

CARIBOU PATROL EduKit

STUDENT VERSION

2020-2021

Woodland caribou (*Rangifer tarandus caribou*) are a federally listed Species at Risk, and many people are unaware that we are in danger of losing them. Its status as a Species at Risk means that strategies are in place to try to help caribou populations recover.

Caribou inhabit the northern part of the globe and play an important role in maintaining a healthy and diverse landscape.

This EduKit is designed to help you learn a bit about caribou, their habitat, and the threats they face, as well as some of the things that we can do to help manage and recover this important species.

J.D. Robert Wiebe Photography



about THE PROGRAM

In 2012, the Aseniwuche Winewak Nation (AWN) started this grassroots program in response to the declining caribou herd populations in west-central Alberta. Caribou Patrol is an Indigenous-led stewardship program that promotes caribou conservation within AWN's traditional territory.

Program Partners:



Aseniwuche Winewak
Nation of Canada



Environment and
Climate Change Canada

Environnement et
Changement climatique Canada



FOOTHILLS LANDSCAPE
MANAGEMENT FORUM



Government



ASENIWUCHE
ENVIRONMENTAL CORPORATION

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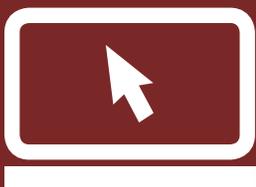


The objectives of this program are to:

- Reduce the potential of vehicle collisions with woodland caribou on area roadways through periodic patrols
- Enhance awareness of caribou management and wildlife roadsharing through education and outreach initiatives for three specific user groups: the public, industry, and students (school groups)
- Collect data on wildlife sightings
- Increase/improve public safety



Jennifer Boham Sloane



resources

Check out the following teachers' manuals:
Porcupine Caribou Management Board Teachers' Manuals
(<http://www.pcmb.ca/resources>)

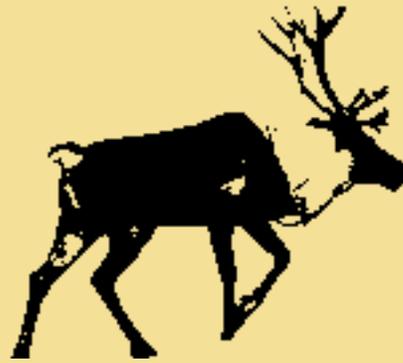
All About Caribou (<https://www.cariboupatrol.ca/information-and-resources>)

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why DO WE CARE?



Caribou are an important species in our Alberta boreal forest. They play a significant role in maintaining the structure of the ecosystem in their habitat. Without caribou, the boreal forest would be a lot different. Caribou are prey, which means that they are food for animals like wolves, bears, cougars, and wolverines, and for scavengers like ravens and eagles. Caribou are herbivores, so they only eat plants, and they have a big impact on the plant species in the forest.¹ Their grazing patterns and movement through the forest can keep trees and shrubs from encroaching on grassy areas. In the summer time their foraging changes the nutrients and decomposition in the soil and their droppings add nitrogen to the soil and water.

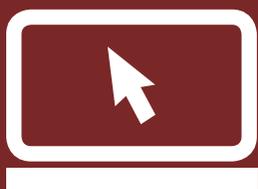
There are 4 caribou herds in west-central Alberta. They are all protected under the federal Species At Risk Act (SARA) with a “threatened” status. In 2014, the Committee On the Status of Endangered Wildlife In Canada (COSEWIC) re-assessed the mountain caribou herds and recommended that they be assigned the more dire “endangered” status.

Woodland caribou mean different things to different people. For instance, they are very important to Indigenous Peoples, who used caribou for food and clothing at one time. Caribou are a living connection to their cultural heritage, which goes back for many hundreds of years.²

CARIBOU... OR REINDEER?

Caribou and reindeer are actually one and the same. “Reindeer” is the name given to caribou in Scandinavia and Russia, but caribou and reindeer are the same species (*Rangifer tarandus*), wherever they are found in the world.

These stately members of the deer family were once one of Canada’s most widespread wildlife species, found in over 80% of the country. Today though, their numbers in many herds are dropping, some by more than 90%.



activity

Dilemmas Caribou Style
(<https://www.cariboupatrol.ca/information-and-resources>)

This activity is designed to give students the opportunity to examine their values and beliefs as they relate to wildlife and other elements of the environment. There are no right and wrong answers for the students, except with respect to legislation.³



about CARIBOU

Distribution and Population

At one time, caribou were considered one of the most abundant large ungulates on earth, with more than 5 million worldwide (all subspecies). In Alberta, over the past 50 years, woodland caribou population estimates have decreased by more than two thirds of what they were. The federal recovery strategies estimate that there are 389 caribou in the four herds in our area, along the Highway 40 North corridor and west into the mountains. That isn't very many. For example, in the fall and winter of 2013, the Caribou Patrol saw more than 1,475 moose, elk, and deer but only 21 caribou.⁴

Habitat

All animals, including humans, have basic needs. They need food, water, shelter, and space. An area in which all of these things are available is called habitat—the place where the caribou lives. Some places are more important than others for the caribou herds; these are called key habitats. They need safe places too.

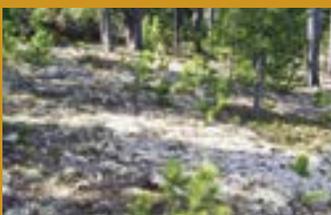
What Do Caribou Eat?

The woodland caribou lives in large areas of mature forest known as the boreal forest and in muskegs that have lots of slow-growing lichens, which are important for caribou. These animals are herbivores, meaning that they only eat plants. The average caribou has to 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 birch leaves.⁵



Kevin Myles, fRI Research

Foothills Landscape Management Forum



There are many different kinds of lichens that caribou like. These include the colourful, crusty plants that sometimes grow on rocks in the forest.

There are lichens that grow on trees too. Those are the long, dry green or black strings that you see.⁶

DID YOU KNOW? Lichens live a long time. The oldest lichens found in the boreal forest can be up to 100 years old.

DID YOU KNOW? Lichens are very slow growing and a forest may take many years to grow enough lichens for caribou.

