

Yukon Species at Risk 2018



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Yukon



Our Wildlife: Yukon Species At Risk

A “species at risk” is any naturally occurring plant or animal in danger of extinction or extirpation (disappearing from the territory). Most Yukon wildlife species are considered to be secure. However, nation-wide declines of the Barn Swallow, slow recovery of Bowhead Whale, and changes to habitats have raised concern about the future of some Yukon animals and plants. The recovery of the Trumpeter Swan and Peregrine Falcon are great examples of conservation achievements.

The Yukon Conservation Data Centre (YCDC) collects and shares information on plants, animals and ecological communities at risk in Yukon including those that have not been formally assessed.

The species in this booklet are those that have been assessed as at risk nationally.

Yukon is known to be home to at least 10,000 plant and animal species, some found nowhere else in Canada and several nowhere else in the world.

Short-eared Owl (cover), Ian Routley
Yukon Draba (above), Government of Yukon.

How To Use This Guide

The purpose of this guide is to provide information on Yukon species assessed as at risk nationally. This publication will be updated annually as both the federal Species at Risk Act (SARA) and the Committee on the Status of Wildlife in Canada (COSEWIC) list of species at risk change. Species are presented based on their SARA status. Those with an asterisk * have a more recent COSEWIC assessment that differs from the SARA status. For the most current list of species on Schedule 1 of SARA, visit: www.sararegistry.gc.ca. For the most current COSEWIC list, visit: www.cosewic.gc.ca.

Subheading Descriptions

Typical Habitat

The information in this section describes the typical habitat of the species in Yukon.

Potential Threats

Threats to a species can vary from region to region; for the most part, the information in this section only describes known threats to each species within Yukon's borders.

Did You Know?

The information in this section highlights interesting facts about the species.

Range Map

The range map shows the general distribution of each species in Yukon and adjacent jurisdictions. Please note that these distributions are approximate. The green colour represents the species' inferred breeding range.

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Photo:
Government of Yukon

Barren-ground Caribou

Rangifer tarandus

THREATENED (2016)

Barren-ground Caribou is one of the several ecotypes of caribou that are emblematic of Canada's north country. Great herds of these Caribou, often numbering in the hundreds of thousands, undertake annual, long migrations across the tundra and taiga of Yukon, Northwest Territories, and Nunavut. In recent years however, most of these herds have declined precipitously, and this trend has resulted in the group's Threatened designation in 2016. In Yukon, the situation is different—here, Barren-ground Caribou are represented by the Porcupine Caribou herd, which is apparently thriving.

Description

Barren-ground Caribou are intermediate in size and colouration

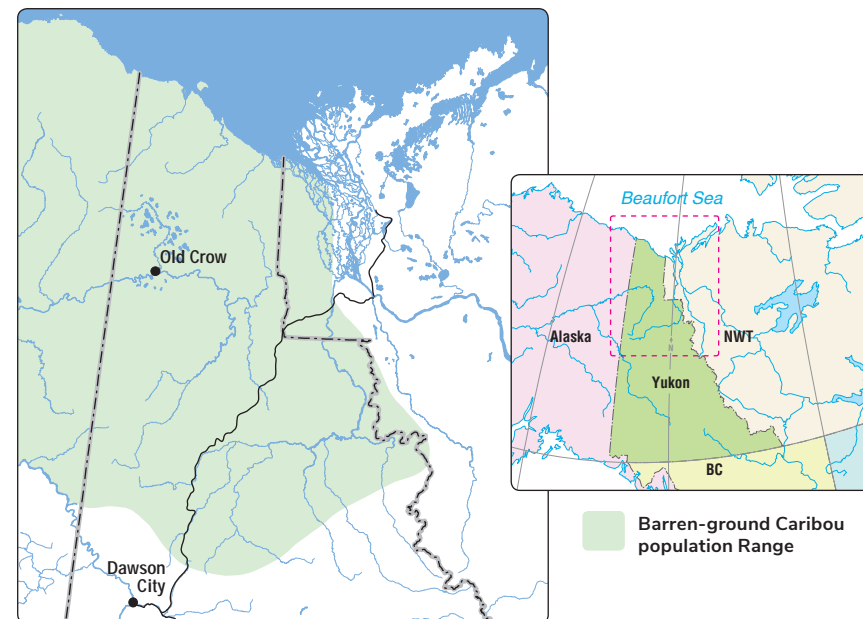
between the boreal and woodland Caribou to the south and the Peary Caribou of the High Arctic; that is, their legs are shorter than Boreal Caribou, and their coats are relatively paler, whereas Peary Caribou have even shorter legs and paler coats.

Typical Habitat

Barren-ground Caribou typically make long-distance migrations between their winter habitat in the taiga and northern boreal forests and their calving grounds on the arctic tundra. They are generalist herbivores, choosing plants (grasses, sedges, forbs, shrubs) primarily on nutrient content. On a larger scale, habitats are selected using factors such as forage nutrition, reduction of predation risk, and the avoidance of biting flies.

Potential Threats

- A warming climate is changing the Canadian north more rapidly than



almost anywhere else on earth, although its potential effects on Barren-ground Caribou are complex and difficult to predict. Tundra in the lowlands of Yukon's North Slope is predicted to vanish under shrubs within 100 years.

- Industrial exploration and development in the caribou's range has increased.
- Subsistence and sport harvest are significant causes of mortality in some parts of the Barren-ground Caribou's range, although this is considered not a serious issue in Yukon.

DID YOU KNOW?

- Barren-ground Caribou are a vital resource for the indigenous peoples of northern Canada, and are embedded deeply within their culture.
- As a large herbivore with a wide range and often immense numbers, Barren-ground Caribou are a keystone species in the ecology of the northern Yukon.
- There is evidence from Aboriginal Traditional Knowledge and

scientific study that Barren-ground Caribou undergo natural fluctuations over a period of decades. Since censuses began for the Porcupine herd over 40 years ago, it rose from about 100,000 to 175,000 1970-1990, then declined to 125,000 in 2000, and recently rose again to about 200,000.

- Since 1987, the Porcupine Caribou has been managed through an international agreement between Canada and the United States.



Photo:
U.S. National Marine
Mammal Laboratory

Bowhead Whale, Bering-Chukchi- Beaufort population

Balaena mysticetus

SPECIAL CONCERN (2009)

This population was severely reduced by commercial whaling from 1848 until about 1915. Since then, there has been very limited subsistence hunting by Aboriginal people in Alaska, Yukon and eastern Russia. In the absence of commercial whaling, it has recovered to an estimated population of 16,892 in 2011.

Description

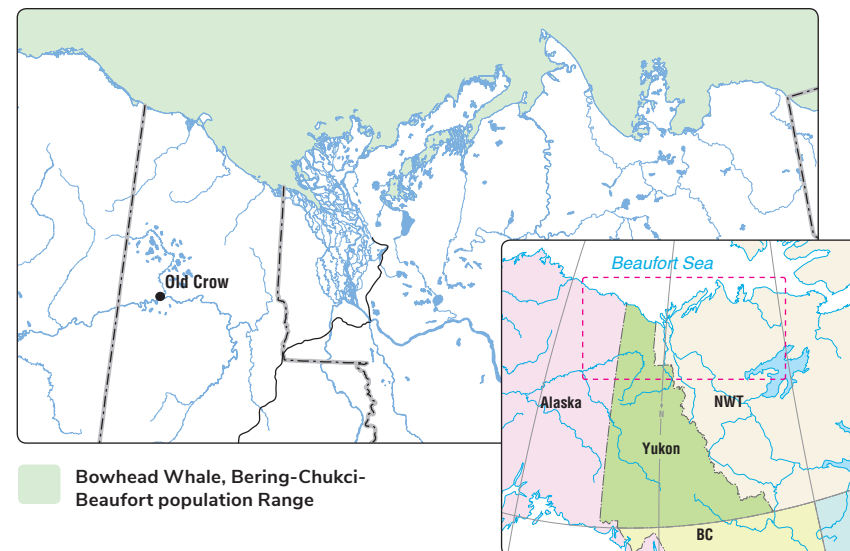
- Bowheads are stocky baleen whales without a dorsal fin. Adults can grow to 20 metres long and weigh up to 100 tonnes.

Typical Habitat

- Bowhead Whales occur in the marine waters of the Beaufort Sea, in conditions ranging from open water to thick, extensive but broken pack ice.

Potential Threats

- Long generation time and low natural reproduction and growth rates make Bowheads inherently vulnerable.
- Rapid changes in ice cover due to climate change are a major concern, although there is uncertainty about how Bowheads will respond to these changes.
- Increasing noise and disturbance from activities such as shipping and oil and gas exploration in the Arctic.
- Harvest of this population will require ongoing monitoring to ensure that it is sustainable.



Bowhead Whales do not migrate to warmer waters like other whales—they spend their whole lives in the Arctic.

DID YOU KNOW?

- The Bowhead Whale has the largest mouth of any animal.
- By weight, the Bowhead is one of the largest whales, second only to the Blue Whale.
- Bowhead Whales take about 25 years to become mature and mothers give birth to a single calf about every 3-4 years.
- Bowhead Whales can live more than 200 years, making it one of the longest living mammals in the world.
- In Canada, Bowhead hunting is managed by Fisheries and Oceans Canada in collaboration with Wildlife Management Boards created under land claims agreements.
- Bowhead Whales do not migrate to warmer waters like other whales—they spend their whole lives in the Arctic.
- Bowheads feed on tiny copepod prey by swimming forward with their mouths open, continuously filtering water through their baleen.



Photo:
Ryan Agar

Collared Pika

Ochotona collaris

SPECIAL CONCERN (2011)

The Collared Pika is a small relative of rabbits. Its bleating calls are familiar to hikers who venture into rocky alpine country in Yukon. The Collared Pika is a species that evolved in unglaciated Beringia, and is restricted to northwestern North America. Close to 50% of their range is in Yukon. Pikas have been deemed “harbingers of climate change” because of their sensitivity to climate patterns, and may be adversely affected by high snowfall and late snowmelt.

Description

Collared Pikas look like small, short-eared rabbits. They are about the size of a small squirrel, and are grey with paler grey patches on their napes and shoulders, which are

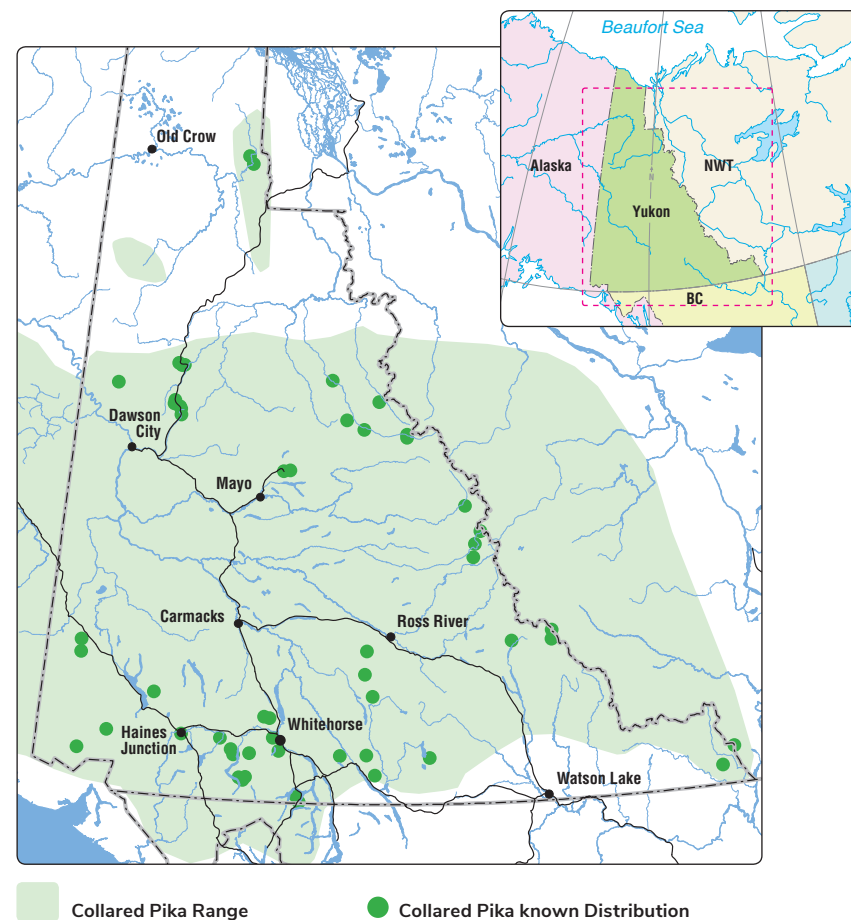
reminiscent of a collar around the neck.

Typical Habitat

Collared Pikas are restricted to alpine talus slopes interspersed with small meadows. The talus-meadow combination offers access to both forage and shelter from predators and weather. Pikas typically do not stray more than 10 m from the edge of the talus slope when foraging.

Threats

Because climate change in Yukon is predicted to bring a greater variability in precipitation, the pika's sensitivity to deep snowpacks and late snowmelt is of concern. This sensitivity, coupled with the fact that their alpine habitat will decline substantially in area as the climate warms, means that the potential for future population declines is substantial.



DID YOU KNOW?

