ contact paper
- ♦ glue
- ♦ scissors
- ♦ Ziploc bag
- ♦ collection of nature items from hike (flowers, leaves, twigs, etc.)

### Directions

1. Go on a nature hike. Along the way, collect small nature items. Remember that butterflies are symmetrical, so you will need the same items for one side as you will for the other.
2. When you return, take a piece of cardstock, fold it in half and cut out half a butterfly along the fold.



3. Open the butterfly shape and trace it onto a piece of contact

paper.

4. Glue the contact paper sticky side up onto the cardstock (do not remove the protective paper at this point).
5. Fold the butterfly in half and cut along the two lines, but don't cut it off. This creates a finger hold for your puppet.
6. Now that you have the base of your butterfly, you are ready to decorate it. Lay it on the table in front of you and remove the contact paper.
7. Start with 2 larger size leaves for the top wings, then 2 smaller size leaves for the bottom wings.
8. Add flowers, feathers, twigs etc. to decorate your butterfly.
9. Place your finger through the cuts in the back and move your hand to flutter your butterfly around.



## Nature Spider Web

Did you know that spiders use their webs to catch their food? In this activity you are going to make a spider web that will display some of the pretty things that you caught on your nature walk.

### Supplies

- ♦ twine
- ♦ nature items gathered from your walk



### Directions

1. While you are walking, you will need to gather a few things:
  - ♦ a minimum of 3 sticks that are 8" or longer
  - ♦ fun or pretty things that you can tie or weave into your web, e.g. feathers, smaller twigs, blades

of grass, odd shaped pebbles (these will be harder to add to your web, but if odd shaped can be tied on) etc.

2. You now have all the supplies that you will need to make your nature spider web. First, lash the 3 sticks together at the middle making sure to spread them out evenly.
3. Once you've tied them in the middle, wrap your string once around one stick, then once around the stick next to it, then once around the stick next to it etc. until you get back to the stick you started on. Move up about 1/2" to 3/4" up the stick and wrap the around the stick, then the next one etc.
4. You can start tying in your nature objects any time you like.

# Woodland Map Treasure Hunt

## Supplies

- ♦ modeling clay
- ♦ foil tray
- ♦ "pirate" coins (from the dollar store) or some other "treasure"
- ♦ sticks, small pebbles, moss, leaves, etc.



## Directions

1. Split the girls into teams. Each team is assigned a small outdoor area about the size of a gym. It should have identifying features like trees, large rocks, etc. in it.
2. Each team hides their "treasure" somewhere in their outdoor area.
3. Each team makes a miniature three-dimensional map of their

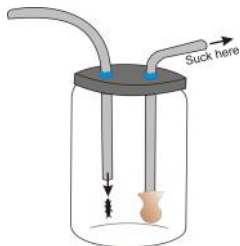
assigned area on the tray. They can use twigs & leaves or needles to represent trees, twigs to represent logs, pebbles to represent large rocks etc. Secure everything well with modeling clay. Don't forget to mark where you've hidden the treasure!

4. Now trade maps with someone else and go in search of where they've hidden their treasure.

## Homemade Pooter

What is a pooter?

A pooter is a container used to collect small insects for observation.



## Supplies

- ♦ clean jar with lid (preferably glass)
- ♦ 2 pieces of plastic tubing  $\frac{3}{8}$ " to  $\frac{1}{2}$ " in diameter
- ♦ the first piece equals the height of the jar plus about 3-4"
- ♦ the second piece equals the height of the jar plus 10-12"
- ♦ gauze or very fine tulle
- ♦ duct tape
- ♦ blue tack (poster putty)
- ♦ drill (for adult use only)

## Directions

1. Drill 2 holes in the lid of the jar,

big enough to feed the plastic tubing through.

2. Slide a piece of tubing into each hole, making sure that each is approximately an inch off the bottom of the jar.
3. On the inside end of the short piece, wrap a small piece of gauze or tulle and secure with duct tape. You want this to be very tight so that you don't accidentally end up swallowing any bugs!
4. Use the blue tack to make sure that the drilled holes around the tubing are tightly sealed.
5. Now, take your pooter out on a walk with you. To catch insects, simply put the end of the long tube close to the insect and suck on the short end. The insect will travel through the tube and into your jar. Have fun watching the insects, but remember to release them when you're done.

## Acorn Hat Craft

### Supplies

- ♦ glue
- ♦ scissors
- ♦ safety pin
- ♦ fun foam: tan & brown
- ♦ googly eyes
- ♦ black marker



Photo by Van Chau

### Directions

1. Use a pair of scissors to cut out the body of the acorn with tan fun foam.
2. Cut out the top of the acorn using brown fun foam. Use a marker to draw some X's to add a textured appearance to the cap.
3. Use glue to attach the top of the acorn to the body of the acorn.
4. Glue googly eyes onto the acorn and add a smile using a black marker.
5. Add a safety pin and attach it to a camp hat.

## Habitat Pile

Have you ever wondered about how you can help small animals? Try making a habitat pile!

This is a pile of logs, sticks, and leaves that will help animals either build shelters or give them a place to live. Find a cool and protected area to build your pile. As the logs rot, you will find all kinds of insect life in them, and possibly some small reptiles, like frogs. If you move logs to look, make sure that you replace them when you're done. As the area rots away, you can add to your pile.

## Leaf Rubbings

### Supplies

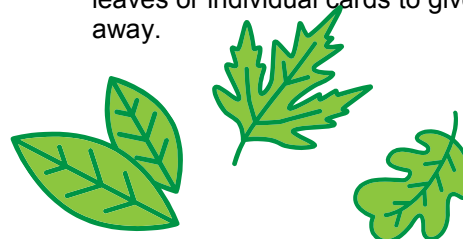
- ♦ leaves
- ♦ crayons
- ♦ notebook
- ♦ plain paper



### Directions

1. Collect leaves that have fallen from the trees.
2. Place a leaf, with the veins facing up, on a notebook.
3. Take a plain piece of paper and place it over the leaf.

4. Use a crayon on its side to colour over the leaf so that its markings show on the paper.
5. Repeat steps 2 to 4 with other leaves and different coloured crayons.
6. Make a collage with the different leaves or individual cards to give away.



## Pinecone Owls

### Supplies

- ♦ pinecones
- ♦ pistachio nut shells
- ♦ maple tree seeds
- ♦ other nut shells
- ♦ feathers or felt
- ♦ wiggly eyes
- ♦ white glue



### Directions

Use your imagination to create owls by gluing the supplies to the pinecone.



## Bird Nest Hat Craft



Going bird watching is a fun thing to do with your unit.

You might be lucky if you come across a bird's nest with eggs in it. Do not disturb the nest, but just observe from a distance. Make a craft to remind you of how pretty the eggs look in the nest.

### Supplies

- ♦ safety pin
- ♦ copper wire
- ♦ pearls or blue beads of different sizes



### Directions

1. Twist the copper wire to form some circles.
2. Add some pearl beads (white birds' eggs) or blue beads (robins' eggs) into the wire and then twist some more. Make sure the beads are in the middle of the wires so that appear to be in a bird's nest.
3. Add a safety pin and attach it to a camp hat.

## Branch Weaving

### Supplies

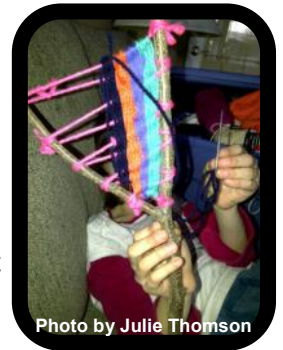
- ♦ forked branches
- ♦ yarn
- ♦ darning needles

### Directions

1. Tie your yarn onto the branch at the base of the "V".
2. Make the weaving base by twisting the yarn across the "V", back and forth, going around each branch twice to ensure it

won't slip. Make sure to leave gaps to weave between!

