



Wapusk
National Park

Parc national
Wapusk

EduKit

The Cape Churchill Caribou of Wapusk



Photo: Murray Gillespie



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Introduction

Parks Canada

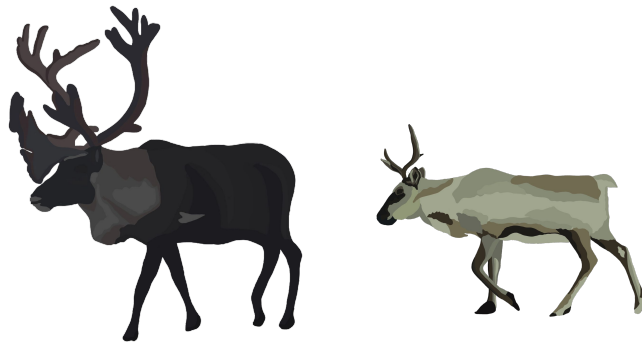
Cape Churchill herd

Conservation

Value of the Caribou

Activities and Quizzes

LET'S GO!
ALLONS-Y!



Caribou are an amazing species that are very important to Canada. You can even find them in your pocket on the quarter!

In this educational kit (or EduKit) you will find numerous lessons and activities about one caribou herd that call Wapusk National Park home: the Cape Churchill herd.

How to use this EduKit

The **Parks Canada** section highlights Parks Canada's mandate, role and commitments. Refer to this section to understand why caribou are important to Parks Canada and beyond.

The **Cape Churchill herd** section presents basic information about the caribou in Wapusk National Park. This includes what they eat, where and why they migrate, the state of caribou in the park and what threatens their wellbeing. Here, you will also learn about our scientist in the park in the **Conservation** section

The **Value of the Caribou** section offers an important discussion about the importance of caribou to Indigenous cultures. Here, you will learn how to respectfully harvest caribou and what parts of the caribou are used.

The **Activities** and **Quizzes** sections challenge students with learned material from this EduKit. Activities reflect a range of age groups and grade levels that can be tailored for your needs. Activities and quizzes can be found within a module as a suggested activity or quiz.



Parks Canada





Parks Canada

Parks Canada's mandate

On behalf of the people of Canada, we **protect and present** nationally significant examples of Canada's natural and cultural heritage, and foster public understanding, appreciation and enjoyment in ways that ensure the ecological and commemorative integrity of these places for present and future generations.

Our Role

We are guardians

...of the national parks, the national historic sites and the national marine conservation areas of Canada.

We are guides

...to visitors from around the world, opening doors to places of discovery and learning, reflection and recreation.

We are partners

...building on the rich traditions of Indigenous peoples, the strength of our diverse cultures and our commitments to the international community.

We are storytellers

...recounting the history of our land and our people – the stories of Canada.

Our Commitments

To protect,

...as a first priority, the natural and cultural heritage of our special places and ensure that they remain healthy and whole.

To present

...the beauty and significance of our natural world and to chronicle the human determination and ingenuity which have shaped our nation.

To celebrate

...the legacy of visionary Canadians whose passion and knowledge have inspired the character and values of our country.

To serve

... Canadians, working together to achieve excellence guided by values of competence, respect and fairness.



Parks Canada

Parks Canada in Manitoba

Check out all of the Parks Canada administered sites in [Manitoba!](#)

parks.canada.ca/manitoba

Parks Canada protects **national historical sites** in Manitoba like Lower Fort Garry and Riel House.

Parks Canada protects **national parks** in Manitoba like Wapusk and Riding Mountain.

Parks Canada protects **animals** in Manitoba like bison, monarch butterflies, polar bears and caribou!



1. Riel House National Historic Site 2. Cape Merry Battery (Prince of Wales Fort National Historic Site) 3. Lower Fort Garry National Historic Site 4. The Forks National Historic Site.



Parks Canada

An overview of national parks and historic sites in northern Manitoba

National parks and national historic sites protect some of Canada's most spectacular natural areas, and commemorate unique historic places, events and people who have shaped this nation. As the name "national" indicates, the Canadian government commemorates and preserves these parks and sites in all parts of Canada.

Wapusk (Wah-pusk) National Park, the focus of this EduKit, covers **11,475 square kilometers** of land. It is the eighth largest national park in Canada! It preserves an area called the Hudson-James Lowland; where 50% of the surface is covered by water and where the treeless tundra meets the boreal forest.

Here, female polar bears have their cubs in the world's largest concentration of inland polar bear denning habitat! In the summer, Wapusk is home to countless nesting waterfowl and songbirds.

Near Churchill, Manitoba, the area has been home to the Cree, Dene, Inuit and Métis for over 4,000 years and is rich in cultural history.

Have you HERD?

Manitoba has two national parks! Riding Mountain National Park was established in 1929. It's a great place to go camping with your family and friends.

The second national park, Wapusk National Park, is found on the western shore of the Hudson Bay, south-east of Churchill.

This park was established in 1996.





Parks Canada

An overview of national parks and historic sites in northern Manitoba

There are also two national historic sites in northern Manitoba: **Prince of Wales Fort** and **York Factory**. They represent parts of a long history of the fur trade and the contributions of Indigenous peoples.

Between 1684 and its closing 273 years later in 1957, York Factory served as a **trading post**, distribution point and administrative centre for a vast network of fur posts throughout the West. From 1812 to the late 1850s, it was also the main entry point for European immigration to Western Canada. By the 1860s, York Factory had over fifty buildings, including a doctor's house, church, school, hospital, photographic room, library, blacksmith shop, and a bakehouse! York Factory was designated as a national historic site in 1936.

Once established at York Factory on the Hayes River, the Hudson's Bay Company (HBC) looked north to increase its scope of the fur trade. A trading post was built from 1731 to 1771 on the Churchill River by the HBC, mainly to trade with the Dene peoples, Inuit from the northwest coast of Hudson Bay, and the Cree living north of the Nelson River. It was a base for northern exploration, whaling, and the search for precious metals. This fort, Prince of Wales Fort, was designated as a national historic site by Parks Canada in 1920.

While all national parks and national historic sites in Manitoba have a special meaning for the people who live near them, they are important as **national treasures**, to be preserved and protected for all.

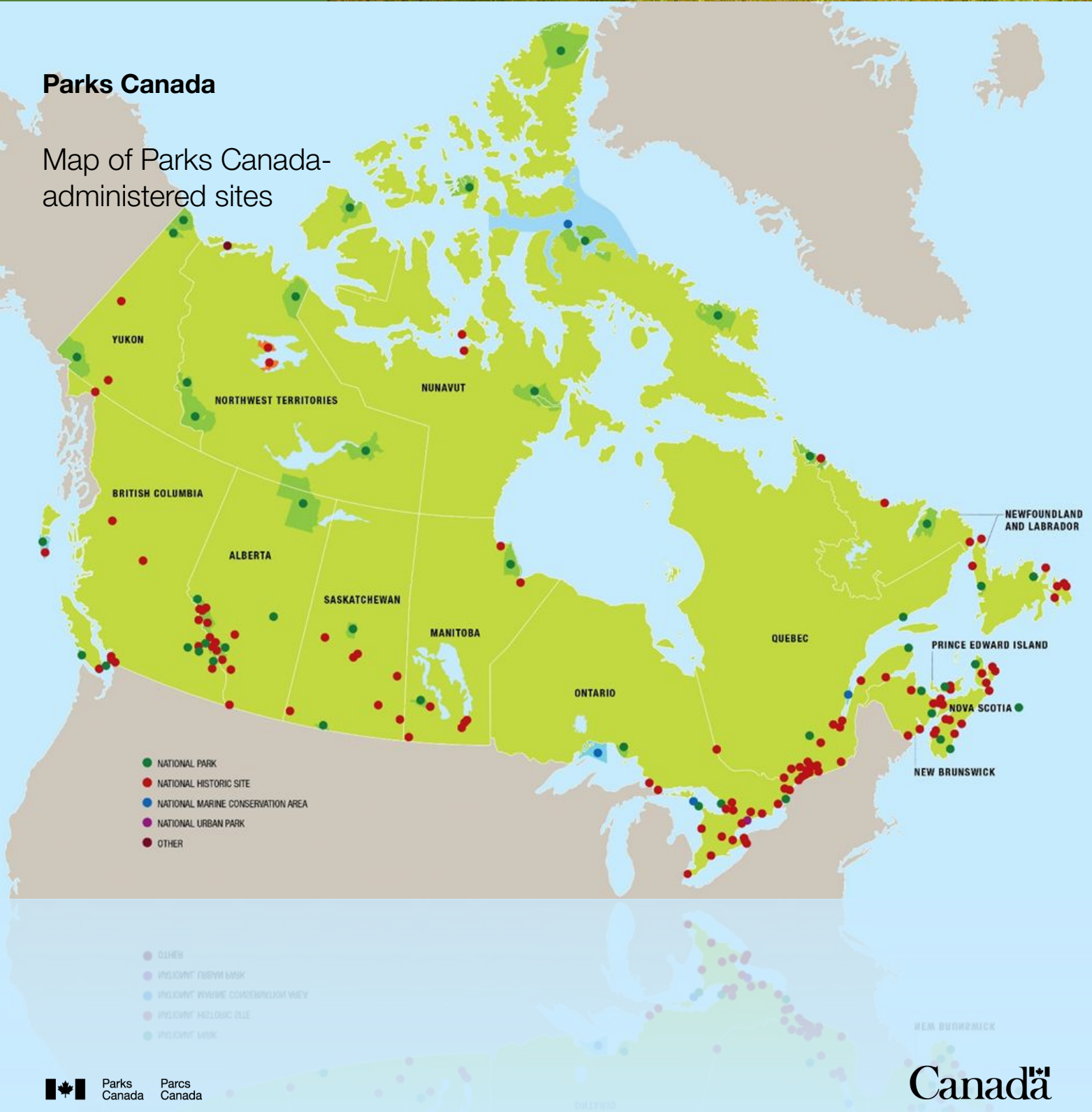


1. Prince of Wales Fort National Historic Site
2. York Factory National Historic Site



Parks Canada

Map of Parks Canada-administered sites



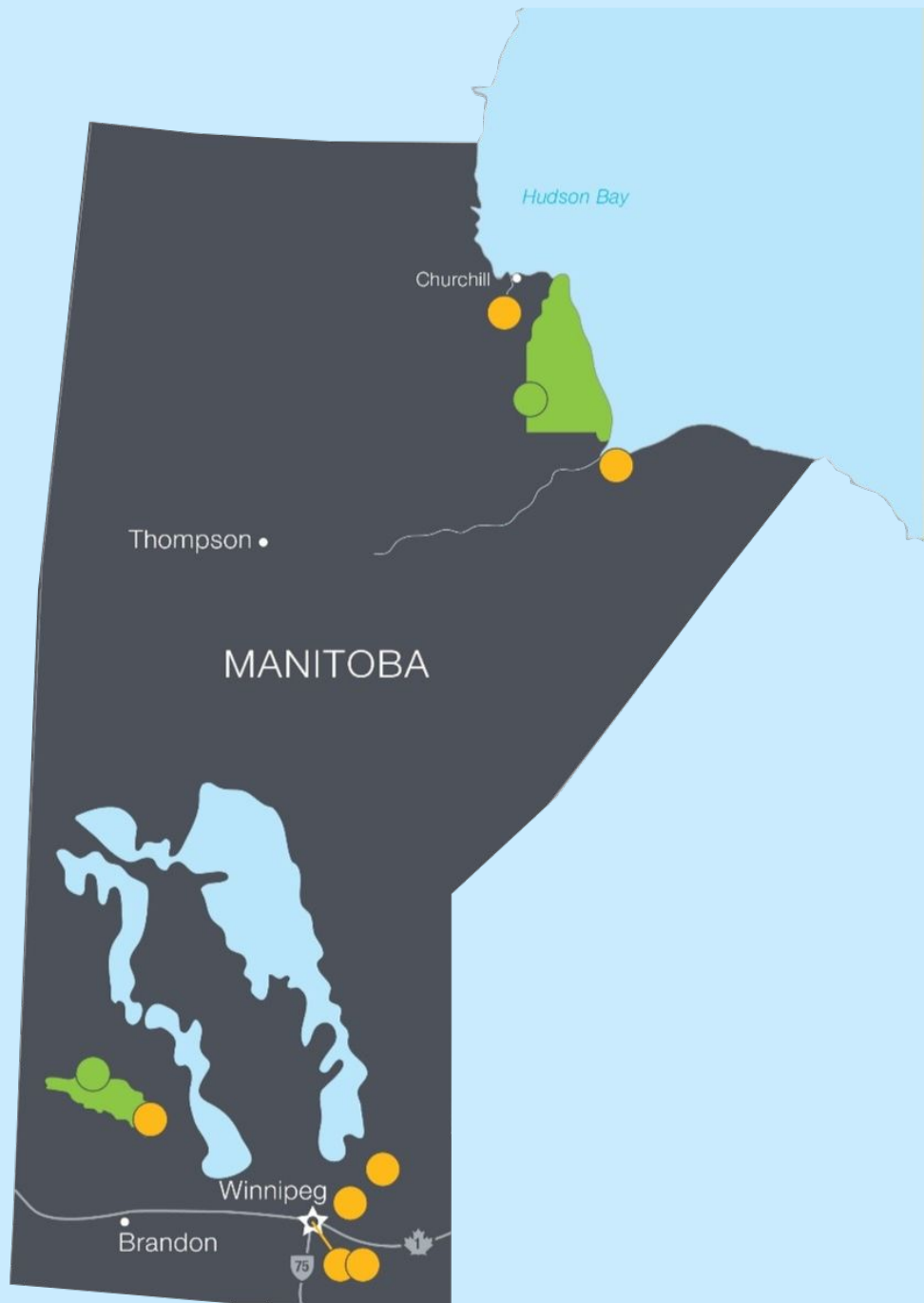


Parks Canada

Map of national parks and historic sites in Manitoba

Research and identify what national parks and historic sites are indicated on this map.