DID YOU KNOW? Half of Canada is covered by boreal forest.

New Life

Woodland caribou are much more solitary than their northern counterparts. Prior to calving, pregnant cows may separate from the herd to give birth and raise their calves in secluded patches of forest, small islands, or in muskeg, because those areas are safer. Caribou are most scattered across the range in summer. They do, however, band together in the fall when males are courting females, especially just before winter. Cows, calves and teenage caribou of both sexes travel in small bands throughout the winter, while mature bulls separate until late winter, when, for a very brief time, many members of the herd gather together in search of the fresh green plants that appear where the snow has melted.

Caribou calves are born in the spring from mid-May to mid-June. Calves are very small when they are born, barely larger than a full-grown snowshoe hare, and that makes them very vulnerable. If the weather is poor, strong winds may keep a calf from standing to feed. The calves who 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 trot, and after a couple of days, they can even swim across streams.

All calves are born at about the same time and grow up at similar rates, learning to keep up with their moms.⁷



www.Gorshkov-photo.com, March 5, 2014

DID YOU KNOW? Caribou cows only have one calf per year. Compared to other deer species, this is low, making it difficult for caribou to recover from population declines.



www.science.psu.edu, March 6, 2014

DID YOU KNOW? Prior to calving, pregnant cows may separate from the herd to give birth and raise their calves in secluded patches of forest.



activity

Checks and Balances (<https://www.cariboupatrol.ca/information-and-resources>)

This activity gets people to evaluate hypothetical wildlife management decisions and identify at least four factors that can affect the size of a wildlife population.⁸



DID YOU KNOW? Caribou have really sharp hearing. They must always stay alert to danger, even when they're sleeping or resting. They collect sounds from near and far. Caribou swivel their ears in almost any direction without turning their heads.

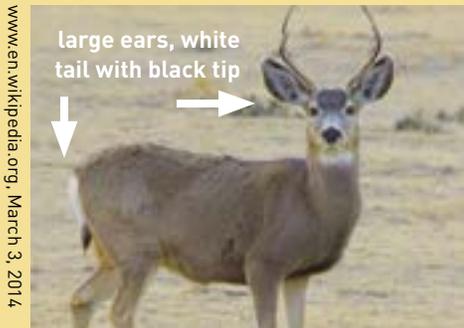
Threats

There are many landscape-related challenges affecting caribou survival and their habitat. The following discusses threats that may be affecting caribou in Alberta. Although each threat is discussed separately, the cumulative impact contributes significantly to the overall effects on caribou populations and habitats.

- **Habitat Change / Loss of Habitat.** Caribou habitat has been changing through timber harvest, oil and gas development and fire suppression. The progressive alteration of these large contiguous forests to a younger, more fragmented forest and climate conditions, short and long term, are thought to have facilitated an increase in primary prey species other than woodland caribou (moose, elk and deer). These changes have resulted in higher densities of wolves, particularly in areas immediately adjacent to caribou range. Increased predator densities typically result in increased mortality of woodland caribou.
- **Climate change.** The changing climate is changing the growth and abundance of lichen, which could negatively affect caribou. It is also making winters less severe, which helps moose, elk, and deer to move into areas that caribou previously had to themselves. Climate change may also affect the frequency of wildfires, avalanches, more extreme weather, and insect outbreaks, which alter caribou habitat.
- **Predation** is acknowledged to be one of the main limiting factors for caribou throughout Canada. Caribou that are able to spatially separate themselves from other ungulate prey are less susceptible to predation. In our area, predators include wolves, grizzly bears, black bears, cougars, bobcats, lynx, golden eagles, coyotes and wolverines. In Alberta, there has been widespread predator control through trapping and various periodic intensive predator control programs.
- **Vehicle Collision.** Caribou struck by any vehicle traveling at highway speed do not survive. Every loss is detrimental to the herd. For more information on wildlife roadsharing, visit <https://wildliferoadsharing.tirf.ca/road-safety-and-wildlife/road-safety/>
- **Insects/Parasites/Diseases.** Other, much smaller members of caribou's habitat can affect their health. Many different insects, parasites, and diseases affect caribou health. Their health and stress levels in turn affect their ability to survive and breed.
- **Pollution.** Air pollutants and contaminants collect in lichen. This may negatively affect caribou health. More research is required to determine how much of a threat this is in our area.?

what do CARIBOU LOOK LIKE?

The woodland caribou is a medium-sized member of the deer family, but they don't look like deer.



This is a mule deer



This is a white tailed deer



This is an elk



This is a moose

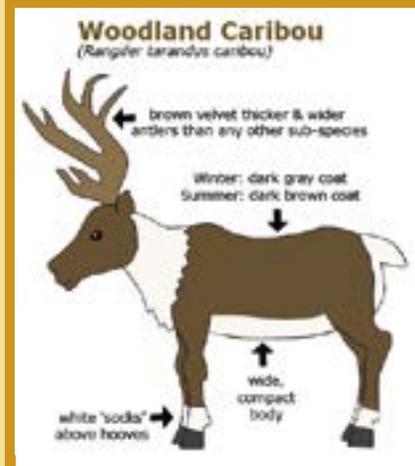


J.D. Robert Wiebe Photography

THIS IS A CARIBOU!

Caribou have a brown body with a cream-coloured neck, mane, tail, and rump. Their coat is really dense and heavy to protect them from the cold winters and high winds. They 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 cells in the hair that act like insulation, keeping the caribou's body heat in. They have small tails, short ears, and compact bodies, and that keeps them protected too. These features reduce the amount of heat that can be lost through the skin.¹⁰

DID YOU KNOW? The hair that covers the body of the caribou is called the pelage. The pelage changes colour throughout the year and is darkest in the summer





J.D. Robert Weibe Photography



www.garygulashnaturephotography.com, March 6, 2014

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 woodland caribou has antlers too, although hers are smaller than those of males.

You can see how much smaller the female antlers are.