3. Tie your yarn on at the base of the "V".
4. Weave in and out of the yarn stretched on the branch, up and down, as shown.



## Trail Signs Hat Craft

You can use trail signs to play a game in a large field. Use big sticks or tree branches and some rocks. Have a start place and then a final destination in mind. Lay the trail signs outside in an open field and see if the girls can find their way. To remind the girls of the fun they had with the trail signs, make a trail sign hat craft.

### Supplies

- ♦ pebbles
- ♦ safety pin
- ♦ small plastic bag
- ♦ toothpicks or small twigs
- ♦ print out of some diagrams of trails signs (images can be found on the internet: <https://www.google.ca/#q=trail+signs&safe=active&tbn=isch>)

### Directions

1. Search the internet for some images or diagrams of some trail signs.
2. Copy and paste the image onto a small piece of cardstock so that it can fit inside the small plastic bag.
3. Place the trail sign card, some pebbles, and some toothpicks or small twigs into a small plastic bag. Seal the bag closed.
4. Add a safety pin to the corner of the plastic bag and attach to a camp hat.



## Pressed Flower Cards

### Supplies

- ♦ glue
- ♦ scrap paper
- ♦ flowers from the garden or open field



### Directions

1. Pick some flowers from your garden or use wildflowers (make sure you have permission!).
2. Use paper and heavy books to press the flowers. Place the flowers between plain pieces of paper and then stack the heavy books on top of the flowers. Allow the flowers to press for a week.





# ECO PAK CHALLENGE INSTANT MEETINGS

The Eco Pak challenge was launched in 2006 to BC Girl Guide members in the form of an Eco Pak backpack and a resource booklet. If your district doesn't have one, or it is incomplete, no need to worry! **You can complete the challenge without the backpack.** Download the full challenge, with all activity instructions included, from the BC Girl Guides website. <http://bc-girlguides.org> select Program > Challenges & Activities >

Provincial Challenges.

The Eco Pak challenge allows girls and Guiders of all branches in Guiding to engage in hands on interactive activities to help them learn about the environment. It is divided into four categories with the challenge requiring a specific number of activities to be completed from each category.

For Guides and Pathfinders we

suggest that the two meetings be spaced about a month apart so the girls can bring in their composters to show what has happened with them.

Remember that these are only suggested activities, and all activities can be adapted to ages, space, location and available resources.



## Meeting Plans for Your First Eco Pak Meeting

### Sparks

- 5-10m: Gathering: Hidden Picture Colouring
- 5m: Opening
- 5m: Opening Introduction
- 5-10m: Shrinking Island Game
- 20-30m: Round Robin – Outside
- 10-15m: Forest Squares
- 10-15m: Eco Bingo Hunt
- 5m: Closing



*60 minute meeting. Approximate activity times shown.*

### Guides & Pathfinders

- 10m: Gathering: Eco Word Search
- 5-10m: Opening
- 5m: Opening Introduction
- 5m: Groundwater Pollution Experiment
- 5-10m: Lap Sit
- 10-15m: Weird Web
- 10m: The Great Cookie Extraction
- 45m: Round Robin
- 15m: Oil Spill Cleanup
- 15m: Elements Game & Pollution Dilution
- 15m: Pop Bottle Composter
- 10m: Sound Mapping
- 5m: Closing



*120 minute meeting. Approximate activity times shown.*

### Brownies

- 5-10m: Gathering: Hidden Picture Colouring
- 5m: Opening
- 5m: Opening Introduction
- 5-10m: Shrinking Island Game
- 10-15m: Weird Web
- 10m: The Great Cookie Extraction
- 20-30m: Round Robin – Outside
- 10-15m: Forest Squares
- 10-15m: Eco Bingo Hunt
- 5m: Closing



*90 minute meeting. Approximate activity times shown.*

## Opening Introduction: What is an Ecosystem?

An ecosystem is all living plants, animals and organisms in a specified area, the way they interact with each other and the environment around them. In an ecosystem, everything has its own role.

For example, a tree is part of an ecosystem. It depends on non-living things like water, sunlight, and weather to live and grow. In turn, there are all kinds of living things that depend on the tree to live and grow. When anything unfamiliar happens to this ecosystem, such as a new animal, a change in temperature, etc., it can throw it out of balance. This can cause change to the ecosystem that can sometimes be harmful to the dependants of the system, or even entirely destroy it.

With that in mind, we need to remember that everything we do, every piece of garbage we throw out, every toxic chemical we use, etc. affects the ecosystem around us.

## Hidden Picture Colouring

For Sparks and Brownies, a hidden picture colouring sheet is an appropriate gathering activity, and can be applied to the **Fun & Games** section of the challenge.

You can find hidden picture puzzles on the Highlights for Kids website at <http://www.highlightskids.com/hidden-pictures/>.

One suggested hidden picture puzzle for the Eco Pak theme is Springtime Jamboree [http://www.highlightskids.com/media/kids/highlightskids/engines/hidden-pictures-interactive/pdfs/HL\\_hp\\_05516\\_BW.pdf](http://www.highlightskids.com/media/kids/highlightskids/engines/hidden-pictures-interactive/pdfs/HL_hp_05516_BW.pdf)

## Eco Word Search

E	D	E	S	Z	N	R	E	U	S	E	E	S	O	V
T	N	I	C	E	L	E	C	T	R	I	C	I	T	Y
T	G	V	E	U	L	J	L	K	P	M	O	K	B	B
W	R	R	I	C	D	L	R	O	J	G	C	D	T	S
C	G	O	Y	R	I	E	L	B	A	W	E	N	E	R
O	L	C	P	F	O	L	R	R	A	H	N	E	C	G
B	E	I	D	S	U	N	B	F	T	T	T	V	O	N
R	H	N	M	T	N	A	M	S	F	R	R	R	M	I
K	A	U	I	A	G	A	Y	E	Y	A	E	E	P	T
L	H	O	V	E	T	L	R	H	N	E	E	S	O	A
E	N	E	R	G	Y	E	O	T	T	T	S	N	S	E
W	I	L	D	L	I	F	E	B	R	L	H	O	T	H
P	C	P	M	T	A	T	I	B	A	H	A	C	M	I
R	E	T	T	I	L	L	S	Z	X	L	B	E	D	Z
W	A	T	E	R	E	L	S	E	T	S	A	W	H	H

CLIMATE	COMPOST
CONSERVE	EARTH
ECOCENTRE	ELECTRICITY
ENERGY	ENVIRONMENT
GARBAGE	GLOBAL
GREEN	HABITAT
HEALTHY	HEATING
LANDFILL	LITTER
POLLUTION	RECYCLE
REDUCE	RENEWABLE
REUSE	TRANSPORT
TREES	WASTE
WATER	WILDLIFE

Created by Puzzlemaker at  
DiscoveryEducation.com

Fulfills part of the Fun & Games  
section of the Eco Pak challenge.

## Groundwater Pollution Experiment

*Hands On Learning.*  
*Eco Pak Challenge, page 29.*

The purpose of this experiment is to help the girls understand how pollution gets into food through water contamination.

### Supplies

- 3 glasses to hold water and celery
- water
- 3 celery stalks with leaves
- food colouring (red & blue)
- knife

### Directions

1. Fill all three glasses of water about  $\frac{3}{4}$  full.
2. When you do this experiment, place the emphasis on the concept of groundwater and the effects of pollution. Pretend the food colouring is a form of pollution - add about four drops of blue food colouring to the water in one glass and about four drops of

red food colouring to the water in the second glass; do not add anything to the water in the third glass. Watch the food colouring swirl and take over the water.