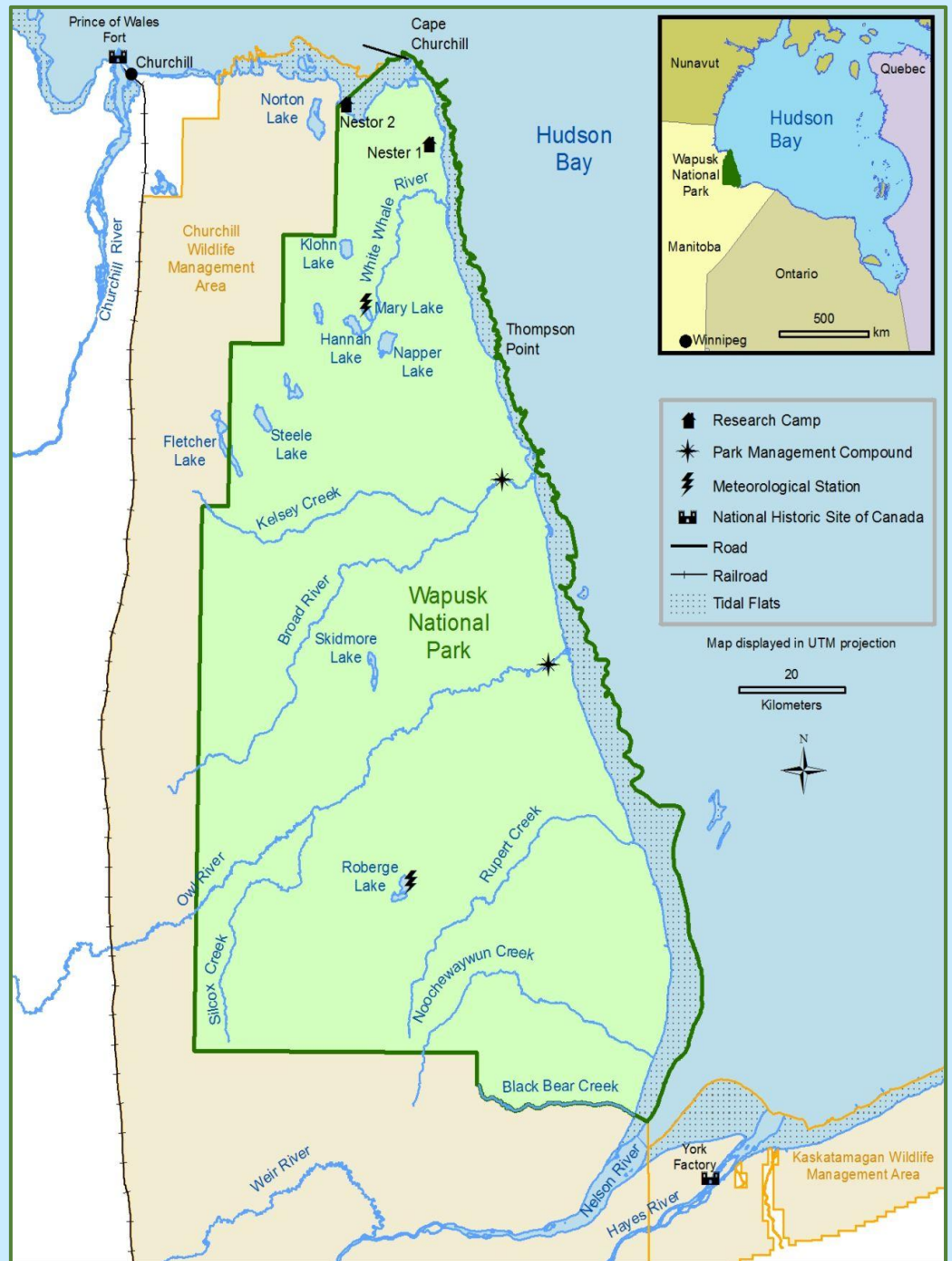
Here's a hint: **green** are national parks and **yellow** are national historic sites.





Parks Canada

Map of Wapusk National Park





Parks Canada

Planning a trip to Churchill, Manitoba

Home of the Cape Churchill herd

How to get there

Churchill is on the edge of Hudson Bay, **1,000 km north** of Winnipeg, Manitoba. It's accessible by plane from Winnipeg and from Thompson or Gillam, Manitoba. The **44-hour** train ride from Winnipeg to Churchill leaves only a few times a week and is a great way to see the scenery of northern Manitoba.

Make the most of your visit

- Start with a visit to the Parks Canada Visitor Centre, pictured below, to learn the history of the Churchill area. You can also see a **caribou exhibit!**



1. Parks Canada Visitor Centre in Churchill, Manitoba

- Wapusk has no roads or hiking trails. However, tour operators can fly over Wapusk or take you into the Churchill Wildlife Management Area by plane, helicopter, car or tundra vehicle.
- Come prepared for an incredibly varied climate – from the coldest winters to the warmest summer days.



Parks Canada

Planning a trip to Churchill, Manitoba

Home of the Cape Churchill herd

- There are so many different bird species to watch! Get your binoculars out.
- Go whale watching! More than **4,500** beluga whales return to the Churchill River in July and August. Take it one step further and kayak alongside these friendly whales!
- Watch breathtaking displays of **Northern Lights** from the end of September through April.
- Take a dog sled ride across the tundra.
- Take a trip to Prince of Wales Fort, Cape Merry Battery and Sloop Cove!



1. Caribou exhibit at the Parks Canada Visitor Centre in Churchill, Manitoba

Cape Churchill Herd





Cape Churchill Herd

The Caribou

What makes a caribou, a caribou?

- Their latin name (Scientific name): ***Rangifer tarandus***.
- Member of the deer family (Cervidae) along with moose, deer and elk.
- The word “caribou” comes from Mi'kmaq “xalibu”, meaning “**who digs for food**”.
- Unlike others within the deer family, **both** male and female caribou have antlers.

The Eastern Migratory Caribou

- The two main herds that use the Wapusk region are the **Qamanirjuaq Herd** (Barren-ground caribou) and the **Cape Churchill herd** (Eastern Migratory caribou).
- This EduKit focuses on the Eastern Migratory, Cape Churchill Caribou herd.



Parka Fact

Just like snowflakes, no two antlers are ever the same!





Cape Churchill Herd

The Caribou

Facts about the Cape Churchill Caribou

- Population counts suggest the size of the Cape Churchill herd has varied from **1,000 to 3,000** caribou over the past 25 years.
- The Cape Churchill herd is a unique forest-tundra ecotype, which describes the area they live in. A large portion of their habitat is protected within Wapusk National Park.

What do they eat?

- Their main food source is **lichen**. Lichen is a mix of algae and fungi that fuse together.
- To stay healthy, caribou eat over **2 garbage bags full** of lichen every day!
- They also have been known to eat willow and birch branches, berries, grasses, sedges and even mushrooms at times.



1. Reindeer lichen



What is your favourite meal?
Could you eat 2 garbage bags full of it each day?





Cape Churchill Herd

The Caribou

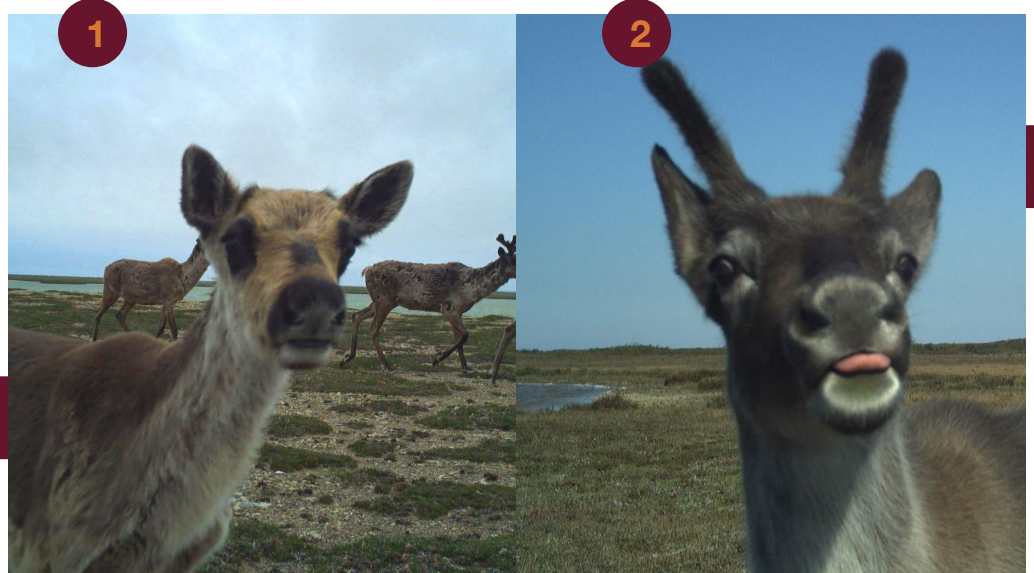
How long do caribou live?

Caribou live for about **15 years!**

Are reindeer and caribou the same animal?

Yes! They belong to the same genus and species.

In North America we use the name “caribou”, while in Europe and Asia they typically use the name “reindeer”.



1 & 2. Two silly young caribou



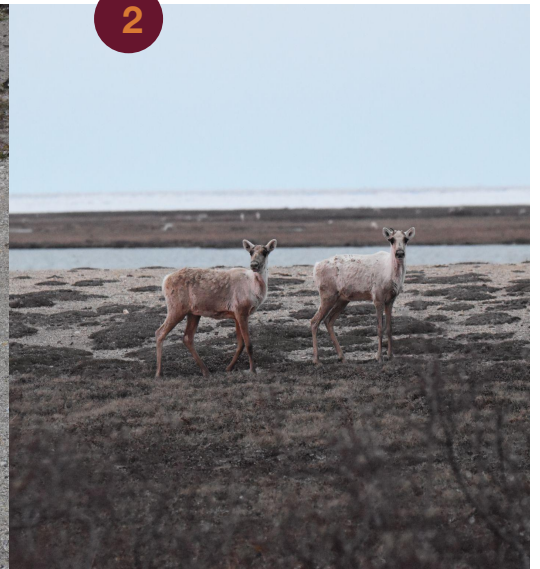
Cape Churchill Herd

The Caribou

Do caribou make noise?

They make **many** sounds! Including grunting and bellowing.

You may also hear a clicking sound when caribou are on the move. That sound comes from a tendon rolling around a small bone in their foot. Some think the clicking helps individuals stay close together in a snowstorm or when it's super foggy.



1. Two bulls resting 2. Two curious cows

Parka Fact

Bulls are male caribou, cows are female caribou, and calves are baby caribou.





Cape Churchill Herd

The Caribou

Caribou are very important to many Indigenous peoples. What do caribou mean to you?

Do antlers stay on forever?

- Antlers grow and shed **every year**.
- For males (bulls), antlers are shed after the fall rut in October/November (they no longer need them to impress). Their antlers can weigh up to 25 pounds. That's about 3 milk jugs!
- For females (cows), antlers are not shed until after they've given birth as they use their antlers to defend their food. Their antlers can weigh up to 8 pounds!

What are antlers made of?

- **Bone!** They are protected and wrapped with velvet skin which helps them grow.



1. Curious bull looking at a trail camera



Cape Churchill Herd

The Caribou

Are caribou dangerous to people?

- Caribou are known to be very docile animals and would prefer to be **left alone**. Always remember, these are wild animals and to be respectful and cautious.

Have you HERD?

Wapusk National Park is home to approximately 300 species of lichen!

They are found in forested areas, as well as on the tundra, on rocks, trees and human-made structures within the park!



1. Cows looking for food



Cape Churchill Herd

Migration Patterns

Action: Other than in Wapusk National Park, what other national parks in Canada protect caribou? What are the herds called? Check the Parks Canada website and write them down!

What are the migration patterns of the Cape Churchill herd?

- The herd spends winters in the southwestern portion of Wapusk National Park's boreal forest and in nearby areas like the Churchill Wildlife Management Area and beyond, to shelter from the harsh winter climate.
- In the summer months, they migrate nearly 200 kilometers to Cape Churchill to have calves. That's a distance longer than **3,000 hockey rinks!**

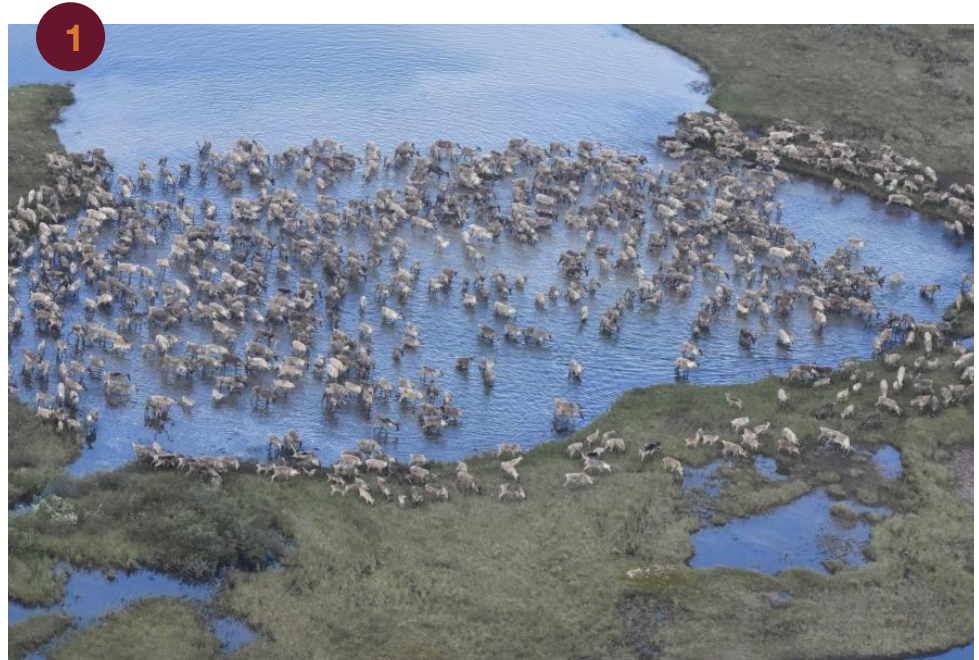


1. Group of caribou



Cape Churchill Herd

Migration Patterns



1. Caribou herd

So why do caribou migrate?

- Caribou migrate for food, shelter, to each calving areas, and to avoid predators.
- During the **winter**, the caribou tend to eat arboreal lichen. That's lichen that grows on the branches of trees. Rather than digging through the deep snow to get at lichen on the ground, caribou use the snow as a sort of stool to elevate them and reach lichen growing on trees above.
- The caribou then migrate to the **tundra** near Cape Churchill during the summer to have their babies, called calves. The space where they give birth is called their calving grounds.