Caribou have really long legs, and their hooves are large and crescent-shaped with four toes. Two of their toes, called dew claws, are small. The other two are large and support most of their weight. Caribou hooves are hollow underneath which allows them to use them like shovels for digging and searching for lichen. This gives them an advantage over other members of the deer family, which sink further into the deep snow. Caribou can live in areas where the snow is too deep for the others. The size of their hooves and the length of their legs help them when they travel over muskeg and snow-covered areas.



Richard T Wright

DID YOU KNOW? Caribou can run up to 60 kilometres per hour for short periods. When they sense danger, they run into open areas. Speed is their best defence against predators but they don't always escape.

DID YOU KNOW? No two antlers are ever the same, even on the same animal.

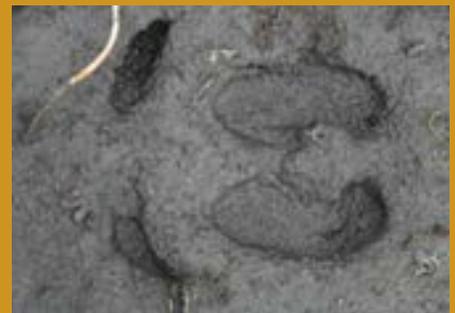
Did you know? Antlers can weigh up to 16 kilograms, which is 10 percent of a caribou's body weight.

Did you know? Caribou shed their antlers and grow a new set every spring. It only takes them 120 days to grow new antlers.

Did you know? caribou recycle their own shed antlers by chewing on them to get calcium.



www.alaskafurid.wordpress.com, March 6, 2014



www.mynatureapps.com, March 3, 2014



www.jinkface.com, March 3, 2014

Prints show at approximately 30% actual size

Antler Growth TIMELINE

Michael Merriam

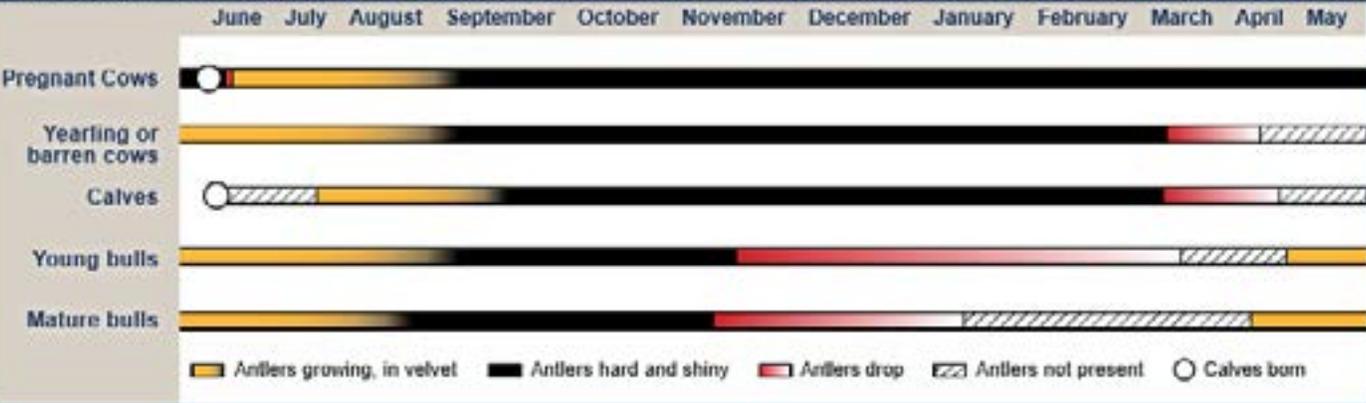


Kevin Gedling



When do caribou usually drop their antlers?

*This is a simplified illustration to represent most caribou in Alaska. Keep in mind that each herd is different and there are ALWAYS exceptions to these patterns. Presence/absence of antlers should not be used to determine caribou sex.



The Alaska Department of Fish and Game, Division of Wildlife Conservation

Spring Summer Fall Winter



Male and female caribou both grow antlers every year. However, they shed them at different times. Males lose them in the winter while females lose them after calving.

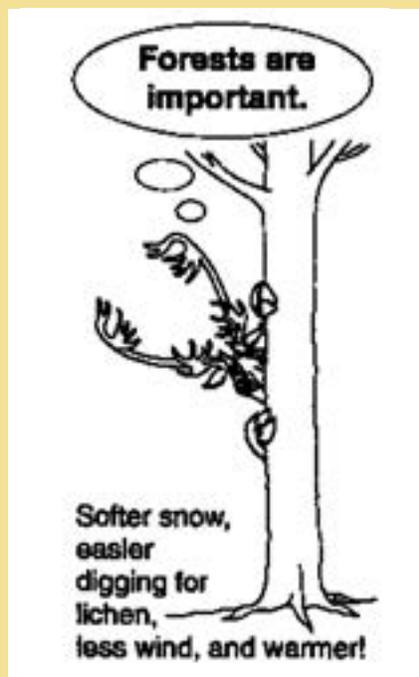
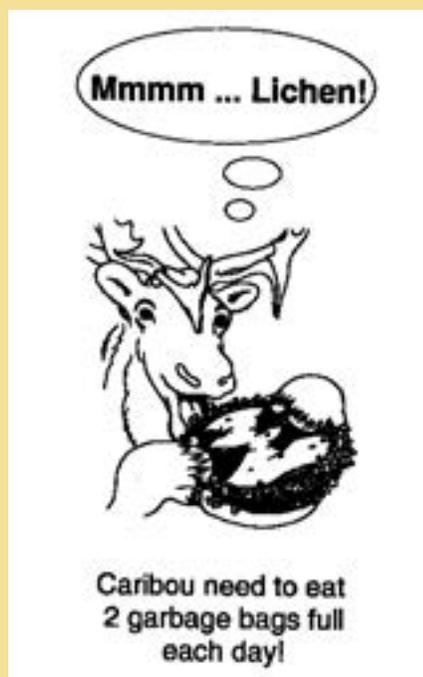


what do CARIBOU NEED?

Like any other plant or animal, caribou need certain things in order to live. These include food, water, shelter, and space. Caribou need to be able to do two things at once: they need to eat, and they need to keep watch for predators. Like many other animals, caribou fill this need by gathering in herds. When caribou are in a group, several animals will be looking up and around while others are eating. They sniff the air regularly and can alert other caribou to danger.

