



**BEVERLY & QAMANIRJUAQ
CARIBOU MANAGEMENT BOARD**

**CARIBOU
IS LIFE**

EDU-KIT



A junior version
of the Beverly
and Qamanirjuaq
Caribou
Management Plan
2023-2032



BEVERLY & QAMANIRJUAQ
CARIBOU MANAGEMENT BOARD

The Beverly and Qamanirjuaq Caribou Management Board (BQCMB) was created in 1982 to manage the Beverly and Qamanirjuaq barren-ground caribou herds. About 20 Inuit, Métis, Dene, and Cree communities across the Kivalliq region of Nunavut, the Northwest Territories, northern Saskatchewan, and northern Manitoba depend on these migratory herds for their nutritional, cultural, spiritual and economic needs. Our members bring together both scientific and traditional knowledge to work toward a common goal—to safeguard these two herds for current and future generations. Our members are:

- Government of Canada (Department of Crown-Indigenous Relations and Northern Affairs)
- Government of Manitoba (Department of Natural Resources and Indigenous Futures)
- Government of Northwest Territories (Department of Environment and Climate Change)
- Government of Nunavut (Department of Environment)
- Government of Saskatchewan (Ministry of Environment)
- Athabasca Denesųliné (Hatchet Lake, Black Lake, Fond du Lac First Nations)
- Ghotelnene K'odtįneh Dene (Northlands Denesųliné and Sayisi Dene First Nations)
- Inuit of the Kivalliq Region (Kivalliq Wildlife Board)
- Łutsěl K'é Dene First Nation
- Northwest Territory Métis Nation
- Tłįchq Government



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CARIBOU, AND THE
CARIBOU ARE US."



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Ecosystem: a geographic area where plants, animals and other organisms, as well as weather and landscape, work together to form a bubble of life.

Subspecies: a group into which plants, animals and other organisms are divided, smaller than a species.



What are caribou?

Caribou are an Ungulate and member of the deer family, Cervidae. Their scientific name is Rangifer tarandus.

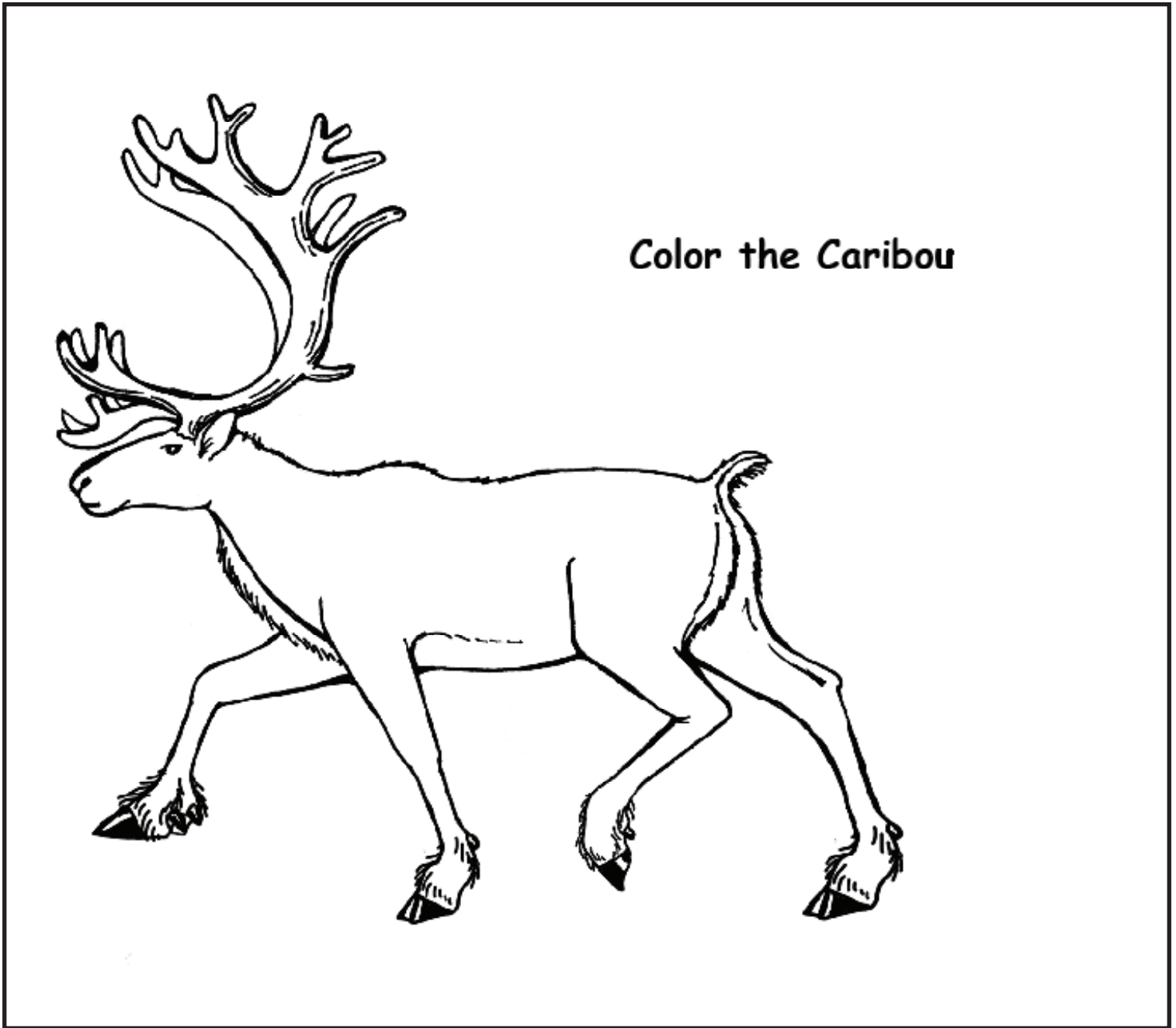
There are three subspecies of caribou that live in Canada - Peary, barren-ground, and boreal woodland. The Beverly and Qamanirjuaq herds are barren-ground caribou. They migrate between the Arctic and sub-arctic parts of Canada each year.

Barren-ground caribou is a **cultural keystone species**, which means they are needed to sustain a culture's ability to be on the land and maintain a relationship with the land.

Barren-ground caribou are also an **ecological keystone species**, meaning they are needed to keep northern ecosystems healthy.

Caribou are a crucial part of the glue that keeps the ecosystem together and functioning.

Ungulate:
(Un-gyuh-layt)
a hoofed mammal



Words describing barren-ground caribou in Indigenous languages of the Beverly and Qamanirjuaq caribou ranges:

- atihk (Cree)
- etthén (Denesų́liné)
- tuktu (Inuktitut)
- aen kariboo (Métis)
- ekwò (Tłı́chọ)

Why we care about caribou



The caribou herds are getting smaller.

The Beverly herd is about one-third of the size it was in 1994.