Cape Churchill Herd

Migration Patterns

Action: Can you think of other reasons why caribou, in general, migrate?

- Would they want to have their babies (calves) in open windy locations? Why?
- Is food available at both locations?
- Where would food be more located in and why?
- Could they be moving because of predators? What kinds?

New season, new hair

- The hair that covers the body of a caribou is called their **pelage**. Pelage changes colour as the seasons change and is darkest during the summer.



Parka Fact

Caribou herds often get their names based on the location of their calving grounds. Hence how the Cape Churchill herd were named!

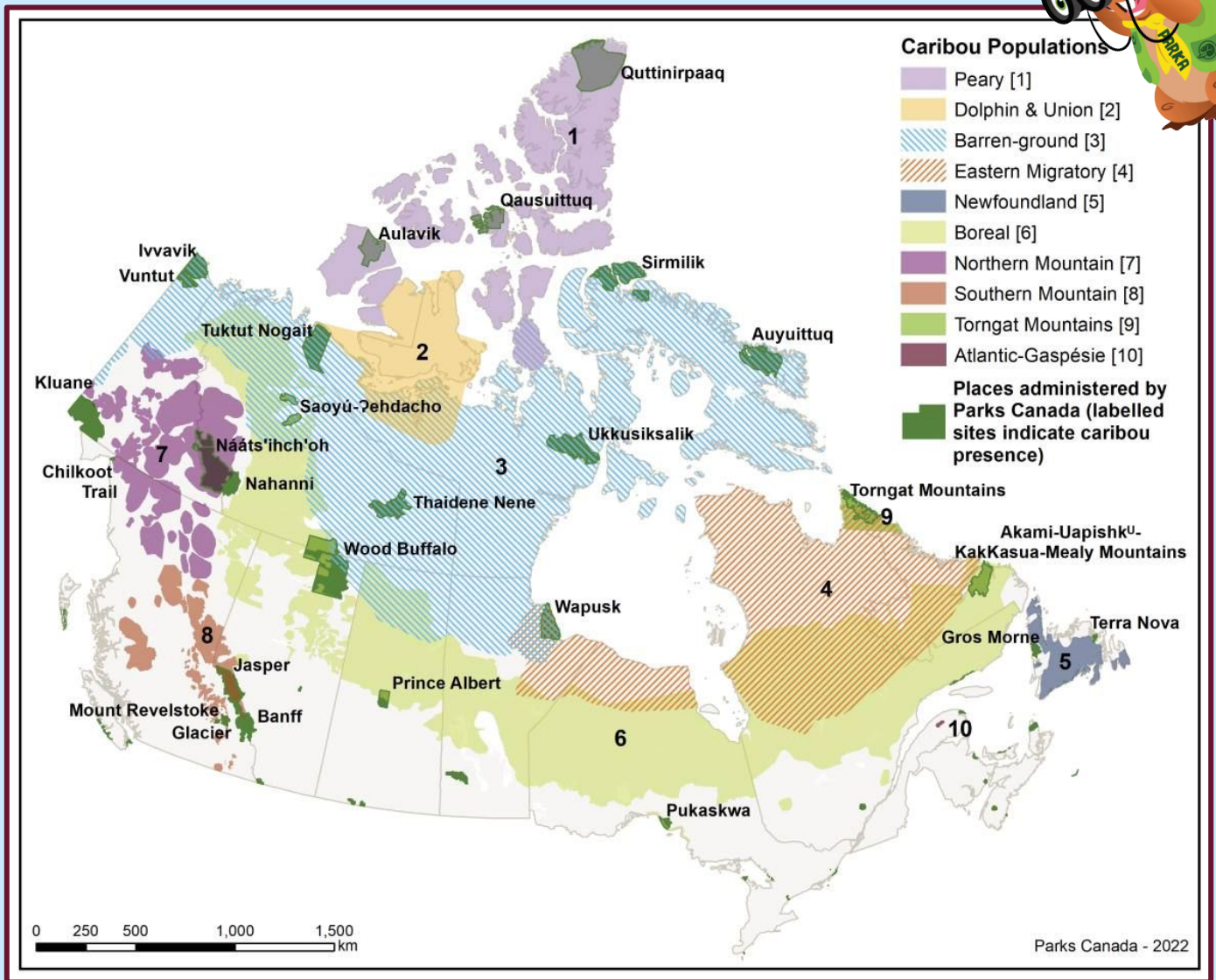




Migration Map

Take a look at all the different caribou populations in Canada and where they live.

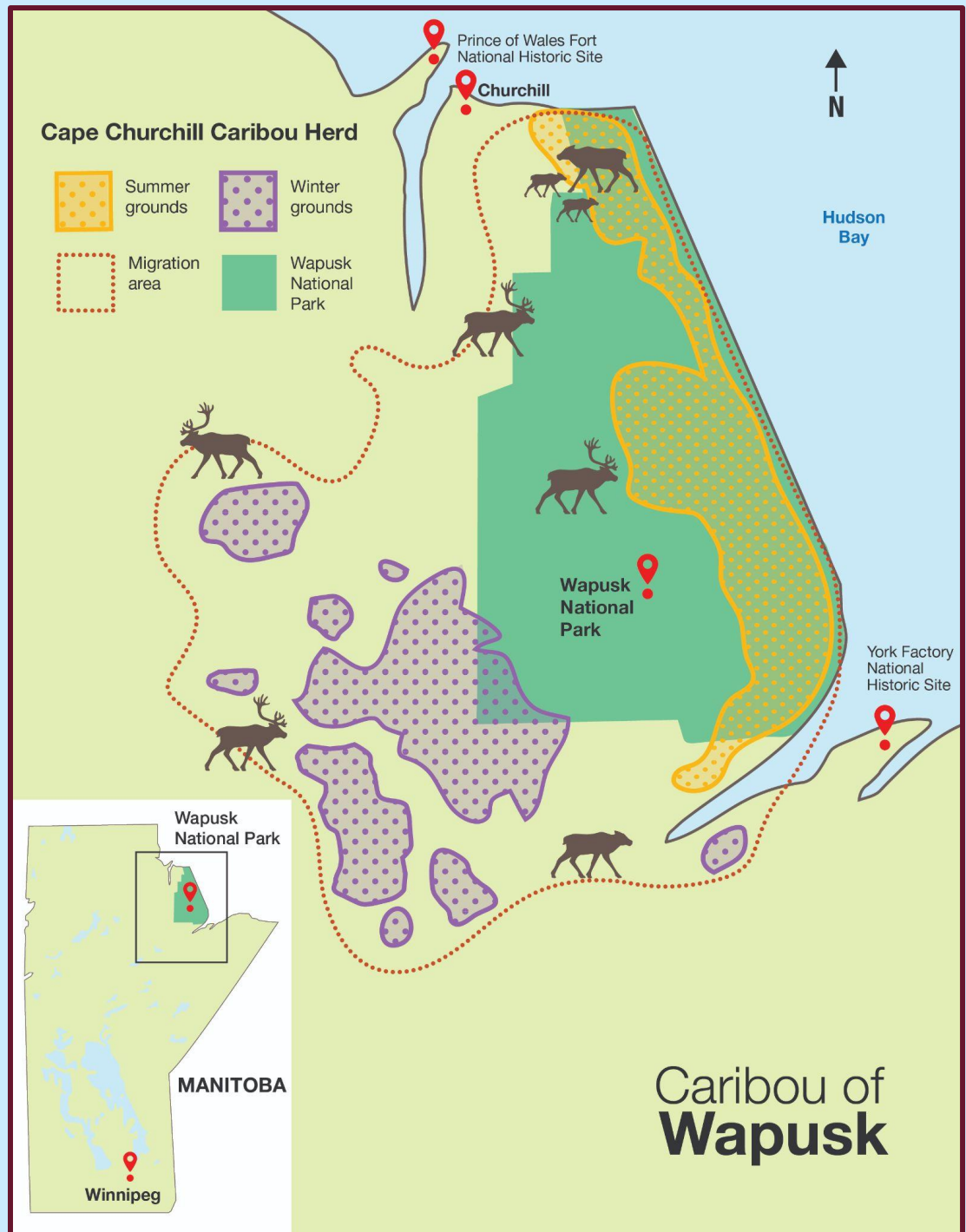
Can you find Wapusk National Park?





Cape Churchill Herd Migration Map

Take a look at the yearly migration of the Cape Churchill herd.





Cape Churchill Herd

Pictures of Wapusk
National Park



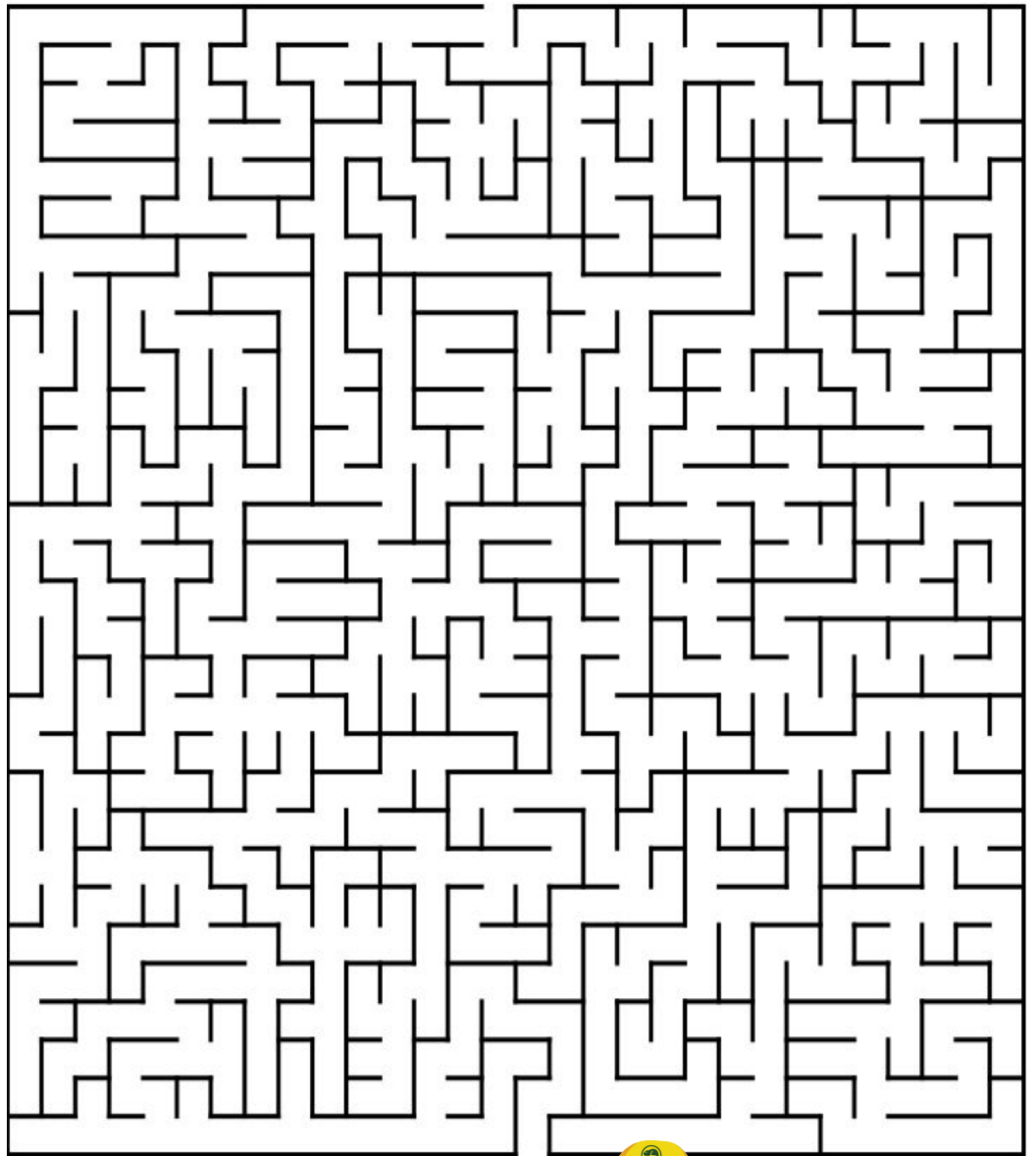


Activity

Caribou Crossing

While migrating, you wandered off from the herd to eat more lichen. But you went too far and need to catch up quickly before the wolves get too close!