DID YOU KNOW?

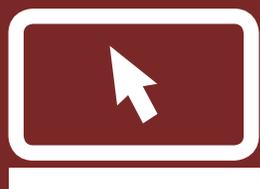
Caribou need lichen. And they eat lots of it, especially in the winter. Caribou are the only large mammals that are able to use lichens as a primary source of food. They have specialized bacteria and protozoa in their stomachs that efficiently digest the lichens, allowing them to take advantage of this rich food source that is available during the winter when other foods are scarce. In the spring, summer and fall, they also like willows, grasses, mosses, shrubs, and broad-leaved and herbaceous plants.



DID YOU KNOW? Caribou find the food that is covered by snow by pushing their long, wide snouts into the snow, searching for food smells before beginning the difficult work of digging. Just as we can smell brownies in the oven, a caribou can easily smell food under one foot (30 cm) of snow. Caribou also use their noses to recognize each other and to detect danger.¹²

DID YOU KNOW? Caribou exploit habitats that enable them to survive in the face of predation and other limiting factors. Desirable habitats may include open areas, treed areas, wet areas (such as muskegs and/or lakes), and alpine ridges.

**video
resources**
<https://www.youtube.com/user/CaribouPatrol>



activity

Caribou Need a Home, Too! (<https://www.cariboupatrol.ca/information-and-resources>)

Caribou need large ranges that meet their habitat requirements for food, water, and shelter from predators, insects, and weather. Caribou ranges include calving grounds, summer range, migration routes, winter range, and other seasonally important areas. Human disturbance may prevent caribou from accessing critical habitat, destroy habitat, or disrupt the movement of caribou herds.

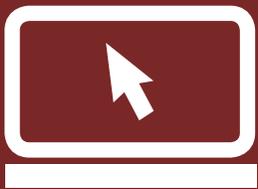
This activity will help students become aware that human activities can impact caribou. Students draw floor plans for houses and then consider the effects on their activities when they remove some of the space from use. The process is repeated for caribou ranges.¹⁴

caribou ADAPTATIONS

All animals and plants have adapted to survive in their environment. Caribou have too. They have evolved and adapted to be able to live in cold temperatures and in landscapes covered in snow. Some of the features that help caribou survive in their environment are:

- Compact bodies, small tails, and short ears. These features reduce surface area and heat loss.
- Two layers of fur covering their bodies, ears, noses, and muzzles.
- 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.
- Large, wide hooves. Caribou hooves work like snowshoes in the snow and paddles in the water. In the winter, their hooves are good for pawing and digging out lichen from under the snow. In the summer, they make caribou efficient swimmers and caribou may quickly jump into the water to escape from predators. Caribou can find their way straight across a lake that is too wide to see the other side.

Animals are the products of countless adaptations over long periods of time. Adaptations increase the animals' likelihood of surviving in their habitat. When a habitat changes, either slowly or catastrophically, the species of animals with adaptations that allow them many options are the ones most likely to survive. Species that have adapted to a very narrow range of habitat conditions are extremely vulnerable to change and may be more susceptible than other animals to death or extinction.¹⁵

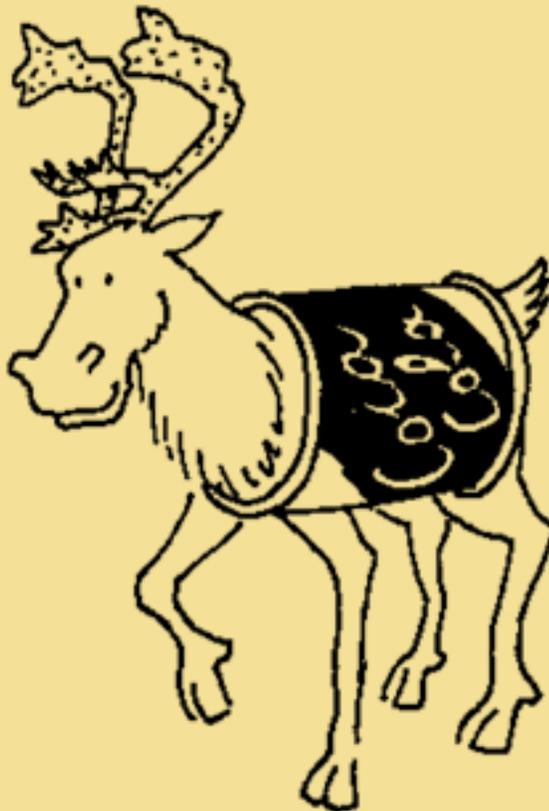


activity

Build a Caribou (<https://www.cariboupatrol.ca/information-and-resources>)

In this activity, students learn about caribou adaptations by building models of caribou, highlighting adaptations.

Divide the children into groups of three. Each group will be given a kit with supplies needed to build a caribou.¹⁷



DID YOU KNOW? While caribou occasionally snort, grunt, pant, and bellow, they are generally silent animals. The most common sound associated with them is a curious clicking noise. This clicking sound is produced when caribou walk. It is caused by tendons slipping over bones in the feet.¹⁴

Hear it here:
<https://vimeo.com/81341806>

who takes care OF CARIBOU?

The Government of Canada and the Government of Alberta do.

The federal government developed recovery strategies for woodland caribou. They also provide funding to support recovery through grants such as the Aboriginal Fund for Species at Risk. The provincial government is working on a range plan for the woodland caribou in our area. Both governments also work to educate the public and industry on woodland caribou.



Environnement
Canada

Alberta Government



Fish and Wildlife officers

do. Fish and wildlife officers help caribou by keeping them from being poached or illegally killed. They also help keep caribou off of roads and help researchers understand more about caribou by keeping track of caribou sightings.

Researchers do.

There are many researchers working to understand caribou, assessing effects of human activity on the landscape, and helping caribou populations recover. Learn more about what researchers and biologists are learning about caribou in Jasper National Park (<https://www.youtube.com/watch?v=cfZdelr5Jtw>).

