



## Stewardship Pemberton Society

### Outdoor Games and Activities

Who Am I? Animal Clues :Two Ways	2
Nature Bingo	3
Scavenger Hunt	4
Food Chain Activity	5
Bee Game	6
Bat and Moth	8
Meet a Tree	9
Survival Game	9
Muskoxen Maneuvers	11
Web or Life Game (Taken from Joseph Cornell's Sharing Nature with Children)	12
Predator - (Taken from Joseph Cornell's Sharing Nature with Children)	13

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The following list of games and actives were compiled base on decades of outdoor education by Delores Franz Los (and additional resources). We are grateful for her guidance, mentorship, and inspiration.

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## Who Am I? Animal Clues : Two Ways

1). Pick an animal or thing in nature. Make a sequence of questions that you ask the group to figure out Who or What Am I? Start with three questions and add more if they need more hints. Encourage the kids to come up with inquisitive questions that guide their thinking. For example, instead of asking - are you a butterfly, ask, are you an insect?

### Example: Butterfly

- I am very active during the summer months in Pemberton
- I am a herbivore
- I am a migrator
- I come in many colours
- I am beautiful to many people
- I fly
- I come in many shapes and colours but am generally smaller than my hand

### Example: Wolf

- I am warm blooded
- I live live in the forest
- I am a predator
- My babies are called pups
- I live in a den

### Example: Beetle

- I am in insect
- I have wings
- I can be very tiny or quite large
- I come in many colours
- I have a shell like exterior

### Example: Ducks

- I am part of the bird family
- I am a migrator
- I am an omnivore
- My feathers are waterproof
- I spend most of my time in the water

Take turns guessing.

This is a great introductory game that gets kids thinking about different animals and also learning different terms and themes (eg. Migrator, herbivore, shapes and colours,etc).

2).Without letting the child see, pin a picture of an animal (domestic or wild) on their back.The idea is that everyone else can see the picture of the animal except them. Now let the children partner up in groups of two and ask each other questions to try and guess - but don't tell what you think you are! You can't ask directions questions like "Am I a snake" but rather guess things along the way such as " do I slither? Are many people scared of me? Do I live in the ground? Do I swim?" etc.

So that all levels of knowledge are included, have groups of photos and give guidelines such as "I am a domestic animal" or "I live in the wild".

Form a circle and let everyone tell what they think they are!

## Nature Bingo

Using the key provided below, make re-usable Bingo cards. SPS has provided a pdf document that you are welcome to print out and use - along with a randomized call card.The categories would be:Wildlife, Mammals, Flowers, Birds, Others.

All the species on the key are from BC. Use dried beans as markers and provide prizes for the winners!

Mammals	Flowers	Birds	Trees/Shrubs	Other
Wolverine	Lupine	Wood duck	Salmonberry	Hornet
Elk	Strawberry	Raven	Raspberry	Garder snake
Lynx	Buttercup	Crow	Cedar	Spit bug
Shrew	Phlox	Oyster catcher	Dogwood	Leech
Bat	Starflower	Robin	Alder	Toad
Grizzly	Daisy	Red-tailed hawk	Cottonwood	Salamander
Black bear	Lily of the Valley	Worbler	Blackberry	Earwig
Cougar	Heather	Wren	Devil's club	Bumblebee
Bighorn Sheep	Monkey flower	Canada Goose	Hemlock	Diving beetle
Chipmunk	Wood violet	Mallard	Blueberry	Caddis fly

Mammals	Flowers	Birds	Trees/Shrubs	Other
Moose	Honeysuckle	Seagull	Salal	Lady bug
Marmot	Bunchberry	Bald eagle	Oak	Rubber boa
Beaver	Water lily	Turkey vulture	Spruce	Dragonfly
Otter	Indian Paintbrush	Red winged black-bird	Pine	Western toad
Wolverine	Nootka rose	Woodpecker	Arbutus	Carpenter ant
Fischer	Columbine	Swallow	Thimbleberry	Painted turtle
Snowshoe hare	Goldenrod	Loon	Larch	Mosquito
Coyote	Oregon grape	Pigeon	Hemlock	Yellow jacket
Muskrat	Tiger Lily	Thrush	Larch	Aphid
Squirrel	Dandelion	Common Flicker	Poplar	Deer fly
Mink	Skunk cabbage	Kingfisher	Saskatoon	Newt
Deer	Foam flower	Chickadee	Willow	Pacific Salamander
Weasel	Plantain	Heron	Maple	Coho salmon
Packrat	Twin flower	Ruffed grouse	Birch	Minnow
Skunk	Queen's cup	Barred owl	Douglas Fir	Lamprey eel
Marten			Currant bush	
Mouse				
Rabbit				
Racoon				
Bobcat				

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## Scavenger Hunt

Start off by breaking people up into groups and be creative - think about math and spelling to form the groups. For example:

- How many letter are in your name?