End



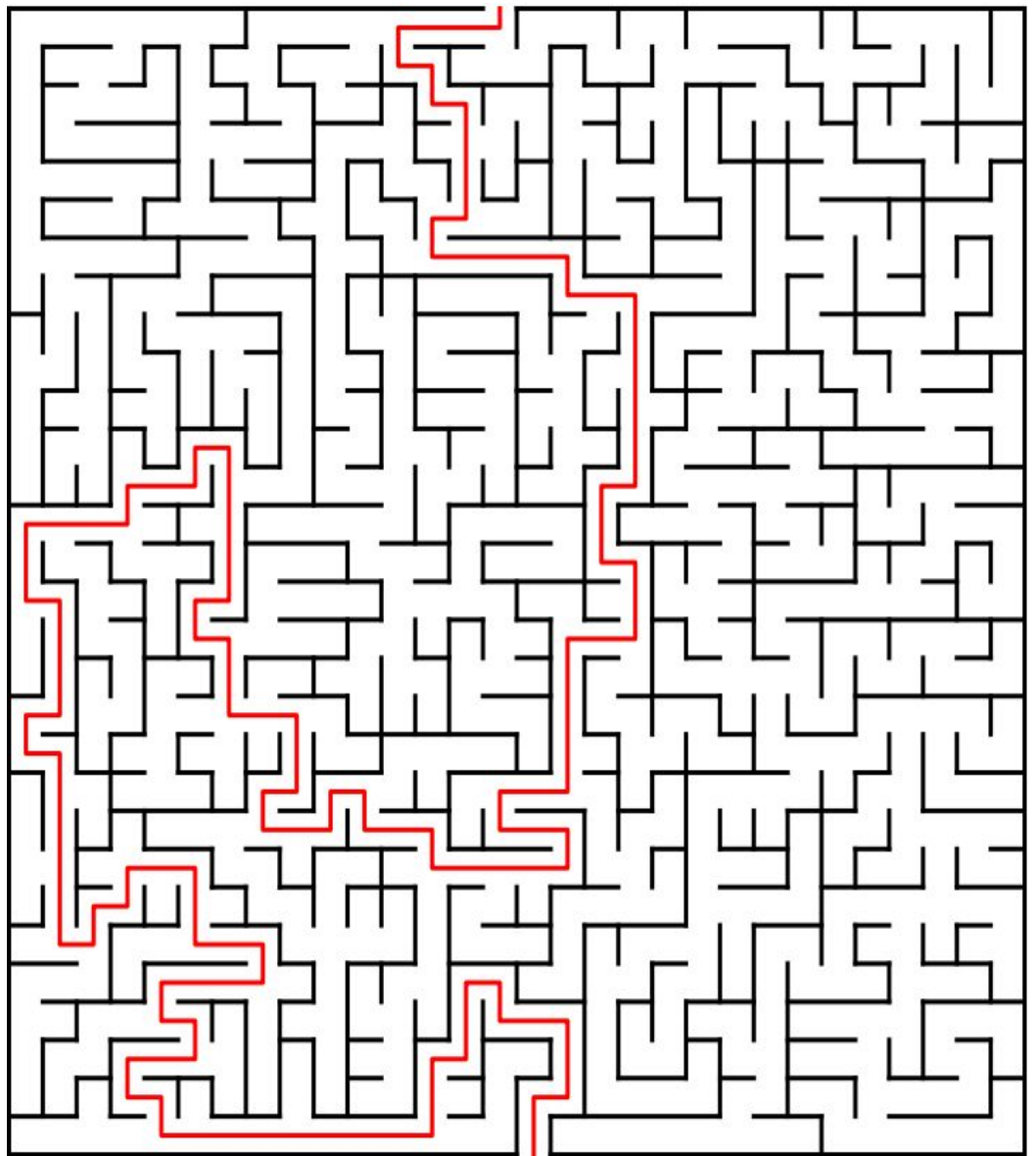
Canada



Activity

Caribou Crossing
Solution

End



Start



Activity

Let's migrate like the caribou!

In your classroom, gym or outside, identify areas that signify a season. One for summer, one for fall, one for winter and one for spring.

Move around the seasons and act as a caribou! What would you be doing in each season? Here's a reminder:

Summer

- On the tundra in Wapusk National Park.
- Eat grasses and small shrubs – use your antlers.
- Cows travel further to calving grounds areas to give birth, while males stay further behind.
- Cows shed their antlers in June.
- There are many mosquitos at this time, huddle together to escape them!
- Wolves and polar bears may be around, hide!

Fall

- Migrate to the boreal forest (200km) – you'll be tired and moving in herds!
- Males shed their antlers.

Winter

- Stay in the boreal forest for the winter.
- Eat their favourite meal – lichen.
- Shelter from the harsh subarctic winter climate.
- Migrate to calving grounds.
- Wolves may be following, make sure you keep an eye out.

Spring

- On the tundra.
- Bulls antlers begin growing.





Cape Churchill Herd

Adaptations

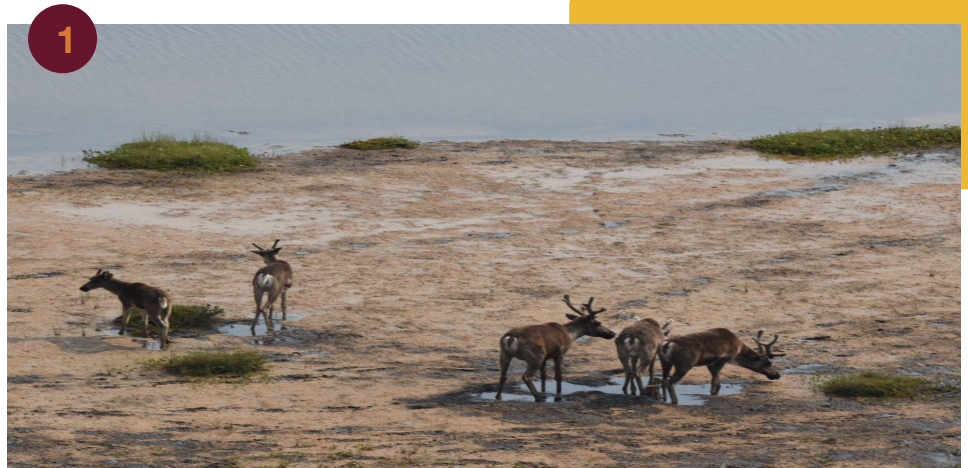
Caribou are highly adapted to living in the snow and extreme cold temperatures.

Physical adaptations are physical features that an animal has that helps them survive. Caribou have existed since the Ice Age and we have learned how their bodies help them survive the arctic.



Hooves

- Can spread out and act like **snowshoes** to walk on snow.
- They have two small toes and two large toes that grow a fleshy pad to help grip icy surfaces.
- Their hooves also act as a **shovel** or **paddle** when swimming.
- They also have **scent glands** at the base of their ankles. When in danger, these scent glands release a scent **alerting** other caribou that danger is near.



1. Caribou drinking



Cape Churchill Herd

Adaptations



Antlers

- Bulls have large antlers to advertise their **strength** to other bulls and cows.
- Females use antlers to help **defend** their winter craters and to **dig** deep craters in the snow to access food.
- Once their antlers fall, caribou also **chew** on them as they are a great source of calcium.

1



1. Caribou antlers



Cape Churchill Herd

Adaptations



Fur

- They have **two** layers of fur. A fuzzy layer is densely packed against their skin, while the other layer has long, hollow hairs that trap air to keep them warm and help them float in the water.
- Their fur helps them stay **warm** in the cold winter months, keeping the heat in and the cold out.



Nose

- Their noses heat the air as it enters their lungs, helping them stay warm.
- It **filters** the bugs out of the air as they breathe.
- It can smell lichen while it's still **under** the snow.



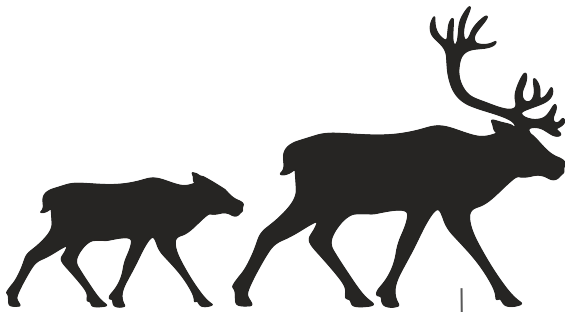
Eyes

- Their eyes help them see in the dark during the long winters.
- They also have **UV vision**, which helps them see in constant brightness during the summer.
- They **change colour** depending on the time of year (blue during winter and gold during summer).



Cape Churchill Herd

Adaptations



In addition to physical adaptations, caribou also have **behavioural adaptations** that help them navigate their environment.

Rutting

- The rutting period is the first part of the caribou's **reproductive cycle**. This is when all the caribou gather in one place and mate with one another.
- Only the biggest and strongest bulls mate with cows, which results in bigger and stronger calves. **Bigger antlers** help to identify which bulls are the strongest.
- This occurs during October and November, and calves are born in the spring.

Herding

- Caribou follow each other. When they are in danger, one caribou usually starts running and the rest will **follow** its lead. This confuses predators and helps protect the caribou.

Escaping biting insects

- To **escape** biting insects, caribou often move to snow patches, wide open spaces, water or areas with less vegetation.

Parka Fact

All calves are typically born within 10 days of each other. This helps protect the herd from predators. During their first three weeks, calves only drink their mother's milk.





Activity

Adaptations

Use this caribou drawing to showcase different forms of adaptations.

Work by yourself and colour in your caribou. Match with something in your classroom to ensure the caribou is hidden from predators and insects! Make it hide in plain sight by matching the caribou cutout to the colour of your classroom door, a poster on the wall, the clock or even the trash can. Just make sure the caribou blends in with the background!

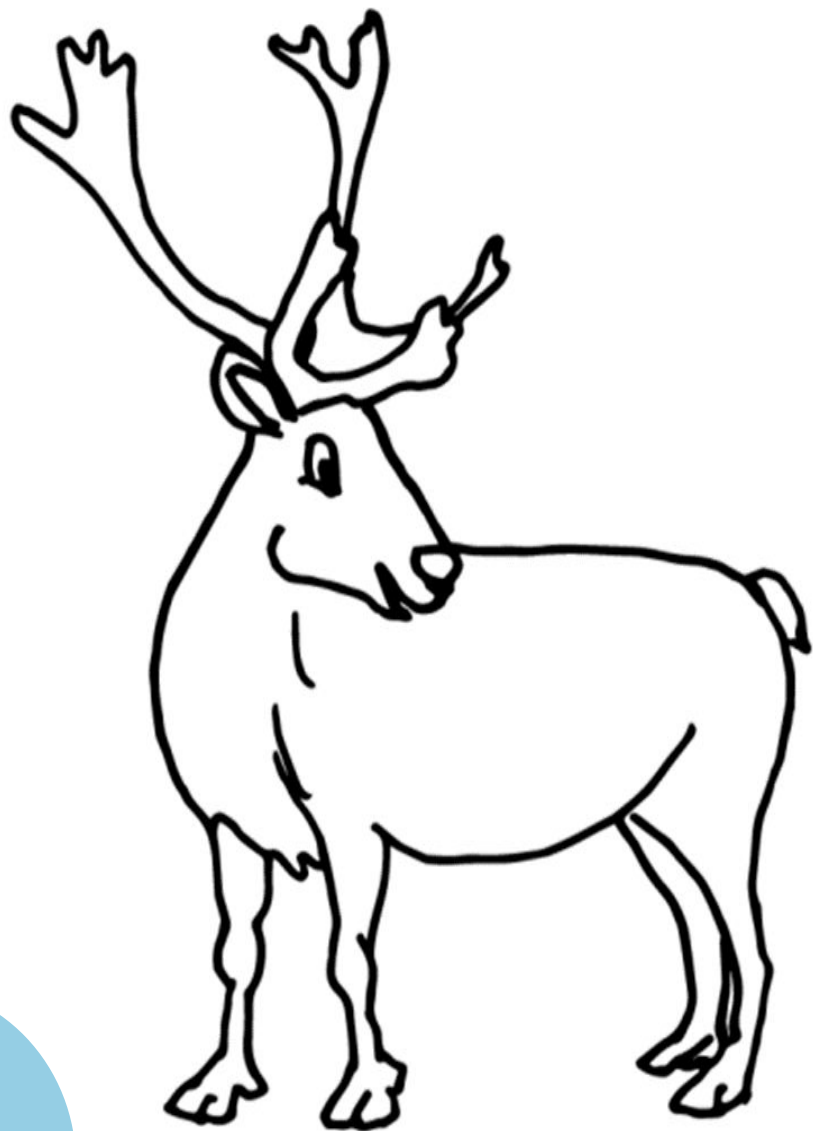
You may also work as a team and make sure you place your caribou in a herd around your classroom to escape predators and bugs. The more the merrier!

The largest herd or most hidden caribou is safest.



Activity

Adaptations





Activity

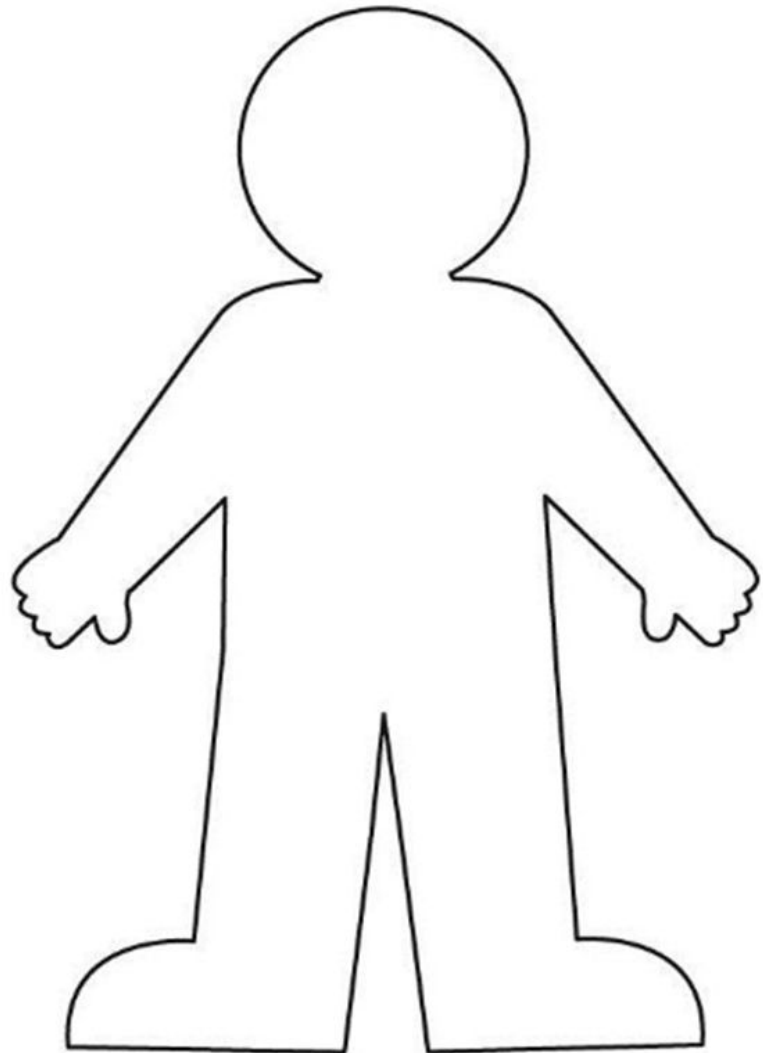
Create your own adaptation

After learning about the caribou and their amazing physical and behavioral adaptations, what kind of adaptations do you have? What kind of adaptations do you wish you had?

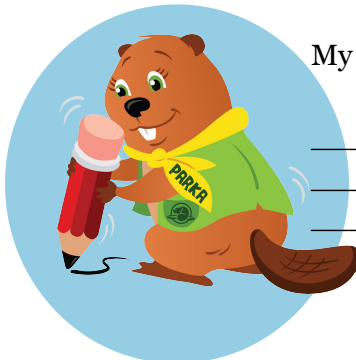
Take what you learned (with a little creativity) and use the space to the right to create your own adaptation. It can be something you already have/do, or you can make something that you've always dreamed of having/doing. Be creative, have fun and write about what your choice!