- Even though they live above treeline in Yukon, Collared Pika do not hibernate.
- Pika eat plants, but collect two types of diets in the summer—the first they eat right away, while the second is stored in ‘haypiles’ within the talus rocks for consumption during winter.
- They are solitary animals and defend individual territories.
- Juveniles emerge to the surface at one month of age and disperse to a new territory within days. They reach near-adult size during their first summer and must establish their own haypile before winter.
- Pika are often heard before they are seen. Listen for their weak “meep” alarm call when near or crossing rock piles.



Photo:
Sergio Martínez/
PRIMMA

Grey Whale, Eastern North Pacific population *

Eschrichtius robustus

SPECIAL CONCERN (2004)

The eastern North Pacific population of Grey Whale winters along the west coast of Mexico. Most individuals spend the summer feeding in the arctic waters of the Bering, Chukchi, and Beaufort seas. A small number migrate through the waters off the Yukon coast to reach feeding areas east of the Mackenzie Delta. On their arctic feeding grounds Grey Whales feed predominantly on amphipod crustaceans by scooping up sediment and straining it through their baleen. They are responsible for recirculating nutrients from the

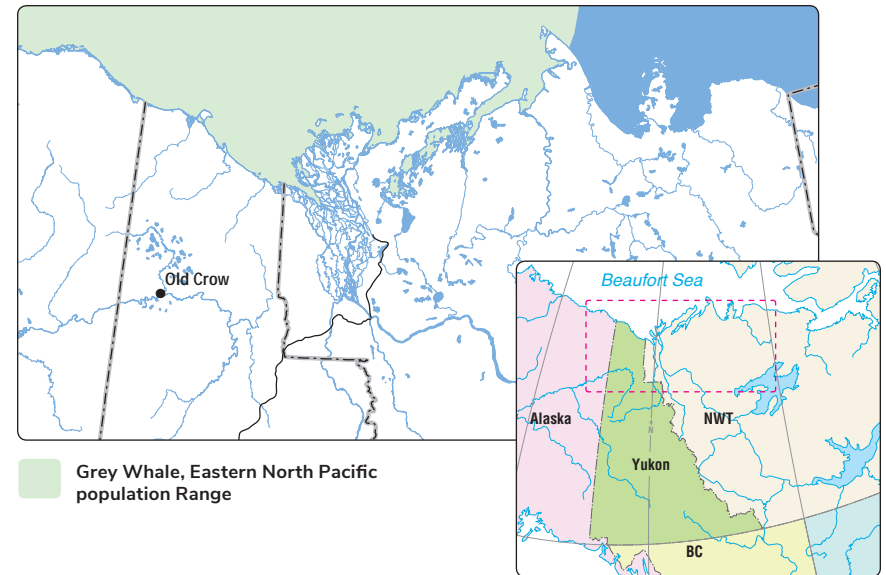
sediments into the water column, making them a keystone species in arctic marine ecosystems.

Description

Grey Whales are medium-to-large (11-14 m) baleen whales that lacks a dorsal fin. They are dark grey, have mottled skin, and are often covered with patches of barnacles and other crustaceans.

Typical Habitat

Grey Whales are usually found in shallow (< 60 m) water close to shore, although in Yukon they have only been reported off Herschel Island and may be transient in deeper waters here. On arctic feeding grounds, Grey Whales feed almost exclusively over mud or sand bottoms and avoid areas of heavy ice.



Potential Threats

Industrial development of shallow marine areas (e.g. oil exploration and offshore mining) and the associated noise pollution (e.g. seismic exploration) can cause loss and deterioration of habitat. Ice cover on the arctic feeding grounds limits

the feeding season and thus affects mortality and calf production. In addition, Grey Whales are killed by entanglement in fishing gear and in collisions with ships, though these causes of mortality have not been reported in waters off the Yukon coast.

DID YOU KNOW?

- Commercial whaling reduced the size of the eastern North Pacific population before they were protected in 1937.
- Grey Whales reach sexual maturity at approximately 8 years and may live up to 70 years.
- Grey Whales undertake one of the longest annual migrations of any mammal, travelling 15,000-20,000 km round trip.
- Grey Whales are the focus of an expanding whale-watching industry and are of significant economic value to coastal communities.
- The entrapment of three Grey Whales in sea ice near Barrow, Alaska, in October 1988 made international news and was the focus of a spectacular rescue involving a Russian icebreaker brought in to create an escape route for the whales.



Photo:
Jared Hobbs

Grizzly Bear

Ursus arctos

SPECIAL CONCERN (2012)

Yukon is home to healthy populations of grizzlies, but they are vulnerable to threats that have reduced or eliminated populations elsewhere. These bears are slow to reproduce; female grizzlies mature at 6-8 years of age, have small litter sizes (commonly 1 or 2 cubs), and have long intervals between cub births (3 to 5 years). These factors make it difficult for them to recover from population declines. Increasing conflicts between bears and humans will likely result in the death of more bears.

Description

Typically, Grizzly Bears are larger than Black Bears and are more heavily built. They can be recognized by their prominent shoulder hump. Their colour varies from light gold to almost black.

Typical Habitat

- Grizzlies are most common in open tundra and subalpine terrain, but also range through the boreal forest.
- Concentrations occur where salmon spawn, such as in the Fishing Branch and southern Kluane areas.



Grizzly Bear Range

Potential Threats

- Increasing industrial development and expanding human habitation in Yukon could lead to an increase in bear-human conflicts. Bears are often relocated or killed in such situations.

DID YOU KNOW?

- Bears are more powerful than people—learn to avoid conflicts with bears and always travel in groups.
- Grizzlies can travel long distances and use very large areas of habitat. One bear that was tracked with a radio transmitter traveled 471 km (292 miles) in 23 days.



Photo:
Graham Forbes

Little Brown Myotis

Myotis lucifugus

ENDANGERED (2013)

Description

The Little Brown Myotis is likely the most common bat species in Canada. Yukoners will probably recognize these bats because they often use buildings as day-roosts and forage in open areas, such as over lakes. Maternal colonies have been studied in the communities of Whitehorse, Watson Lake, and Haines Junction.

Typical Habitat

Little Brown Myotis are not yet known to hibernate in Yukon. Individuals arrive in late April and leave through September. They roost in buildings, rock crevices, tree

cavities, and under tree bark within the boreal forest zone, usually close to water.

Potential Threats

White-nose Syndrome (WNS) is caused by a fungal pathogen (*Pseudogymnoascus destructans*) that likely was brought from Europe



Photo: Graham Forbes



Little Brown Myotis Range

and was first recorded in US in 2006 and in Canada in 2010. Since then, population declines of more than 90% in northeastern US and 94% in eastern Canada have been reported. Mixing of bats during autumn swarming events and transmission by people may help spread WNS

across the species' range. Rate of spread has averaged 200–250 km/yr and WNS is predicted to infect the entire Canadian range by 2026–2030. Other threats include wind turbines, colony eradication due to public concerns, and other conflicts and disturbances.

DID YOU KNOW?

- Little Brown Myotis can live up to 34 years (the oldest known in Yukon is 12 years).
- The colonies in Yukon are some of the most northerly occurring bats in North America.

- They weigh about as much as a toonie.

For more information on Yukon bats see: www.yukon.ca/sites/yukon.ca/files/env/env-yukon-bats.pdf



Photo:
Graham Forbes

Northern Myotis

Myotis septentrionalis

ENDANGERED (2013)

Description

Very little is known about the Northern Myotis in Yukon. It was first recorded from the LaBiche River in 2004 and from the Watson Lake area in 2007. Its range covers much of North America but is absent in the mid-western US and rare in the southeastern US. The species appears more common in the northern parts of its range.

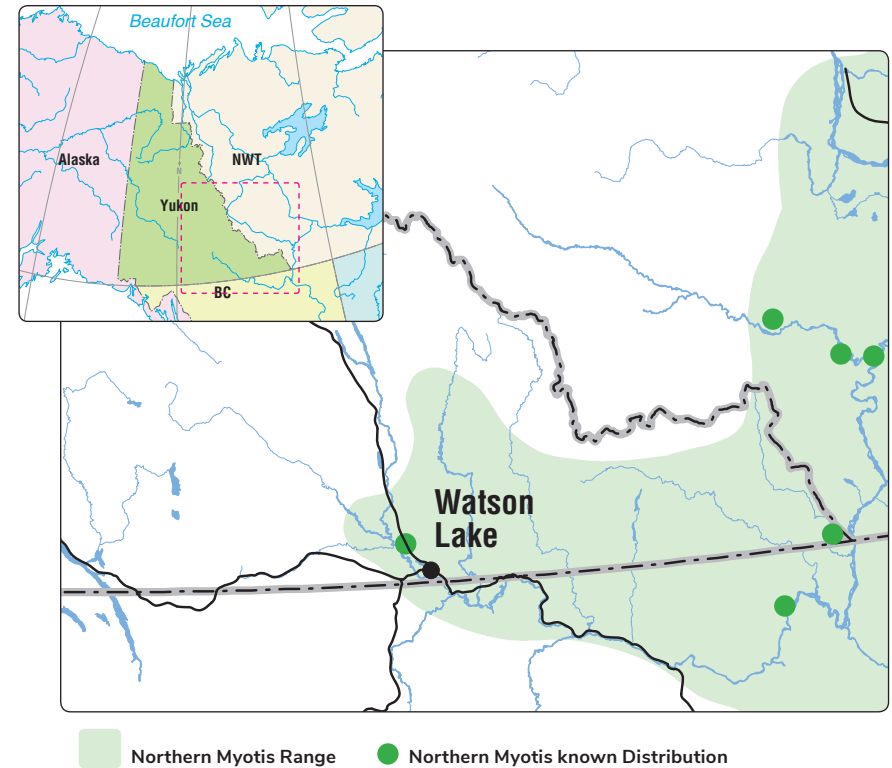
Typical Habitat

Northern Myotis are not known to hibernate in Yukon. They are less cold tolerant than Little Brown Myotis. In Yukon, they have been

found only in the Liard River drainage in older White Spruce dominated forests. Northern Myotis rarely use human-made structures for roosting and are strongly associated with older trees. Maternity colonies in eastern Canada are usually in larger trees, ranging from 25-44 cm diameter.

Potential Threats

White-nose Syndrome (WNS) is caused by a fungal pathogen (*Pseudogymnoascus destructans*) that likely was brought from Europe and was first recorded in US in 2006 and in Canada in 2010. Since then, population declines of more than 90% in northeastern US and 94% decline in hibernating populations of Myotis bats in hibernacula in Eastern Canada have been reported.



Mixing of bats during autumn swarming events and transmission by people may help spread WNS across species range. Rate of spread has averaged 200-250 km/yr and WNS is predicted to infect the entire Canadian range by 2025-2028. Other threats include wind turbines, colony eradication due to public concerns regarding disease transmission, and other conflicts and disturbances.

DID YOU KNOW?

- Northern Myotis are rarely seen, even in areas where they are common, because they are generally solitary and prefer to stay within the forest canopy.
- This species is also known to feed by gleaning (taking insects directly off leaves and tree bark).

This species is also known to feed by gleaning (taking insects directly off leaves and tree bark).



Photo:
Gordon Court

Polar Bear

Ursus maritimus

SPECIAL CONCERN (2018)

Recent scientific research suggests the Southern Beaufort Sea population of Polar Bears is likely declining. Reproductive rates vary among sub-populations of Polar Bears but all are relatively low. Females reach maturity at 4-6 years and have litters of no more than 1-2 cubs every 3 or so years. There is increasing concern over the effect of climate change on the availability of sea ice and the seals that Polar Bears prey upon.

Description

Translucent hairs make polar bear fur appear white or off-white to yellow. Compared to Grizzly Bears,

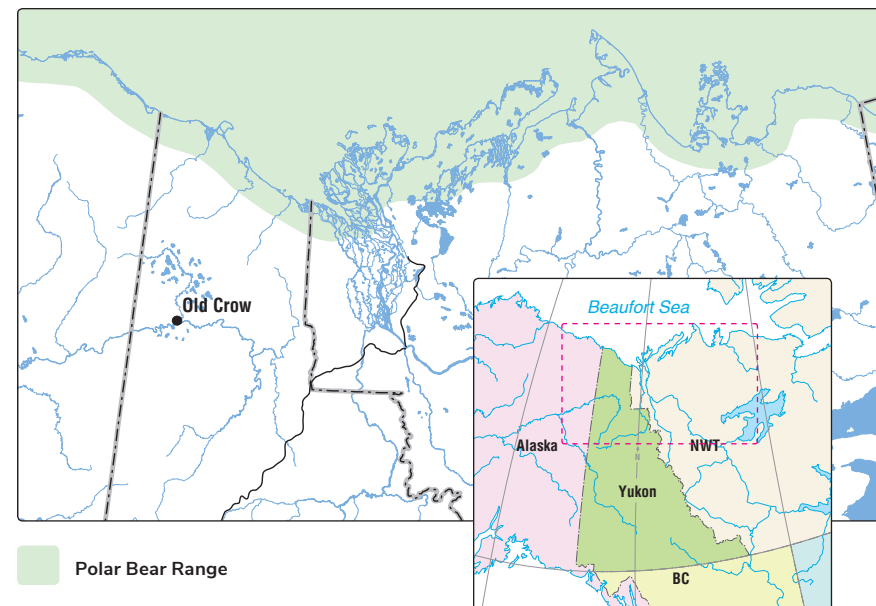
Polar Bears have shorter claws, a much longer neck, and no shoulder hump.