If you have an even number of letters in your name - spell your name for your scavenger hunt. If you have an odd number of letters in your name, maybe you need to find one thing from the first 12 letters of the alphabet, spell One Mile Lake, or Nature Centre, etc.

Break up into groups of two using this or a similar method. Each group has to find items outside for each letter and share select items with the group.

- Remember to set boundaries, and give a time limit. Make sure kids know WHAT a scavenger is. A crow, coyote, bear. We are looking for things that others might discard and we do NOT want to destroy anything in nature. Don't grab the whole branch of the rose bush but just a single flower. Provide bag/containers for liquid items and also perhaps a rubber glove for gross things (or ask kids not to collect nasty things!).

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## Food Chain Activity

Take kids out into the field and introduce the food chain. Put out green pieces of paper that represents grass in the field (a lot - maybe 100)

Tell the kids who is involved in this food chain: there is the grasshopper who feed on the tall grass. And who eats the grasshoppers? Shrews! What is a shrew? Who has seen one? And who might eat a shrew? A red-tailed hawk! The hawk is at the top of the food chain. Allocate kids: 3/4 as grasshoppers, about 1/4 as shrews and only two hawks. Let them know that this is how it works in nature: there is often a lot of things at the bottom of the food chain and only a few individuals at the top.

Grasshoppers are to go out and collect one piece of grass at a time and bring it back to an adult (they have small stomachs).

Blow the whistle. Ask the kids to eat all the grass they can find. Ask them if that was easy? There seems to be a problem. They have run out of grass. There is not enough food OR there are too many grasshoppers. What happens when creatures in nature do not get enough food? Nothing is eating the grasshoppers. In some areas, grasshoppers destroy crops.

Redistribute the grass in the field. Put ribbons on the arms of about 1/4 of the kids who will be shrews. Let grasshoppers start collecting grass (still one at a time to bring back to an adult) for a few moments and then blow the whistle to let them know that the shrews are out! Shrews are to tag grasshoppers. Tagged grasshoppers are "out" and go back to an adult. Leaving lots of grass still in the field, blow the whistle twice for all shrews and grasshoppers to come back (Ask them again - was that easy! How did it feel to be a grasshopper? How did it feel to be a shrew? Was it easy to get the grasshoppers?)

Now introduce the hawk (strong eyes and strong fliers). Blow the whistler for grasshoppers to go out to collect grass for a few moments. Then blow whistler again to let

shrews out (to tag grasshoppers). THEN blow the whistler again to let them know that the hawk is out! Hawk is to tag the shrews. who come back to the adults and are “out”. Let this go on until all or most of the shrews are ‘eaten’ by hawk.

Debrief: Did you see how the grass survived longer when the grasshoppers had to look out for the shrews? And then how it was easier to get the grass when the shrews had to look out for the hawk?

So - what eats the hawk? Nothing because s/he is at the top of the food chain. BUT sometimes there are problems. Sometimes people cause problems. They do things and don't think about plants and animals in nature.

Now put out the grass again - but add in yellow and brown to the green grass (but don't tell the kids what each colour represents). Have the kids go through the food chain activity again until the whistle is blown. When the papers have been collected, sort them out into colours.

Brown represents pesticides. Grasshoppers eat the pesticides, and the shrews eat the grasshoppers. When the hawk eats the shrew it has pesticides in it. Pesticides won't kill hawks - but it makes it so when they lay eggs, the shells are very soft and they do not hatch. They can not have any young.

Perhaps yellow could represent grass from areas where a lot of logging has occurred. Hawks need trees to make a nest. What happens if there are no trees? No nests means no babies.

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## Bee Game

In an open space - put out about 4 different flower colours that the bees will collect: red, pink, yellow and orange pieces of paper.