Name:

Date:



My adaptation is:





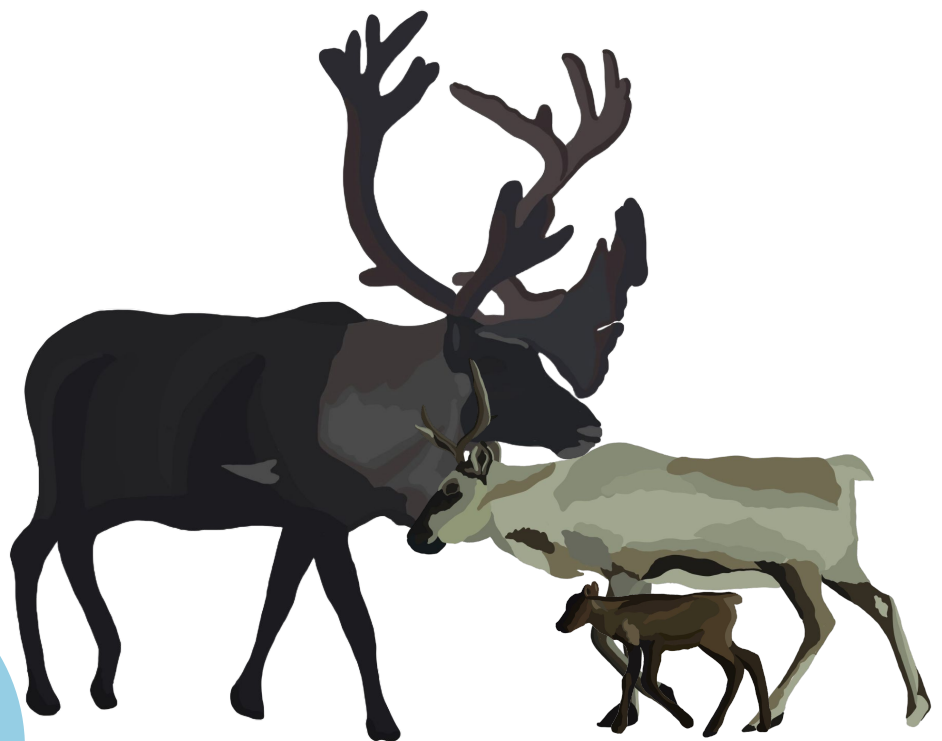
Activity

Build your own caribou!

The adaptations caribou have help them survive in the cold, in the summer, through long migrations and against hungry predators. While remembering what physical adaptations caribou have, build your own caribou using materials around your home or around your classroom.

Use materials you think will help them stay warm, help them run fast, swim, walk on snow, eat or hear.

Once you've made your caribou, present it to others and explain why your caribou would do well in Wapusk National Park!





Quiz

All about caribou

Read the following information about caribou and answer a few questions.

Caribou migrate between their calving grounds along the Hudson Bay coast to their winter home in the boreal forest. They also go by the name “reindeer” in Europe, Asia and when they become domesticated in North America.

Caribou are herbivores, meaning they only eat plants. They mostly eat lichen, a type of vegetation that grows on bark, wood, mosses, rock, soil and other undisturbed surfaces, and sometimes even hangs from trees. They can also eat grasses and small shrubs. During the winter when most plants die, lichen continues to grow underneath the snow. Because they live in such harsh conditions and their main food source is often buried under the snow in winter, caribou have developed some physical adaptations to help them survive.



1. Cows and their calves



Quiz

All about caribou

Antlers: Caribou antlers are important to their survival. They use them for mating and wrestling. Unlike other types of deer, both the male and female caribou grow antlers. Female caribou have antlers to find and defend their food.

Hooves: Caribou hooves have a few special features. They spread out wide like a snowshoe to help caribou keep their balance on slippery ice and rough terrain. Just like the rest of their body, caribou hooves are completely covered in fur which helps keep their hooves warm when walking on snow and ice and gives them extra grip when walking on slippery surfaces.

Fur: Caribou have unique fur. There are two layers: the inner layer is soft and woolly while the outer layer is coarse, like human hair, except that it is hollow like a drinking straw. Warm air gets trapped inside those hairs, helping them to stay warm during the cold winter months. The air trapped inside their fur also acts like a life jacket, helping them float while they swim and keeping their body temperature regulated.

Nose: Caribou have special elongated noses. Unlike other deer, caribou noses are completely covered in fur. Their noses are also very wide because they contain lots of blood vessels that warm the cold winter air they breathe before it reaches their lungs.





Quiz

All about caribou

Questions:

1. What areas do the Cape Churchill herd migrate between?

2. What is another name that caribou are known by when they are domesticated in North America? Is the Cape Churchill domesticated?

3. What does “herbivore” mean?





Quiz

All about caribou

4. What do caribou eat?

5. What are 4 physical adaptations of caribou?

6. What physical adaptation do female caribou have that other females in the deer family don't? Why do they have this adaptation?





Quiz

All about caribou

7. What physical adaptation helps caribou hooves stay warm and how?

8. Why do caribou have hollow hair in their fur?

Caribou are an endangered species, what would you do to help them?





Activity

Word search



1. CARIBOU
2. ADAPTATION
3. MIGRATE
4. LICHEN
5. TUNDRA
6. FOREST
7. ANTLERS
8. REINDEER
9. HOOVES
10. FUR
11. NOSE
12. WARMTH
13. MATING
14. PROTECTION
15. HOLLOW
16. HABITAT
17. ULTRAVIOLET
18. SURVIVAL

How many times can you find WAPUSK?

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



Activity

Word search

Answer key

1. CARIBOU
2. ADAPTATION
3. MIGRATE
4. LICHEN
5. TUNDRA
6. FOREST
7. ANTLERS
8. REINDEER
9. HOOVES
10. FUR
11. NOSE
12. WARMTH
13. MATING
14. PROTECTION
15. HOLLOW
16. HABITAT
17. ULTRAVIOLET
18. SURVIVAL

WAPUSK appears 3 times.



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



Quiz

Test your knowledge

Test your knowledge by competing against your peers in our caribou multi-choice game!

Instructions:

- Make teams of 2 to 3 students.
- Students will be presented with different choices, there may be 1 or multiple answers.
- Circle the answer that your team agrees on.
- At the end of the game, tally up the answers and see who won!

1. What is an example of a physical adaptation?

- A butterfly turning from a caterpillar to a chrysalis
- A caribou using its hooves to dig for food
- A bird eating a worm
- A mouse hiding from a cat

2. What's the difference between a caribou and a reindeer?

- Caribou eat lichen while reindeer eat carrots
- Reindeer fly while caribou swim
- Caribou travel alone while reindeer travel in herds
- Caribou and the reindeer are the same species, but reindeer are domesticated

3. What is an adaptation seen in newborn calves?

- Though they can't see yet, they can smell lichen from miles away
- They're born with antlers to help dig for food
- They can stand and walk within hours of being born
- They become fully independent within 2 weeks of being born





Quiz

Test your
knowledge

4. **What type of terrain is the caribou habitat in Manitoba?**
 - a. Arctic tundra and boreal forest
 - b. Arctic tundra and the Rocky Mountains
 - c. Boreal forest and tall grass prairies
 - d. Rocky Mountains and boreal forest

5. **What is an example of a behavioral adaptation?**
Hint: There may be one more than one answer!
 - a. A cat having claws
 - b. A bear having big and strong hind legs
 - c. Wolves hunting caribou in a pack
 - d. Caribou sticking together to escape bugs
 - e. A duck having webbed feet

6. **What are 5 physical adaptations of the Cape Churchill herd?**
 - a. Antlers, fur, tail, claws, ears
 - b. Fur, tail, wings, hooves, mouth
 - c. Antlers, hooves, fur, nose, eyes
 - d. Eyes, nose, mouth, stomach, gills





Quiz

Test your
knowledge

7. **What is a physical adaptation of caribou that help them protect themselves from predators like wolves?**

- a. Their antlers
- b. Their hooves
- c. Their fur
- d. Their nose
- e. Their eyes

8. **What are the 3 behavioral adaptations of the Cape Churchill herd?**

- a. Hibernation, migration, nocturnal
- b. Migration, rutting, herding
- c. Herding, hiding, hibernation
- d. Rutting, running, swimming

9. **What is rutting?**

- a. Caribou looking for food
- b. Caribou wrestling with other caribou
- c. Caribou mating time
- d. Caribou migrating from the tundra to the forest

10. **Why do caribou migrate?**

- a. To avoid predators
- b. To gather together and mate with one another
- c. To find food
- d. All of the above





Quiz

Test your
knowledge

Answer key

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Conservation





Conservation

Endangerment

The Cape Churchill herd is classified as **Endangered**.

What does the term “**endangered species**” mean?
Brainstorm and write it down.

Answer: “Endangered” is the term to describe species (which are any living thing including plants, insects, animals and even humans) that could become extinct in Canada or throughout the world if the threats to their survival are not removed or decreased.



1. Cows and their calves



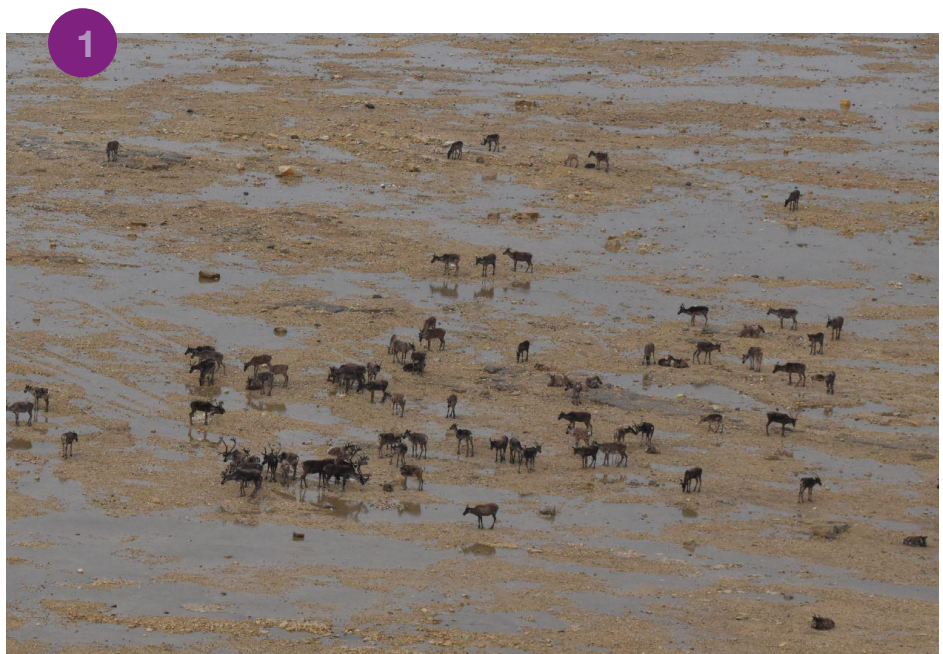
Conservation

Threats to caribou

How many caribou are within the Cape Churchill herd?

Exact numbers are hard to confirm, but data suggests the population varies between **1,000 and 3,000** caribou over the past 25 years. Unfortunately, it is believed that the population is declining.

Why do you think the population is declining?



1. Group of caribou

Have you HERD?

Calves born in June can walk and travel within hours of their birth! This is an adaptation that protects them from predators.



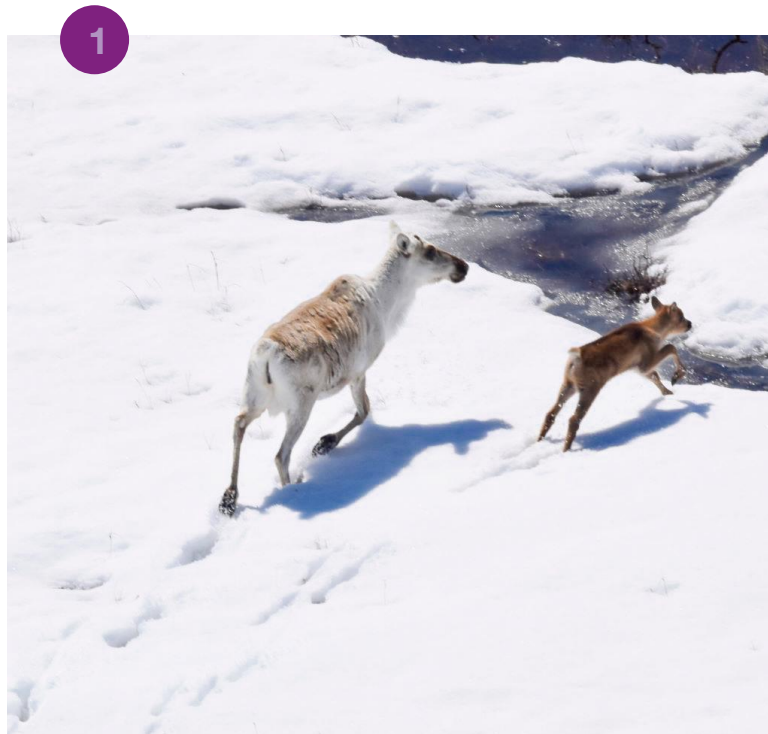


Conservation

Threats to caribou

Habitat loss

- Habitat loss is thought to be one of the **main reasons** we see a decline in caribou populations across Canada.
- How is caribou habitat being lost? **Human activities** like mining, logging, oil and gas development, power lines, building homes, cabins, roads and trails cause caribou to avoid areas where these activities happen. Researchers have found that caribou will avoid these different types of disturbances on the landscape for up to 16 km!



1. Cow and her calf



Conservation

Threats to caribou

Habitat loss

- Human structures on the land can also disrupt caribou migration routes. Roads, trails and power lines are roadblocks for caribou and can force them to take different routes. This often requires caribou to spend more energy moving to safer areas.



1. Cows and their calves

Saving the caribou, it's up to YOU!

Brainstorm ways in which humans can change their actions to protect caribou, rather than disturbing them.