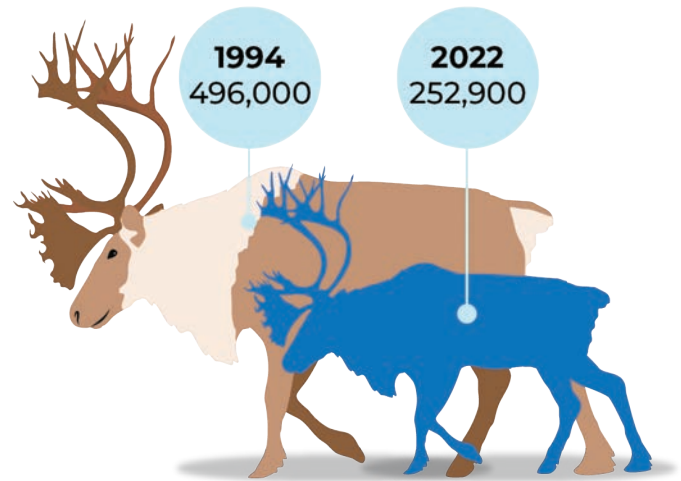
The Qamanirjuaq herd is about half the size it was in 1994.

Barren-ground caribou herd populations are cyclical, which means that their population goes in waves from low to high over long periods of time.

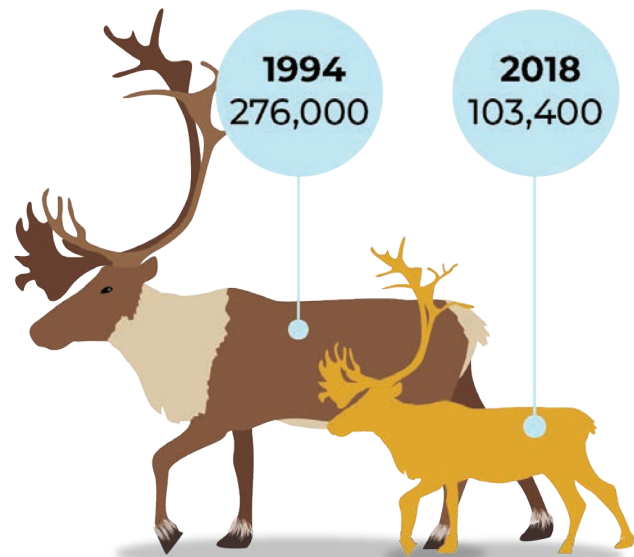
Indigenous peoples have more knowledge about these populations cycles than scientists do. But things like climate change and industrial activity in caribou habitat can make it harder for the herd sizes to recover when they are low.

Qamanirjuaq:
(Ka-min-YOO-ree-ak)

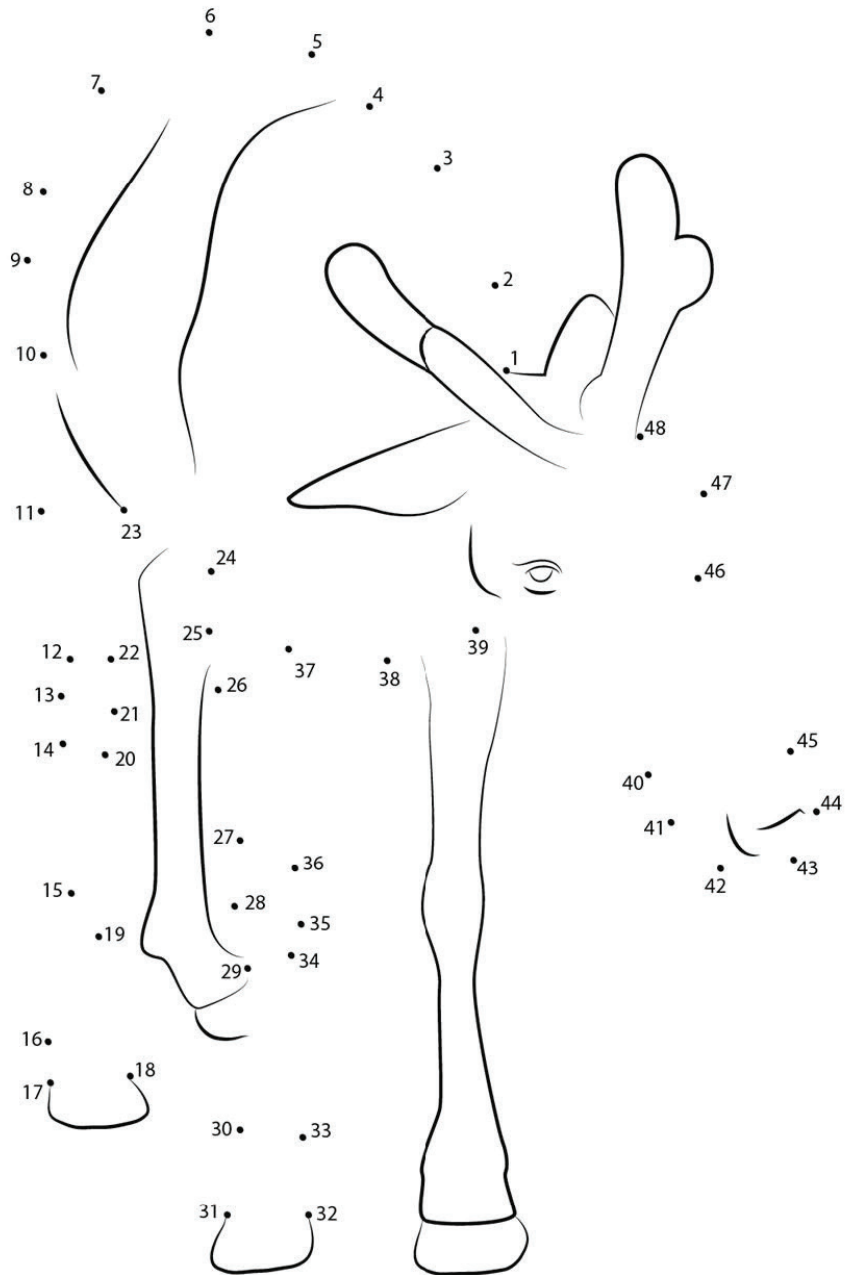
Qamanirjuaq Herd Decline



Beverly Herd Decline



Connect the dots



Qamanirjuaq is Inuktitut, and it means “big lake.” Caribou from the Qamanirjuaq herd return to the Qamanirjuaq Lake area in Nunavut every June to have their calves.

What do caribou look like?

Did you know?

The word "caribou" is believed to come from a Mi'kmaq word, "xalibou," which means one that paws, or shovels.

The caribou's wide concave hooves work like snowshoes, keeping the animals from sinking into deep snow.

They're also ideal for scooping out snow so that caribou can find their food.