Typical Habitat

- From early winter until sea ice break-up, Polar Bears prefer to hunt seals on the annual sea ice along coastlines, but they may range more than 200 km offshore.
- Maternal denning sites are usually located in snowdrifts on land near the coast, but they can also be in snow on sea ice.

Potential Threats

- Climate warming is causing a reduction in the total amount of sea ice, and affect the timing of break-up and freeze-up—thus reducing the abundance of ice-dependent seals and the bears' ability to find them.



- Environmental contaminants (mainly organochlorines) and marine oil spills.
- Harvest of this population will require ongoing monitoring to ensure that it is sustainable.

Compared to Grizzly Bears, Polar Bears have shorter claws, a much longer neck, and no shoulder hump.

DID YOU KNOW?

- Polar Bears evolved within the last 400,000 years to occupy the niche of hunting seals from a sea-ice platform.
- 60% of the world's Polar Bears live in Canada.
- Polar Bears can swim 100 kilometers.
- Polar Bear males can be 2 to 3 times as large as females - one of the greatest differences between sexes in mammals.
- Polar Bears can live 25-30 years.
- Polar Bear skin is black, which helps them retain heat from the sun.
- Polar Bear paws have thick fur between the toes to help insulate their feet.



Photo:
Damian Power

Wolverine

Gulo gulo

SPECIAL CONCERN (2014) WESTERN POPULATION

Wolverine populations in Yukon are believed to be stable. However, their low density and secretive nature make them difficult and expensive to inventory, so information on populations is limited. Elsewhere they have declined or even disappeared in the face of human expansion into wilderness. They are sensitive to disturbances, only breed every two years or more, have small litters, and juveniles and kits can have high mortality rates.

Description

The Wolverine resembles a small, stocky bear. Colour varies from brown to black, often with a pale facial mask and a yellowish or tan

stripe running along the sides from the shoulders and crossing at the tail.

Typical Habitat

- Wolverines can travel long distances (over 350 km) and use large areas of habitat. They also can live in a wide variety of habitats, from the boreal forest to alpine tundra and barren-lands, as long as they have large wilderness areas with adequate year-round food supplies.

Potential Threats

- Wolverines avoid areas of human activity, especially near denning sites.
- Wolverines are reluctant to cross active roads; elsewhere, roads can form a significant barrier to movement and cause high mortality.
- Habitat loss and alteration.



DID YOU KNOW?

- Track counts and aerial surveys in Vuntut National Park have documented a relatively dense population estimated at 9.6 animals/1000 square kilometres.
- Wolverine fur is frost- and ice-resistant, and highly valued for parka trim.

- Wolverines have large paws that help them move easily on top of crusted snow.
- Wolverines have strong jaws that allow them to crush bone and frozen food.



Photo:
Syd Cannings

Wood Bison *

Bison bison athabasca

THREATENED (2000)

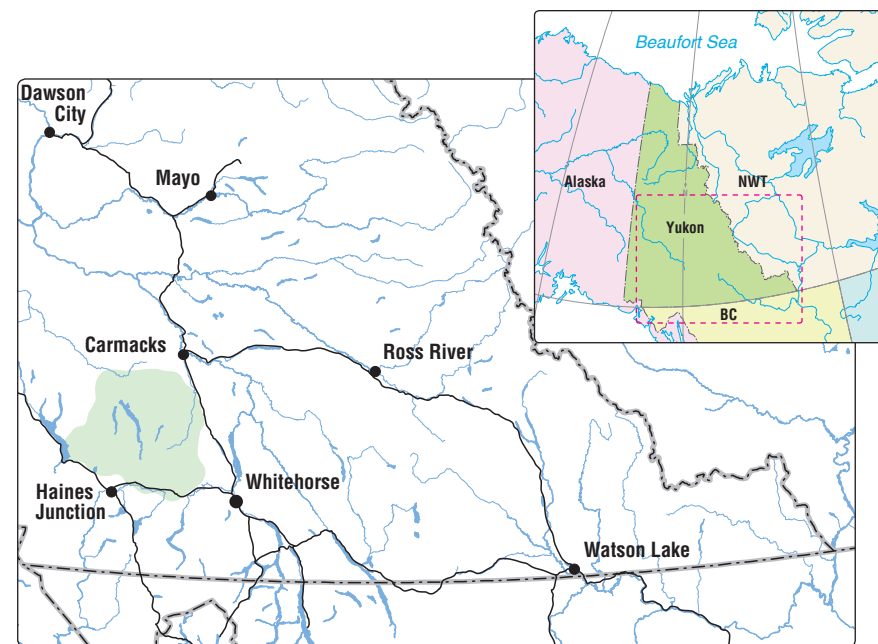
Between 1986 and 1992, 142 bison were brought to Yukon. They were released along the Nisling River west of Carmacks, but subsequently moved south into the Aishihik and Hutshi lake watersheds. The Aishihik herd numbers about 1,470. Other Wood Bison were released at Nahanni Butte, Northwest Territories—this herd has grown to 400 animals, and regularly crosses the border into the southeastern Yukon. Others were released in the Liard region of British Columbia—this herd, numbering about 140 animals, often ranges into Yukon near Contact Creek.

Description

Wood Bison are dark brown with a very large head, distinct beard, and shoulder hump. They are larger than Plains Bison, and can be distinguished from them on a number of characters, including: the highest point of the hump is well forward of the front legs in Wood Bison; there are virtually no furry 'chaps' on the front legs in Wood Bison; and the cape grades smoothly back rather than ending abruptly behind the shoulders as it does in the Plains Bison.

Typical Habitat

Wood Bison rely on a variety of grasses and sedges found on south-facing slopes, wetlands, open meadows, and alpine tundra.



Wood Bison Range

Potential Threats

- Contact with livestock or other bison could introduce diseases such as anthrax, brucellosis, and tuberculosis.
- Collisions with traffic.
- Because the Wood Bison population was reduced to

just a few dozen individuals in the 1960s, the remaining genetic diversity is very low and the genetic diversity in the reintroduced populations is even more limited. This means a greater susceptibility to diseases and a potential decreased ability to adapt to a changing environment.

DID YOU KNOW?

- Wood Bison are the largest land mammals in North America.
- Various forms of bison inhabited Yukon for perhaps as long as 700,000 years. Fossils indicate that changes in appearance and size happened quickly during the ice ages.
- The Aishihik herd in southwest Yukon is the largest disease-free, free-ranging Wood Bison herd in the world.
- Unlike most hoofed mammals that use their front feet to paw through snow, bison sweep their neck and head from side to side to clear snow from vegetation.



Photo:
John Nagy

Woodland Caribou

Rangifer tarandus caribou

Because they have different lifestyles and therefore face different threats, Woodland Caribou in Yukon have been divided into two population types under the Species at Risk Act: Northern Mountain and Boreal. Northern Mountain Caribou live in mountainous areas through the central and southern Yukon and have distinct elevational and seasonal migrations. They make up the bulk of Yukon's Woodland Caribou. Boreal Caribou, on the other hand, live in the forests east

of the Mackenzie Mountains and enter Yukon only in small numbers in the Peel River lowlands. They live in small groups, and prefer to stay within the forest all year. Recent research suggests Woodland Caribou populations in Yukon are stable overall.

Description

Both types of Woodland Caribou look the same. They are larger and darker brown than Barren-ground Caribou (such as those of the Porcupine Caribou herd), and have thicker and broader antlers, and longer legs and faces.

Woodland Caribou, Boreal population

Rangifer tarandus caribou

THREATENED (2014)

Typical Habitat

- In general, the habitat of Woodland Caribou is lichen-rich, mature and old coniferous forest in a matrix with alpine/subalpine, subarctic taiga, peatlands, or lakeshores.
- Boreal Caribou range across the northern boreal forest and taiga, and require vast areas of land and the ability to move unhindered between various habitats.

Potential Threats

- Loss or degradation of habitat as a result of resource exploration and development.
- Habitat changes that result in an increased risk of predation.
- Human disturbance (e.g. snow machines on winter range, increasing backcountry activity on summer range).
- Climate change threatens Woodland Caribou by causing an increase in the frequency and severity of forest fires, which eliminate winter forage habitat for 50 to 60 years.

In general, the habitat of Woodland Caribou is lichen-rich, mature and old coniferous forest in a matrix with one or more of alpine/subalpine, subarctic taiga, peatlands, or lakeshores.



Photo:
Jared Hobbs

Woodland Caribou, Northern Mountain population

Rangifer tarandus caribou

SPECIAL CONCERN (2014)

Typical Habitat

- In general, the habitat of Woodland Caribou is lichen-rich, mature and old coniferous forest in a matrix with one or more of alpine/subalpine, subarctic taiga, peatlands, or lakeshores.
- Northern Mountain Caribou spend the summer in alpine and upper subalpine ranges and in winter move down to the forest in lower areas where ground lichens are abundant and snow cover is relatively shallow.

Potential Threats

- Loss or degradation of habitat as a result of rural land use and industrial development.
- Habitat changes that result in an increased risk of predation or hunting, as well as unregulated hunting itself.
- Human disturbance (e.g. snow machines, exploration).
- Highway collisions are a threat for some herds.
- Climate change threatens Woodland Caribou in several ways:
 1. It may cause an increase in the frequency and severity of forest fires, eliminating winter forage habitat for 50 to 60 years;
 2. It will cause shrinkage of summer alpine tundra habitat; and
 3. It may cause spring icing events.

DID YOU KNOW?

- Caribou are the only members of the deer family where both sexes grow antlers.
- Twenty-six Northern Mountain Caribou Herds occur at least partially within Yukon. The Finlayson Herd may be the largest.

- Historically Woodland Caribou inhabited the forests of the northern US states from Maine to Washington. The last herd in the southern US has been reduced to 11 animals that live in the Selkirk Mountains of northern Washington and Idaho.





Photo:
T.T. McIntosh

Alkaline Wing-nerved Moss

Pterygoneurum kozlovii

THREATENED (2004)

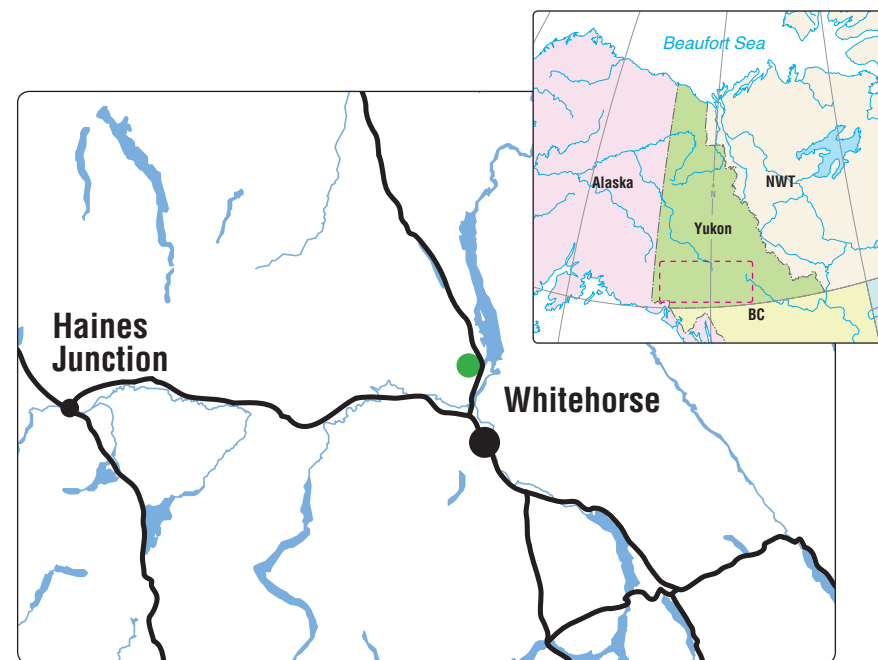
This species, restricted in North America to western Canada, is globally imperilled and rare. Canada possesses the great majority of documented locations. The species typically grows on soil among grasses and sedges along the margins of saline ponds and sloughs in semi-arid regions of Canada. It has been confirmed from south-central British Columbia to Saskatchewan but is unknown in the United States.

Description

Alkaline Wing-nerved Moss is tiny, growing about 2 to 3 mm tall with leaves about 1 mm long and. The species is an acrocarpous (producing males and female structures on the same plant) moss that usually grows in small 1 to 4 cm² patches.

Typical Habitat in Yukon

Alkaline Wing-nerved Moss is restricted to the edges of open, seasonally wet and saline ponds, lakes, and sloughs, where vegetation remains low and patches of soil are available. In this habitat, it grows on open or lightly litter-covered soil amongst vascular plants, especially



● Alkaline Wing-nerved Moss Distribution

salt grass (*Puccinellia* sp.), sedges (most commonly *Carex praegracilis*), and, sometimes, Foxtail Barley (*Hordeum jubatum*).

It is most often found within a narrow band around the edges of the wetland where the ground is flat to very slightly sloping.

Potential Threats in Yukon

About half of all the known sites are subject to impacts from people and domestic animals. Of the British Columbia sites, 6 have apparently been lost to urban development, highway improvement, and trampling by cattle, implying that decline in habitat quality and extent are presently impacting the species.



Photo: B.A. Bennett

DID YOU KNOW?