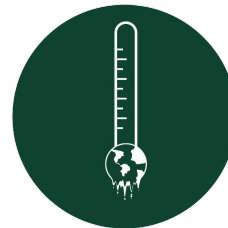


Conservation

Threats to caribou

Climate change

- Although caribou are resilient and have adapted to living in harsh climates, they are still affected by climate change.
 - Changes that are currently affecting caribou include earlier snowmelts, later winters, and **warmer temperatures**.
 - These changes affect their ability to travel on land, retrieve their favorite food source and increases the potential of parasites.
 - As time goes by, climate change will continue to pose a threat to caribou populations.



Before continuing, brainstorm how climate change can affect caribou!

- Lichen, caribou's favourite food, is affected by climate change. Climate change increases the presence of plants like shrubs, which can decrease the presence of lichen.
- Rising temperatures usually increase the duration and **intensity of insect life**. This means caribou will likely have a harder time protecting themselves from biting insects.



Conservation

Threats to caribou

Climate Change

- Flies also **lay their eggs** on and in caribou fur and attempt to enter their nostrils. As we learned earlier, when caribou are bothered by insects, they tend to form larger groups, and/or try to escape by moving to windy locations where they can be safer. This behaviour can have a negative impact as caribou spend more energy trying to avoid insects rather than feeding.
- Climate change is likely to lead to an increase in wildfires. Wildfires can cause significant harm to the caribou by eliminating lichen and tree cover, which act as a “roof” when it snows.
- Drier lands due to climate change also reduces the winter range that is available for caribou.



Have you HERD?

During the summer season, caribou can be spotted huddled in the ocean, attempting to escape from biting insects!





Conservation

Threats to caribou

Threats to caribou

Predators

- As part of the cycle of life, caribou are affected by the presence of predators.
- **Wolves** are the main predator of caribou across Canada. Polar bears, grizzly bears, black bears, lynx and wolverines in Wapusk are also known to kill caribou or scavenge caribou killed by other factors.



How is climate change affecting wolves, and other animals' food source? Partner up and brainstorm.

Have you HERD?

Not all stressors are human-caused stressors. Stressors like predators, insects, and wildlife are examples of natural stressors.





Activity

Spot the differences

In addition to caribou, climate change is affecting northern Manitoba in a number of ways. These pictures demonstrate effects of climate change on Parks Canada administered sites and animals that live in and near northern Manitoba.

Can you spot the differences?

Write down what you think they represent.





Activity

Spot the differences

Answer key

Answer Key

1. Polar bears are being forced onto land as the sea ice is decreasing because of warmer temperatures. This changes their migration patterns, their ability to hunt and to eat enough fat to store in their bodies during ice-free periods.
2. Caribou are being swarmed and bitten by insects as temperatures get warmer which causes the caribou to form larger groups and move to windy locations to hide from these insects. During normal, cool weather, about 10 to 12 caribou group together. As temperatures rise, hundreds will stick together. This disrupts their usual migration patterns.
3. The fish population in the Hudson Bay is seeing a loss of biodiversity as the warming water results in fewer fish species which is affecting the food source for belugas.
4. The thawing of permafrost in northern Manitoba is the source of ground instability affecting York Factory and Prince of Wales Fort national historic sites.
5. Indigenous peoples are having to adjust to changing caribou migration patterns which affects their traditional hunting routines. Their food sources are also being affected by this change.
6. Churchill's nature is changing as temperatures increase, causing the snow melting season to last longer.





Activity

Riddles

Here are some descriptions of some of the threats to caribou.

Read the clues and guess what they are.

1. I travel in a pack to get to my favourite snack. They may hear me howl and growl, but caribou will not easily throw in the towel. When they see me, caribou often let out a smell, warning others as they stick together and to wish me farewell. I stay back behind their herd as they migrate, I prey on the slow, the weak, the old and the calves left alone on a silver plate. **Who am I?**
2. I'm very hot. The bigger I get, the harder it is to get me to stop. You may use me when camping to make delicious s'mores, but I'm not safe when left alone in the outdoors. When I touch a tree, I often make them go down. To caribou, I can be a real let down. I affect caribou by putting them in danger and ruining their food. Turns out, they don't like when lichen is barbecued. **Who am I?**
3. I create a lot of buzz around town, but caribou don't seem to like the gossip. What a letdown! Whenever they hear or feel me, caribou tend to run away or even take a dip in a pond. What a weird way to respond... Yes, I may lay eggs on the caribou from time to time, no one told me it was a crime! I also like to bite caribou here and there, which to them, is a complete nightmare. **Who am I?**
4. I've made caribou life a little harder. Because of me, they are finding new, weird plants, must walk further, and their days are so much warmer. If a herd needs to cross ice to migrate – forget it, the water won't freeze! I also make it harder for lichen to grow, sorry, but I will make sure there are even more fleas! **Who am I?**
5. I've created roads, dams and I've cut down some trees, and I'll continue to do so as I please. Though I may be harming the home of caribou, I care more about new roads and buildings, boo-hoo! We're not all bad though, many of us recognize these new developments affect caribou habitat, and if you do as well, pat yourself on the back. We have a huge role in protecting caribou, it's about time we see it through. **Who am I?**





Activity

Riddles

Answer key

1. I travel in a pack to get to my favourite snack. They may hear me howl and growl, but caribou will not easily throw in the towel. When they see me, caribou often let out a smell, warning others as they stick together and to wish me farewell. I stay back behind their herd as they migrate, I prey on the slow, the weak, the old and the calves left alone on a silver plate. **Who am I? Wolves**
2. I'm very hot. The bigger I get, the harder it is to get me to stop. You may use me when camping to make delicious s'mores, but I'm not safe when left alone in the outdoors. When I touch a tree, I often make them go down. To caribou, I can be a real let down. I affect caribou by putting them in danger and ruining their food. Turns out, they don't like when lichen is barbecued. **Who am I? Forest Fire**
3. I create a lot of buzz around town, but caribou don't seem to like the gossip. What a letdown! Whenever they hear or feel me, caribou tend to run away or even take a dip in a pond. What a weird way to respond... Yes, I may lay eggs on the caribou from time to time, no one told me it was a crime! I also like to bite caribou here and there, which to them, is a complete nightmare. **Who am I? Flies/Mosquitoes**
4. I've made caribou life a little harder. Because of me, they are finding new, weird plants, must walk further, and their days are so much warmer. If a herd needs to cross ice to migrate – forget it, the water won't freeze! I also make it harder for lichen to grow, sorry, but I will make sure there are even more fleas! **Who am I? Climate Change**
5. I've created roads, dams and I've cut down some trees, and I'll continue to do so as I please. Though I may be harming the home of caribou, I care more about new roads and buildings, boo-hoo! We're not all bad though, many of us recognize these new developments affect caribou habitat, and if you do as well, pat yourself on the back. We have a huge role in protecting caribou, it's about time we see it through. **Who am I? Humans**





Conservation

Conservation Efforts

Check out [this](https://www.youtube.com/watch?v=frNvpkdSgdE&t=1s) video to see our scientists at work in the park!
(<https://www.youtube.com/watch?v=frNvpkdSgdE&t=1s>)

There is a lot of work happening in Wapusk National Park!

Wapusk National Park protects an area of northeastern Manitoba from development and human disruption. Over these 11,475 square kilometers, the park assists in the protection of the Cape Churchill Caribou calving grounds and summer habitat. The scientists in the park are key to its protection.

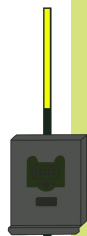
Here are some examples of the caribou research happening in Wapusk:

- Collecting and analyzing **caribou scat** (poop!), to learn about their diet and physical health.
- Installing **92 trail cameras** to capture images that can teach us about caribou migration and health.
- **GPS collars** on adult caribou to better understand their migration patterns.
- **Aerial surveys** (in a helicopter!) to count the herd which can tell us about the population.

Have you HERD?

Remote field cameras are used for both monitoring and research activities. They are found all around **Wapusk National Park**.

Though they help with monitoring caribou, the cameras have also captured polar bears, grizzly bears and black bears, moose, wolves, arctic hare, red foxes, wolverines, sandhill crane, and many other animals!





Conservation

Conservation Efforts

Here's the scoop on caribou poop:

- To assess which areas have scat, scientists took to the sky in a helicopter to look for **signs** of caribou. These signs can be tracks, areas where caribou have dug through the snow, or caribou craters that were formed when caribou have sat or laid down to rest.
- Once these traces were found, the team began collecting pellet samples, about 20 to 30 samples per person, and stored them in a cooler to keep them frozen until they can be sent to a lab.
- The scat samples are sent from Churchill to Ottawa to learn about their DNA. Once analyzed, we'll be able to know so much more about the caribou that call Wapusk National Park home.

What are other ways that researchers could survey caribou safely?



1. Caribou tracks 2. Freezer full of caribou scat samples 3. Cluster of caribou scat



2022 - 2024

Nature Legacy – Wapusk National Park

Addressing knowledge gaps through innovative research projects focused on environmental conservation and protection of species at risk

Conservation

Nature Legacy

The Candid Caribou Project

Campaign Objective

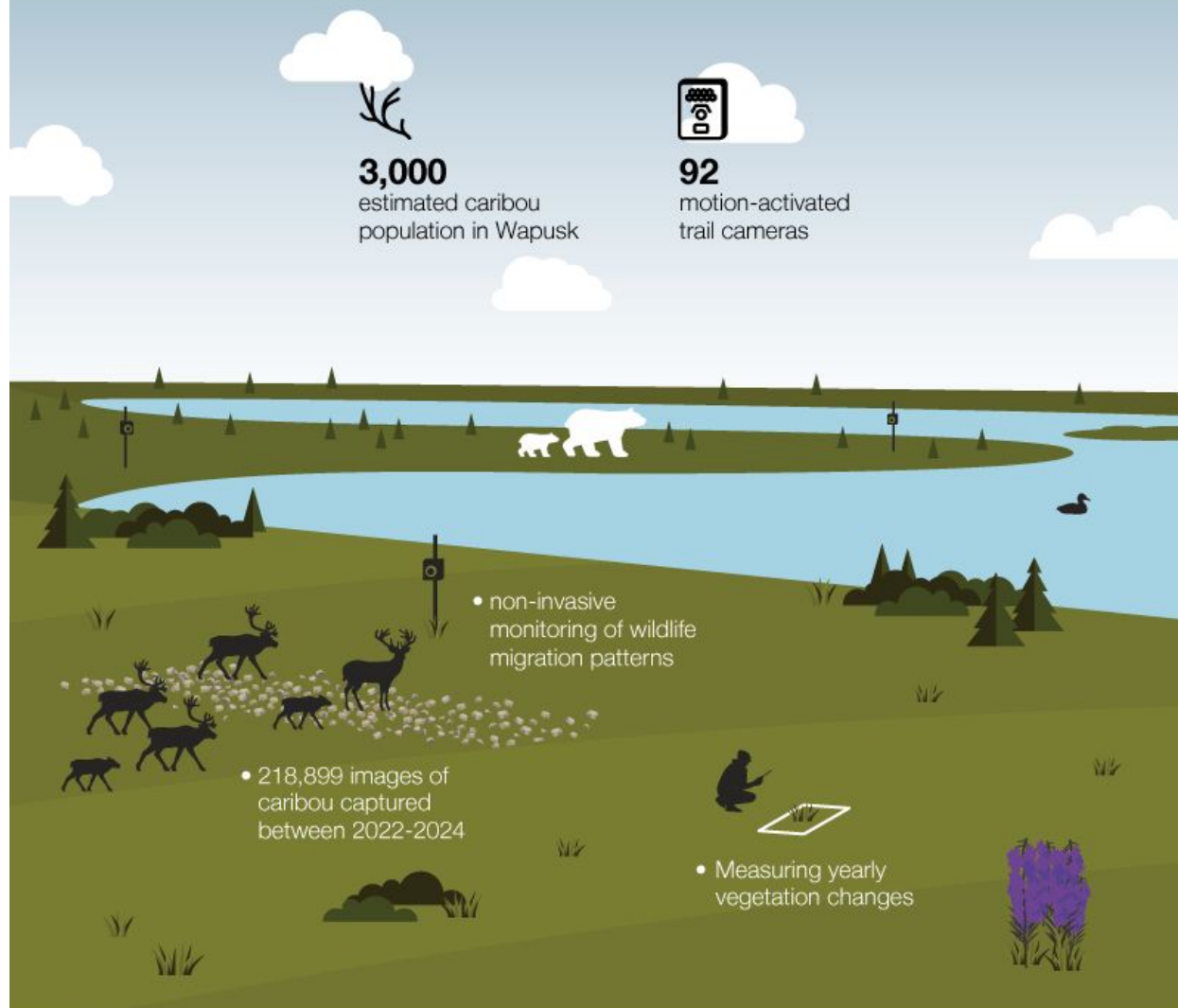
Characterising the Eastern Migratory Cape Churchill Caribou herd occurrences with a trail camera system and climate-smart conservation.

Strengthening Relationships

Collaborating with the University of Saskatchewan and the Manitoba Métis Federation.

Monitoring Species at Risk

Meeting Species at Risk Act requirements through minimally invasive monitoring and research methods.





Activity

Concentrated caribou

Unfortunately, caribou face many disturbances. Pesky biting and noisy insects, human structures like roads and powerlines, hungry preying wolves, and warmer temperatures decreasing the presence of their favourite meal – lichen, many factors disrupt their normal routine. Through it all caribou try to stay cool and concentrated as they focus on migrating, eating and raising their calves.

Now it's your turn to see if you can stay cool, calm and caribou! In teams of 3, you'll test yourselves.

Player 1: The caribou

- Your job is simple... Eat! There's lichen everywhere, you just need to get your **hooves** on it.
- With a blindfold on (you've closed your eyes because the bugs keep getting it), put 1 spoon in your hand (your antlers), and the other hand behind your back. You'll dig through lichen (fuzzy pom pom balls) that are at a bottom of a bowl. However, you'll have to get the snow out of the way first (cotton balls).
- You have **45 seconds** to try and dig all the snow out.
- Sounds easy? Well, there are also disturbances around...





Activity

Concentrated caribou

Player 2: Insects

- Insects often follow caribou around and lay eggs in their fur.
- Your job is to make buzzing sounds to throw the caribou off.
- You're also a **powerful** insect. With a paper plate in hand, fan the player all around to mimic the constant buzzing of flies all around them. Your powerful wings may also affect how much snow the caribou can remove from their bowl.