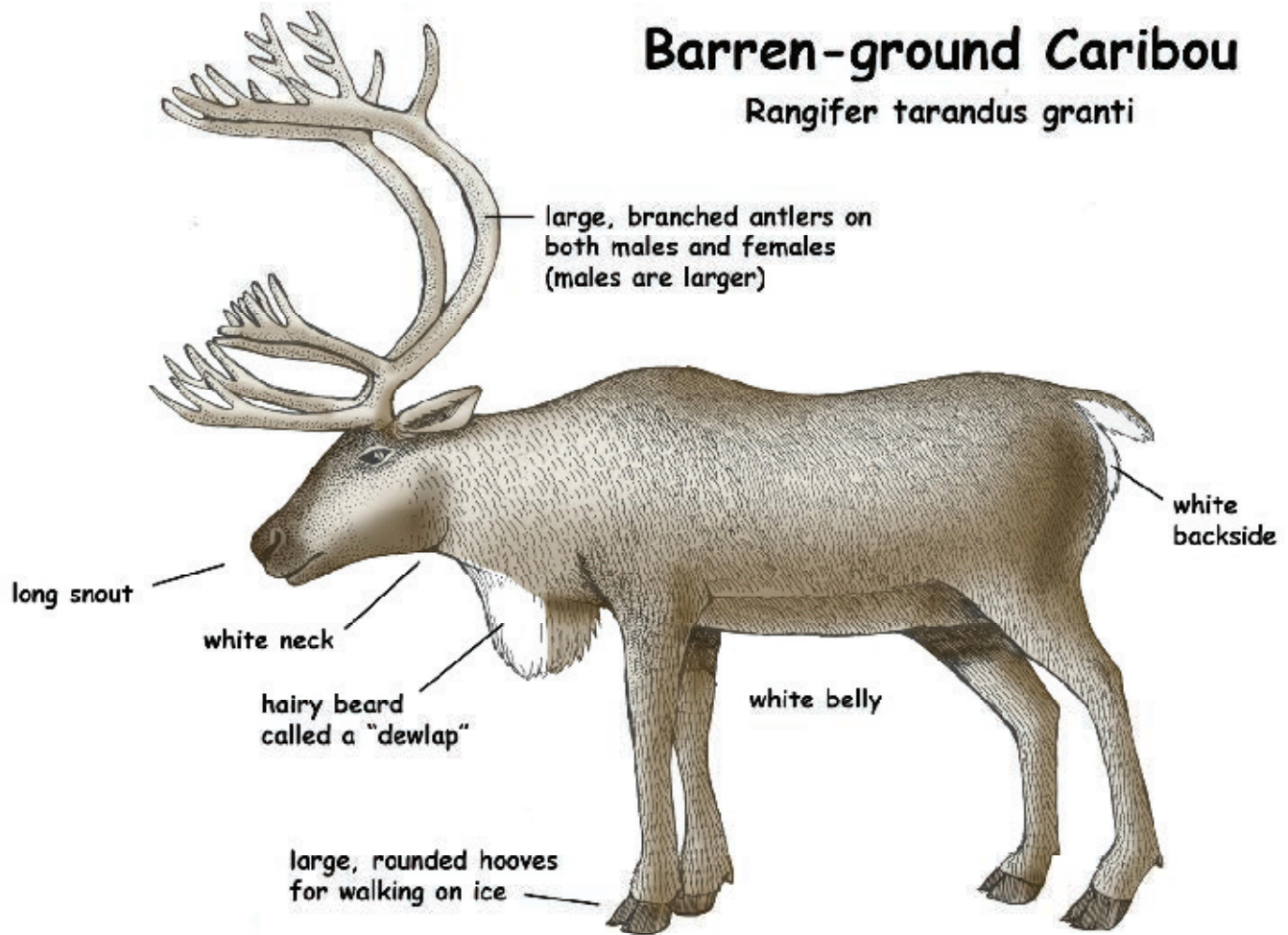
Barren-ground caribou have brown fur with a white neck, belly and tail. In the fall, mature males have a striking white neck and mane and a distinct band along the flank separating the brown back from the white belly. Their colours are more faded during the winter. The velvet covering their antlers is brown.

A male caribou's antlers have one long curved branch with tines clustered at the top and a 'shovel' branching over the forehead. Females also have antlers, but they are much smaller and not as elaborate.

Barren-ground caribou are slightly smaller than boreal woodland caribou. Females weigh between 85 to 135 kg (187 to 298 lb) and males weigh between 100 to 140 kg (220 to 309 lb).

Barren-ground Caribou

Rangifer tarandus granti



CARIBOU ADAPTATIONS



ADAPTATION: The process of changing to suit different conditions.

TWO LAYERS OF FUR

Caribou have two layers of fur—fine, crinkly underfur and a thick coat of guard hairs on top. The guard hairs are hollow and have air inside the hair that acts like insulation, keeping the caribou's body heat in. They are covered in hair from their nose to the bottom of their hooves. The hairy hooves give reindeer a good grip when walking on frozen ground, ice, mud, and snow.

THE MUZZLE

Caribou have the ability to regulate body temperature through their muzzles.

The muzzle acts as a heat exchanger, warming and cooling air to reduce heat and moisture loss as they breathe in and out.

SHORT STOCKY BODY

Caribou have a short, stocky body with short ears that help conserve heat, but their legs are long to help them move through the deep snow.





CARIBOU ANTLERS

.....
Caribou antlers are really big, and they curve forward. One thing that sets them apart from other members of the deer family is that the female caribou has antlers too, although hers are smaller than those of the male. A male's antlers can grow to be more than one metre long. Compared to their body size, caribou have the largest and heaviest antlers of all living deer species. Female antlers only reach half of a metre in length.

Non-pregnant females will lose their antlers during the winter, but pregnant females will not drop their antlers until they give birth in the spring.

Because animals with antlers are dominant over those without, this adaptation allows a pregnant female to protect her food resources during scarce winter conditions, ensuring adequate nutrition for the continued development of her fetus.