This tiny moss is a perennial that grows from buds on underground stem-like rhizomes. In Yukon, the species is currently known from a single site along the Mayo Road.



Photo:
Randi Mulder

Baikal Sedge

Carex sabulosa

SPECIAL CONCERN (2018)

Until 2009, Baikal Sedge was known in North America from only four dune complexes in Yukon (Carcross, Robinson Roadhouse, upper Takhini River, and the Alsek River) and at the Nogahabara Dunes in Alaska. Recent surveys have discovered several smaller sites in the area of Whitehorse, Champagne, and Dezadeash Lake. Historically, there was also a small population at Christmas Bay on Kluane Lake. As its name suggests, it also lives in the Lake Baikal region of eastern Asia.

Description

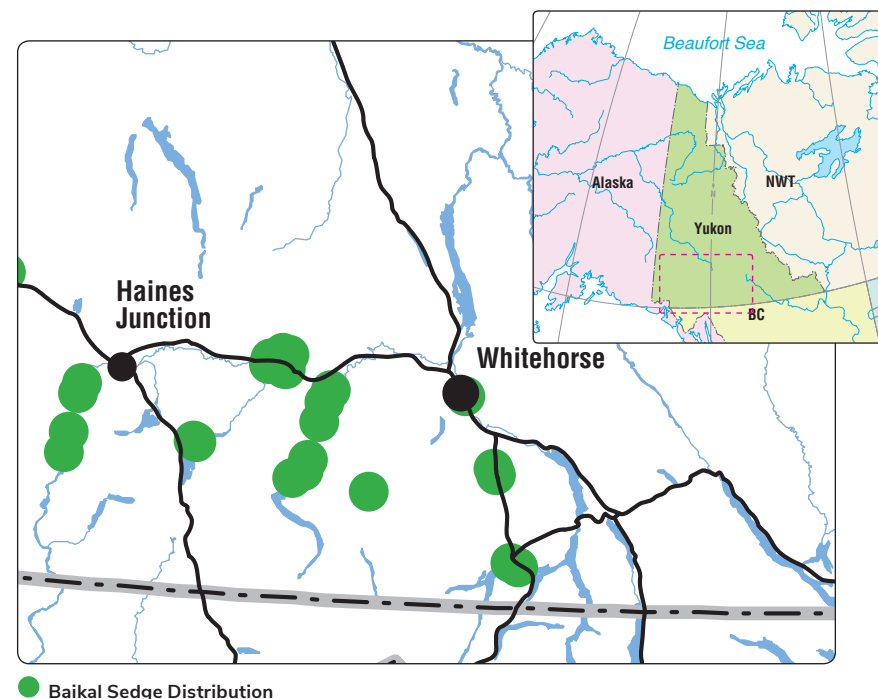
The Baikal Sedge is a grass-like perennial with a drooping, club-shaped flowering head; long, mostly underground, reddish leaf sheaths; and curled basal leaves.

Typical Habitat

Occurs only on active or semi-stabilized dunes.

Potential Threats

- Natural dune stabilization—air photos show a reduction in dune area of 15-20% over the last 50 years at Carcross due to the encroachment of trees and other vegetation.
- Recreational (all-terrain vehicle) use at Carcross and the Takhini dunes.
- Loss of habitat.
- Invasive species.



DID YOU KNOW?

- The root system of the Baikal Sedge is 10 to 20 times as massive as the above-ground plant.
- A smut fungus that destroys developing seeds has been found at most Yukon populations. It is unclear how large an impact this fungus has on the sedge.
- Baikal Sedge was likely much more widespread during the last ice age, when aeolian dunes and steppe habitat were common on the landscape. Natural plant succession has resulted in dunes across southern Yukon becoming overgrown with forest communities.



Photo: Syd Cannings



Photo:
Syd Cannings

Spiked Saxifrage

Micranthes spicata

SPECIAL CONCERN (2013)

Spiked Saxifrage is restricted to the unglaciated portions of Alaska and Yukon. It was first reported in Yukon from near the mouth of the Indian River in 1899, but was not seen again for over a century. After its rediscovery along a small tributary of the Yukon River in 2009, targeted inventories found it to be an extremely sparse inhabitant of the Klondike region. Recently, however, it has been found in the Beaver Creek area--there it not only grows along creeks, but in the moist alpine zone of mountains south of the community of Beaver Creek.

Description

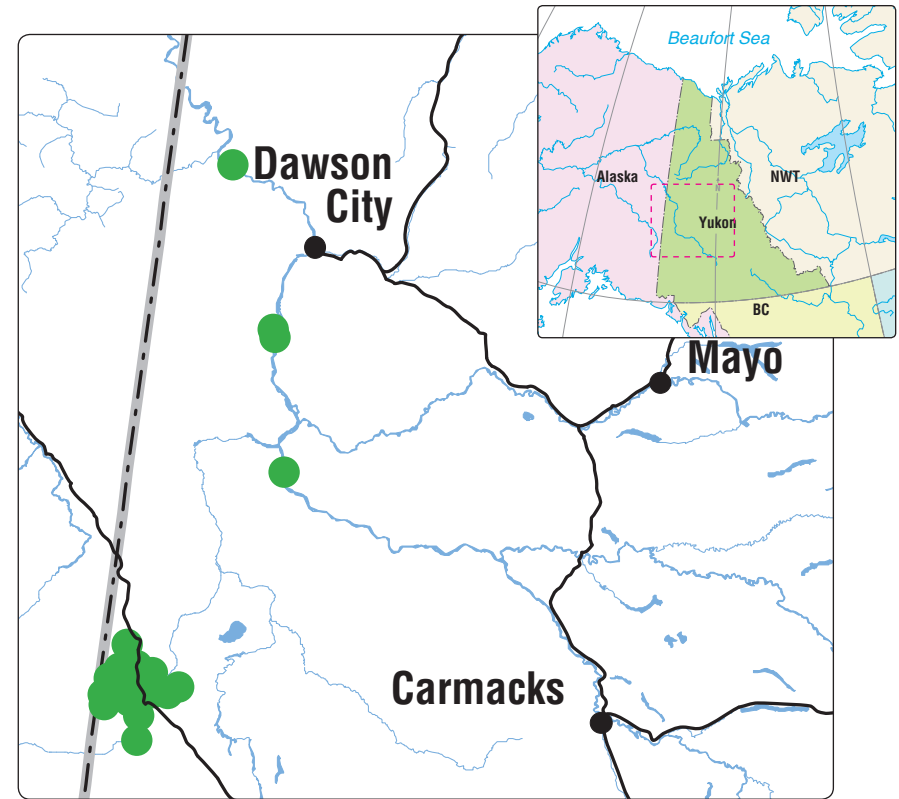
Spiked Saxifrage is a tall (up to at least 70 cm high), striking plant with large, round, toothed leaves and a spike of small, cream-coloured flowers.

Typical Habitat

- Occurs along cool, shady creeks in the permafrost zone
- In the Beaver Creek area, it also occurs in moist, rocky alpine and open subalpine areas.
- Prefers shallow soils over rock or wood debris.

Potential Threats

- Placer and hard-rock mining and exploration in the Klondike and Beaver Creek regions.



● Spiked Saxifrage Distribution

- Climate change, which may increase the frequency of fires, landslides, and scouring floods, and over the long term may cause changes to subalpine and alpine habitats.
- Human-caused wildfires.

DID YOU KNOW?

- Spiked Saxifrage is reported as a food used by aboriginal peoples.
- The Yukon population harbours gene variants not found in Alaska, and may be important in contributing genetic diversity to the species.



Photo:
B.A. Bennett

Tiny Tassel Moss

Crossidium seriatum

SPECIAL CONCERN (2014)

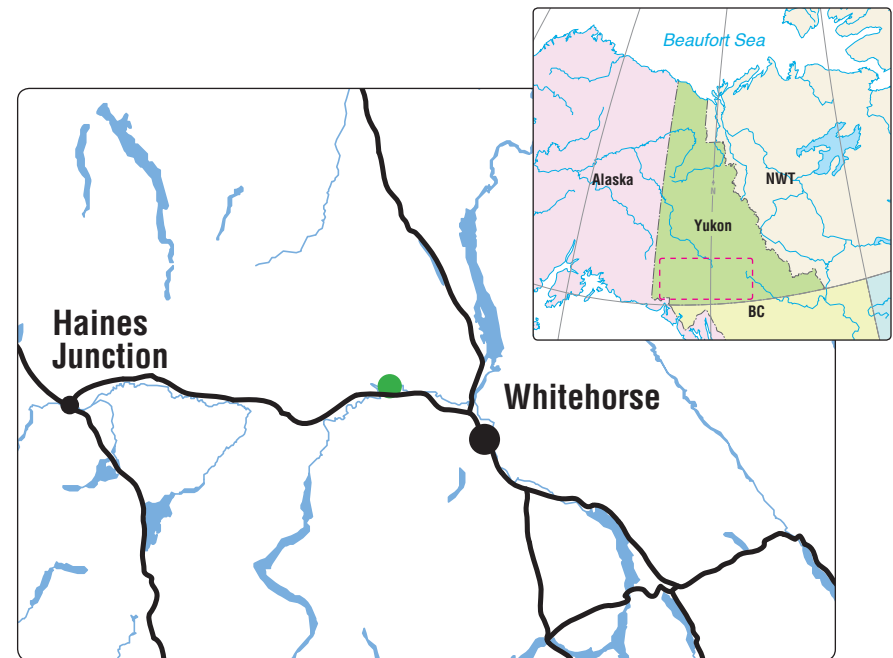
Tiny Tassel occurs throughout western North America. It has been documented in Baja California and Chihuahua in Mexico north to Yukon where it is disjunct by over 1500 km from sites near Kamloops, British Columbia. Tiny Tassel is considered by some experts to be present in Europe; however, European taxonomic authorities now consider examples of Tiny Tassel documented from Europe to be a different, closely related species. It may also be present in China.

Description

Tiny Tassel is a small dark green to golden brown moss. It grows to 1-1.5 mm high, sometimes in clumps but more often as scattered individuals among other species of small dryland mosses.

Typical Habitat in Yukon

Tiny Tassel occurs on fine-textured soils associated with silts in the semiarid shrub steppe. These calcium-rich silts, are often derived from lake deposits formed during the most recent glacial period in BC and Yukon. It is currently only known in Yukon from Takhini Salt Flats, which was once the bottom of



● Tiny Tassel Moss Distribution

Glacial Lake Champagne, a large lake that filled the Takhini Valley.

Potential Threats in Yukon

Much of this species habitat is under increasing pressure from human uses and development, including livestock grazing and agricultural and urban conversion. Tiny Tassel is likely to be affected by changing temperatures and precipitation patterns associated with climate change.

DID YOU KNOW?

Although Tiny Tassel is capable of growing on the hottest, driest, silty banks, it is also found in similar soils in ephemeral seeps which are the only places this species has been known to produce sporophytes. It is unusual for a moss to grow in both very wet and very dry sites.



Photo:
Martin Owen (YG)

Yukon Draba

Draba yukonensis

SPECIAL CONCERN (2018)

Yukon Draba is a relict species of Beringia, known globally from grassland sites in southwestern Yukon: one just outside of Kluane National Park and the rest near Sekulmun, Hutshi, and Aishihik lakes.

Description

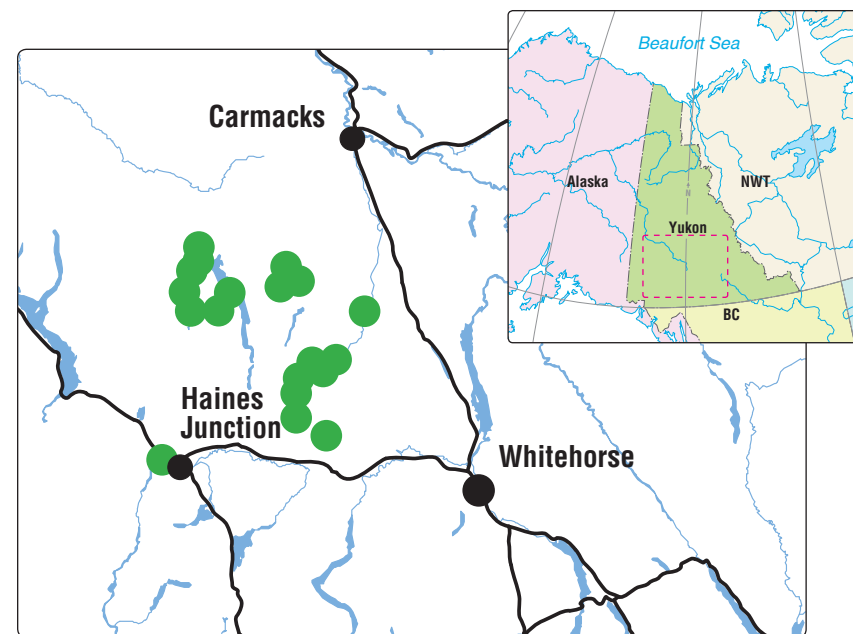
Yukon Draba is 2-20 cm tall, with small, 4-petaled, white flowers. It is a herbaceous wildflower in the mustard family. Individual plants have a small taproot, one or more rosettes of leaves and one or more flower-bearing stems. The untoothed leaves are covered with distinctive, stiff, unforked hairs.