3. Cut the celery stalks about 1 inch from the base of the stalk and then place one into each of the three glasses. Pretend that they are little plants, trees or even people who drink water from the ground.
4. Put the glasses aside, and at the end of your meeting, observe the celery. You may need to break off part of the stem to see changes in the veins of the celery. You should be able to see how the "polluted" water has moved up the stalk.
5. Discuss with the girls how pollution in the water affects us all, and how it can be absorbed into our food.



## Sound Mapping

*Taking it Outside.*  
*Eco Pak Challenge, page 34.*

### Supplies

- ♦ paper and pencil

### Directions

1. Each girl finds an area outside where they are at least 5 feet away from anyone else.
2. They sit quietly and listen to the sounds going on around them. In the middle of the paper, they draw something to represent themselves.
3. As they listen, they draw representations of the sounds they hear and the distance in relationship to themselves.
4. At the end of the allotted time, ask them to share their drawings and what they heard, then have them compare it to what others heard.





# Shrinking Island Game

*Fun & Games.*

*Eco Pak Challenge, page 8.*

## Supplies

- sheets of newspaper or skipping ropes
- music

## Directions

1. Place sheets of newspapers around the room to create "islands". You can also create islands by forming skipping ropes into circles on the ground. If there are enough supplies, try to create one island per girl.
2. The girls are going to represent animals that live on different islands.
3. When the music plays, the girls have to pretend to look for food and water – away from their islands. They will continue to do this as long as the music is playing.
4. When the music stops, the girls

have to quickly find safety and shelter on an island. This is to represent the animals seeking safety from their predators or harsh weather conditions.

5. Everyone must get on an island. If there are no islands available, then the girls must make room for other girls to share. If any of a girl's body part is outside the island, then she has "not survived". Encourage the girls to help each stay alive and fit on an island.
6. As the game continues, an island is removed during each round. This is to represent urbanization (e.g. cities) and human developments, where humans have taken over wildlife habitats. The game ends when there are only one or two islands left and all the girls are forced to squish together so that everyone fits. Stop the game when it is no longer possible to fit everyone on the remaining islands.

## Eco-Message

The girls can learn about the importance of habitat and how a decrease in space for organisms to live can lead to limited resources like food, water, and shelter due to competition amongst the organisms in that community. Brainstorm with the girls and come up with ways in which a habitat can be changed. They will realize that both natural disasters (e.g. acid rain, greenhouse effect, global warming, climate change, forest fires, volcanic eruptions) and human activities (e.g. road construction, building of new homes and golf courses, expansion of farmland, deforestation, pollution) have negative impacts on the environment.



# Lap Sit

*Fun & Games.*

*Eco Pak Challenge, page 5.*

## Directions

1. Have the girls stand in a circle with their shoulders touching. Everyone should be facing the center of the circle.
2. Go around the circle and number the girls off 1 to 4. Ones represent "food", twos represent "water", threes represent "shelter", and fours represent "space". The entire circle represents a good habitat.
3. Ask everyone to turn to their right so that each girl is now facing the back of the girl standing in front of her.
4. Have everyone place their hands on the shoulders of the girl standing in front of them.
5. On the count of three, have

everyone put their legs together and then sit down slowly until they are sitting on the lap of the girl behind them. The girl behind them acts as a chair for the girl in front. It is important that everyone does this at the same time! If this works, then you will have a good habitat and it will not collapse.

6. Next, make up a scenario where one of the components of the habitat is removed. For example, remove all the girls who are the "shelter" from the circle to represent deforestation, or the cutting down of all the trees in the forest. Have the girls remaining attempt to

sit down in their circle, without moving, to fill in the spaces left by the girls who were removed. You will see that the habitat has fallen apart. Reinforce the concept that without shelter, organisms have no place to keep warm and stay safe.

## Eco-Message

The purpose of this game is to teach the concepts of a habitat, a place where an organism lives, and its four components (food, water, shelter, and space). The girls should realize that organisms depend on these four essential components and the removal of any one of these components would have a huge impact on the ecosystem. Have the girls list some examples of the four components. Explain that without these four components, survival is not possible.



## Forest Squares

### *Taking it Outside.*

This is a very simple activity that allows you to compare the differences between two environments.

### Supplies

- ♦ a piece of string about 4 meters long for each girl
- ♦ pencil and paper

### Directions

1. Take the girls out into a wooded area, a field, bog or meadow. Lay down the string so that it forms a square. With a pad and pencil, draw or write all the different kinds of plants and bugs that you find in the square. Count how many of the same thing there are, e.g. how many of the same plant, how many of the same bug, etc.
2. Now, pick up the string and move about 20 steps away and once again, lay down your string in a square. Do the same thing and identify all the plants and bugs in the square. Add them up the same as you did for the first square.
3. Now compare what you found in the first square to what you found in the second square. Were there more of one plant in one of the squares? Were there more of bugs? Do you see any reason why that would be the case?

## Oil Spill Clean-up

### *Hands On Learning.*

In BC, we are very aware of how much damage oil spills can do to our environment, but to actually understand it, we can try to recreate an oil spill and experiment with different ways to clean it up.

### Supplies

- ♦ a large cookie sheet
- ♦ water
- ♦ oil – any kind will work, but it will show up better if you use dirty oil (car oil works well)
- ♦ small rocks and sand

## The Great Cookie Extraction

### *Hands On Learning.*

*Eco Pak Challenge, page 22.*

The goal of this challenge is to “mine” chocolate chips from cookies to better understand what happens to the environment when we mine for fossil fuels like coal.

### Supplies

- ♦ chocolate chip cookies
- ♦ toothpicks
- ♦ paper towel

### Directions

1. Hand out one chocolate chip cookie to each pair of girls.
2. Ask the girls to guess how many chocolate chips there are in each cookie.
3. Give the girls a set amount of time to try to get as many chocolate chips out of the cookie using their hands and the toothpicks provided. Place the extracted chocolate chips on a piece of paper towel.
4. Once the time is up, ask the girls to count the number of chocolate chips on the paper towel.
5. Ask the girls to take note of the condition of the cookie after they have taken out all the chocolate chips. Has the cookie crumbled? Is it still intact? Most of the girls

should notice that all that is left are crumbs. Ask the girls if they can put the cookie back to the way it was.

6. Have a discussion about how mining different resources (e.g. coal, fossil fuels) can have a negative impact on the environment.
7. Repeat this activity with another chocolate chip cookie. Ask the girls to carefully take out as many chocolate chips as possible without causing a lot of damage to the cookie. After 4 minutes, discuss the results. Compare the number of chocolate chips extracted and the condition of the cookie this time to the previous time.

### Eco-Message

Consider the pros and cons of mining for natural resources. What are the effects of trying to extracting things (e.g. drilling for oil, mining for coal, etc.)? Is the environment harmed when humans are trying to obtain these natural resources?

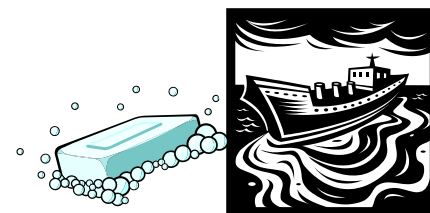


- ♦ small pieces of wood, grass, and feathers
- ♦ a small handheld fan
- ♦ An assortment of cleaning supplies: e.g. sand, kitty litter, string, Dawn dish soap, laundry degreaser, newspapers, j-cloths, etc.

### Directions

1. Create a beach scene in the cookie sheet using the rocks, sand wood and grass
2. Add water to the tray so it is about 2/3 full, then drop some feathers (ducks and seagulls) into the water.
3. Carefully pour some oil onto the water

4. Using your fan at one end of the tray, direct it so the oil moves towards the shore, then turn it off.
5. Use different items to find out what cleans up the oil the best
6. Record your observations.
7. At the end, talk about what happened. What cleaned up the spill the best? Were you able to contain the spill? Explain that even if it looks like you've cleaned it up, there is still oil in the water.