Player 3: Snow

- It's snowing! The caribou is a strong digger, but the lack of trees in the area due to foresting results in a much **heavier** snowfall than usual.
- As the caribou takes out their snow from their bowl, put them back in their sneakily, but only one-by-one and with only one hand!

Take turns switching roles!

The caribou with the most amount of lichen and least amount of snow in their bowl wins!





Conservation

Interview with
our scientists:
Russell Turner

We asked our team in Wapusk about their work with caribou! Here's what they had to say:

Russell Turner, an Ecosystem Scientist, passionate about wildlife conservation and the Arctic is responsible for Species at Risk Monitoring with a current focus on caribou. He is also lucky enough to be one of the few to often go into Wapusk National Park. Russell has seen animals such as polar bears, caribou, wolves, beluga whales, golden eagles, snowy owls and many more critters that call Wapusk home.

What was your first encounter with a caribou in Wapusk? Were you close? How many were there?

My first encounter with caribou in Wapusk was a memory **I will never forget**. It was my first trip into Wapusk in July 2020, to conduct our lake hydrology water sampling project. It was mid day just after lunch and we were in a helicopter flying to our next pond. When out of the corner of my eye I saw something **large and unknown** moving in a pond a couple kilometers away. I had no idea what it was. My brain did not comprehend what I was looking at because it was **so big!** It was the size of a hockey rink moving on the landscape. I quickly took a **photo** with my camera and zoomed in on the screen to see what it was. Sure, enough it was an **entire herd of caribou** moving. With excitement I shrieked into the headset “caribou at three o'clock” and asked the pilot to fly a bit closer. The next couple of minutes we witnessed a large group of roughly **700 caribou** move across the tundra in and out of ponds.



Conservation

Interview with
our scientists:
Russell Turner

What was the largest herd you have seen? How many caribou do you think there were?

The largest herd that I have ever seen was around **1,000 caribou**. They were all standing in a pond face into the wind and not really moving. We circled the herd, from a safe distance in our helicopter to capture photos. Then later counted the photo to get an exact count. This photograph is our most recent best estimate at a minimum number of animals for the Cape Churchill Caribou herd.

Have caribou ever gotten close?

Yes, one instance stands out to me. In summer 2021, I was part of the team that was deploying trail cameras throughout the Cape Churchill herd's summer range. Three of us were dropped off by helicopter along a beach ridge to install a **trail camera**. The helicopter had to leave us to go refuel back at camp. After we installed the camera, we all sat down in the middle of the ridge to have our lunch knowing that the helicopter would not return for at least 30 minutes. While we were eating lunch, we watched a **huge bull** from 3 km away begin to **walk directly towards us** and I took a picture. We remained silent and did not move. The large bull walked right down the middle of that beach ridge about 20 meters from us. What really stands out to me was the sounds this caribou made, the **huffing and puffing** from this bull as he trotted by completely unfazed by our presence.



1. A lone caribou



Conservation

Interview with
our scientists:
Russell Turner

Are you ever scared if you see caribou?

No, almost never. The only time I have ever been scared by caribou was one morning at 4 am I crawled out of my tent to use the bathroom at Broad River Compound, where we conduct research. It was so early, a little foggy and very little light out. I turned towards the washroom and could feel a **set of eyes watching me**. I quickly turned around and just on the other side of our bear proof fence was a group of **five caribou**, also half asleep, **watching my every move**. I had to rub my eyes thinking I was still dreaming, and in the instant, the group of caribou **jumped up and ran away**. My heart was beating so fast as I heard the group galloping away. I was no longer half asleep.

To you, why are caribou so important to the park and to Canada?

To me, caribou are **iconic**. They are so important to Canadians we have them on our 25-cent coin. They are important to Wapusk because I feel that the **health of caribou help us understand the health of the park**. If we have a healthy thriving caribou population, we can expect that all the other ecosystems and plants and animals are also healthy.

Parka Fact

Caribou are **chionophile** (*Kie-AHN-oh-file*) animals which means they love and thrive in the snow and cold weather! While the thought of warmer weather may be fun for you, warmer temperatures across both winter and summer is harmful for caribou.





Conservation

Interview with
our scientists:
Russell Turner

What's your favourite fact about caribou?

That both male and female caribou **grow antlers**.

If we're not in the park, or an area near caribou, what can we do to help protect them?

Learn about caribou. Discover why they are so **unique** and understand the important role that caribou play for **northern communities** and ecosystems that they are found. **Advocate** for protected areas that protect caribou and their habitat. And finally, **share** what you love about caribou with friends, family and social media so others can discover what makes them so unique.



1. A picture snapped by Russell of the large herd he saw in the helicopter 2. A picture of Russell at Owl River 3. The large bull that walked close to Russell and his team.



Conservation

Interview with
our scientists:
Nicole Rogowsky

Nicole Rogowsky, currently a Resource Management Officer, has played a large role in processing trail camera pictures of caribou. She has also worked in visitor safety, monitoring fires and ensuring safety precautions are met in the park by planning for emergencies.

What was your first encounter with a caribou in Wapusk? Were you close? How many were there?

My first encounter with a caribou in Wapusk was in late winter 2023. There was a single caribou running along the snowmobile tracks we had made previously. Once it saw us, it did a cute **little jump** and ran off.

Have you ever seen a large herd? How many do you think there were?

I have seen herds with maybe **20 to 30** caribou. Usually in the spring time when they are starting to **migrate** to Cape Churchill.

Have caribou ever gotten close?

The closest I have been to a caribou is when I was in one of the compounds in Wapusk. There was a male caribou that was hanging around, maybe **100m away** from the fence. I've also had caribou in close proximity other places in the park. They are **curious** animals and tend to watch from a distance.

Are you ever scared if you see caribou?

Nope! I am more **excited** when I see caribou.



Conservation

Interview with
our scientists:
Nicole Rogowsky

To you, why are caribou so important to the park and to Canada?

Caribou are important because they are part of an **intricate ecosystem**. A healthy ecosystem has a variety of animals that each have unique roles in keeping the environment healthy. It is important that we **protect** the animals that live on the land consider how our choices as humans may affect them.

What's your favourite fact about caribou?

The Cape Churchill caribou migrate over **200km** every year from the boreal forest to the tundra every spring to have their babies and access better food.

If we're not in the park, or an area near caribou, what can we do to help protect them?

The best thing people can do to protect caribou is to **learn** about the work being done to protect them and their habitat and play your role in **reducing your carbon footprint and waste** to help address the effects of climate change.



1. Caribou during mid-August 2. Caribou during early May



Conservation

Interview with
our scientists:
Emily Hunt

Emily Hunt, a Resource Management Technician, is responsible for hands-on tasks like collecting samples at the park. She first began her journey at Parks Canada as a student at Lower Fort Garry National Historic Site!

What was your first encounter with a caribou in Wapusk? Were you close? How many were there?

My very first encounter was seeing a group of about **10 caribou** from a helicopter in the air. The first time I saw caribou on the ground was on a hike in the park, we sat down on the ground and one **brave young female** slowly got closer and closer to us, **sniffing** us and checking us out. She stopped about 50 feet away.

Have you ever seen a large herd? How many do you think there were?

Yes! The biggest herd I've ever seen was around **300** caribou.

Have caribou ever gotten close?

Yes! If you sit down and are very still and quiet, or if you put your **arms over your head and bend up and down** (like if you pretend to be a caribou eating lichen), they will often come closer to figure out what you are.

Are you ever scared if you see caribou?

No. They're very curious, but they **spook easily**. If they are nervous, they'll just run away.



Conservation

Interview with
our scientists:
Emily Hunt

To you, why are caribou so important to the park and to Canada?

Caribou are **beautiful creatures**, and they play an important part of the ecosystems in Wapusk and across Canada. They're also an important **traditional food source** for Indigenous peoples.

What's your favourite fact about caribou?

Caribou can see **UV light**, something human eyes can't do. In the winter when the ground is covered with snow, the snow reflects UV light and looks very bright. But the lichen buried under the snow absorbs UV light and looks like big black patches in the bright snow. That's how caribou find their food in the winter!

If we're not in the park, or an area near caribou, what can we do to help protect them?

Keep learning about caribou and **sharing** what you know! The more people who are aware and want to help protect them, the better!



1. Emily testing the trail cameras by mimicking a caribou 2. Two caribou resting



Conservation

Our scientists
at work



1. Taking water measurements 2. Lake hydrology sampling 3. Measuring ice thickness 4. Downloading permafrost logger data 5. eDNA sampling 6. Removing empty fuel barrels 7. Hopping on a helicopter 8. Maintaining caribou trail cameras



Conservation

Snaps from trail cameras

The trail cameras in Wapusk National Park have allowed us to view many different animals that roam the park. What animals do you see?



1. Moose 2. Polar Bear mother and cubs 3. Grey Wolf 4. Ptarmigan 5. Barren Ground Grizzly Bear 6. Arctic Fox 7. Red Fox 8. Sandhill Cranes



Quiz

Interview questions

Having read the interviews with our scientists, answer the questions below.

1. **Where was Russell when he encountered his first herd? What was he doing?**

2. **Were the scientists ever scared if a caribou got close? Why or why not?**

3. **The scientists all had favourite facts about caribou, describe one of them.**





Quiz

Interview questions

4. How does Emily mimic a caribou and gain their attention?

5. What was Nicole's favourite fact? From what you've learnt about caribou, what is your favourite fact?

6. How can we protect the caribou if we're not in the park or a scientist?





Activity

Aerial survey

Aerial surveys are conducted with a helicopter by our team in Wapusk National Park. These surveys are done to estimate population size and look over the activity of caribou. By counting the number of caribou they see, scientists can count the number of males, females, and calves which help in understanding how the caribou population is changing.

Below is a picture of a herd. How many caribou do you think are pictured?





Activity

Habitat diorama

Use a small box, like a shoebox, to make a caribou habitat. Search the web for the different plants you can find, animals nearby, and landscapes caribou live in. Perhaps you'd like to recreate Wapusk National Park.

You can use anything! Paper, magazine cut outs, clay, toys, drawings, craft materials, etc.

You'll present this to the class and share how the habitat you've created helps caribou survive and how it mimics caribou current habitats.

Here's what should be included:

- One habitat: tundra, boreal forest or wetlands.
- Plants that live in this habitat. Label them!
- A threat to the caribou. For example, human structures, climate change or predators. Label them!
- Two animals should be present, one caribou and another animal you learnt lives in the same habitat.
- And finally, write a paragraph (at least 5 sentences), explaining your diorama, where this diorama is based on, why you designed it the way you did, what the threats are, what plants and animals you included, and how this diorama portrays the real habitat of a caribou.



1. Cows and their calves





Activity

A world without caribou

Search the web and learn about the caribou food chain and their benefits to the ecosystem.

Four caribou herds in Canada are extirpated, which means that though the species no longer exist in Canada, they still live in other areas in the world. How do you think extirpation of the four caribou herds affected the animals in their habitat? How is it all connected?

Find out who and what would be affected if the entire caribou species became extinct.

Here are some things to think about:

- Wolves are the main predator for the Cape Churchill caribou. How would the extinction of caribou affect wolves and other animals wolves may eat more of as a result?
- Other animals also prey on caribou, will they be affected? How?
- How will their extinction affect the tundra ecosystem?
- Without caribou, will national parks and protected wildlife areas still exist?
- How will their extinction affect nearby Indigenous communities that harvest the caribou?
- How will the extinction of reindeer (domesticated caribou) affect communities that thrive with them?



Value of the Caribou





The value of the caribou

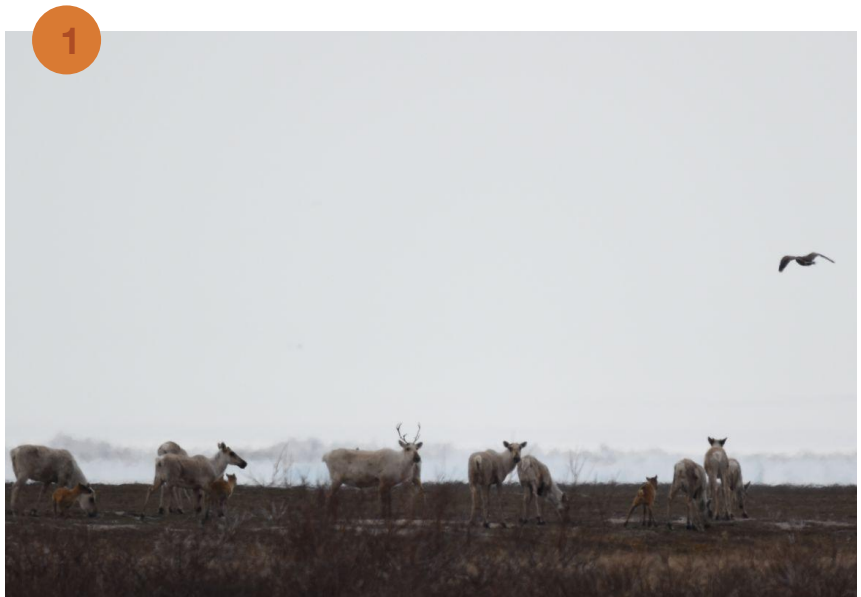
Caribou and Indigenous Knowledge

Indigenous peoples (such as Inuit, Cree, Dene and Métis) in Churchill and other areas rely upon caribou. Caribou are used for food, ceremony, clothing and more.

Members of these communities have passed down information through generations, called Traditional Ecological Knowledge. Below are some examples of this shared knowledge.

Economic value

The harvesting of caribou creates economic opportunities for Indigenous peoples. As you'll soon see, the entire caribou is used for food or as a tool. Caribou help to provide opportunities for trading and selling of parts and food.



1. Cows and their calves



The value of the caribou

Caribou and Indigenous Knowledge



1. Cows

Tool and clothing value

As mentioned, caribou aren't only needed for food. Parts of the caribou are used to create amazing tools, clothing and shelter. By using the entire caribou when harvesting, Indigenous peoples can make goods and rely on sustainable and durable materials. Many carry on traditions thanks to Traditional Knowledge shared by Elders and Knowledge Keepers.





The value of the caribou

Caribou and Indigenous Knowledge

Nutritional value

Eating freshly harvested caribou, hunted in a respectful way, is much more nourishing than eating imported foods. Indigenous peoples that harvest caribou ensure that their meats are frozen properly – so the meat never goes bad and the taste stays fresh!