Laura Finnegan is a researcher working for the Caribou Program at fRI Research. Laura has put radio collars on some caribou. That means that she can now track those caribou and learn about where they go on the land.



Aseniwuche Winewak
Nation of Canada

The Aseniwuche Winewak Nation of Canada do.

We can't let caribou become a story of the past. We want our children to live the lives of our ancestors, the best way they can. AWN works with many caribou strategies, researchers, land users and governments to recover caribou populations. AWN provides traditional knowledge and baseline data information into those processes.

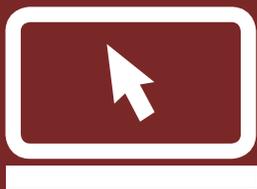


The Caribou Patrol does. The Caribou Patrol works to keep caribou from being killed on roads. They also keep track of where caribou are seen so that we can understand what areas they are using as habitat.



Industry does. The FLMF provides a forum where the forest and energy industries collaborate on industrial resource development activities to practise Integrated Land Management (ILM) with an overall objective to reduce impacts on caribou and other values. Collaboration activities have a goal of reducing the impact, amount, and extent of road access development compared to the standard practise of individual companies developing their own access and adopting site specific mitigation practises. The FLMF focus in on habitat management (vegetation) and management of industrial footprint to augment government population and human use strategies to support an overall caribou recovery strategy.²¹

Co-management Role Play (<https://www.cariboupatrol.ca/information-and-resources>)



activity

Co-management is a process that brings local resource users and government representatives together to share the management responsibility for local or regional resources. It is an alternative approach to managing local resources that has been gaining increasing support throughout Canada. The cooperative approach to management can involve government wildlife and fisheries staff, wildlife boards, First Nations, community hunter and trapper associations, and others. These groups work together, using both scientific and traditional knowledge to manage resources.

In this activity, students take the roles of different members of a caribou management board and make a decision about a key management issue.²²

Cultural Importance OF CARIBOU

Aseniwuche Winewak Nation of Canada (AWN) Perspective on Caribou¹¹

As Caretakers of the Earth, we commit to working in unity, in faith, for life.

Our concern for the woodland caribou is founded in the belief that the Creator made all things, that all living things have a right to be here. We believe in the Medicine Wheel, that wellness lies in the balance of all things. We believe we must treat the land with respect, that we must have respect for all living creatures. Traditional knowledge provides wisdom and direction on how to treat Mother Earth.

Traditional knowledge, learned by countless generations on the land, has a vital role in managing a sustainable landscape. It is listening to our Elders when they tell us that we need to think of our children and grandchildren. It is knowing where and when to hunt, how to skin a moose, how to prepare meat, how to tan a hide, how to make tools, how to survive. It is knowing that all things are interconnected; one



Aseniwuche Winewak Nation of Canada

DID YOU KNOW?

Sustainability and integration of knowledge are not new concepts to Aboriginal people. Understanding these concepts is a part of who we are.

It is how we survived on the land.

thing can't be changed without changing the whole. It is sharing our stories and our history, because we have always been here. It is having a vision for the future, knowing that our collective future depends on our cooperation. The integration of traditional knowledge and scientific knowledge can reduce environmental impact and create balance.

Our people lived and moved throughout our traditional lands, accumulating vast amounts of knowledge.



Our role as Caretakers of the earth allows us a unique role in responding to declining caribou populations. We hold the stories of where caribou used to be and how they were used, and are now able to provide programs that help to paint the current picture. We work with the Governments of Alberta and Canada to share information about caribou. For decades, our Elders have been speaking up for the preservation of caribou to anyone who would listen as they have seen a dramatic decline in the woodland caribou population. We have been active in many caribou-recovery strategies.

Our people have traditionally hunted caribou for food and other items made from the animals, such as hides and tools. In Alberta, only Aboriginal peoples are still allowed to hunt caribou, but most do not. The Aseniwuche Winewak Nation decided to voluntarily stop hunting caribou decades ago in response to the decline.

'We used to see caribou and their calves all the time. Now it is very rare.'
– AWN Elder

'Caribou were never just in one spot or one area, they were everywhere.'
– AWN Elder

'All the animals around here used to be fatter and healthier than they are now.'
– AWN Elder

'The Little Smoky is a boreal herd and they do not move around to different areas. They need muskeg and old forest to live'. – AWN Elder

'We can tell if the caribou are boreal or mountain based on the size of their footprints. Boreal caribou have bigger feet because they have to travel through deeper snow and muskeg – it's like snowshoes.' – AWN Elder



activity

Symbolic Caribou (<https://www.cariboupatrol.ca/information-and-resources>)

Caribou and other wild animals are sometimes used as symbols. This means they are used to suggest meanings based on people's knowledge of caribou and concepts related to caribou.

Caribou can also be found in popular culture. Santa's reindeer are a kind of caribou. And, of course, caribou can be found on the Canadian quarter, used every day by millions of people.

In this activity, students research how caribou are portrayed in coats of arms, on Canadian money, and in popular culture, and then create a coat of arms from the caribou's perspective.¹²

why do CARIBOU MOVE?

Unlike caribou that inhabit the tundra, woodland caribou do not migrate long distances between seasons, instead staying in the forest, either alone or in small groups. Woodland caribou make seasonal movements from summer to winter ranges, and the cows have places where they go to have their calves. Caribou live with snow, cold weather, and short days during the long winter, so they do not travel great distances. They stay in areas where they can easily dig through the snow for ground lichen or pick lichens off the trees. Forest openings and muskegs are important. Windswept alpine ridges are important for the caribou that winter in the mountains.¹⁸

In our area, the caribou winter range is in the same place as roads and highways, and that is very dangerous for caribou. This is the time of year when the Caribou Patrol, coordinated by the Aseniwuche Winewak Nation of Canada, goes to work. The patrol crews reduce the potential of vehicle collisions with caribou by patrolling local roads and getting caribou off the roadways. The patrol also works to increase awareness of caribou concerns with the people who use roads in caribou areas.

In the spring, the cows travel to their calving area. In the summer, the caribou move to open mountain meadows and open spruce and pine forests. They are always on the move so they don't overgraze, and they eat different grasses, herbs, and shrubs in different areas. During the summer, they travel and eat so they can build up their fat reserves for the long winter.