Typical Habitat

- Dry, grassland sites.
- At the Haines Junction site, Yukon Draba grows on almost flat, well-drained meadows situated on ancient gravelly beaches.
- Often most dense on the tops of low ridges, bumps, road berms, and Arctic Ground Squirrel mounds.

Potential Threats

- The Haines Junction site is threatened by increased traffic and road expansion associated with mining exploration.
- Invasive species that are well adapted to dry meadows are expanding rapidly in southern Yukon.



● Yukon Draba Distribution

DID YOU KNOW?

- Yukon Draba is one of four mustards found only in Southwest Yukon and nowhere else in the world.

- Yukon Draba has been collected by botanists in the meadows near Haines Junction since the 1940s. Other sites were found between 2011 and 2016.
- Yukon is home to 38 of Canada's 58 species of Draba.



Photo: Government of Yukon



Photo:
Syd Cannings

Yukon Podistera

Podistera yukonensis

SPECIAL CONCERN (2014)

This rare member of the carrot family is restricted globally to the west-central Yukon and a small piece of adjacent Alaska. After an intensive survey over the past few years, 22 sites are now known in Canada; these are found in two separate regions of unglaciated Beringia: a northern group centred in the southern Ogilvie Mountains and a southern one in the Dawson and Ruby ranges.

Description

Yukon Podistera is a perennial that grows in clumps from a stout, elongate taproot. Blue-green

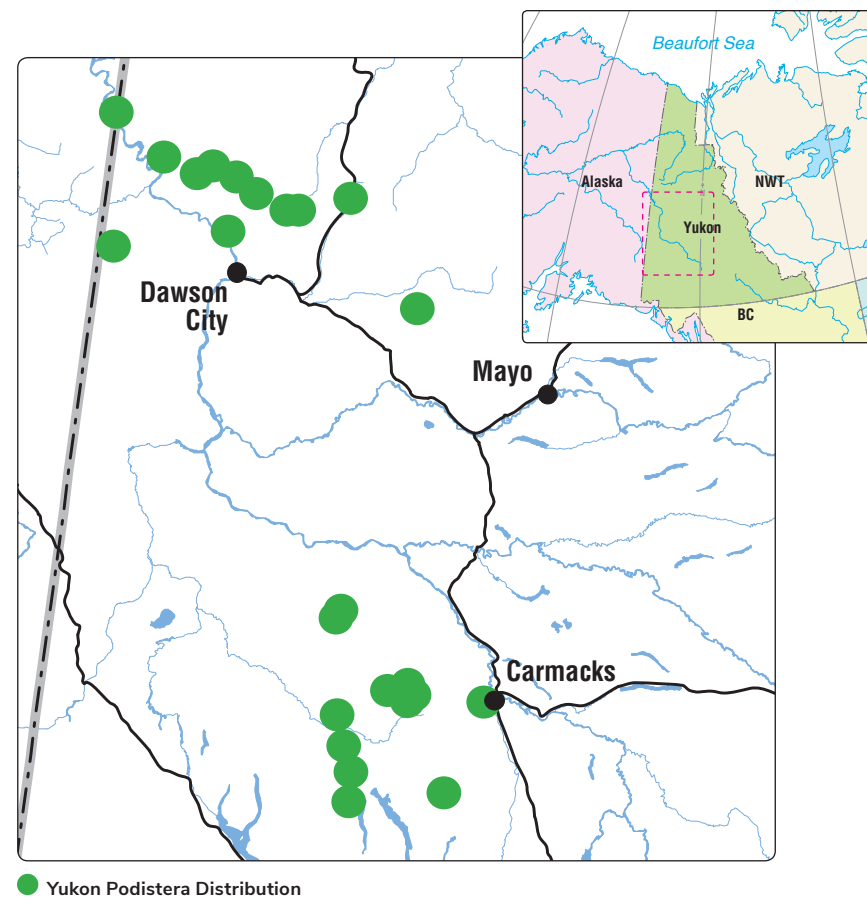
pinnate leaves grow below leafless stems that bear umbels of small flowers. The flowers are bright yellow when young, but soon fade to white.

Typical Habitat in Yukon

- Open, rocky areas with shallow soil; stable talus slopes, scree and tors.
- Dry, sunny, windswept ridges that have little snow cover and are clear early in the spring.
- Primarily in the low alpine, but also occasionally on steep faces lower down.

Potential Threats in Yukon

- Climate change that results in shrubs and other plants taking over open habitats.
- Mining and mineral exploration.



DID YOU KNOW?

- The Yukon Podistera begins flowering early in the spring, usually in mid-to late May.
- These plants grow slowly and live a long life, perhaps at least 15 years.

- The closest relatives of Yukon Podistera live in the southern Rocky Mountains and Sierra Nevada of the United States.



Photo:
Adolf Ceska

Yukon Wild Buckwheat

Eriogonum flavum var. *aquilinum*

SPECIAL CONCERN (2017)

Yukon Wild Buckwheat is a rare plant found only on stony, south- or southwest-facing slopes in unglaciated areas of Yukon and Alaska. In Canada it is known only from a small area in the immediate vicinity of Aishihik, Yukon. It has been assessed as Special Concern because its small population may become threatened by the ingrowth of shrub and trees on southern Yukon grasslands. In Alaska it is found near Eagle on the Yukon River and on the Porcupine River. However, searches at Canadian

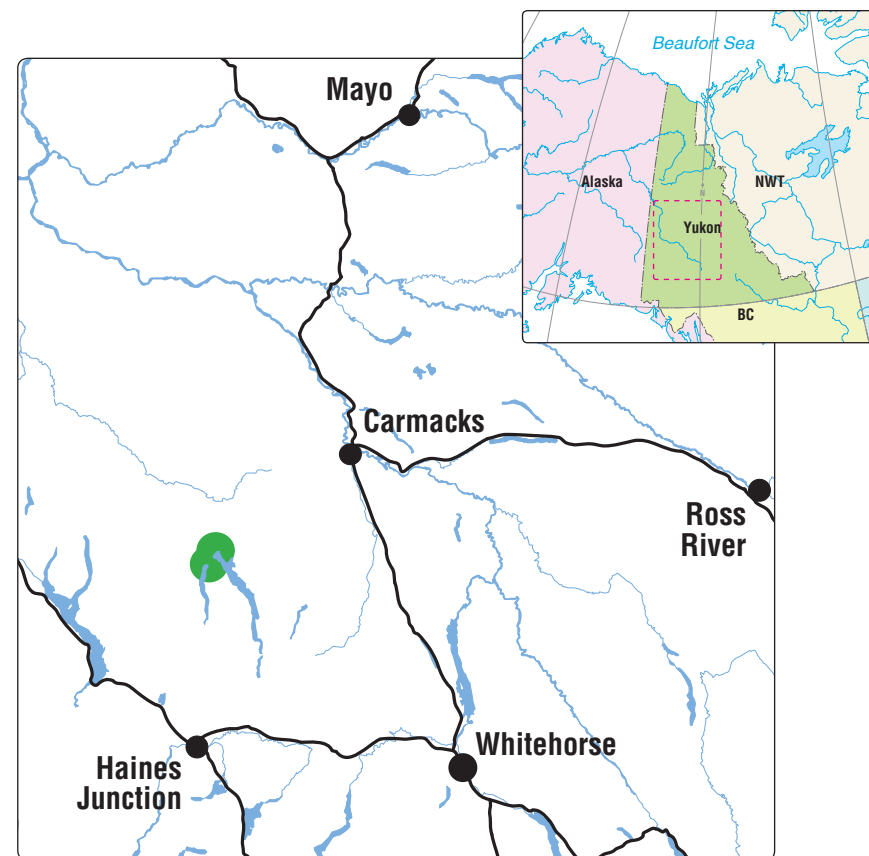
sites near these areas have failed to turn up this species.

Description

Yukon Wild Buckwheat is a long-lived, perennial wildflower with basal leaves that form a compact mat up to about 35 cm wide. The stems and leaves are covered with a dense layer of short, whitish hairs that give the plant a greyish appearance. The mat arises from a stout, woody underground stem. The flowers are bright lemon yellow and are arranged in an umbel at the end of the bare stem.

Typical Habitat in Yukon

Yukon Wild Buckwheat inhabits grasslands on dry, south-facing



● Yukon Wild Buckwheat

slopes. In the Aishihik area, it occurs at elevations of 900 to 1000 m on well-drained sandy or silty soils with gravel and cobbles.

Potential Threats in Yukon

The greatest potential threat is the ongoing, gradual invasion of grasslands in the southern Yukon by

trees (aspens, spruce) and shrubs, perhaps brought on by warmer and wetter conditions. Yukon Buckwheat is somewhat protected from this threat, because it lives in the steepest, driest parts of the grasslands. Invasive plants are another potential threat.

DID YOU KNOW?

- Species of buckwheat have been used medicinally by First Nations.

- Although it is pollinated by a wide range of insects, seedlings are rare; recruitment is apparently quite low.



Photos:
Shannon Henderson,
Agriculture and Agri-food
Canada

Dune Tachinid Fly

Ger maria angustata

SPECIAL CONCERN (2011)

In Canada, the Dune Tachinid Fly is restricted to a few active dunes in southwestern Yukon. It is presumed to be a parasite of the larva of a dune moth. This fly is just one of a group of species that are found only in these dunes at the edge of unglaciated Beringia—others include the Baikal Sedge, a small gelechiid moth, a stiletto fly, and other tachinid flies.

Description

The Dune Tachinid Fly is a black, bristly, medium-sized fly (about 9 mm long). The second segment of the antennal branch (arista) has a distinctive elbowed appearance.

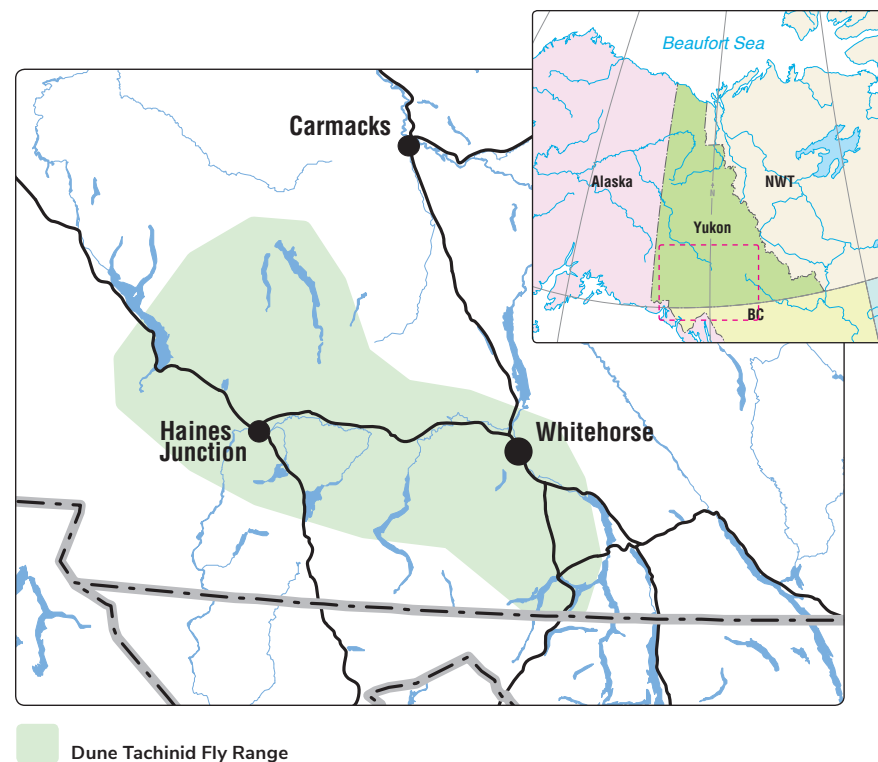
Typical Habitat

- Active or semi-stabilized dunes or smaller sand blowouts with scattered grasses, sedges, and other vegetation.

- In Yukon, the habitat always includes some grass or grasses.

Potential Threats

- At the Carcross dunes, increasing recreational all-terrain vehicle use has caused a decline in habitat by eliminating grasses in heavy use areas.
- The Carcross Dune habitat is also threatened by residential housing and road developments.
- A potential, but significant threat is invasive species that have the ability to quickly stabilize dunes—for example, Altai Wild Rye and White Sweet-clover.
- Natural succession will probably continue to eliminate more open dune area, especially at the large Alsek dunes in Kluane National Park Reserve.



DID YOU KNOW?

- All tachinid fly larvae are parasitic on other insects, usually moth caterpillars.
- The fly family name Tachinidae comes from the Greek tachys, meaning "fast," a reference to the speedy flight of these flies.





Photo:
Ivar Leidus

Gypsy Cuckoo Bumble Bee

Bombus bohemicus

ENDANGERED (2014)

This bumble bee, formerly relatively common across a broad swath of northern North America, has virtually vanished in recent years. South of Yukon, this species was last reported in 2008 (in Quebec). However, it has been recently collected in several places in Yukon and Alaska. It is an obligate nest parasite of particular bumble bees, among them the Western Bumble Bee and Yellow-banded Bumble Bee.

Description

A medium-sized bumble bee with a gold band across the thorax and a white tip on an otherwise black abdomen. This rare bee can be distinguished from worker and

queen Western Bumble Bees by the absence of broad, concave pollen baskets on the hind leg and an abdomen that is distinctly more curved.