CARIBOU HOOVES

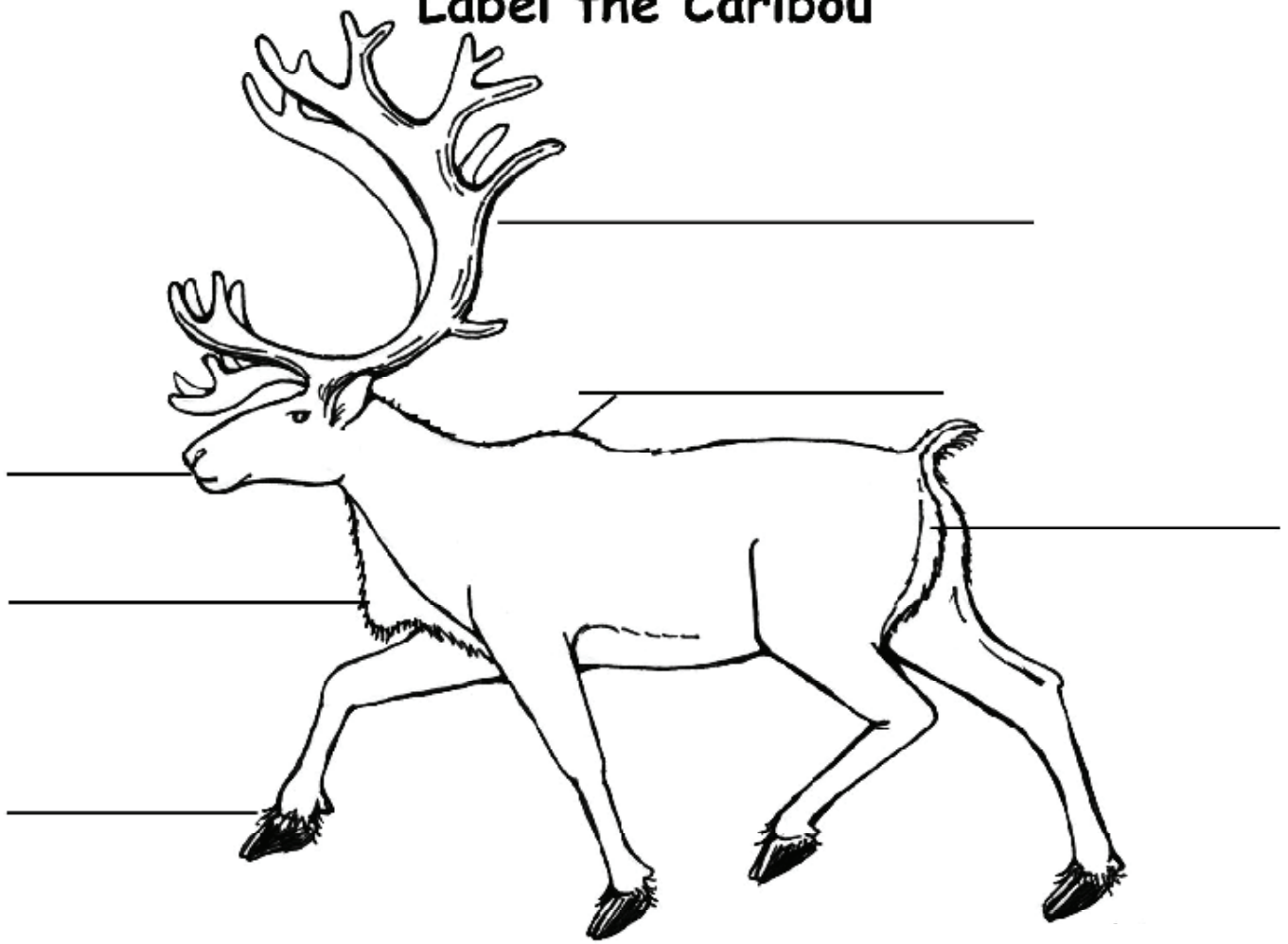
.....
Caribou have large, wide hooves. Caribou hooves work like snowshoes in the snow and paddles in the water. In the winter, the hooves are good for pawing and digging out lichen from under the snow. In the summer, they make caribou good swimmers, which allows caribou to jump quickly into the water to escape from predators.



The size of the caribou's hooves and the length of their legs help them when they travel over muskeg and snow covered areas.



Label the Caribou



Caribou Word Search

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

COW
 TUNDRA
 UNGULATE
 CALF
 TAIGA
 HERD
 ADAPTATION
 CARIBOU
 QAMANIRJUAQ
 ANTLERS
 BULL
 BEVERLY
 ECOSYSTEM
 HABITAT
 BARRENGROUND
 LICHEN



Did you know...

The Canadian quarter has been imprinted with a caribou since 1937!



Cultural Importance of Caribou

The relationship between Beverly and Qamanirjuaq caribou and Indigenous communities has developed over thousands of years. Historically, every part of the caribou was used for food, tools, clothing, weapons and cultural objects. Nothing was wasted. Today, caribou is still very important to Indigenous communities.

NUTRITIOUS FOOD SOURCE

Lean caribou meat is high in protein and low in fat, and is often more nutritious than imported foods. The meat can be eaten dried, fresh or smoked. In northern communities, fresh meat and produce are hard to get, and costs are high.

TRADITION AND EDUCATION

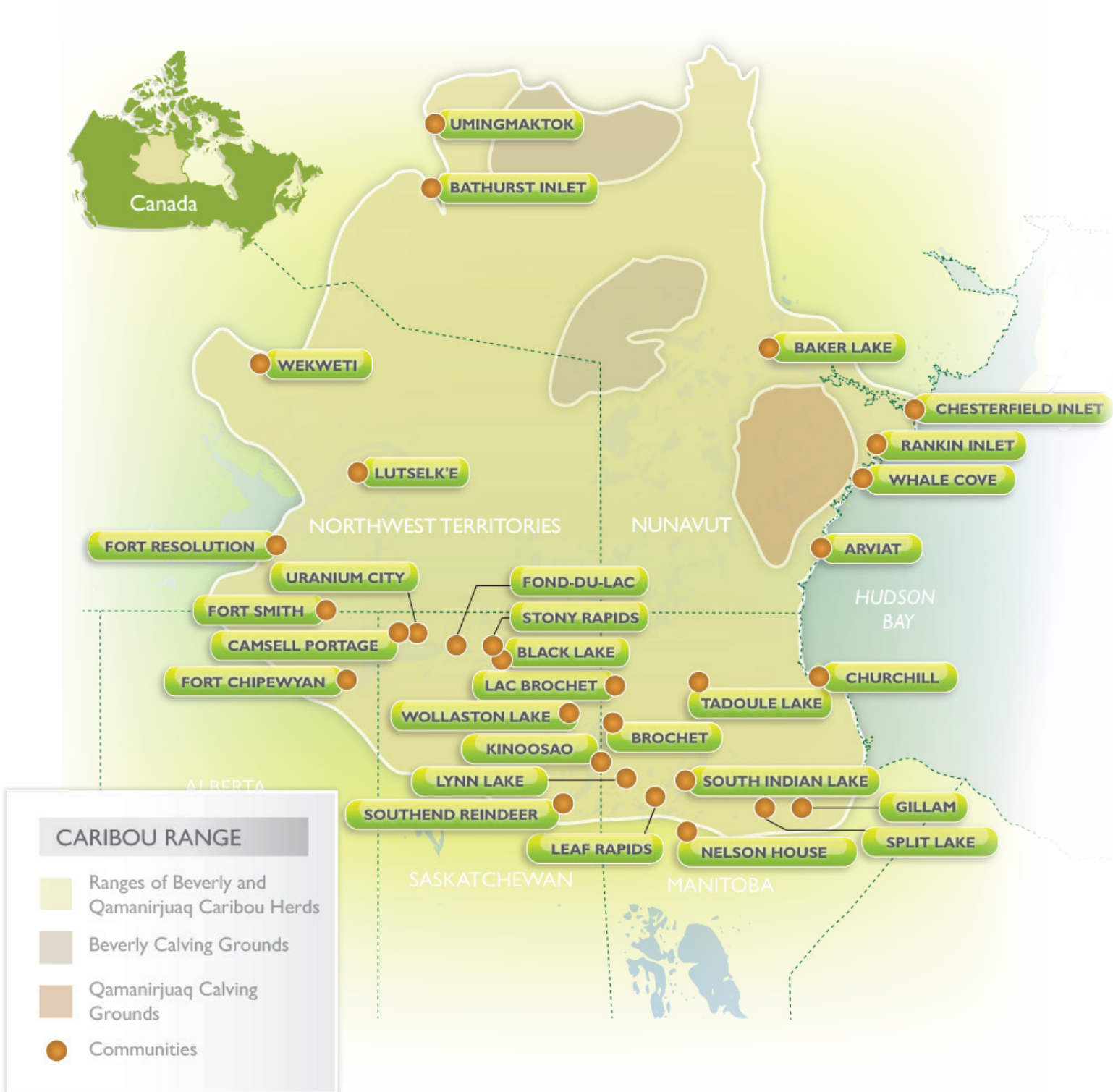
In Indigenous communities, teaching young people to hunt responsibly ties them to the traditions of their past. The world is changing, and if youth retrace the footsteps of their elders, there will be caribou for the future.

