"Wolf Prowl" is a predator/prey simulation activity where participants take on the roles of wolves and their prey. Wolf behaviour and social structure is fascinating, and has been studied for many years. There have been many negative myths and stories about wolves (i.e. Little Red Riding Hood, The Three Little Pigs, Beauty and the Beast) which has contributed to a frightening stereotype of these magnificent creatures. By participating in this activity, students gain an insight into the adaptations made by the wolves' prey as well as an understanding of wolf hunting strategies.

Preparation

Each student should be assigned a role prior to the activity. The attached page on "Role Assignments" outlines the required roles and numbers. Introducing the roles in advance may allow the students to think about, or even research their animal's adaptations and behaviours.

Students should be reminded to wear <u>old clothes</u>. The playing area includes meadow, brush and forest and <u>may be wet</u> (warm, waterproof boots are *highly* recommended). Layers of clothes (including extra socks) are also recommended as students may become warm while running around.

At the Outdoor Centre, we will review the rules and distribute the game equipment. All of the prey animals (beaver, deer and moose), will receive a specific allotment of life tags, representing their offspring. Some animals will wear coloured bands to distinguish them from others.

The Rules

Roles:

- Beavers work in a family of two. They are released into the playing area before the wolves to give them a chance to find a place for their lodge (a hoola hoop or inner tube). Once their lodge is in position, it must remain in that place. While beavers are in their lodge, they cannot be caught. However, they must leave their lodge to find food and water in order to survive. Each beaver must find their own food and water, one member of the family cannot collect for both. It takes only one wolf to capture a beaver.
- Deer and Moose are also released into the playing area before the wolves. They may use this time to find an appropriate hiding spot and to begin collecting food and water. These animals may choose to travel in a group or as an individual. It takes 2 wolves (from the same pack) to capture a deer. If a deer is tagged by one member of a pack, the deer must count to 30 and wait until the second member arrives. If the second does not arrive within 30 seconds, that deer may escape. It takes 4 wolves from the same pack to capture a moose. Once tagged, the moose counts to 60 awaiting the other members. If all four members do not arrive within 60 seconds, the moose may escape.
- The Lone Wolf hunts on its own. It can only capture beavers and does not join other packs to hunt. One beaver is the equivalent to 25 kg of meat.
- The 2-Wolf Pack and the 3-Wolf Pack may capture beaver and deer (providing at least two of its members tag the deer). All food is shared among the pack members. When a successful capture is made, only one life tag is taken from the prey. Individual members may hunt alone for beavers to accumulate more meat for their pack. It is recommended that packs have a distinguishable "call" to identify their pack from others. One deer is the equivalent to 100 kg of meat.

The Rules, continued...

- The 4-Wolf Pack and 5-Wolf Pack may capture beaver, deer (requires a minimum of two members) and moose (requires at least four members). All food is shared among the pack members. The same rules and recommendations apply for these packs as they do for the others. One moose is the equivalent to 400 kg of meat.
- At the end of the game, wolves will add the sum of their captures in terms of kilograms of meat per pack member. The two packs whose members receive the most food survive, the others die of starvation

Food and Water Stations?

- Numbered food and water stations are placed throughout the playing area. Students must visit a specified number of these and collect the corresponding tokens in order to survive.
- All animals must find water.
- As in life, animals may be preyed upon while at food and water stations.

Predation (Tagging):

- The capture of prey by the wolves is simulated by tagging, at which point the prey must surrender one life tag. Pack wolves take only one life tag to be shared among the pack members. Wolves may not capture the same animal twice in a row. An animal that has just been captured by one wolf/pack must be given ample time to get away before being tagged again by another wolf/pack.
- As stated earlier, at least two wolves from the same pack must tag a deer within 30 seconds to make a successful capture. At least 4 wolves from the same pack must tag a moose within 60 seconds to make a successful capture.
- If an animal loses all its life tags, it must leave the game and return to the designated home base.

The End of the Game:

• A single long whistle blast indicates the end of the game. Return to the home base immediately. Beavers, remember to bring your lodge. Once everyone has returned, we will review the game and discover who survived and how the populations fluctuated.

3 WHISTLE BLASTS IN SUCCESSION INDICATES AN EMERGENCY - RETURN TO HOME BASE IMMEDIATELY!

Simulation limitations: No Territoriality and is there contact between wolves?

Students, please note:
This is a simulation:
no classmates are to be actually eaten!

Role Assignments

These charts are used to assign students to their roles for this simulation activity. Please consult the group numbers chart to identify the numbers required for each role. Gender should not be a consideration in assigning roles (i.e. a family of beavers may include two girls or two boys).

Wolf Prowl Group Numbers

Moose

# in class	beaver	deer	moose	lone welf	2-pack	3-pack	4-pack	5-pack
31	8	5	3	1	2	3	4	5
30	8	5	3	1	2	3	8	
29	8	5	3	1	-	3	4	5
28	8	4	3	1	-	3	4	5
27	6	5	3	1	-	3	4	5
26	6	5	3	1	2	-	4	5
25	6	5	2	1	2	-	4	5
24	6	4	2	1	2	-	4	5
23	6	4	2	1	2	3	-	5
22	6	4	2	1	2	3	4	-
21	6	3	2	1	2	3	4	-
20	6	3	2	1	-	3	-	5

 Role Assignments

 Predators:

 Lone Wolf

 2-Pack
 +

 4-Pack
 +

 +
 +

 5-Pack
 +

 +
 +

 Prey:
 Beaver(Families)

 +
 +

 +
 +

 +
 +

 +
 +

 +
 +

 +
 +

 +
 +

 Beaver(Families)
 +

Game Summary

	Lone Wolf	2-Wolf Pack	3-Wolf Pack	4-Wolf Pack	5-Wolf Pack	
Beaver	25kg x	25kg x	25kg x	25kg x	25kg x	
(25kg)	=kg	=kg	=kg	=kg	=kg	
Deer	_	100kg x	100kg x	100kg x	100kg x	
(100kg)		=kg	kg	=kg	=kg	
Moose	-	-	-	400kg x	400kg x	
(400kg)				=kg	=kg	
Total Weight	kg	kg	kg	kg	kg	
Total Weight Per Wolf	kg divided by # wolves =	kg divided by wolves =	kg divided by # wolves =	kg divided by # wolves =	kg divided by wolves =	
	kg	kg	kg	kgkg	kgkg	