Have about 4 adult bee keepers that represent different hives. Tell them about the different roles of bees. There are DRONES - the boy bees - who do NOTHING except wait to be fed and for the remote possibility that they may mate with the queen which happens about once a year. The boys do no work! Actually when it gets cold, the girl bees - called the WORKER BEES, know that if they keep all the boys there over the winter and have to feed all of them, they will run out of honey. So they march them to the entrance of the hive and kick them out! They don't let them back in. What happens to the boys? They all die when it gets cold because the worker bees don't let them in. So what do the worker bees do? They collect pollen and nectar to bring back to the hive to make honey.

They clean the hive, look after the eggs and the queen. How do they all know what to do? Since bees don't "talk" they communicate by dancing!

So - all of the kids in the group today are going to be worker bees - the girl bees. ALL of the kids for a few moments are going to be GIRLS (boy children too)! Break kids up into four groups. Pick one child from each group to be the SCOUT. The scout is sort of the coordinator for the bees. She will dance to tell the others where the best pollen and nectar from the flowers are (scouts can also collect pollen and nectar). When the whistle is blown, the bees (again all worker bees are girls) are to collect pollen and nectar - one piece at a time and bring it back to their bee keeper. Once all the pieces are collected, sort them into colours and count them. Who got the most? Reiterate with the kids that creatures in nature are not lazy. They need to work very hard to gather enough food for the winter.

Take away all the red and pink flowers. They are the pollen and the nectar bees need to support the hive and make honey. Then take away all the yellow: that is the honey. When people take away all the honey, the hives die because they can't make it through the winter. We need to ONLY take the extra honey and leave enough for the bees to eat. Now: which hives collected pollen and nectar from orange flowers? Well this orange flower has pesticides on it. Pesticides kill bees. For every three orange flowers (or something like that) one bee dies. How many bees do you have left in your hive? Can you see how bees are challenged in our modern world?

Did you know that 60% of the food that we eat relies on bees for pollination? What are some examples? Corn, apples, pears, plums, tomatoes, squash, tree nuts... What if all the bees in the world were to die because of pesticide use?

If you are continuing on to the Nature Centre it is great to tie this in with a visit to the demonstration hive. Tell kids there is a bee hive inside (don't worry it is inside a clear case and they are not flying around inside). Ask them to stay outside and see if they can see where the bees are getting inside to their hive? Once they have found it, go inside and ask them to sit on the floor and very quietly see if they can all look at where the bee hive is. Do they know what it looks like?

Interesting bee facts to talk about while hive viewing:

- How long does a bee live? 6 weeks average.
- How much honey does a bee produce in it's lifetime? 1 teaspoon!
- What are the boy bees called? Drones.
- What are the girls called? Worker Bees.
- How do they communicate? Dancing. Can you see any dancing?
- What do bees 'make'? Honey and wax
- What do bees collect from flowers? Pollen and nectar.
- How many bees live in a hive? Tens of thousands.

- Who made the hive - the cells in between the frames? The bees do this work. It is not made in a factory, or by man.
- Can they hear the bees?
- Smell the honey?
- Can they see some cells that are bigger than others? These are the drone cells (where the boys will hatch from).
- Can they see the queen? She is bigger. She lays all the eggs - including new queen bee eggs.
- How long does it take for the eggs to hatch? 3 days.
- How long does the queen live? It depends - sometimes only a year.
- What happens when a new queen cell hatches? The first job of the new queen is to eat and kill all competing queens. If there are more than one queen at a time, they will battle until only one queen remains.
- How long does honey last? Thousands of years! They have found perfectly good honey, buried with Egyptian kings that is thousands of years old. Once it is sealed by wax in the hive - it keeps for ages. Can the kids see areas in the honey comb where the honey is completely sealed off by the wax? The bees are preserving their honey for the winter.

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## Bat and Moth

**Resources:** At least one blindfold, and at least 6 people

**Where:** Indoors / outdoors. Good places—large spaces, preferably not too uneven a surface.

This game illustrates how bats use their hearing to find their prey (through echo-location) —and not their eyesight. Allows the children to experience this first hand, by using their own hearing and sense of direction.

Everyone is to stand in a circle - these people are trees in a woodland. The space in the middle is a woodland clearing. All trees must stand up, with their roots in the ground. This is the setting for a special event that you wouldn't often see, because it happens at night, when we're all in bed. Some bats catch their prey in woodland clearings just like this one. They come out at night, but what do they eat? No, they don't eat human blood! Some eat fruit, some eat flowers, some big ones eat mice and some eat moths, which also come out at night. How do they catch moths in the dark? By using sound and their hearing- like sonar. So, that's how our bat is going to catch our moth!