CLOTHING, BEDDING AND CRAFTS

Caribou skins are used for clothing and bedding, and bones and antlers can be made into handicrafts that are an important source of income for many Indigenous people.

“We all share in this responsibility to make sure there are caribou for the next generation.”
*BQCMB Chair Earl Evans,
 Northwest Territory Métis Nation*

Map of the caribou ranges



See an animation of the caribou migration at https://arctic-caribou.com/wp-content/uploads/BQ_Animation.mp4 or scan the QR code at right.



THREATS TO CARIBOU



HABITAT (Habe,tat)

the natural home
or environment
of an animal,
plant, or other
organism.

There are many threats affecting caribou survival and their habitat.

CLIMATE CHANGE

The weather is changing. Warmer, dryer weather is causing changes to the land we can't see yet. This is a big threat because we don't know yet how it will affect the caribou and their habitat, but we do know it is starting to affect lichen growth. Wildfires due to climate change are also larger, hotter and more frequent. These fires are affecting the forested winter range of the caribou and reducing the amount of food they have to eat.

DISEASES AND PARASITES

Caribou can be infected by many parasites. These include warbles, nasal bots, Besnoitia, lungworms, tapeworms, and brucellosis. There is also a concern about Chronic Wasting Disease (CWD) a fatal, infectious wildlife disease that affects deer, elk and moose in North America. So far, there have been no caribou infected with CWD.

PREDATORS

Predator-prey relationships are part of a healthy ecosystem, but when caribou herds are getting smaller, predators can become a problem. Wolves, grizzly bears, black bears, cougars and wolverines are major predators of caribou.





Take what you need is what my grandpa always told me.

Community member, Northlands Denesųłıné First Nation, Lac Brochet, MB

Development of roads, mines, the hydro-fibre line...in the long run will damage the relationship with the land and caribou.

Jimmy Laban, Black Lake Denesųłıné First Nation, SK

DISTURBANCE

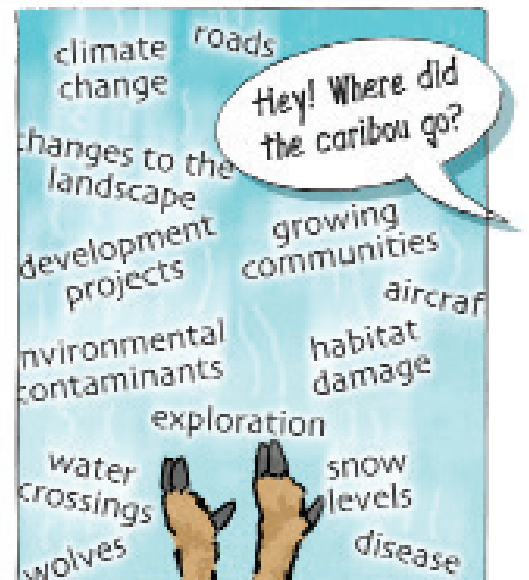
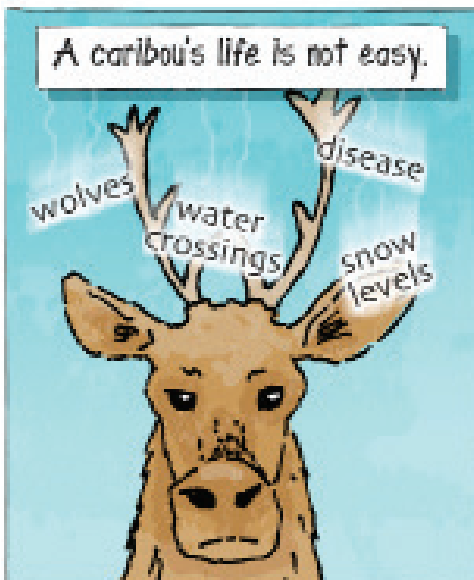
.....
Caribou are very sensitive animals. The more people make changes to the environment, the more broken up the land that caribou can use becomes. Barren-ground caribou need huge areas of land to thrive, so they can find food and migrate safely to their calving grounds. Roads, mines, and other human-caused disturbance open up access to the places caribou live. Roads can also cross the paths that caribou use while migrating. Unfamiliar smells, sounds and sights can cause disturbance and change the caribou's behaviour.

DISRESPECTFUL HUNTING

.....
It is important to hunt caribou respectfully, but this does not always happen. Disrespectful hunting can mean overhunting (taking more caribou than needed), wastage (not using all parts of the caribou), or using drugs and alcohol while hunting. All of these things create an even bigger problem when the herds are declining in size. Some communities have a list of rules hunters should follow to make sure they are hunting respectfully, and it is important that everyone knows what these rules are.

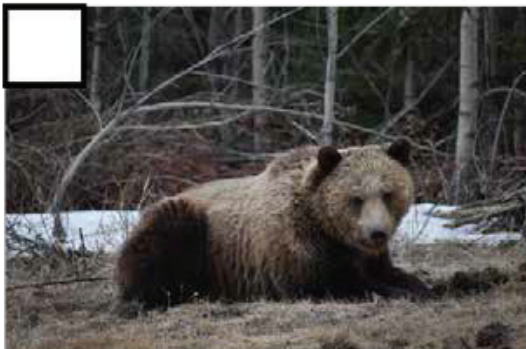


**Above:
development on
the caribou range
causes disturbance
for the animals.**

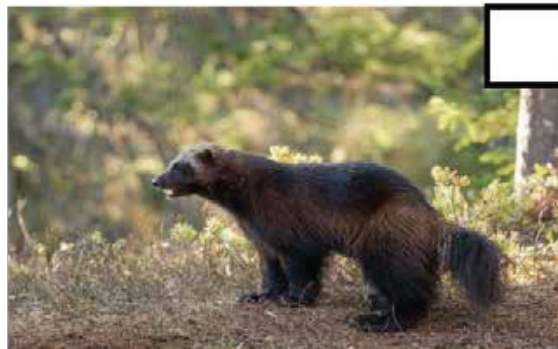


Which animals are known to prey on caribou?