Typical Habitat in Yukon

- Require open areas with abundant flowers through the summer.
- Areas where their host bees occur: Western and Yellow-banded bumble bees inhabit lowland meadows and open woodlands.
- May also parasitize Cryptic Bumble Bees, which in Yukon occur from the valley bottom up into subalpine shrub tundra.

Potential Threats in Yukon

- Declines of host bees.
- Introduced pathogens from managed bees in greenhouses.
- Pesticide and other chemical use in agriculture.



DID YOU KNOW?

- Queens invade other bumble bee colonies, disable or kill the host queen, and lay their eggs. After they hatch, the larvae are reared by the host workers.

- Cuckoo Bumble Bee queens are built for battle: their bodies are armoured with extra thick chitin and their abdomens are curled beneath them, ready to sting their host queens.



Photo:
Bruce Bennett

Transverse Lady Beetle

Coccinella transversoguttata

SPECIAL CONCERN (2016)

The Transverse Lady Beetle was once one of the most common and widespread lady beetles in North America, but has recently declined to numbers below detection thresholds in much of southern Canada and the United States. In the north and mountainous west, however, it remains fairly common.

Description

These are typical lady beetles: small (5-8 mm long) with orange or red wing covers that have black markings. The distinctive markings consist of a black band and four

elongate spots, allowing easy identification.

Typical Habitat

Transverse Lady Beetles are habitat generalists, occurring wherever their aphid prey is found: suburban gardens, coniferous forests, deciduous forests, and meadows including alpine meadows.

Potential Threats

The causes of the decline in Transverse Lady Beetles are unknown. Possible threats (primarily outside the Yukon) include the spread of exotic lady beetles such as the Seven-spotted Lady Beetle and the Multicolored Asian Lady Beetle, land use changes and other habitat loss, agricultural pesticides, and conversion of farmland to forest.



DID YOU KNOW?

- Both larval and adult Transverse Lady Beetles are key predators, feeding voraciously on a wide variety of aphids and other small insects.
- Lady beetles sold to gardeners as an eco-friendly predator control method are usually exotic species, and potentially do far more harm than chemicals.
- This and other species of lady beetles congregate in large numbers for hibernation, often on mountaintops. Some Grizzly Bears in the Rockies abandon berry-picking in the valleys and seek out lady beetles in the alpine, eating them like so many little red berries!
- Transverse refers to the black band that covers the top of both wing covers.



Photo:
Syd Cannings

Western Bumble Bee, *mckayi* subspecies

Bombus occidentalis mckayi

SPECIAL CONCERN (2014)

This northern subspecies of the Western Bumble Bee ranges in Canada from northern British Columbia through the southern Yukon and the westernmost Northwest Territories. Recent surveys suggest that it is still relatively common. However, its southern relatives are experiencing a serious, apparently northward-moving decline, and the northern subspecies faces an uncertain future.

Description

A medium-sized bumble bee with a short head. In Yukon, these bees usually have a transverse band of

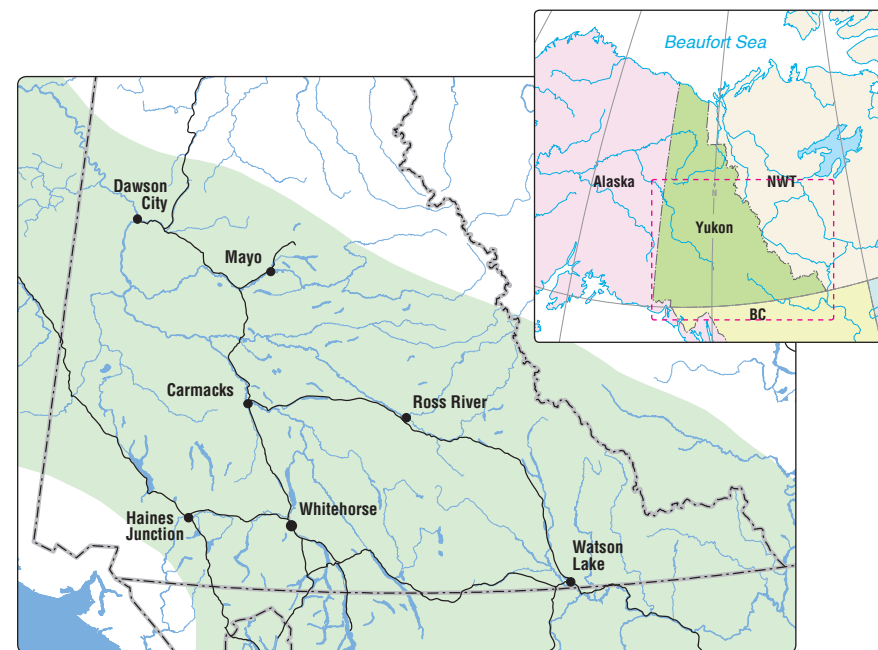
golden hair across the front of the thorax, a golden stripe across the third segment of the abdomen, and a whitish tip to the abdomen.

Typical Habitat in Yukon

- A bumble bee of the valleys, where it inhabits mixed woodlands and montane meadows.
- Requires nectar and pollen from a wide variety of flowers throughout the spring and summer, including willows, Kinnikinnick, sweet vetches and white sweet-clover.
- Nests underground in abandoned rodent burrows.

Potential Threats in Yukon

- High natural parasite load, particularly the intercellular, parasitic, fungus *Nosema bombi*.
- Pesticide and other chemical use in agriculture.
- Habitat loss.



Western Bumble Bee Range

DID YOU KNOW?

- Bumble bees are essential to the pollination of certain flowers that require a serious shaking to release their pollen; blueberries and low-bush cranberries are good examples.

- The *mckayi* subspecies of Western Bumble Bee probably originated in the unglaciated region of Beringia, when the northern populations were isolated from their southern cousins by the vast ice sheets that covered British Columbia and southern Yukon.



Photo:
Leif Richardson

Yellow-banded Bumble Bee

Bombus terricola

SPECIAL CONCERN (2015)

The Yellow-banded Bumble Bee is a widespread species across eastern northern North America, and reaches the northwestern limit of its range in southeastern Yukon. In recent decades, its numbers have declined significantly in southern Canada, probably as a result of a number of cumulative threats, including pathogens from managed bumble bees used in greenhouses, pesticide use associated with agriculture (including neonicotinoids), climate change, and habitat loss within urban and agricultural areas. Little is known of population trends or the species' status in Yukon, but it seems to be reasonably common in its restricted range.

Description

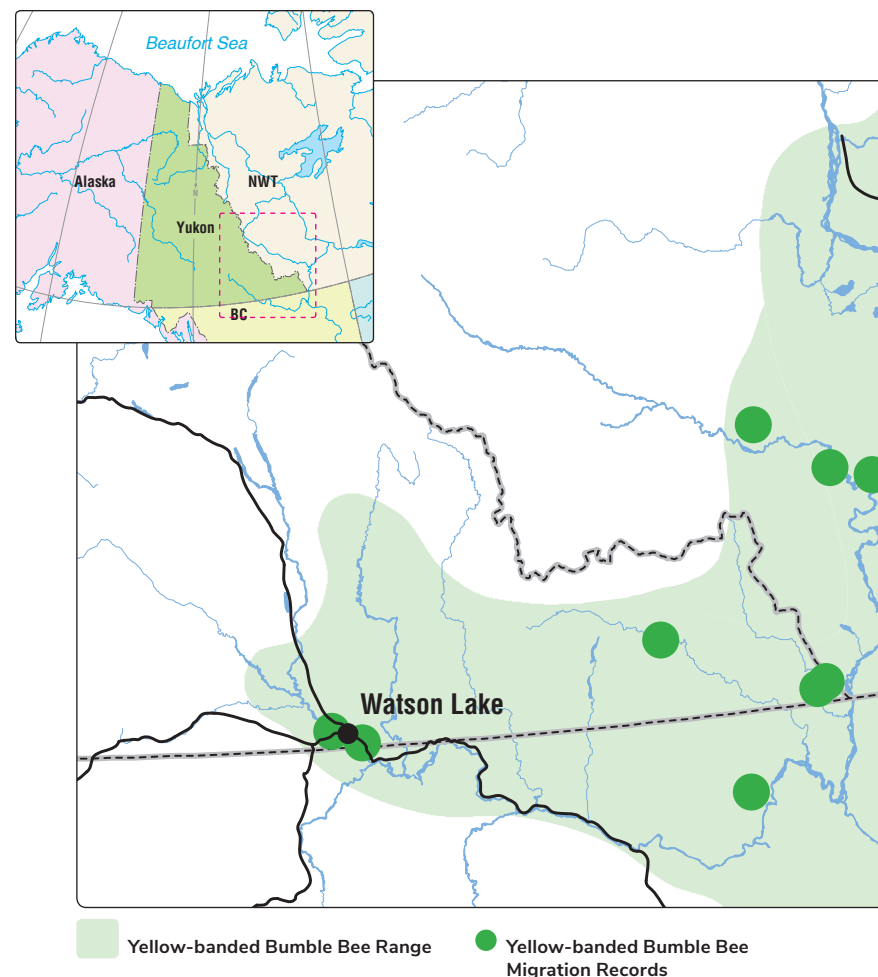
The Yellow-banded Bumble Bee is a medium-sized bumble bee, distinguished by a narrow yellow band behind the head and a broad yellow band on the second and third segments of the abdomen. The tip of the abdomen is white.

Typical Habitat in Yukon

- Open, flower-rich areas in the lowlands of southeastern Yukon.
- Requires nectar and pollen from a wide variety of flowers throughout the spring and summer.

Potential Threats in Yukon

- There are few known threats in the wilds of the southeastern Yukon, although parasites and diseases may be limiting factors.

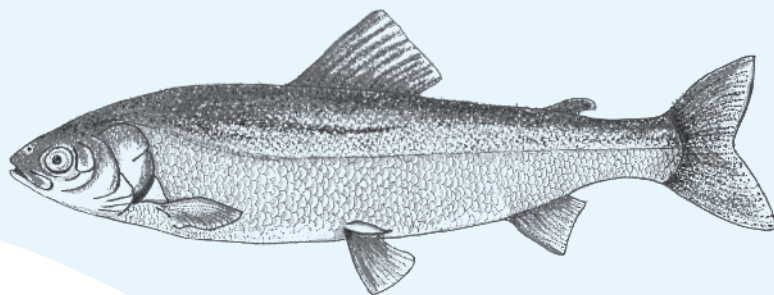


DID YOU KNOW?

- Bumble bees live in small colonies of female workers and a single queen. Late in the summer, reproductive males and females emerge and mate. The fertilized queens disperse and overwinter on their own, and start a new colony the following spring.
- Bumble bees are close relatives of the introduced Honey Bee.

Like that species, they make honey to rear their larvae, but because they don't maintain their colonies over the winter, they make only small amounts.

- The Yellow-banded Bumble Bee is the eastern sibling of the Western Bumble Bee, another Special Concern species in Yukon.



Drawing:
Nancy Lewis-de Graff

Bering Cisco

Coregonus laurettae

SPECIAL CONCERN (2017)

Bering Cisco are common in the Yukon River system in Alaska, but only a few reach Canadian waters as far upstream as Dawson City. However, traditional knowledge suggests that the distribution is more widespread than currently documented. Recent research indicates that a number spawn in the Yukon River system upstream of Dawson. Spawning migrations spans late spring or early summer through fall, with peak spawning activity occurring in October.

Description

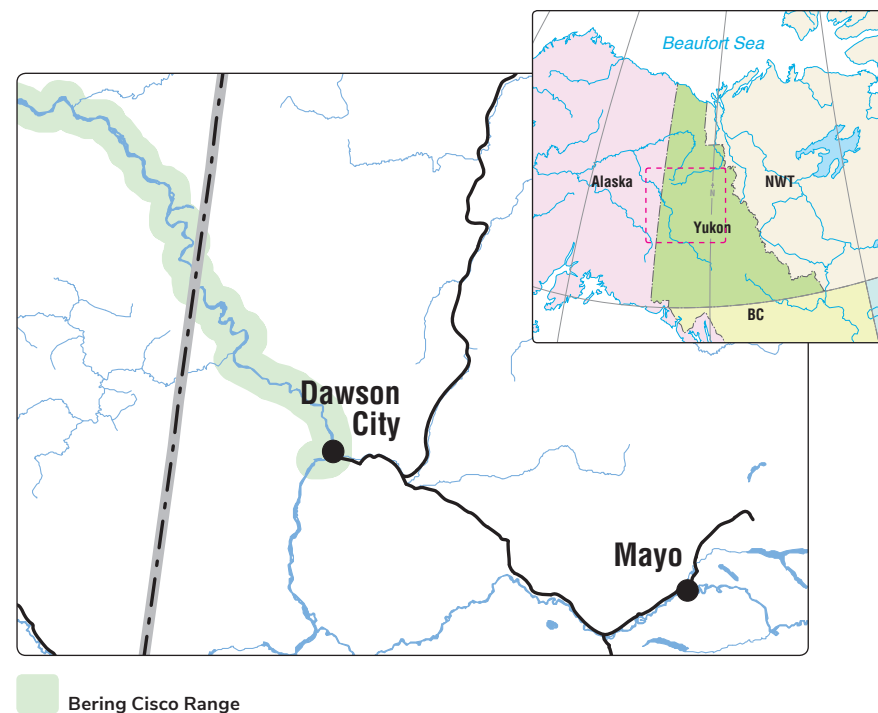
Bering Cisco resemble large, plump herring, with silver-coloured bodies and moderately sized scales. The average fork length of migrating fish is about 37 cm. The species is distinguished from other cisco by the pale, almost colourless pelvic and pectoral fins and 18 to 25 gill rakers on the lower portion of the first gill arch.