In the fall, the caribou begin moving back to their winter ranges.

Subspecies

There are different subspecies of caribou in Canada. They are all caribou, but groups in different areas look a little different and behave in different ways. One of those subspecies is the Woodland caribou, which is the kind of caribou we have in Alberta.



Steven Fick/Canadian Geographic

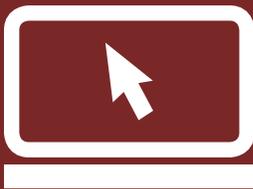


Ecotypes

An ecotype is a group of animals within a species that has adapted to particular environmental conditions and habitat and acts differently from the other ecotypes. In Alberta, the woodland caribou have two ecotypes, the boreal forest caribou ecotype and the mountain caribou ecotype. Most mountain caribou are migratory, and make seasonal migrations between alpine and subalpine areas in the mountains and upper foothills. The boreal caribou is not migratory. It wanders extensively throughout the year, and there is a lot of overlap between its summer and winter ranges.



International Boreal Conservation Campaign



resources

Watch the documentary *Being Caribou* made by two Canadians who spent five months on foot with the endangered Porcupine Caribou herd.
www.beingcaribou.com/beingcaribou¹⁷

Watch the video clip *Animated Movements of the Porcupine Caribou* to see how caribou move through various habitats throughout the year:
<https://journeynorth.org/tm/caribou/MigAnimation.html>

how many CARIBOU ARE THERE?

Exactly how lucky are you to see a caribou here in the Grande Cache, Hinton, Grande Prairie area?

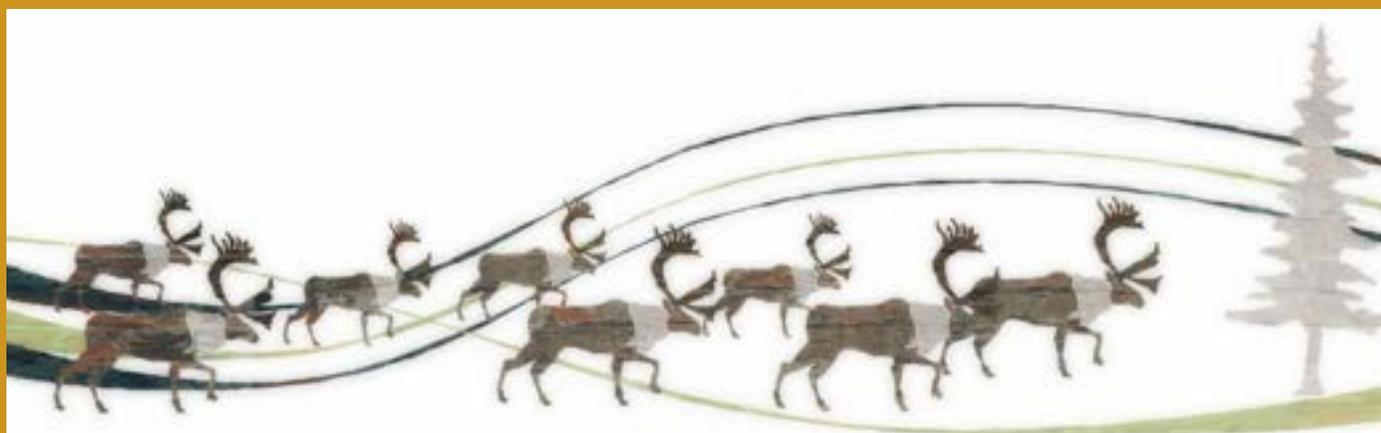
Of the four herds in our area, along the Highway 40 corridor and west into the mountains, only one herd is the boreal ecotype (Little Smoky), and the other three herds are the mountain ecotype (A la Peche, Redrock/Prairie Creek, and Narraway). According to the federal recovery strategies for each ecotype (published in 2012 and 2013, respectively), population estimates for each herd are as follows.¹⁶

Range Name	Population Size Estimate	Year	Population Trend
Little Smoky	78	2011	Decreasing
A la Peche	88	2012	Decreasing
Redrock / Prairie Creek	127	2012	Decreasing
Narraway	96	2012	Decreasing

DID YOU KNOW? Caribou herds around the world are declining, and scientists are working to find out why. Updated population estimates will be provided once they've been published by the provincial or federal government.



Kevin Myles, FRI Research



Jean Polfus

species at risk: THE LAW – IN CANADA

Species at Risk Act (SARA)

SARA is an important tool for conserving and protecting Canada's biological diversity, and helps Canada meet its international commitments under the Convention on Biological Diversity. It also supports the federal commitments under the 1996 Accord for the Protection of Species at Risk to prevent species in Canada from becoming extinct as a consequence of human activity. The purposes of SARA are:

1. to prevent wildlife species from being extirpated or becoming extinct,
2. to provide for the recovery of wildlife species that are extirpated, endangered or threatened as a result of human activity, and

3. to manage species of special concern to prevent them from becoming endangered or threatened.

The Act establishes a process for conducting scientific assessments of the status of individual wildlife species and a mechanism for listing extirpated, endangered, threatened and special-concern species. SARA also includes provisions for the protection, recovery and management of listed wildlife species, and their critical habitats and residences.

The responsibility for conservation of species at risk is shared by all jurisdictions in Canada. The Act recognizes this joint responsibility and that all Canadians have a role to play in the protection of wildlife.

DID YOU KNOW? No matter who you are, SARA can affect you if a species at risk is found at any time throughout the year on a property in which you have an interest.

DID YOU KNOW? Listing a species under an endangered, threatened or extirpated status triggers mandatory recovery planning, by the competent minister, in order to address threats to the survival or recovery of these listed species.

DID YOU KNOW? There are currently 602 species listed on Schedule 1 of SARA.