# Eco Bingo Hunt



Before heading out, have a discussion with the girls about what contaminates the earth, e.g. car exhaust, litter, etc.

Go on a walk and have the girls cross off everything that they see on the list. A line of 5 gets a Bingo. When a girl gets a Bingo, have her say which of the squares she's crossed off are good for the environment and which are bad for it and why.

*Fulfills part of the Taking it Outside section of the Eco Pak challenge.*



## Weird Web

*Hands On Learning.*

*Eco Pak Challenge, page 17.*

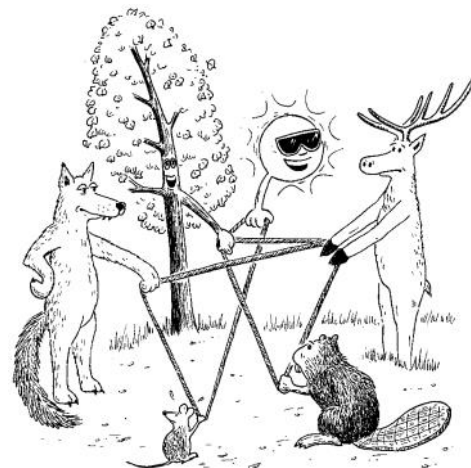
Canadian Parks and Wilderness Society (CPAWS) has given BC Girl Guides permission to use this educational content from their Southern Alberta's Education Resources for the Eco Pak Challenge. Please visit their website at [http://cpaws-southernalberta.org/upload/5min\\_Fieldtrips.pdf](http://cpaws-southernalberta.org/upload/5min_Fieldtrips.pdf) to access the original content.

### Supplies

- ♦ signs from **Who am I?** activity, included in Appendix D of the Eco Pak challenge.
- ♦ two balls of at least 100 m of twine or very thin rope

### Directions

1. Instruct students to stand or sit in a circle, showing their **Who Am I?** signs. You should also be part of the circle. Tell students that you will be playing the role of the sun, the ultimate source of life for all things (as befits your role as teacher!). Pass the ball of string to the tree, and say "I am passing the ball to the tree, because it needs me to survive. I give energy to the tree."
2. Tell students that they can pass the ball to another ecosystem element in the circle **only if it needs you in order to survive, or if you need it in order to survive**". For example, the squirrel could pass the ball to the tree (which it needs to survive) or to the owl (which needs it to survive).
3. Make sure that each exchange is justified by each student as they pass the ball, and that the whole group understands and agrees with the rationale that is given. Challenge students to establish connections with everyone in the circle, so that no organisms are left out. (Note: you might find it useful to have students rehearse this by having them point to ecosystem elements they need to survive – or that need them to survive - before the ball of string is passed).
4. When every organism is connected, have students pull gently to make the string taut. Ask students to examine the pattern they have created. Tell them that this pattern represents the very complex pattern of interconnections between organisms that occurs in a natural ecosystem. For this reason, interrelationships within an ecosystem are sometimes referred to as the **'web of life'**. Ask students if the web they created is more simple or more complex than the web of life that actually exists in their schoolyard or in a park; students should realize that things in nature are far more complex than the simple web they have created.
5. Tell students that something has just happened to change this ecosystem: a new community is being built nearby, and an area of the forest will need to be logged to provide the space. Keeping the string taut, ask the "tree" student(s) to suddenly release the string when you count to three. After the string is released, immediately ask if anyone felt the tension in the string change when the tree dropped out (several, including the squirrel, should say yes). Ask those affected by the loss of the tree to say how they are affected.
6. Count to three again, and ask these "affected" students to in turn drop the string. Keep going until everyone has dropped the string. Have students drop the string in front of them so they can pick it up again for the next round. Students should come to realize that any change to an ecosystem - whether slight or profound - is felt throughout the system. Tell students the golden rule of ecology: **In an ecosystem, you can never do just one thing.**  
*Easy Option:* Rather than have students drop their strings, ask them to gently tug on the string. Those feeling the tug can tug in turn, and so on. This eliminates the need to pick up the dropped string.



### Eco-Message

The girls should understand how different organisms are interconnected in a food web. The Sun is the source of energy for all life. The energy from the Sun is captured by plants, which are then eaten by plant-eating animals (herbivores). These animals are then eaten by carnivores. Discuss the pattern that is created by the string as it is passed from one person to the next.

*See the Eco Pak challenge for instructions on playing the game with changes to the ecosystem.*

## Elements Game

*Fun & Games.*

### Supplies

- ♦ ball

### Directions

1. Get the girls to stand in a circle. Select one to be the caller and stand in the centre of the circle with the ball.
2. She calls out one of the words: Earth, Wind, Water or Air, then throws the ball to a girl in the circle.
3. The person catching the ball has to name something that lives in the element. If Fire is called, the girl says nothing since nothing can live in fire. She just passes the ball back to the centre of the circle as quickly as possible.
4. No repeats are allowed.

# Pop Bottle Composter

## Hands On Learning.

This activity helps us to understand the process of decomposition and how things that are regarded as waste can be turned into valuable nutrients for the soil

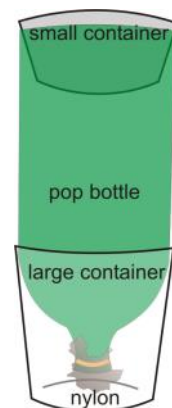
## Supplies

- ♦ 2 litre plastic pop bottle
- ♦ an elastic band
- ♦ an old nylon
- ♦ scissors
- ♦ a mixture of “green” materials such as grass, fruit, vegetable scraps, and “brown materials” such as newspaper, dried leaves etc.
- ♦ soil
- ♦ scale
- ♦ a 750g and a 250g cottage cheese or yogurt containers

## Directions

1. Place the nylon over the spout of the pop bottle and secure tightly with the elastic band.
2. Turn the bottle upside down in the larger cottage cheese container. There should be room for it to drain.
3. Cut the bottom of the bottle off at the ridge.
4. Now place the smaller container so it sits inside the pop bottle. It will act as a lid.
5. Using your composter
6. Make a list of what you are composting, including the soil. Weigh it and record the weight.
7. With the lid removed, start with some soil in the bottom of your composter (pop bottle). Pack green and brown material into the bottle in alternating layers,

8. making sure that the brown material has been broken apart into smaller pieces.
8. Add more soil and sprinkle with water. Cover with the lid.
9. After a week, stir the compost. Do this every week for a month or until the green and brown materials have broken down.
10. Weigh the finished compost.
11. This gives the girls a first hand look at how plant and certain recyclables break down and turn into something that benefits the environment instead of polluting it. Talk about how composting can help reduce what we put into our landfills.



# Pollution Dilution

## Hands On Learning.

## Eco Pak Challenge, page 23.

This is a quick demonstration about the consequences of polluting water, and how long it takes to remove the pollution from it.

*Adapted from an activity in “World of Fresh Water” by the United States Environmental Protection Agency, 1997.*

## Supplies

- ♦ 2 clear jars
- ♦ green food colouring
- ♦ large clear bowl
- ♦ water

## Directions

1. Add some water to one clear jar (“polluted jar”). The water will represent water in a lake.
2. Add 2-3 drops of green food colouring to one jar. The food colouring will represent pollutant in the lake.
3. Explain to the girls that rainwater will dilute the pollutant found in the lake so that the water in the lake will eventually be clean again. The rainwater is the new

water and this water will gradually replace the water that is already in the lake. Ask the girls how long they think it would take for this to happen? For small lakes it will take about 10 years and for bigger lakes it will take over 200 years.