Grizzly Bear



Wolverine



Coyote



Lynx



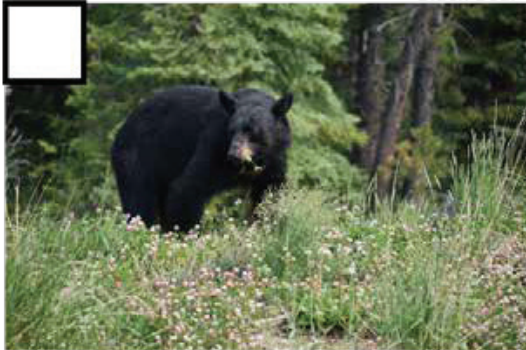
Red Fox



Wolf



Black Bear



Cougar



Answers: Grizzly Bear, Wolverine, Wolf, Black Bear, Cougar

CARIBOU MIGRATION



WHY DO BARREN-GROUND CARIBOU MIGRATE?

To find food: In the summer, caribou eat grasses, sedges, shrubs, and mushrooms in the open tundra. In the winter, they eat lichens and buds in the taiga forest.

To avoid predators: Caribou migrate to calve in places where they can minimize exposure to predators, like open tundra and high, rocky areas.

To reach better habitat: Caribou migrate to find the best habitat for each season. In the summer, they prefer the open tundra to escape insects and predators. In the winter, they prefer the taiga forest for cover from the wind.

To mate: Caribou migrate to a special area each fall for the rut (mating season) because it gives them a safe place to gather in large groups, find mates, and prepare for winter. Barren-ground caribou have one of the longest range migrations among ungulates. Large herds, like the Qamanirjuaq herd, may travel 2000 – 4000 kilometres (1250 – 2500 miles) or more in a year, even though their summer and winter ranges are 500 – 1000 km (313 – 625 miles) apart. As well as spring and autumn migrations, the herds have a mid-summer migration to near the tree line. They also travel in zigzag and back-and-forth patterns.

MIGRATION
(Mi·gra·tion)
seasonal
movement of
animals from
one region to
another.

When do caribou sleep?

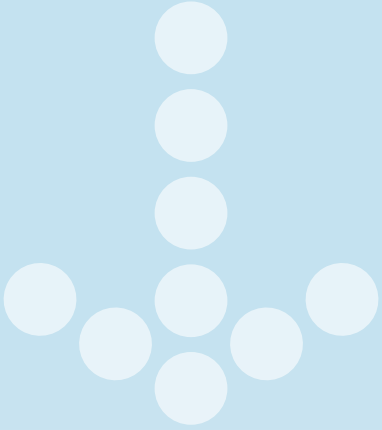
Caribou often rest during the middle of the day. They move out into open spaces, like onto frozen lakes, rivers, meadows or bare ridges, to rest. Moving into the open is a strategy against wolves. The caribou's only defence is to run away so they want to be able to see the predator coming in order to escape. They lie in compact groups, facing in all directions.

See an animation of the caribou migration at: <https://bit.ly/4ewBtf5> or scan the QR code at right.





New LIFE



After calving the caribou come together into groups of up to 30,000 caribou, trying to find relief from mosquitoes.

THE RUT

.....
In late September to mid-November, males, called bulls, engage in frequent and furious sparring battles with their antlers before the most dominant male gets an opportunity to mate with the females, called cows. This is called the rut.

CALVING SEASON

.....
Pregnancy in female caribou lasts around 7.5 months or 230 days. After spending the winter near the treeline, the caribou cows make their way to the calving grounds in Nunavut, followed by the bulls.

Caribou calves are normally born in mid-June. Cows almost only ever have one calf per year, so each one is precious and important.

After calving the cows join the bulls and come together into groups of up to 30,000 caribou, trying to find relief from mosquitoes.

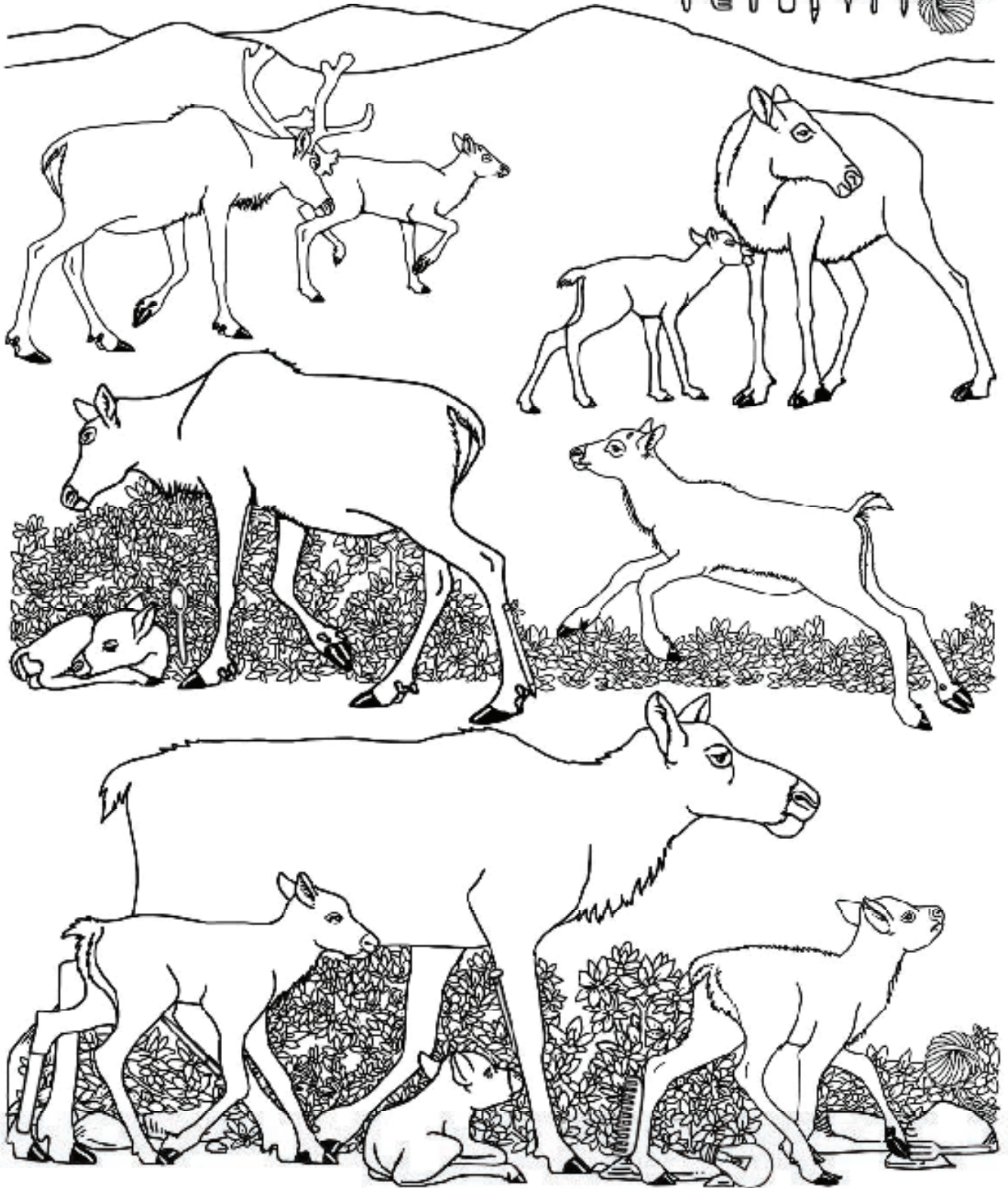
Caribou cows are good mothers. They provide nourishment in the form of milk rich in fat, and lead their calves away from any danger. The mother will defend her calf from small predators but cannot do much if a wolf is the attacker. In winter, the mother paws away snow with her large round hoofs to make a feeding 'crater'. This allows the calf to feed on exposed lichens and other vegetation. The calf learns how to survive by following the behavior of the mother.