One person should be chosen to be a bat and another person to be a moth. The bat is blindfolded. Explain that, to catch their moth, the bat must send a sonar signal by shouting 'bat'. This sound travels away from the bat and then bounces off the moth. The re-

flected signal (echo) is the word 'moth', which the moth shouts, whilst trying to keep away from the bat. The bat should be listening out, with its sensitive hearing, for the direction in which the 'moth' sound comes from, in order to track it down and catch it. The bat continues to shout 'bat' and each time the moth hears this, they must shout 'moth'. [This is essential for the game to work!] Try to encourage the bats to catch their prey at waist height. The trees' role is to help the animals stay inside the clearing. If they go too close to the edge, the trees can gently guide them back into the circle by using their arms and making a 'swoosh'ing sound. If the bat is having trouble catching their moth, suggest that all the trees take a step in, to reduce the size of the circle. The numbers of bats and moths in the circle can be varied.

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## Meet a Tree

- Why: Direct Experience, empathy, olfactory and tactile awareness
- Where: Day / forest
- Who: 2 or more players, ages 4 years and up
- Requires: Blindfolds

This game is for groups of at least two. Pair off. Blindfold your partner and lead him through the forest to any tree that attracts you. (How far will depend on your partner's age and ability to orientate himself. For all but very young children, a distance of 20-30 yards usually isn't too far.)

Help the "blind" child to explore his tree and to feel its uniqueness. I find that specific suggestions are best. For example, if you tell children to "Feel the tree," they won't respond with as much interest as if you say, "Rub your cheek on the bark." Instead of, "Explore your tree," be specific: "Is this tree alive? ... Can you put your arms around it? ... Is the tree older than you are? ... Can you find plants growing on it? ... Animal signs? ... Lichens?"

When your partner is finished exploring, lead him back to where you began, but take an indirect route. Now, remove the blindfold and let the child try to find the tree with his eyes open. Suddenly, as the child searches for his tree, what was a forest becomes a collection of very individual trees.

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## Survival Game

This is a complicated game but very worthwhile for teaching the basics of ecology and the food chain. In the introduction to the game, you should talk about the relationship between herbivorous (plant-eating), omnivorous (everything-eating) and carnivorous

(meat-eating) animals. You should also talk about some possible strategies that the three different types of animals use to survive in nature.

This game requires some set up before hand. In a large area with some forest and shrub cover, set up some cards inside of zip lock bags - attached to rocks or hanging from trees. The cards are to represent things that wild creatures need to survive. Set out perhaps 3 of each of the following food cards:

- 1). Berries
- 2). Bark
- 3). Shrubs
- 4). Nuts
- 5). Seeds

and also

6). Water - this can just be blue flagging tape on a tree. Write a number on the flagging tape with a sharpie so it can be recorded. Attach about 3 of these in various locations depending on the size of your area.

Now within your group, you are going to have mostly herbivores (about 2/3 of group) (deer, rabbits, moose, mice, etc), with some omnivores (about the last 1/3 of the group - bears, coyotes, shrews, etc), one carnivore (cougar/owl) and one man.

Now - all herbivores, omnivores and carnivores will get 5 ribbons to tie around their arms (flagging tape - all the same colour for each group - for example, 5 pink ribbons for omnivores, 5 yellow ribbons for herbivores, and 5 green ribbons for carnivores). All these players also get life cards and a pencil to fill in the blanks when they find the food or water. The life card should have on it:

Food:

- 1).
- 2).
- 3).
- 4).
- 5).

and Water (instruct the students to write the number from water ribbon they found).

The animals are to record what they found for food/water. The goal is to fill the card and still be alive!

“Man” has no rules in this game. His/her role is to simply watch and call out the name (of the animal or individual). If he does that - the animal needs to go to man and give up a “life” (flag).

The Rules

This is a survival game. Therefore, the only way to "win" is to still be alive at the end of the game. Each type of animal (herbivore, omnivore and carnivore) has different needs which must be met in order to survive. Send the Herbivores out into the play area first, and give them at least a 5-minute head start on the others. The herbivores must find all the food and water stations in order to survive. Next, send out the omnivores. They are looking to "eat" the herbivores and also fill out their life cards. Herbivores are caught by being tagged, at which point the omnivore (or carnivore) takes one flag from them. Carnivores are sent out next. They must find all the water stations and must catch as many omnivores and herbivores as possible. Now send out Man. As he is on the top of the food chain, Man can hunt any animal and doesn't have to tag them to catch them - just needs to call their name (you could also use a water gun if you felt it was appropriate). When man calls your name - you need to give him a life card. When an animal runs out of lives, she is out of the game and should return to the start point.