4. Explain to the girls that renewal time refers to the amount of time it takes for “new” water to replace all of the existing lake water.
5. To demonstrate renewal time in this activity, add water to the second clear jar (“clean water jar”). The water in the second jar will represent new water (e.g. rainwater, groundwater, and water from runoff from surrounding areas, etc).
6. Hold the “polluted jar” over a large bowl. Carefully pour the water from the “clean water jar” into the “polluted jar”, making sure that all the water that flows out will end up in the large bowl. The girls should see that the “pollutant” is slowly being flushed out of the “lake”.
7. Ask the girls if they can see the green food colouring (pollutant) in the lake. If they can still see the green food colouring, then do

- another renewal cycle. Pour another jar-full of clean water into the polluted water jar to flush out the food colouring. It will probably take 3 to 4 times before the girls will no longer see the pollutant.
8. Have the girls examine the water in the bowl. Ask them if the pollutant has been removed from the water? Is it still there? The girls will realize that the pollutant has not been removed, but just displaced into another location (e.g. moved from one lake to another lake). Ask them if they have actually fixed the problem.

## Eco-Message

It is difficult to fix a water pollution problem. Dilution is sometimes used as a solution for pollution, but it takes a long time. This activity gets the girls to consider two concerns related to cleaning the lake of pollutants: 1. Where does the polluted water from a lake go? Does it move into a river or to another lake? 2. Have all the pollutants been flushed from the lake so that the lake water is now considered to be “renewed”?

# Meeting Plans for Your Second Eco Pak Meeting

## Sparks

5-10m: Gathering: Food Chain Colouring Sheet  
 5m: Opening  
 5m: Opening Discussion  
 5-10m: Food Chain Story  
 10m: Food Chain Tag  
 20m: Mini Ecosystem  
 5m: Closing



60 minute meeting. Approximate activity times shown.

## Brownies

5-10m: Gathering: Food Chain Colouring Sheet  
 5m: Opening  
 5m: Opening Discussion  
 5-10m: Food Chain Story  
 10m: Food Chain Tag  
 20m: Mini Eco System  
 15-20m: Nature Campfire  
 5m: Closing



90 minute meeting. Approximate activity times shown.

## Don't forget!

To complete the Eco Pak Challenge there are two instant meetings plus service.



## Guides & Pathfinders

Note: the week prior to this meeting remind the Guides and Pathfinders to bring their composters with them to the next meeting.

10m: Gathering: Cryptogram Puzzle  
 5-10m: Opening  
 5m: Opening Discussion  
 10-15m: Food Chain Relay  
 10m: Taster's Choice  
 10m: Nature Observation Kim's Game  
 10-15m: Texture Rubbings  
 15-20m: Nature Trust Walk  
 15-20m: Nature Campfire  
 5-10m: Closing

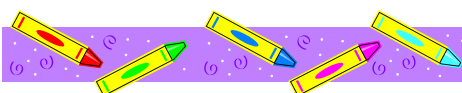


120 minute meeting. Approximate activity times shown.

## Food Chain Colouring Sheet

### Fun & Games.

Find a colouring sheet online for the girls to visually see a food chain or food web. <https://www.google.ca/#q=food+chain+coloring&tbm=isch>



## Opening Discussion

Ask the girls what they know about food chains and ecosystems. Tell them that today they're going to learn about both of these things so that they have a better understanding of how what they do affects all life around them.

With Guides and Pathfinders, take a look at their composters to see what has happened with them. Talk about decomposition being an important part of the food chain.

## Cryptogram Puzzle

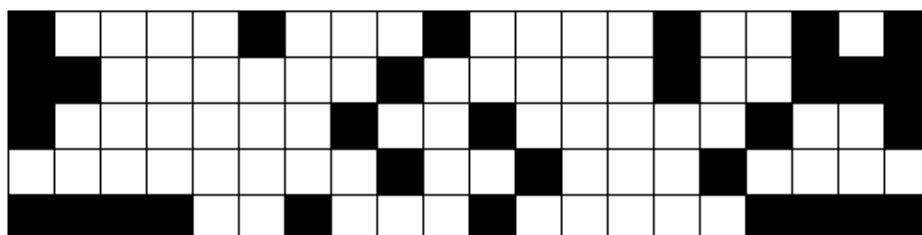
### Fun & Games.

Note: you can create your own puzzle at [www.discoveryeducation.com/free-puzzlemaker/](http://www.discoveryeducation.com/free-puzzlemaker/)

Solve this Fallen Phrases puzzle to read a quote about nature by John Muir.

A fallen phrase puzzle is a puzzle where all the letters have fallen to the bottom. Somehow, all the letters got mixed up on their way down, but they are still in the same column. If there is only one letter in a column, place it in the one box above it first. Next, look for any two-letter words, and see if you can figure out what word it could be using the letters in the columns below it. As you use each letter, cross it off in the columns below, so you know what letters are left. Finally, use trial and error to figure out the rest of the puzzle.

Solution can be found on the back page of the Funfinder!



N N N  
 H A C R O T E U O G D  
 N T T U H L N H E O W T S L S T A  
 W A I O G E D H T T F G R D A N E T  
 A T S E N F E E E T H I I H E I R I S T



# Food Chain Tag

## Fun & Games.

Adapted from the Great Canadian Shoreline Cleanup Curriculum Guide.

### Supplies

- ♦ poker chips, bingo tokens, popsicle sticks, etc. – 5 times as many tokens as there are players (i.e. for a group of 20 girls, have 100 tokens)
- ♦ for older girls: small stickers to fit on the food tokens – one per girl (i.e. 20 girls = 20 stickers)
- ♦ strips of fabric in 3 different colours, long enough to tie around a girl's arm: 60% of one colour (i.e. green), 30% of a second colour (i.e. yellow), and 10% of a third colour (i.e. red). In a group of 20 girls, 12 would have green, 6 would have yellow and 2 would have red.

### Directions

1. Explain to the girls that they are going to play a game to represent a simple food chain. The tokens represent food. Scatter the tokens throughout the playing area.
2. Most of the girls will be herbivores, who eat plants. Distribute the green armbands to

the herbivores. An example of an herbivore is a mouse. The mice will collect food tokens from the ground.

3. The next group of girls will be carnivores, and they eat the herbivores. Distribute the yellow armbands to the carnivores. An example of a carnivore is a snake. The snakes can only collect food from the mice – they must tag a mouse to collect one food token from her.
4. The final group of girls will be the top predators. They eat the carnivores. Distribute red armbands to the top predators. An example of a top predator is a hawk. The hawks can only collect food from the snakes – they must tag a snake to collect one food token from her.
5. Players cannot tag the same girl twice in a row.
6. Give the mice a head start on the game. Allow at least 30 seconds for them to begin collecting food tokens.
7. Announce loudly when the snakes are introduced to the game so that the mice are aware of the danger. Allow at least 30 seconds for the snakes to collect

some food tokens from the mice.

8. Announce loudly when the hawks are introduced to the game.
9. Allow the girls to play the game for as long as they desire. If they are getting tired, call the girls in for a discussion.
10. Have the girls count how much food they have. If they have eight or more tokens, they have collected enough food to survive. Talk about which creature is most likely to survive.
11. For older girls: the girls who have less than eight tokens sit down. They do not have enough food to survive. Ask the remaining girls to look at their food tokens. Do any of the tokens have stickers on them? Explain that the stickers represent pollution, and any girl who has 3 or more stickers has been poisoned and does not survive. Explain to the girls that animals are not aware of pollution, which is why they were not told what the stickers represent.
12. Play the game again, now that the girls know about the pollution. How does this change their strategy?

## Food Chain Story

### Hands On Learning.

Find a story at your local library or bookstore to illustrate food chains.