Typical Habitat

- Long annual migrations are made to spawning areas in the mainstem portions of large rivers; in Yukon they are restricted to the lower Yukon River drainage. Bering Cisco spawn in fast-flowing water near beds of loose gravel where eggs are broadcast over the substrate.
- Outside Yukon, they are found in river estuaries and brackish lagoons along coastal Alaska.

Potential Threats

- No urgent threats are known, but the small numbers of fish restricted to one main river in Canada (the Yukon River) make it sensitive in that system.
- The migratory behaviour of Bering Cisco makes the species susceptible to obstructions such as causeways and dams.
- The reduction of water flow or alteration in discharge or water quality in those rivers where they are known to spawn could be a limiting factor and a future threat.
- Incidental by-catch and a potential for over-harvest in the subsistence fishery.



DID YOU KNOW?

- These small but powerful travelers battle against currents for over 2100 kilometres in their migratory upriver path from the Bering Sea through the Yukon River.

- In Alaska, Bering Cisco are targeted by coastal fishers who value them for their high oil content.

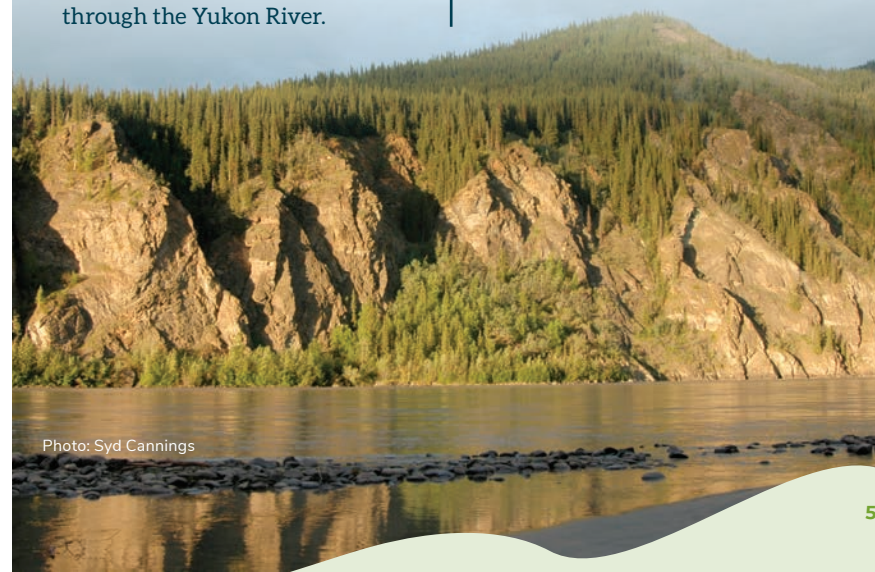


Photo: Syd Cannings



Photo:
Government of Yukon

Bull Trout, Western Arctic population

Salvelinus confluentus

SPECIAL CONCERN (2012)

Because Bull Trout are highly sensitive to habitat changes. They are an indicator species of general ecosystem health. There is no evidence of decline of Bull Trout in Yukon or the Northwest Territories; but in recent decades Bull Trout declined in abundance, including localized extinctions, across their southern range. Bull Trout populations depend on the availability of more pristine and cooler environments of the northerly regions.

Description

Bull Trout are difficult to distinguish from Dolly Varden (*Salvelinus malma*) but the two species generally occupy different geographic ranges. Where their

ranges overlap, measurements or genetic studies are needed to separate them. Bull Trout have larger, broader, and flatter heads than Dolly Varden, with bodies that are more slender and ventrally flattened. Pale round spots along their sides and backs that are pink, lilac, yellow-orange or red distinguish them from other types of trout such as Rainbow and Cutthroat.

Typical Habitat

This cold water species' strict habitat requirements vary across life history stages. Bull Trout require habitat that is cold, clean, complex, and connected. Structurally complex habitat provides cover for shelter and the right requirements for breeding and rearing young, while connected habitat allows this migratory species to move between the areas it needs to complete its life cycle.



Bull Trout, Western Arctic population Range

Potential Threats

- Their voracious appetite and habit of congregating during spawning make Bull Trout susceptible to over-harvest by anglers particularly in spawning congregations.
- Barriers including dams, roads, and hanging culverts.
- Habitat change including forest harvest, mining, oil and gas developments, and increasing wildfire events.

DID YOU KNOW?

- Its head and jaws are unusually large for a salmonid, leading to its common name "bull".
- In the US Bull Trout is listed as Threatened.
- Both freshwater and anadromous (ocean run), populations are known although only freshwater populations occur in Yukon.



Photo:
US Fish and Wildlife
Service

Dolly Varden (northern form)

Salvelinus malma malma

SPECIAL CONCERN (2010)

Two subspecies of Dolly Varden are recognized in Canada, a southern form and a northern form. The northern form is found north of Bristol Bay in Alaska, along the north slope of Alaska and Yukon, east to the lower Mackenzie River, including the Peel River and its tributaries. Some isolated populations have found their way over low passes and entered the headwater systems of Yukon River tributaries such as the Klondike, Hess, and Rackla rivers.

Description

Dolly Varden are characterized by a pattern of pale orange or reddish spots on a dark background. Anadromous (sea-run) northern form Dolly Varden reach more

than 35 cm in length; other adults are usually less than 30 cm. Non-anadromous adults retain the parr marks of the juveniles whereas anadromous individuals lose them. Spawning anadromous males develop a hooked lower jaw and are strikingly coloured; all other individuals have a more muted colouration.

Typical Habitat

- All types of the northern form of Dolly Varden spawn and overwinter in freshwater associated with perennial groundwater springs.

Potential Threats

- Low water and low groundwater flow in freshwater habitats at spawning and overwintering grounds, correlated with climate warming.
- Over-harvesting.



DID YOU KNOW?

- Dolly Varden are a valued part of the Gwich'in and Inuvialuit diet.
- Dolly Varden get their name from a character in the novel *Barnaby Rudge* by Charles Dickens—a woman known for her colourful

dresser, one of which was green with pink polka-dots.

- Dolly Varden and their close cousins, the Arctic Char and Bull Trout, have confused scientists for many years, and have been the subject of many studies regarding biogeography and evolution.



Photo:
Louis Bernatchez

Squanga Whitefish

Coregonus sp.

THREATENED (2018)

Both the Lake Whitefish and its Old World sibling, the European Whitefish, are common, native fish in southern Yukon. In five Yukon lakes, however, two forms of these species coexist and act as separate species. The 'typical' whitefish feeds on bottom-dwelling invertebrates; the other is a distinct form that feeds on plankton in open water. In Squanga Lake and two nearby lakes, the bottom feeding whitefish is the Lake Whitefish and the open water form is derived from the European Whitefish. In Dezadeash Lake, both forms are derived from the European Whitefish.

The one ecological feature that the five lakes have in common is the absence of plankton-feeding Least Cisco, so it appears that the plankton-feeding form of whitefish has evolved to take advantage of this open ecological niche. These whitefish, unofficially collectively named the Squanga

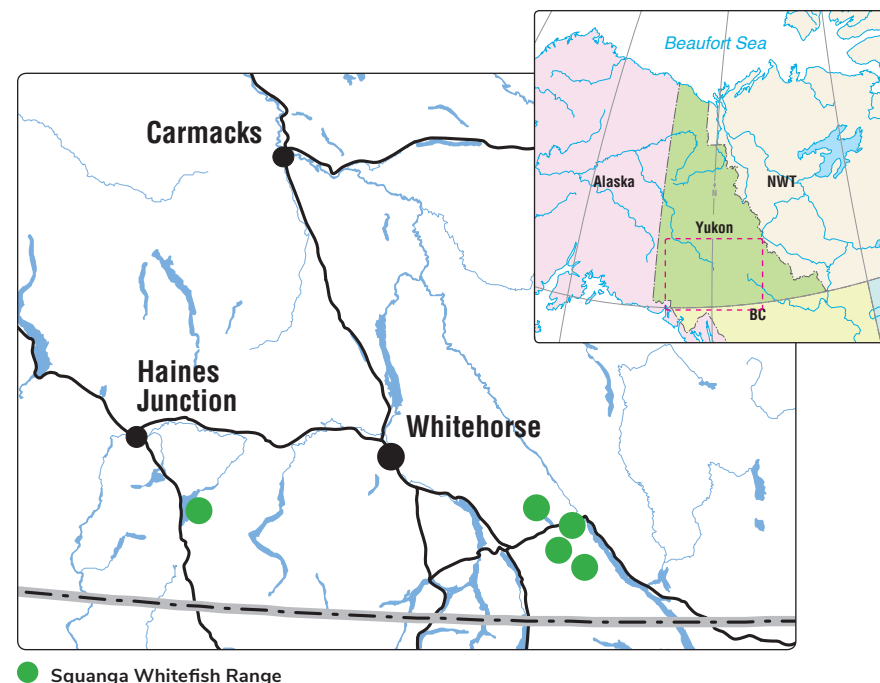
Whitefish after the lake in which they were first found, probably evolved independently within each watershed. In fact, genetic evidence indicates that the pattern is best explained by two distinct populations of whitefish colonizing the lake on separate occasions; one securing the rich bottom-feeding niche and the other doing the best it can to survive in the open water. This pattern is found in a number of lake systems across Canada.

Description

To the casual observer, the Squanga Whitefish looks just like the Lake Whitefish. In the hand, it can be distinguished from Lake Whitefish by higher gill raker numbers. Other differences include greater gill raker length, distance between gill rakers, size of the head, and length of the fins relative to the size of the body.

Typical Habitat

- Lakes that are relatively shallow and productive with well-developed, meandering creek channels for spawning adjacent to the lake.



● Squanga Whitefish Range

Potential Threats

- Habitat loss due to lakeside developments (Little Teslin Lake).
- Introduction of exotic fish, including trout.
- Over-harvesting



Photo: Randi Mulder

DID YOU KNOW?

- The Squanga Whitefish is known from only five lakes in Yukon: Dezadeash Lake in the southwest, and Squanga, Seaforth, Little Teslin and Teenah lakes in the south-central region. A similar form also existed in Hanson Lake in central Yukon, but was poisoned along with all other fish species there to prepare this lake for Rainbow Trout stocking.
- Similar fish have evolved from Lake Whitefish elsewhere, including Dragon Lake near Quesnel, British Columbia. Like those in Hanson Lake, that species was also poisoned to extinction before trout were introduced to the lake.



Photo:
Jared Hobbs

Western Toad

Anaxyrus boreas

SPECIAL CONCERN (2012)

Western Toads have severely declined in the southern half of their range since the late 1970s—the centre of the world's distribution of Western Toads has shifted north from central California to British Columbia. The cause for the decline is uncertain but a number of factors including diseases are thought to play a part. In Yukon, they are confined to the southeastern corner of the territory, although their range in northwestern British Columbia reaches Atlin and parts of White and Chilkat pass regions.

Description

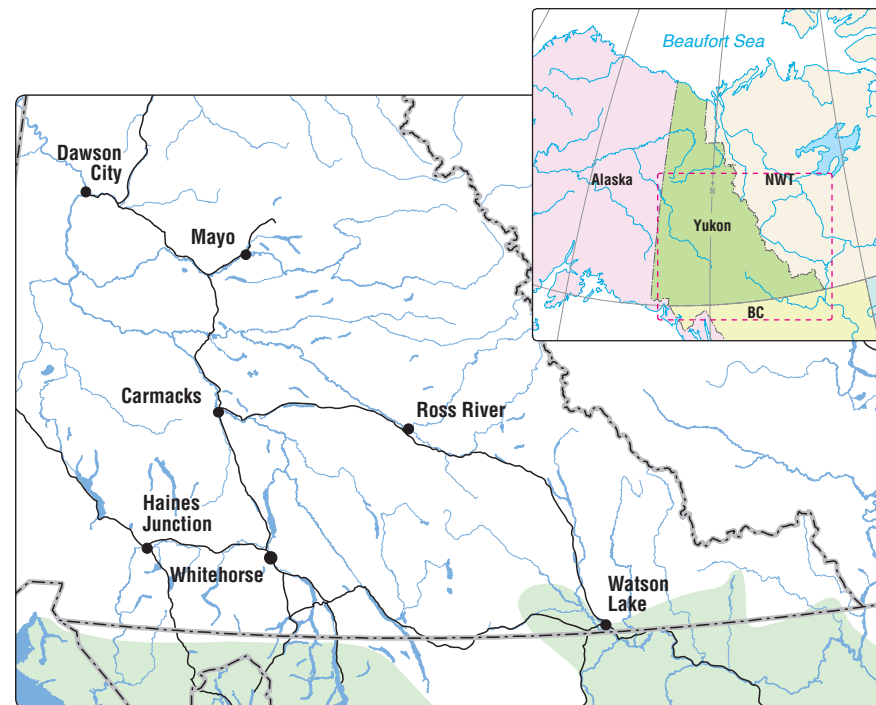
Western Toads are usually green or brown with a light stripe down the middle of the back, and have reddish-brown warts. Newly hatched tadpoles and toadlets are black.