Keep the game going as long as it plays out - or call kids in with the whistle. Have a group discussion about the different strategies used by the players to survive. It is always interesting to find out what strategies the survivors of the game used, and to try and apply them to real life. For example: a carnivore whose strategy was to hide by one of the water stations, wait for other animals to come by, and ambush them. Cougars, wolves, and other top predators often use this strategy in nature!

If you want to make this game really complicated, name all your animals! For example: in the Herbivores you can have Deer, Rabbit, Squirrel, etc., in the Omnivores you can have Raccoon, Skunk, Bear, etc., and in Carnivores you can use Wolf, Owl, etc. As part of the survival game the players must find the mate of their species and trade some sort of "reproduction card". In your discussion afterwards, talk about the risks and dangers animals must face in the wild as they try to find a mate and reproduce.

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## Muskoxen Maneuvers

For this game you will need two different colours of rags for tails.

Pick an area that could simulate an open grassland or range. In a large, open area (like a gym or field) split kids up. For 10 players you should have four groups:

- 2 wolves
- 2 bull muskoxen
- 3 mothers
- 3 calves

Give the wolves and the calves tails.

It is the bulls job to protect the herd and alert them to when danger (wolves) are around. Send the wolves off away from the group to plan ahead to come up with a tactic - should they stay together? Split up? Wait for a few minutes before attacking?

Now have the muskoxen 'graze' as they would in the wild. In the wild, the calves stay quite close to their mothers. It is the bulls job to alert the herd when there is danger.

When danger presents itself (ie the wolves come)- the herd is to form a circle - the calves are always on the inside, with their mothers facing out to keep watch and protect them. The bulls also protect the circle by moving around the outer circle, also facing the wolves, to block them. The wolves come in and try to "get" the calves by taking their tails. The muskoxen can also take the wolves tail. When a tail is taken, the animal is out of the game.

Open a dialogue on survival strategies (team work, benefits of safety in numbers, hunting strategies, etc)

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## Web or Life Game (Taken from Joseph Cornell's Sharing Nature with Children)

For 3 or more players

Ages 5 and up

Need: Ball of string

Here is a game that makes very clear the essential interrelationships amount all the members of nature's community. Webbing vividly portrays how air, rocks, plants and animals function together in a balanced web of life.

The children form a circle. The leader stands inside the circle near the edge, with a ball of string: *"Who can name a plant that grows in this area?.....oregon grape.....Good. Here, Miss Oregon grape, you hold the end of the string. Is there an animal living around here that might eat Oregon grape? A robin? Yes! What a good meal for a robin. Mr. robin will you please take hold of the string here: you are connected to Miss Oregon grape by your dependence on her fruit for your lunch. Now, who needs a robin for his lunch?"*

Continue connecting the children with string as their relationships to the rest of the group emerge. Bring in new elements and considerations, such as other animals, soil, water and so on, until the entire circle of children is strung together in a symbol of the web of life. You have created your own ecosystem!

To demonstrate how each individual is important to the whole community, take away by some plausible means, one member of the web. For example, a fire or a logger kills a tree. When the tree falls, it tugs on the strings it holds; anyone who feels a tug in his string is in some way affected by the death of the tree. Now everyone who felt a tug from the tree gives a tug. The process continues until every individual is shown to be affected by the destruction of the tree.

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Predator - (Taken from Joseph Cornell's Sharing Nature with Children)

For ages 5 and up

6 or more players

Need: Bells and blindfolds

This game introduces food chain activities and the way they work in nature. In an open clearing, form a circle about 15 feet across. Blindfold two of the children and have them stand in the centre of the circle. Ask one of the children to name a predators that lives in the area, and ask the other child to name a prey. The predator tries to catch his prey by listening for him, then tracking him down and tagging him. If either animal goes too near the edge of the circle, the children tap him twice. Stress the need for silence while the game is in progress, and have the players make things more realistic by imitating the animals they've chosen to be. For variety, experiment with different numbers of predators and prey. Put bells on some of the animals, forcing them to modify their strategy of hunting or avoiding being captured. If your predator is not as bold as he could be, and interest is lagging, tighten up the circle, bringing the predator and his prey close together.