**The Best Children's Books.org** has compiled a list of appropriate books, with suggested age levels listed.

<http://www.the-best-childrens-books.org/examples-of-food-webs.html>



## Nature Observation Kim's Game

### Taking it Outside.

### Supplies

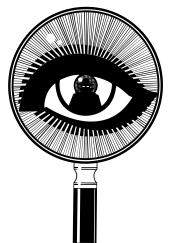
- ♦ 20 items collected from nature (i.e. pebble, pinecone, grass, seeds, leaves, twig, bark, etc.)
- ♦ a sheet or blanket to cover the items
- ♦ paper and pencil for each girl

### Directions

1. In an outdoor area, secretly gather the natural items together and place them on the ground. Cover them with the sheet or blanket.
2. Gather the girls around the covered items and explain to them that they will have just two minutes to observe the items,

then five minutes to write down everything they can remember.

3. Lift the sheet and start timing.
4. When time's up, and everyone has had five minutes to write down what they remember, go around the circle and have each girl describe one of the items she remembers, with as much detail as possible. All other girls check that item off their list, so the next girl around the circle describes another item she remembers.
5. After the girls have described as many items as they can remember, remove the sheet to see if they missed anything.



# Food Chain Relay

## Fun & Games.

Using the following descriptions, explain to the girls the parts of the food chain, and give an example of how energy is passed from one living thing to another, e.g. Acorn, Squirrel, Hawk. The squirrel eats the acorn, the hawk eats the squirrel.

### Producers

Plants are called producers because they use a process called photosynthesis to produce glucose/sugar and oxygen from the sun's energy, carbon dioxide pulled from the air and water from the soil.

### Consumers

Animals are called consumers because they cannot make their own food. That means that they need to eat (consume) plants and/or animals to survive.

There are 3 types of consumers:

- ♦ Herbivores are animals that eat only plants
- ♦ Carnivores are animals that eat only animals
- ♦ Omnivores are animals that eat both animals and plants.

### Decomposers

Bacteria and fungi are decomposers. They eat dead plants and animals in a process that breaks them down and decomposes them. During the decomposition process, they release nutrients and mineral salts back into the soil which in turn are used by the producers.

### Supplies

- ♦ food chain relay cards (next 2 pages)

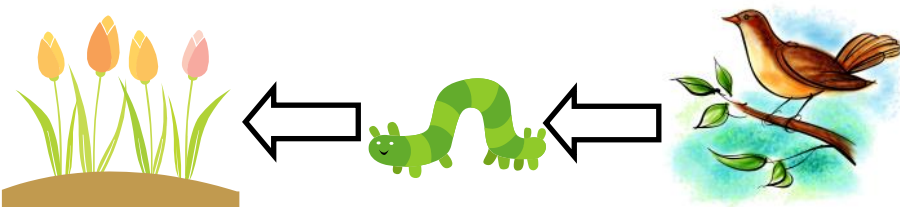
## Directions

1. Divide the girls into teams and line them up at one end of the room. At the other end of the room, turn the cards upside down. Explain that in this game, food chains consist of 3 cards only.
2. The first girl in line picks a card and places it on the table.
3. She runs back, tags the second girl who runs up and picks a card. If the card belongs to the same food chain as the first card, she can lay it beside it, e.g. if the first girl has picked a caterpillar, and the second picks a flower, she would place the flower to the left of the caterpillar. If it's not part of the same food chain, then she lays the card on the table to start a different food chain.
4. She runs back and tags the next girl who goes up and either picks a new card or moves a card that has already been turned over into the correct location of the food chain.
5. This continues until all cards have been used. There are several possible combinations, so at the end, have the girls explain their choices.

Samples of food chain combinations:

- ♦ flower, caterpillar, bird
- ♦ grass, rabbit, fox
- ♦ acorns, mouse, snake,
- ♦ mouse, snake, hawk
- ♦ algae, fish, dolphin
- ♦ fish, dolphin, shark
- ♦ grass, grasshopper, mouse
- ♦ jellyfish, turtle, shark
- ♦ grass, grasshopper, lizard

To make the cycle more difficult for older girls, increase the number of participants in the food chain and/or make it a complete cycle by adding bacteria, fungi etc.



# Taster's Choice

*Hands On Learning. Eco Pak pg 24.*

*Adapted from an activity in "World of Fresh Water" by the United States Environmental Protection Agency, 1997.*

**Note:** Make sure to tell the girls that using your sense of taste is not a good way to determine whether water is safe to drink. But for the purpose of this activity, all the substances used are safe.

## Supplies

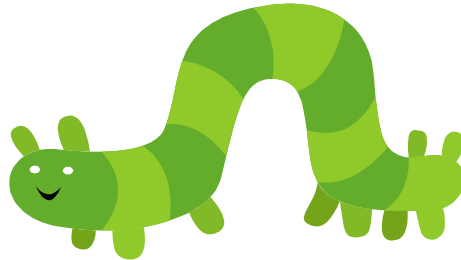
- ♦ 6 clear bottles
- ♦ carbonated water
- ♦ salt
- ♦ lemon juice
- ♦ sugar
- ♦ artificial flavouring (e.g. vanilla, coconut, etc.)
- ♦ small Dixie cups

## Directions

1. Remove the labels from 6 clear bottles.
2. Label the 6 bottles from 1 to 6.
3. Fill the 6 bottles with different water mixtures:
  - ♦ Bottle 1: plain water
  - ♦ Bottle 2: carbonated water
  - ♦ Bottle 3: water with salt
  - ♦ Bottle 4: water with lemon juice
  - ♦ Bottle 5: water with sugar
  - ♦ Bottle 6: water with artificial flavouring (e.g. vanilla, coconut)
4. Make sure that the water in the 6 bottles looks the same so that the girls cannot tell them apart.
5. Explain to the girls that none of the water samples used in this activity are dangerous to drink. They will be asked to drink the 6 water samples.
6. Set the 6 bottles out on a table. Ask the girls which bottle they think has "clean water" (e.g. tap water). Record their answers.
7. Have the girls sample the water from each bottle by pouring a small amount into a Dixie cup. Have another Dixie cup available for the girls to spit in.
8. After everyone has had a chance to sample the drinks, discuss what they found during the activity.
9. Discuss what freshwater (water from lakes) is with the girls.