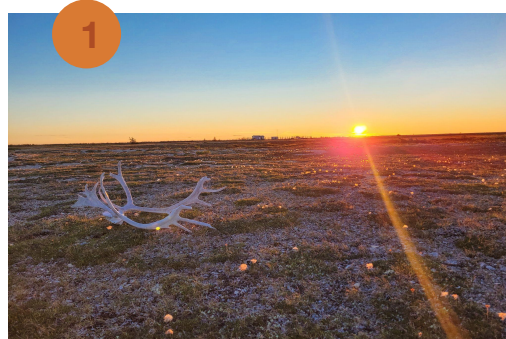
Cultural value

Caribou are a central part of many Indigenous peoples' lives. Children may first be introduced to the caribou through oral traditions, where caribou take on a central part of a tales, songs, prayers and more.

Children may also recognize the importance of this animal through physical traditions such as hunting - which they'll often learn from their Elders. Elders will teach them how to harvest caribou – not only how to hunt, but how to do so respectfully.

The caribou and its migration also are key to Indigenous Knowledge. Migration patterns teach about the state of the land and how this may affect their own harvest, or the patterns of other animals in the area.

Harvesting of caribou brings communities together as hunters share their harvest. It gives communities a change to explore the land and what it offers.



1. Caribou antlers 2. A herd of caribou



The value of the caribou

Caribou and Indigenous Knowledge

Ensuring the park and its animals are protected also means we must partner with Indigenous communities surrounding Wapusk National Park.

Parks Canada organized a series of workshops to bring together Indigenous partners (Cree, Dene, Inuit and Métis), academics and government officials to discuss the ways we can work together to protect caribou.

Here's are some key takeaways:

1. Educating the importance of **respecting** caribou, for both Indigenous and non-Indigenous people.
2. Teaching youth **how to hunt** respectfully and how to not waste the harvest.
3. Respecting the caribou by **waiting** for the first herd to pass and waiting to hunt the others.
4. **Removing** the harm of industry (hydro, mines, roadways and pipelines).
5. Inviting **Elders** to share their stories and teachings, such as origins of the caribou.
6. Need to **increase** the total area of protected habitat and areas.
7. Continue to **identify and fill knowledge gaps** with both science and Indigenous knowledge.





Activity

Caribou
colouring sheet





Activity

Caribou
colouring sheet





The value of the caribou

Parts of the caribou

Let's see what can be made by using parts of the caribou!

Food

- Internal organs are cleaned and used for meat - boiled or roasted.
- Most of the flesh is cut into strips and dried. It is lightweight, compact, nutritious and does not spoil (great for trail food).
- Bone marrow (located inside the bones) is boiled to extract the bone grease. Tastes great in broths and soups.
- Hooves are boiled to make jelly.
- The only part of the caribou that is typically not consumed are the lungs, which are used as scraps along with other food to feed dogs.



1. Cows and their calves



The value of the caribou

Parts of the caribou

Clothing

- Clothing is made from caribou hides, babiche (cord or lacing made from caribou hide) and sinew (muscle fibres).
- The stiff, crimped and hollow hair provides excellent wind protection and insulation.
- Caribou hide can be made into parkas, shirts, pants, boots, mittens and dresses - often decorated with porcupine quills and beadwork.
- Sinew is even tougher than babiche. Made from tendon, it can be used to make bow strings, dog harnesses and ropes.

1



1. Art made with caribou fur



The value of the caribou

Parts of the caribou

Shelter

- Winter shelters are made from caribou hides (tanned with fur on). A typical shelter uses 10 to 15 hides.
- Dried hides with fur were used as sleeping mats, robes and floor mats.
- Caribou hair can also be used in mattresses and pillows.

Have you HERD?

The best caribou pelts are collected in the fall because they do not have holes from the flies.



Tools

- Cleaned bones can be made into many different tools like knives, blades and spears.
- Bones can also be carved to make needles and fishhooks.
- Rawhide is used to make drum covers, knife cases and buckets.
- Antlers are used to make spoons, arrows, cups, knife handles and buttons.

Containers

- Caribou stomach and bladders are washed and used as storage containers for food and water.
- Stomach containers can be filled with water to be heated on hot cooking stones.
- Babiche can be woven to make mesh bags.



The value of the caribou

Interview with Heather Spence-Botelho

Heather Spence-Botelho is a Knowledge Weaver, whose family and ancestors harvest caribou from the Churchill region during the fall and winter seasons. She utilizes all parts of the caribou; from sharing meat with her Elders and family to traditional hide tanning and tool making from caribou legs. Heather uses the antlers of the caribou to make earrings and other art. Respectful harvesting is extremely important to Heather and she teaches youth she works with to do the same. Here's what she had to say about caribou:

Do you remember the first time you saw a caribou?

Growing up in Churchill, caribou would come **very close** to the community. When I was a young girl, I remember seeing a caribou cross the road, literally! I saw **Elders and hunters** bring their caribou harvest home and watched as they prepped the meat to share and cook.

Could you provide examples of what you've made with caribou?

I've made some yummy **caribou stir fry** and my auntie has the best quick recipes, which are my favourite.

Who taught you how to harvest the caribou and use it to make these things?

My **brother, uncle and fellow hunters** have taught me to hunt caribou. I go out hunting with them, which allowed me to shoot my own caribou and have them guide me on field dressing techniques.





The value of the caribou

Interview with Heather Spence-Botelho

What is your favourite thing about caribou?

My favourite thing about caribou is **watching them** from afar. Not every caribou I see is for hunting, but watching a single caribou or a herd is **amazing** to witness and watch how they migrate and work as a group.

Why does caribou matter to you?

Caribou means **sustaining a traditional life** in this forever evolving world. I love the natural ways of harvesting caribou for healthy lean meat as well as all the other beautiful gifts the caribou offers; hide for sewing, antlers and bones for jewellery and gifts for my friends and family.

What can we do to protect the caribou?

Respectful hunting teachings! Take only what you need, listen to your Elders, and use every part of your caribou harvest. Hunt bulls only when possible!



1 & 2. Earrings made by Heather using caribou fur

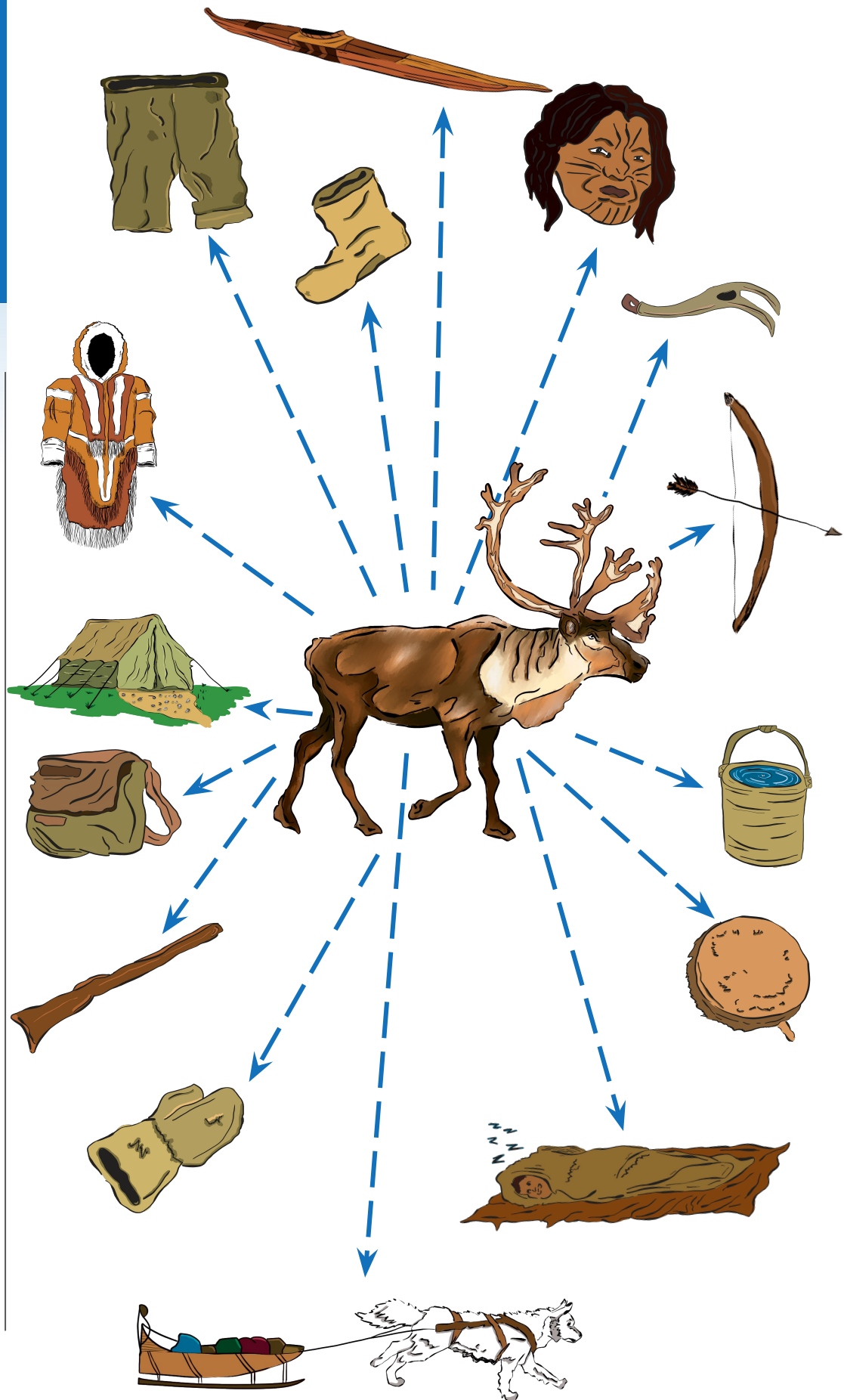


Activity

Identify the tools

You can make many things out of a caribou!

Can you identify each tool and its purpose on this page?



Remake of D.B. Marsh, 1942, The Beaver

Canada



Activity

Identify the tools

Answer key



Pants:

Cozy pants were made with caribou fur facing the inside or outside.



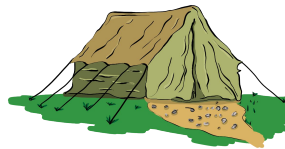
Artiggi:

This is a very warm winter parka. Short hairs are used inside the parka, and the longer hairs are used on the outer layer.



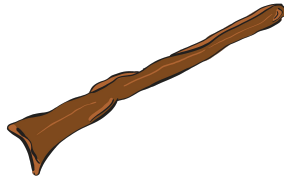
Socks:

Socks were made with caribou fur on the inside to ensure they were cozy and warm.



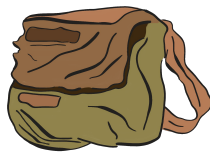
Tent:

Tents were made by putting several caribou hides on top of branches used as poles to create the tent structure.



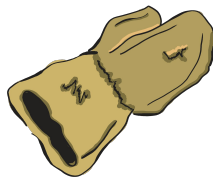
Rifle case:

Cases were made with caribou hide to help protect weapons from severe weather.



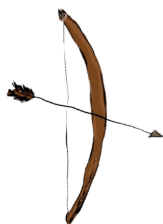
Hunting bag:

This bag made of caribou hide was often filled with animals, tools and food.



Mitts:

Caribou legs are dried, scraped and sewn into mitts. Hair may also be sewn around the opening of the mitten.



Bow & Arrow:

Bows & arrows were very important when hunting. Bows were made from antlers, and antlers, bones and sinew were used to make arrows.

D.B. Marsh, 1942, The Beaver



Activity

Identify the tools

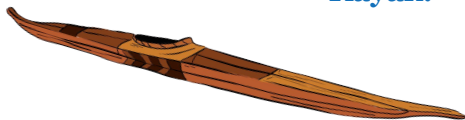
Answer key



Harness:

Harnesses were made of caribou skin sewn tightly together. Toboggans would also be made with caribou skins and antlers. To keep the dogs nourished, they'd often eat caribou, seal, fish and whale.

Kayak:



Though the kayaks were made with branches, they were covered with caribou hide to keep the passenger warm

Sled Anchor:



Sled anchors were used to anchor sleds into ice during strong winds. They are made with caribou antlers. Antlers were also used to make bow & arrows.



Water bucket:

Made with caribou skin.



Drum:

Drums are made with fawnskin – skin of a younger caribou. The hide must not have any holes and be well stretched.



Sleeping bags:

Female caribou hide are used for blankets and sleeping bags as the leather is soft.



Tattoos:

The long thick muscle at the back of caribou's legs are made into sinew, and made into threads. This thread is dipped in seal oil and soot, threaded into a needle made of caribou-bone and used to make symbolic tattoos on faces and hands with different meanings.



The value of the caribou

Respectful harvesting and honouring of caribou

Caribou benefit from respectful harvesting as hunters use traditional knowledge, often passed down by Elders, which detail how to hunt and harvest caribou respectfully.

Respectful harvesting includes:

- **Respecting the land** – knowing where hunting is permitted and leaving no trace.
- **Distinguishing between bulls and cows** – Bulls should be harvested rather than cows for a healthy caribou population.
- **No commercial sales** – as this could lead to overhunting. Only take what you need!
- **Leaving no trace of your harvest** – including recovering any dead or wounded animals and leaving the land and waters clean.
- **Use Traditional Ecological Knowledge** – to have a better understanding of the land and respectful harvesting practices.
- **Harvest caribou meat carefully** – to ensure every part is used.
- **Use every part** – nothing goes unused. Every part of the caribou can be used, either to eat, to stay warm, as shelter or as a tool.

Are there any other ways we can practice respectful harvesting?





Thank you for participating and learning about the Cape Churchill herd and Wapusk National Park.

Your work is never done, continue to educate yourselves to help protect this amazing animal!

For more information about the Caribou that calls Wapusk National Park home and the current work to protect their habitat, please [visit our website](https://parks.canada.ca/wapusk).

parks.canada.ca/wapusk

This EduKit is the result of collaborative efforts to inform and educate about caribou in the Greater Wapusk Ecosystem, a goal established during the caribou workshops. It was made possible thanks to collaborative research and knowledge sharing from Parks Canada, the Government of Canada, the Government of Manitoba, the University of Saskatchewan, York Factory First Nation, Fox Lake Cree Nation and the Manitoba Métis Federation.