Definitions:

STATUS	DEFINITION (“Wildlife” includes sub-categories of Mammals, Birds, Amphibians, Reptiles, Fish, Molluscs, Arthropods, Plants, Lichens, and Mosses)	NUMBER OF SPECIES ON SARA SCHEDULE 1
Extinct	A wildlife species that no longer exists.	
Extirpated	A wildlife species no longer existing in the wild in Canada, but occurring elsewhere.	24
Endangered	A wildlife species facing imminent extirpation or extinction.	269
Threatened	A wildlife species likely to become endangered if limiting factors are not reversed.	137
Special Concern	A wildlife species that may become a threatened or an endangered wildlife species because of a combination of biological characteristics and identified threats.	172



woodland caribou recovery IN CANADA

Recovery Strategy for the Woodland Caribou, Boreal population (*Rangifer tarandus caribou*) in Canada

Woodland Caribou, Boreal population was listed under the Species at Risk Act (SARA) as threatened in June 2003 when the Act came into force.

In October 2012, the Government of Canada published this Recovery Strategy, which identified critical habitat in 50 of 51 identified ranges for the species in nine provinces and territories (AB, BC, MB, NL, NT, ON, QC, SK, and YT).

Environment and Climate Change Canada (ECCC) published the first 5-Year Report on the implementation of the Recovery Strategy for boreal caribou in October, 2017. The Report provides information on conservation and recovery measures implemented or underway in each province or territory, the status of provincial and territorial recovery planning, and updates on habitat and population condition in each range.

In February 2018, the Government of Canada (GOC) published the Action Plan for the Woodland Caribou, Boreal Population, in Canada - Federal Actions, which outlines the recovery measures that the GOC is taking or will take to help achieve recovery for boreal caribou, including in three key areas:

1. knowledge to support recovery, including the creation of the National Boreal Caribou

DID YOU KNOW? The provinces are directed to develop action and range plans to outline how each caribou range will be managed to ensure critical habitat is protected over time to enable a self-sustaining caribou population.

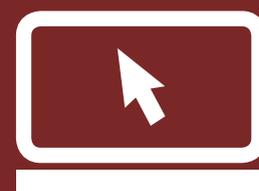
- Knowledge Consortium to enable governments, Wildlife Management Boards, Indigenous peoples, and stakeholders to address key knowledge gaps, regularly share information and lessons learned, and to undertake studies to support boreal caribou recovery
- recovery and protection activities, including the establishment of section 11 agreements with provinces and territories and other interested parties as well as action on federal lands
- reporting on progress

Consistent with the Minister's obligations under SARA section 63, this report provides a summary of steps taken to protect critical habitat. The report also provides a summary of additional steps to be taken in the near future to further protect critical habitat.

Recovery Strategy for the Woodland Caribou, Southern Mountain population (*Rangifer tarandus caribou*) in Canada

Following the Designatable Unit report on caribou (COSEWIC 2011), a new population structure was proposed and accepted by COSEWIC. This resulted in the new Central Mountain population, composed of 12 subpopulations from

the previous Southern Mountain population of Woodland Caribou (COSEWIC 2002). The Central Mountain population of Caribou was designated Endangered in May 2014. This population is endemic to Canada and occurs in 10 extant subpopulations in east-central British Columbia and west-central Alberta in and around the Rocky Mountains. Surveys have shown consistently high adult mortality and low calf recruitment, accelerating decline rates. Threats are continuing and escalating.



resources

https://www.registrelep-sararegistry.gc.ca/virtual_sara/files/plans/rs_woodland%20caribou_bois_s_mtn_0614_e.pdf

https://www.registrelep-sararegistry.gc.ca/virtual_sara/files/plans/rs_caribou_boreal_caribou_0912_e1.pdf

species at risk: THE LAW – IN ALBERTA

Wildlife Act

General status determination is the first step in a continuing process of evaluating and reporting on the biological status of Alberta's wild species. This exercise takes place every five years with the last published report being in 2010.

Those species that "May Be At Risk" receive a detailed status assessment and will go on to receive a much more detailed evaluation.

The Minister reviews the recommendations of the Endangered Species Conservation Committee and makes a decision on detailed status designation.

Species that are designated as endangered or threatened are then legally identified as such under Alberta's Wildlife Act.

This makes the harvesting or trafficking of that species illegal, punishable by a fine of up to \$100,000, imprisonment for a term of not more than 2 years, or both. There is also a year-round prohibition against disturbing the nest or den of an animal listed as endangered or threatened.

- For endangered or threatened species, a recovery plan will be produced, often involving advice from a recovery team

To find the list of endangered or threatened species in Alberta, see Schedule 6 of the Wildlife Regulation.

DID YOU KNOW? As of 2018, there were 33 species listed on Schedule 6 of Alberta's Wildlife Regulation, which classifies those species as being either endangered or threatened.

DID YOU KNOW? It has been recommended both provincially and federally that Woodland caribou's "threatened" status be changed to the more dire "endangered" status.



Jackie Urchishyn



woodland caribou recovery IN ALBERTA

2019 Draft Agreement Highlights

The draft agreement identifies a five-year timeline for advancing the following commitments:

- Completion of forest harvest sequencing plans, industrial access management plans and recreational access management plans.
- Completion of sub-regional plans that include recovery outcomes for all caribou populations.
- Continuation of critical habitat restoration activities that have already commenced, and initiation of restoration of critical habitat in additional priority portions of selected ranges.
- Continued work with Indigenous peoples to identify desired access routes.
- Incorporation of caribou recovery values in Wildfire Management Plans.
- Integration of multi-species approaches when planning and implementing conservation measures for caribou.
- Evaluation and revision of existing project approval conditions for energy, forestry and other land uses to reduce impacts to caribou critical habitat, individual caribou and caribou populations, including cumulative effects.
- Continuation of wolf population management in select ranges.
- Establishment of a rearing facility in the Little Smoky range and commencing a five-year pilot program. • Continuation of annual caribou population growth and distribution monitoring.
- Continuation of work to estimate range-specific caribou population size.
- Development and implementation of a critical habitat monitoring and reporting framework.
- Refinement of critical habitat delineation for southern mountain caribou.
- Identifying possible effects and outcomes of climate change on Alberta's boreal conditions.

Alberta is working towards an agreement with Canada that will set out how the two governments will work to stabilize and recover woodland caribou populations in Alberta.