**Flower**



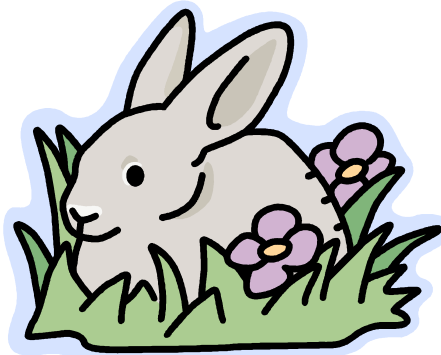
**Caterpillar**



**Bird**



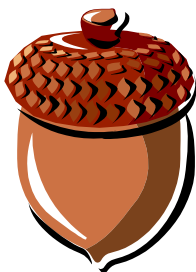
**Grass**



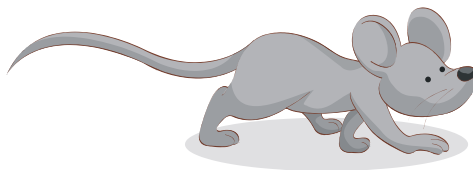
**Rabbit**



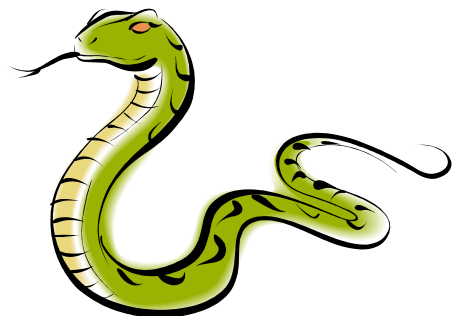
**Fox**



**Acorn**



**Mouse**

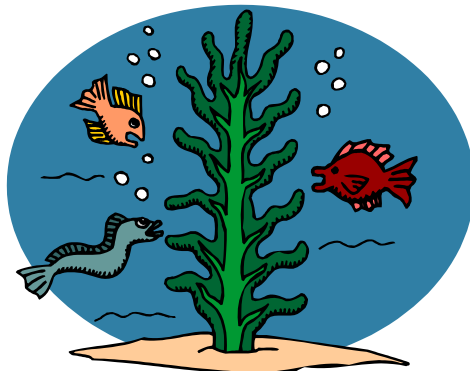


**Snake**

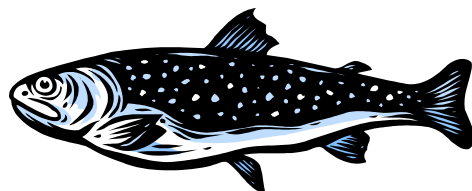




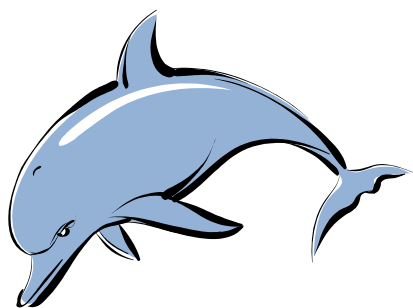
**Hawk**



**Algae**



**Fish**



**Dolphin**



**Shark**



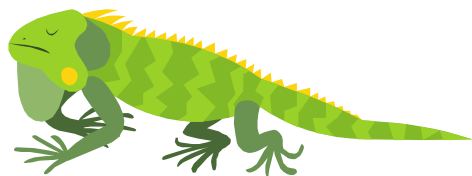
**Jellyfish**



**Turtle**



**Grasshopper**



**Lizard**

# Nature Trust Walk

## Taking it Outside.

This is an active exercise in developing trust and awareness of what's around you in a nature setting.

## Supplies

- ♦ one blindfold per team of two

## Directions

1. Find a place outside that has a variety of different objects to touch, walk over, under, etc., and if possible, where birds and critters might be close by.
2. Pair everyone off. Decide which girl will be blindfolded first and which girl will lead first.
3. Once one girl is blindfolded, the "leader" guides the first girl in a direction that she feels interesting. She should give her partner the opportunity to try out some of her senses with guidance, e.g. touch things that are different textures, smell things that might be interesting, listen to sounds around her, and move through the route giving direction on how to move under, over and around things.
4. After 5 minutes, the partners change places.
5. Once the second girl has had her chance to be blindfolded, bring the whole group together for a discussion.
  - ♦ What type of textures did you feel?
  - ♦ What did you hear?
  - ♦ What did you smell?
  - ♦ Was it hard to know where and how to move?
  - ♦ Were you more or less aware of what was going on around you?

It is often said that the blind are more acutely aware of what is going on around them and that their senses make everything sharper and more intense. That includes being able to move around in nature and enjoy it.

# Mini Ecosystem

## Hands On Learning.

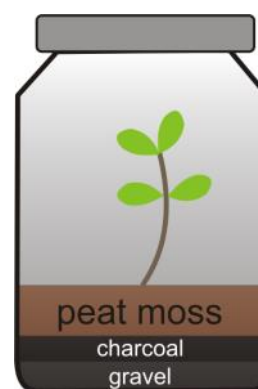
## Supplies

- ♦ a clean glass jar with a lid
- ♦ peat moss
- ♦ charcoal (you can find at the aquarium supplier)
- ♦ gravel
- ♦ a small seedling that will fit in the jar with room to grow
- ♦ natural items like seashells, twigs, etc., if you want to build a scene in the jar

## Directions

1. Soak the peat moss in water to make it damp.
2. Layer in the jar: gravel, then charcoal, then peat moss.
3. Add your seedling, planting it in the peat moss.
4. Press down to compact the peat moss, but not too hard.
5. Use the natural items to decorate around the plant.
6. Sprinkle a little water in the jar,

7. then cover with the lid.
7. Put the jar into a sunny place.
8. To take care of your plant, only open the jar if it looks dry. Sprinkle a little water in it. Turn the jar around every couple of days to make sure that all sides of the plant get an even amount of sunshine.



# Texture Rubbings

## Taking it Outside.

Bark and leaf rubbings can be a simple way to look at and identify trees. This is best done on a dry day because otherwise, wet bark can make your paper tear.

## Supplies

- ♦ large crayon with paper removed
- ♦ regular 20 lb photocopy paper
- ♦ trees
- ♦ cardstock
- ♦ craft glue
- ♦ scissors
- ♦ pen
- ♦ field guide for trees

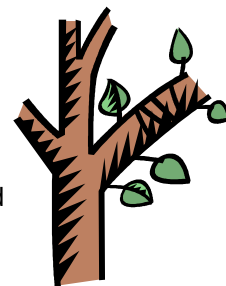
## Directions

1. Hold a piece of paper up against the bark of a tree.
2. Rub the side of the crayon over the paper until the pattern from the bark appears. It may take several times before it becomes clear.

3. If you would like, make rubbings from several different trees. Compare the patterns. Can you identify which rubbing came from which tree? If you need to, use a field guide to help you identify them. Make sure you write the name at the top so you'll be able to identify them again the next time.

## Take it a step further

Once your rubbings are complete and you have identified them, cut around them carefully and glue them to cardstock. Punch holes in the edge and fasten them together with twine. Draw a picture of the tree's leaf on the page and write down 1 or 2 interesting facts about the tree. You've now created your own personal field guide.



## Nature Campfire

*Hands On Learning.*

*Eco Pak page 31 & 99.*

A list of suggested songs related to nature are included in Appendix F of the EcoPak Challenge. Here is one possible campfire (see the EcoPak for links to song lyrics and tunes):

**Tall Trees**

**Squirrel**

**I Like the Flowers**

**Little Green Frog**

**(Brownies) Participation Story: The Story of the Magic Forest**

**(Guides & Pathfinders) Fable: The Lion and the Hyena**

**The Cuckoo**

**Listen to the Earth**

*Do your traditional meeting closing following the campfire.*



## Service

These two meetings complete all except the service component of the Eco Pak Challenge. Discuss with the girls what type of service projects they could do that will fit in with the requirements for the Eco Pak challenge.

Some ideas are:

- ♦ Fish Hatcheries
- ♦ Recycle Plants
- ♦ Conservation and Experimental Forests
- ♦ Stream/Shoreline/Community Clean-Up
- ♦ Community Gardens
- ♦ Painted Fish on Drains
- ♦ Build butterfly, bat and bird houses to put up in parks and at waterfront
- ♦ Adopt a Forest, Animal, etc.

## Participation Story: The Story of the Magic Forest

*Source: Campfire Activities, Girl Guides of Canada – Guides du Canada.*

### Characters and actions

- ♦ **Brownies** - Say "Lend a Hand"
- ♦ **Toadstools** - Say "Brownie Magic"
- ♦ **Berries** - Say "Yum, Yum"
- ♦ **Evergreens** - Say "Creak, creak"
- ♦ **Leaves** - Say "Rustle, rustle"
- ♦ **Birds** - Say "Tweet, tweet"
- ♦ **Animals** - make any kind of animal noise
- ♦ **Brown Owl** - Say "Hoot, hoot"
- ♦ **Mosses** - Say "Fairy Carpets"
- ♦ **Magic Forest** - All jump up, turn around and sit back down

### The Story

Once upon a time there was a **Magic Forest**. It was a very beautiful forest because the **Brownies** who lived there worked very hard to keep the **Leaves** swept up, the **Evergreens** properly pruned, and the **Mosses** watered. The **Brownies** also helped the **Birds** to find the nicest **Berries** to eat and the **Animals** to find the warmest homes for the long winter months.