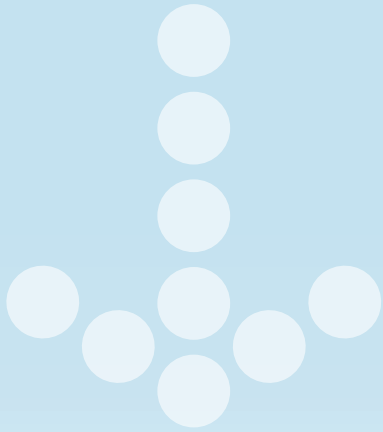
Some things that can affect calf survival are quality and amount of food for females while pregnant and during the calves first year, the number of predators, and the weather.

The calves who do survive grow up really fast. They can stand and walk a few steps about an hour after they are born. After a day, they can run, and after a couple of days, they can swim across streams and small rivers.

New Calves in the Caribou Herd - Hidden Picture

Find and circle the 10 items that don't belong in the caribou herd. Then color!





What do caribou eat?

LICHEN

(Li·chen)

a plantlike organism that typically forms a low crusty, leaflike, or branching growth on rocks, walls, and trees.

NUTRITIOUS FOOD SOURCE

Caribou need lichen. And they eat lots of it, especially in the winter. Caribou are the only large mammals that use lichens as a main source of food. They have special stomachs that efficiently digest the lichens, allowing them to use this rich food source that is available during the winter when other foods are limited. The average caribou must eat at least three kilograms of food every day, which is about two garbage bags full. In the summer, they also eat grasses, willows, shrubs, mushrooms, and leaves.

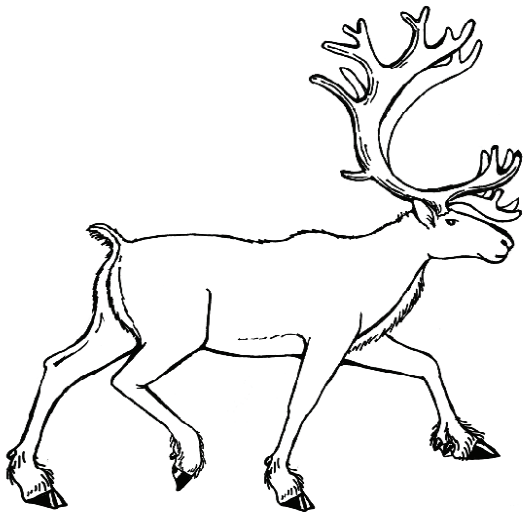
SLOW GROWING FOOD

Lichen is very slow growing. It typically takes forests 50-100 years to have enough lichen to support a caribou herd. Therefore, large areas of forests are essential to caribou survival.