Working with the Government of Canada on a draft agreement also reduces the risk of the federal government issuing an Emergency Protection Order or Critical Habitat Protection Order in relation to Alberta's caribou populations or ranges, which could have negative effects on Alberta's reputation, investor confidence, jobs and the economy.

Draft Conservation Agreement for Woodland Caribou (Canada-Alberta)

Under Section 11 of the Species at Risk Act (SARA) the Minister of Environment and Climate Change Canada (ECCC) can enter into conservation agreements to benefit a species at risk or enhance its survival in the wild. A draft conservation agreement between Alberta and the Government of Canada for woodland caribou has been negotiated, outlining actions that support conservation and recovery of populations and their critical habitat in Alberta that will be taken in the next five years. The overarching goal of the draft agreement is to work towards achieving and maintaining self-sustaining caribou populations over the long term, in line with the population and distribution objectives and critical habitat outcomes outlined in the federal Recovery Strategies

and aligned with A Woodland Caribou Policy for Alberta. The draft agreement is not a range-plan, nor does it make land-use determinations. It commits to timing for completion of caribou range-plans in Alberta.

All of Alberta's woodland caribou ranges are currently below the critical habitat thresholds outlined in the federal recovery strategies and most of the caribou populations are decreasing. Many of the ranges overlap important forest and energy resources that support local communities and the provincial economy. Woodland caribou are an important part of the lives and traditions for Indigenous peoples, as well as many other Albertans. Determining the appropriate mix of conservation measures is a complex undertaking that requires analysis of biological, jurisdictional, social, and economic factors, natural resource related tenures, and the rights and interests of Indigenous peoples.



resources

<https://talkaep.alberta.ca/caribou-range-planning>

<https://www.alberta.ca/albertas-species-at-risk-strategies.aspx>

what CAN I DO?

One way you can help protect caribou is by learning more about them, their habitat, and the threats to their survival. Without public support, wildlife management programs have limited success. You can become involved in caribou and other wildlife issues by participating in public consultations regarding issues that affect caribou.

You can also contact local government and conservation groups for ideas on how to help caribou and their habitat. People face important choices now and in the future about how we use and affect the natural world. These choices can affect caribou and other living things.

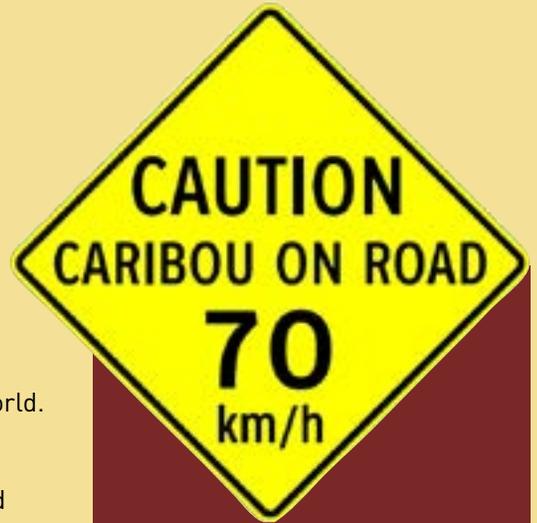
If you cross-country ski, snowshoe, or snowmobile in caribou areas, avoid creating new trails/paths. It is also best to avoid recreating in caribou habitat during calving season.

Share what you learn with your friends. When we all work together, change can happen.

Motor vehicle drivers should slow down to 70 kilometres per hour when there are caribou on the road to prevent caribou being killed in vehicle collisions. Please visit the Wildlife Roadsharing Resource Centre (<https://wildliferoadsharing.tirf.ca/road-safety-and-wildlife/road-safety/>) for excellent information and tips. Stay safe out there!

Become familiar with appropriate legislation, such as Alberta's *Wildlife Act* (www.qp.alberta.ca/documents/acts/w10.pdf) and Canada's *Species at Risk Act* (<https://www.canada.ca/en/environment-climate-change/services/species-risk-public-registry.html>).

Learn more about the caribou herd that lives closest to you.
#CareAboutCaribou



When our Caribou Patrol crews are alerted to caribou lingering on a roadway, they put up these signs a few kilometres apart and patrol the area until the caribou have moved away. They may also incorporate other diversion tactics.

PLEASE report all caribou sightings in west-central Alberta!



www.facebook.com/CaribouPatrol

www.cariboupatrol.ca

info@cariboupatrol.ca

toll free: 1.877.CPHWY40



Source Credits



For information on how the Foothills Landscape Management Forum is advancing integrated land management in the Province of Alberta:

<https://flmf.friresearch.ca/>

Caribou photographs featured in this publication were courtesy of:

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To create your own activities:

www.discoveryeducation.ca/Canada/

Manitoba Model Forest:

<https://www.thinktrees.org/resources/the-wonderful-world-of-the-boreal-woodland-caribou-english/>

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- 1 <https://visual.ly/community/infographic/animals/woodland-caribou>
- 2 Aseniwuche Winewak Nation of Canada (AWN)
- 3 <http://www.env.gov.yk.ca/publications-maps/documents/ProjectCaribou.pdf>
- 4 Caribou Patrol - ESRD Report 12
- 5 SFM-Canada
- 6 <http://www.env.gov.yk.ca/publications-maps/documents/ProjectCaribou.pdf>
- 7 <https://www.thecanadianencyclopedia.ca/en/article/caribou>
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- 11 Aseniwuche Winewak Nation of Canada (AWN)
- 12 <http://www.env.gov.yk.ca/publications-maps/documents/ProjectCaribou.pdf>
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https://www.registrelep-sararegistry.gc.ca/virtual_sara/files/plans/rs_caribou_boreal_caribou_0912_e1.pdf
- 20 Caribou (Our Wild World Series) by Julia Vogel
- 21 Wayne Thorp, Program Lead, FLMF 2014
- 22 <http://www.env.gov.yk.ca/publications-maps/documents/ProjectCaribou.pdf>
- 23 <https://www.alberta.ca/caribou-range-planning.aspx>



Caribou Patrol Program

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