The Fairy Queen was very pleased with the **Brownies'** work, so she decided that before the winter covered the **Magic Forest** with a

blanket of snow, she would, if the **Brown Owl** approved, give the **Brownies** a midnight party.

The Fairy Queen needed a lot of help to prepare the party so she called upon the **Animals** to collect as many **Toadstools** as they could find, and put them in the Fairy Ring for the **Brownies'** tea tables. She also asked the **Animals** to bring the softest green **Mosses** for the **Brownies'** to sit on.

The **Birds** were asked to collect the nicest **Berries** and nuts they could find for the feast, and the **Brown Owl** gladly offered to run the games and dances. The Bad Fairies heard of the party and decided to creep out into the **Magic Forest** and spoil the fun with frowns and bad moods and tempers. Of course it was the **Brown Owl** who saw them first and she quickly sent the news to the Fairy Queen who was very upset. The **Birds** saw the Queen's distress and called the Wind Fairies to make a great storm and blow the Bad Fairies out of the **Magic Forest**.

Everyone began to prepare for the storm as the black clouds rolled across the **Magic Forest**, and the wind whistled in the **Evergreens** and

the **Leaves** blew in all directions. The **Animals** carefully took the **Berries** into their dens for safekeeping and the **Brownies** sat on their **Toadstool** tables so that they wouldn't blow away. Even though the Wind Fairies blew and blew they couldn't blow the Bad Fairies from the **Magic Forest**. Then the **Brown Owl** had an idea. "Let's ask the Sunbeam Fairies to shine brightly even in the darkest corner of the **Magic Forest** and see what happens." The Sunbeam Fairies were very happy to be invited to shine at night, and out they danced. The **Birds** began to sing and the **Animals** came out of their dens, the **Evergreens** and the **Leaves** and the **Mosses** shone in the sunlight and everywhere, frowns turned upside down and became smiles. The Fairy Queen arranged the **Berries** cleverly on the **Toadstool** tables and then everyone looked for the Bad Fairies, but they couldn't be found. When the **Brown Owl** called all the smiling **Brownies** to the feast, there were many more **Brownies** than they had expected. Can you guess where the Bad Fairies went?

This ends the story of the **Magic Forest**.



# Fable: The Lion and the Hyena

Source: *Campfire Activities, Girl Guides of Canada – Guides du Canada.*

(a Sudanese tale)

Once upon a time, a lion and a hyena went hunting together. They killed a deer and the hyena said, "I wonder how we can get some fire to cook this deer?"

The lion was surprised and said, "Why cook it? Let's eat it raw!"

"Oh no," said the hyena, "we must cook it." He looked around and pointed to the sun setting in the west. "Look, there's a good wood-fire. Just run over there and bring back some logs and embers."

So the lion ran off, and ran and ran toward the west until the sun had gone down and the fire had all gone.

In the meantime, the hyena quickly ate up all the deer until only the tail was left. Then he took the tail and stuck it in the ground so that just the end of it was sticking up.

After a while, the lion came back and the hyena asked, "Well, where's the fire?"

The lion answered, "While I was running, the fire disappeared into the earth so I didn't get any. But where's the deer?"

"Oh," said the hyena shaking his head, "while you were running the deer also disappeared into the earth. He's not quite gone yet though, his tail is still sticking out. You'd better grab hold of it tight or else he'll be completely gone!"

So the lion caught hold of the tail and pulled, but it came out of the ground with no sign of the deer attached.

"You are a silly," said the hyena. "You've broken off the tail! Now the deer has gotten away and we'll never be able to get him out!"

And they never did.



## Program Connections

The following program connections apply to various activities throughout this issue of the FunFinder. Refer to the individual program books for details. There may be other program connections that you could apply, as well.

### Sparks

Going Outside Keeper  
Going Camping



### Brownies

#### Key to the Living World

1. Wondrous Walks
2. Plant Life
4. Celebrate Earth Day

#### Key to Camping

5. Sing and Shout

#### Key to My Community

1. My Neighbourhood

#### Interest Badges

Saving our Plants and Animals  
Taking Part  
Happy Hiking  
Super Crafts



### Guides

**You in Guiding:**  
**Be Involved in Your Community**  
4. Environmental service project.

**Beyond You:**  
**Explore the Outdoors and Nature**  
1. Outdoor activity.  
3. Learn trail signs.  
6. Outdoors activity of choice.

**Beyond You:**  
**Learn About Our Environment**  
1. Hike or nature study.  
2. Promote healthy environment.  
3. Water.  
4. Explore plants, etc.  
6. Environment activity of choice.

#### Interest Badges

Campfire Leading	Conservation
Ecology	Hiking
Endangered Species	Naturalist
Outdoor Adventures	Wildflowers
Outdoors in the City	Water



### Pathfinders

Out on the Trails  
Up Close & Personal w/ Nature  
Our Environment



# BC Program Committee Available Positions

The BC Program Committee is a busy and rewarding committee to be a part of. We create challenges, produce the FunFinder, provide trainings for Guiders and host Girl Events. We work as a team for many of our activities, but also have individual responsibilities based on our positions. We are currently looking to fill the following positions with dedicated Guiders who are passionate about the program.

## Healthy Lifestyles Specialist

### Purpose

To stimulate and promote Healthy Lifestyle activities through British Columbia in the delivery of the Girl Guides of Canada-Guides du Canada program for girls and Guiders.

### Qualifications

Be conversant with the programs for all branches of Guiding (or willing to learn!).

Be enthusiastic about active living, healthy lifestyles choices, self-esteem, etc. and have an understanding of current concerns and issues.

### Upcoming Tasks

Create a brand new BC Challenge - "Colour Me Healthy".

## Ranger Specialist

### Purpose

To stimulate and promote an active interest in the Girl Guides of Canada-Guides du Canada program, especially the Ranger program, throughout British Columbia.

### Qualifications

Be conversant with the Ranger program.

Be passionate about girls and Guiders having fun while completing the different levels of program.

Be able to relate well to both girls and adults.

Should have experience in working with Rangers.

## STEM Specialist

### Purpose

To stimulate and promote the use of Science, Technology, Engineering and Math activities through British Columbia in the delivery of the Girl Guides of Canada-Guides du Canada program for girls and Guiders.

### Qualifications

Be conversant with the programs for all branches of Guiding (or willing to learn!).

Be enthusiastic about STEM and have some work experience in at least one of the fields.

## Lones Coordinator

Although we do currently have the Lones Coordinator position filled, Susan Stephen has agreed to take on the position of Deputy Program Adviser, so we are looking for her replacement in the Lones position.

The Lones Branch of Guiding was established to enable girls to become Sparks, Brownies, Guides, Pathfinders and Rangers who, because of work, studies, illness or distance from an active Unit, are unable to attend meetings in the usual way.

Following is an excerpt from the Lones Coordinator position description.

### Purpose

To promote additional program ideas and activities for Lones.

To provide a way for the Lones Coordinator and all Lones to keep in touch with each other.

### Qualifications

Be conversant with the program for all branches of Guiding, being familiar with Lones.

**To apply for any of these positions, please contact [program@bc-girlguides.org](mailto:program@bc-girlguides.org)**

*Cryptogram Solution: When one tugs at a single thing in nature, he finds it attached to the rest of the world. - John Muir*

## BC Program Committee



Girl Guides of Canada Guides du Canada

### BC Program Adviser

Julie Thomson

### Girl Programs Specialist

Carla MacRae

### STEM Specialist

Vacant

### Lones Coordinator

Susan Stephen

### Environment Specialist

Van Chau

### Healthy Lifestyles Specialist

Vacant

### Arts Specialist

Barb Wilson

### Communications Liaison

Alyssa Robertson

### Ranger Specialist

Vacant

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