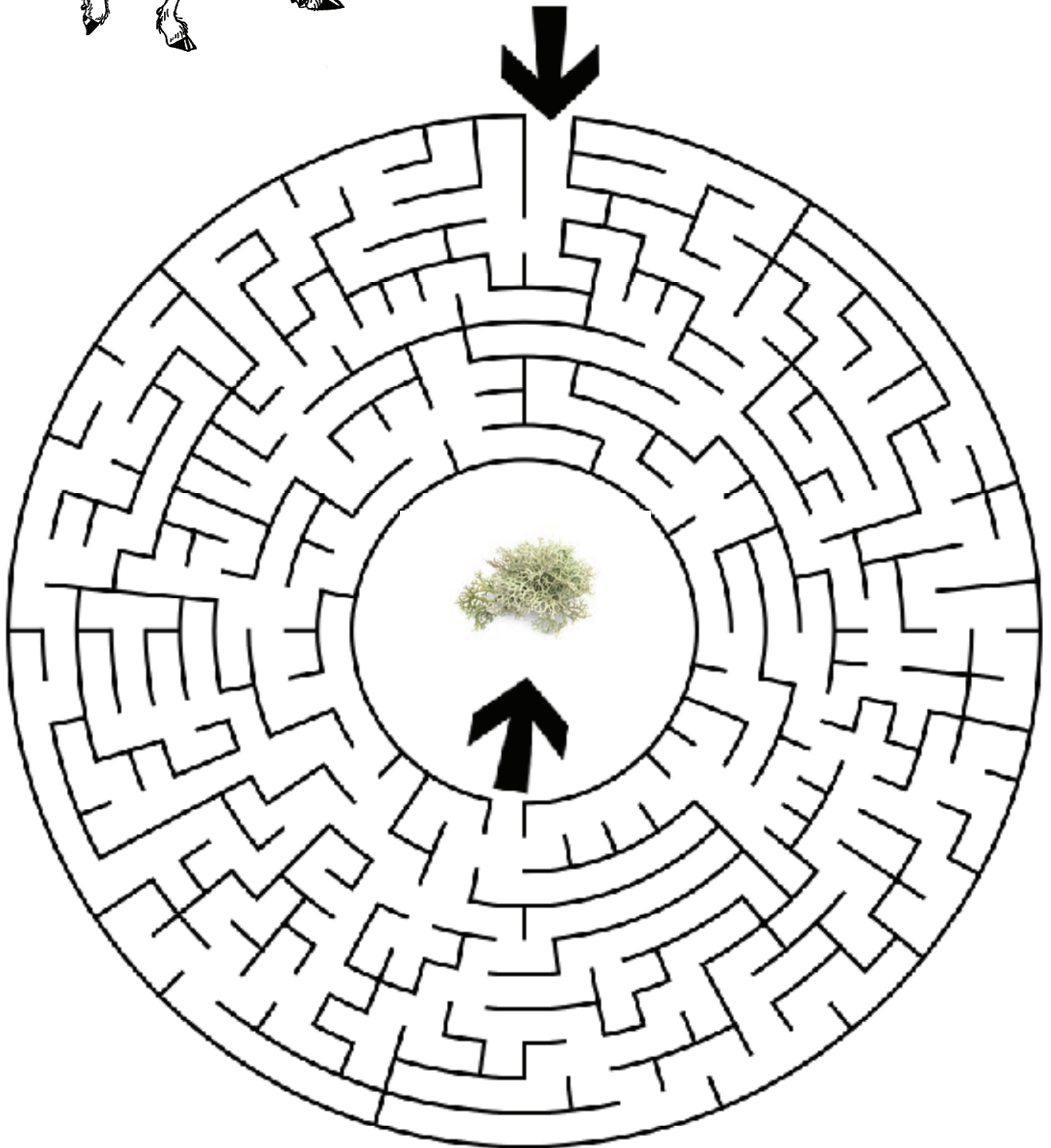


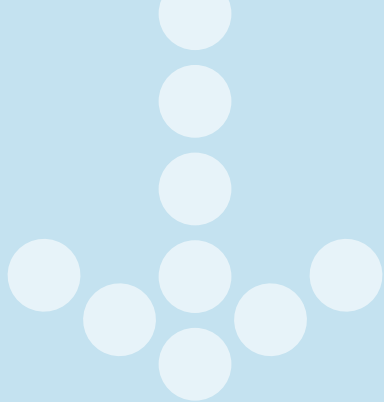
Mmmm ... Lichen!

Caribou need to eat
2 garbage bags full
each day!



This caribou is hungry. Help it find the lichen.





Community connections are important. We need to strengthen connections between youth and Elders.



How you can help

Keep learning about caribou! Elders in your community have many stories to share. Listen to these stories so you can pass them on to the next generation.

Visit your library or search the internet for more information about caribou.

Participate in youth programs like culture camps.

Share what you've learned about caribou with family and friends.

For more information about barren-ground caribou, check out Caribou Quick Facts at: <https://bit.ly/40Lwc0d> or scan the QR code:



We can't survive without caribou. We have to protect our caribou—there is no other way.

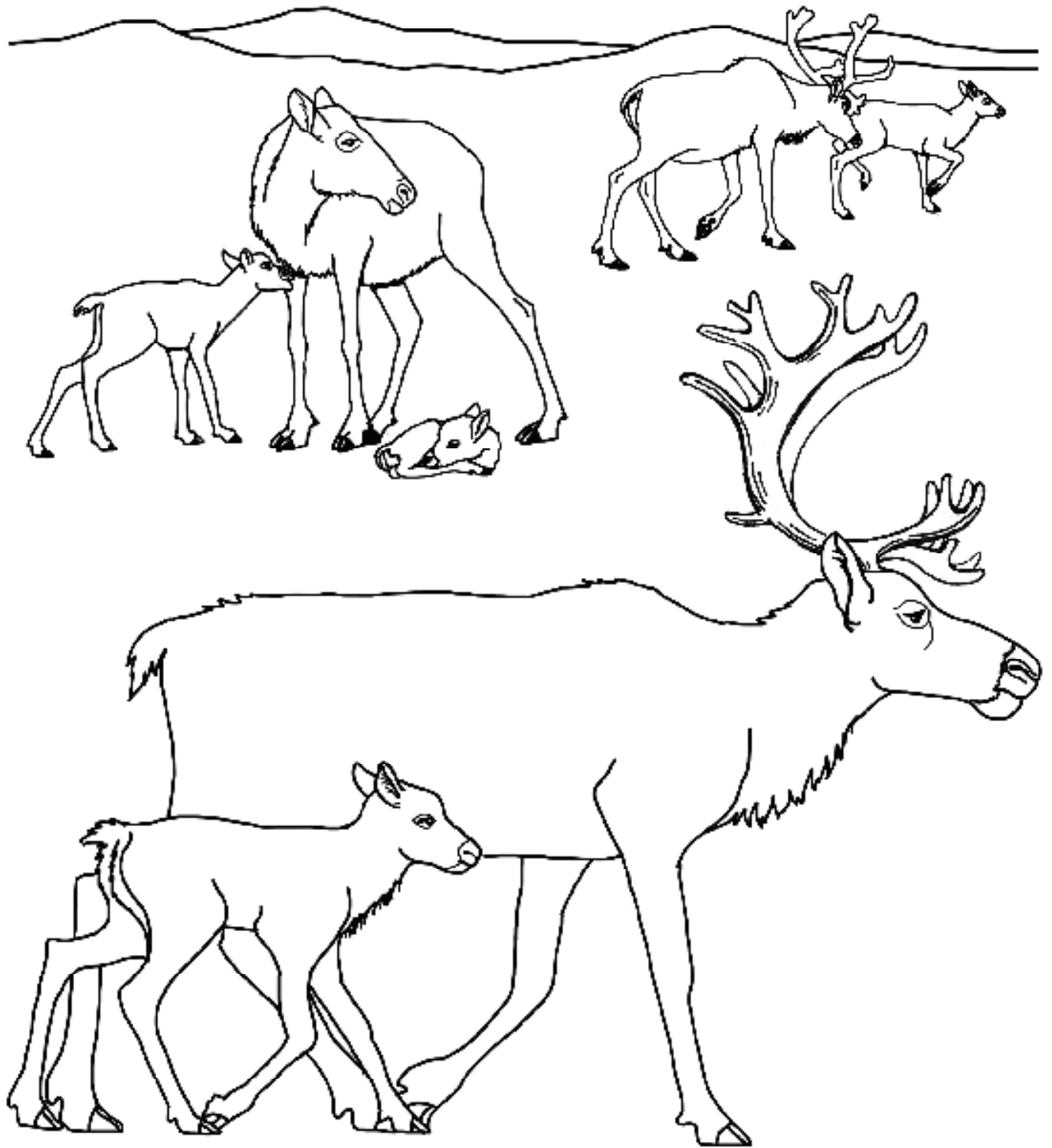
Arviat, NU, Hunters and Trappers Organization



True or false

- | | | |
|--|------|-------|
| 1. Caribou are a member of the deer family. | TRUE | FALSE |
| 2. Only male caribou have antlers. | TRUE | FALSE |
| 3. The caribou herds are getting smaller. | TRUE | FALSE |
| 4. Caribou have brown tails. | TRUE | FALSE |
| 5. Parasites don't bother caribou. | TRUE | FALSE |
| 6. Wolverines prey on caribou. | TRUE | FALSE |
| 7. Caribou calves are born in April. | TRUE | FALSE |
| 8. Caribou eat mostly leaves. | TRUE | FALSE |
| 9. Barren ground caribou are larger than woodland caribou. | TRUE | FALSE |
| 10. Caribou meat is very nutritious. | TRUE | FALSE |
| 11. Caribou have two layers of fur. | TRUE | FALSE |
| 12. Not using all parts of the caribou is called wastage. | TRUE | FALSE |

Caribou Herd and Calves



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