Typical Habitat

- Congregate and breed in shallow silty or sandy ponds, springs, lake margins, and streamside flood pools.
- Summer habitats include shrubby, forested areas; wet shrublands; and meadows.
- Over-winter in areas of high snow cover by burrowing underground to a layer deep enough (up to 1.3 m) to prevent freezing, and moist enough to prevent their skin from getting too dry.

Potential Threats

- Loss of breeding habitat.
- Drought.
- Fluctuating winter temperatures, freezing rain, low snow cover.
- Disease (e.g. ranaviruses and chytrid fungus).
- Fish stocking



Western Toad Range

DID YOU KNOW?

- Western Toads return to the same breeding sites year after year.
- They are one of the few amphibians that live in alpine areas.
- They can travel up to 7 km in less than a day, and prefer to walk or crawl rather than hop.
- They are nocturnal and difficult to find outside the spring breeding season.



Photo: Syd Cannings



Photo:
Cameron Eckert

Bank Swallow

Riparia riparia

THREATENED (2013)

This widespread species has shown a severe long-term decline of 98% of its Canadian population (now estimated at 1.4 million) over the last 40 years. As with many other aerial insectivores, the decline continues, albeit at a slower rate since the 1980s. Data from 2001-2011 indicate a potential loss of 31% of the population during that 10-year time period.

Description

The Bank Swallow is the smallest swallow in the Americas. Total body length averages 12 cm and they weigh 10-18 g. Sexes are similar in size and plumage. Bank Swallows have a grey-brown head,

a pale forehead, white underparts, a distinctive brown upper breast-band, and a long notched tail. In flight, the Bank Swallow is best distinguished by its small size, distinctive breast-band, and its quick and flicking wing-beats.

Typical Habitat

The Bank Swallow breeds in a wide variety of natural and artificial sites with vertical banks, including riverbanks, lake and ocean bluffs, aggregate pits, road cuts, and stockpiles of soil. Sand-silt substrates are preferred for excavating nest burrows. Breeding sites tend to be somewhat ephemeral because of bank erosion. Breeding sites are often situated near open habitat used for aerial foraging (e.g., grasslands, meadows, rivers or lakes). Large wetlands are used as communal nocturnal roost



Bank Swallow Range

sites during post-breeding and migration periods.

Potential Threats

The reasons for the declines are not well understood, but are likely driven by the cumulative effects of several threats. These include loss of breeding and foraging habitat, destruction of nests during aggregate excavation, collision

with vehicles, widespread pesticide use affecting prey abundance, and impacts of climate change.

DID YOU KNOW?

- The Bank Swallow has an extensive global distribution, occurring on every continent except Australia and Antarctica.
- In Yukon, Bank Swallows are among the most numerous birds encountered by river travellers.



Photo:
Gord Court

Barn Swallow

Hirundo rustica

THREATENED (2011)

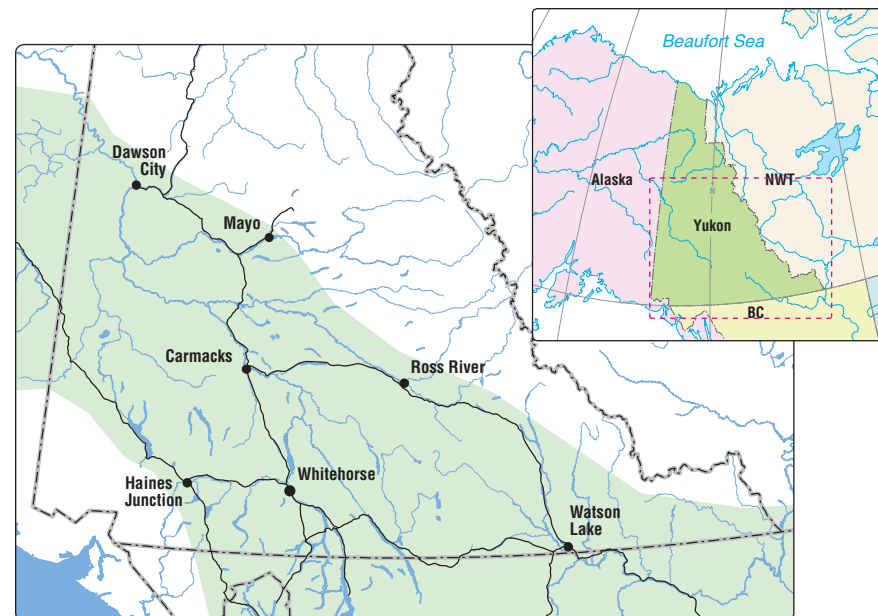
The Barn Swallow is the most widespread species of swallow in the world, and has become closely associated with human rural settlements. Despite its cosmopolitan distribution and close ties with humans, it has suffered recent, significant declines that began somewhat inexplicably in the mid 1980s. In the last ten years alone, populations have declined about 30% in Canada. Causes of this decline are not clearly understood, but the Barn Swallow is an insectivorous, long-distance migrant, and may be suffering primarily from troubles on its tropical wintering ground and migration routes.

Description

The Barn Swallow is a small, slender bird easily recognized by its steely-blue back, cinnamon belly, chestnut throat and forehead, and by its deeply forked 'swallow' tail.

Typical Habitat

- Following European settlement, nesting sites of Barn Swallows have shifted almost completely from natural sites (caves and crevices in cliff faces) to manmade structures. Structures most commonly used include barns and other outbuildings, garages, houses, bridges, and road culverts.
- Barn Swallows prefer various types of open habitats for foraging, including grassy fields, wetlands, farmyards and croplands, lake and river shorelines, cleared rights-of-way, sand dunes, and alpine tundra.



Barn Swallow Range

Potential Threats

- Nests may be lost through intentional or incidental destruction on buildings and bridges.
- Yukon's Barn Swallows may also be threatened during their migration by loss of foraging habitat, and exposure due to pesticides at tropical wintering grounds.

DID YOU KNOW?

- The Barn Swallow is perhaps the only Yukon breeding bird that occasionally breeds in South America during the boreal winter.
- The Barn Swallow is found on every continent except Antarctica.
- Scientific studies have shown that female Barn Swallows prefer males with longer, more symmetrical tails.

Photo: Trish Loretz



Photo:
Cameron Eckert

Buff-breasted Sandpiper

Tryngites subruficollis

SPECIAL CONCERN (2012)

The Canadian Arctic supports about 87% of the Buff-breasted Sandpiper's North American breeding range, and about 75% of this shorebird's global population. The species was once common and historically perhaps even abundant, but it suffered severe declines from intensive market hunting in the late 1800s and early 1900s. By the 1920s, it was thought to be on the brink of extinction. Its population has grown since hunting of the species was banned in North America, but numbers have never fully recovered. There is evidence for population decline in recent decades, and many conservation organizations consider the species to be of concern throughout its range. However, this species is

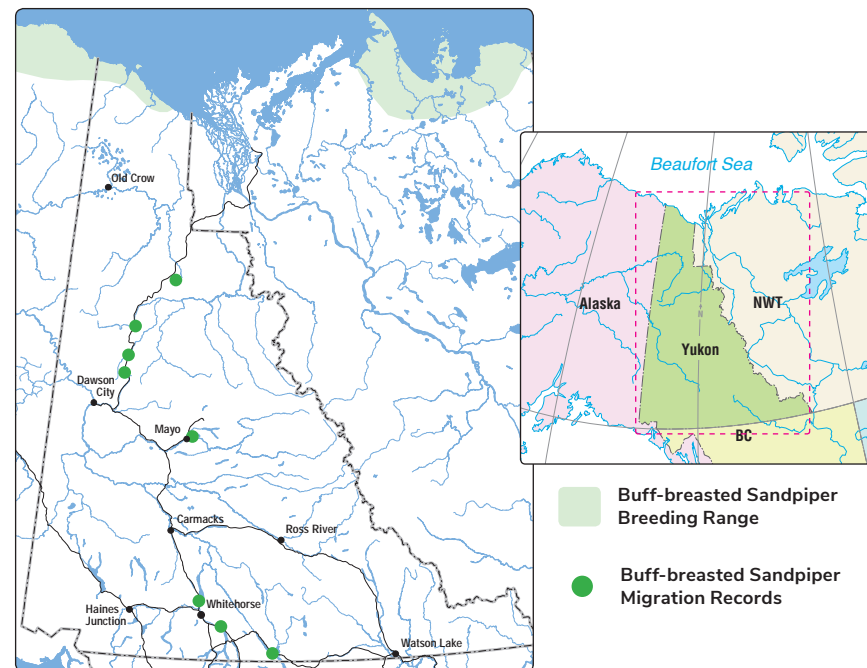
difficult to monitor effectively, and population trend information is currently lacking.

Description

The Buff-breasted Sandpiper is a medium-sized shorebird with a buff-coloured face and underparts, and brown to black speckling on its wings and back.

Typical Habitat

In Yukon, Buff-breasted Sandpipers breed on the tundra on the North Slope. On migration and during the winter, they occur primarily in grasslands. Nowadays, they use a variety of human-altered sites for stopovers, such as crop fields, golf courses, airport runways, sod farms, and pastures. Buff-breasted Sandpipers winter mainly on the South American Pampas, where livestock grazing maintains their preferred short-grass habitat structure.



Potential Threats

- Climate change may impact Buff-breasted Sandpipers in several ways. Northward advancement of shrub cover will dramatically alter its tundra breeding habitat. Rising sea levels and increased rainfall could flood the birds' coastal habitat on both breeding and wintering grounds. More frequent and intense storms could increase mortality of juveniles migrating along the Atlantic coast.
- Habitat loss, fragmentation and degradation are likely the primary threats to the Buff-breasted Sandpiper, particularly within its specialized grassland habitat, both on its wintering grounds in South America and along its migration routes. Throughout much of the migration and winter range,

native grasslands have largely disappeared, and the species have been forced to switch to using human-altered habitats.

- In the Arctic, breeding habitat overlaps areas of mineral and energy extraction although in Yukon these activities have not taken place in the species' known breeding area.

DID YOU KNOW?

- This is the only North American shorebird with a lek mating system (similar to Sage and Sharp-tailed grouse), in which males congregate to display to females during courtship.
- Buff-breasted Sandpipers are known to be extremely tame, and to return to wounded flock members.



Photo:
Larry Master

Canada Warbler

Wilsonia canadensis

THREATENED (2008)

In the heart of their breeding range to the southeast of Yukon, Canada Warblers apparently declined almost 5% per year between 1968 and 2006, which amounts to a loss of 85% of the population during that period. But because their Yukon breeding grounds are far from the nearest road, there is no information on declines in the territory. The factors responsible for the decline have not been confirmed, but habitat loss, particularly on the wintering range, is thought to be the most likely factor. In Yukon,

Canada Warblers only nest in the far southeast, in the valleys of the Beaver and La Biche rivers.

Description

Canada Warblers are small, brightly coloured songbirds. The male (pictured above) is a handsome slate grey above and bright yellow below, with a black face and a necklace of black spots. The female is similar but duller in colour, without a necklace.

Typical Habitat

- Canada Warblers nest in Yukon in the interior of old-growth forests with dense, shrubby understories.
- Nests are hidden on the ground under dense cover.



Potential Threats

- Habitat loss in old-growth forests of the southeast.
- Sour gas escapement from wells in the La Biche valley.
- Insecticide and herbicide use on their wintering grounds.

Despite their diminutive size, Canada Warblers are long-distance migrants, flying to and from the northern Andes each year.

DID YOU KNOW?

- Despite their diminutive size, Canada Warblers are long-distance migrants, flying to and from the northern Andes each year.
- Perhaps because they must travel such a long distance between wintering and breeding grounds, Canada Warblers arrive in

their namesake country late in the spring, and are among the first songbirds to head south in summer.

- Many other insect-eating long-distance migrants are also declining in numbers, including Common Nighthawks, Olive-sided Flycatchers, and Barn Swallows.



Photo:
John Meikle

Common Nighthawk

Chordeiles minor

THREATENED (2007)

Despite their 'common' name, declines approaching 50% have been recorded for Common Nighthawks across Canada in the last ten years. Substantial threats likely occur at the southern edge of their breeding range, and on their winter range in South America.

They are late migrants, usually arriving in Yukon in the first week of June. Two eggs are laid directly on soil, sand, gravel or bare rock. Nestlings remain in the nest until late summer.

Description

Common Nighthawks are medium-sized birds, with mottled, dark brown plumage. They have long, slender wings and a long tail. The

head is large and broad, with large eyes and a wide mouth. In flight, adults show a white patch on the wings.

Typical Habitat

- Common Nighthawks nest in a variety of habitats such as mature pine forests, old burned forests, open forests, and wetlands.
- Wetlands, lakes and rivers can be an important source of abundant flying insects.
- They are also known to nest on sand dunes and beaches, forest clearings including recently logged areas, rocky outcrops, peatlands, marshes, lakeshores, river banks, gravel roads and quarries, and the open areas around airstrips.

Potential Threats

- Reductions in insect prey due to pesticides.



Common Nighthawk Range

- Habitat loss and degradation.
- Human activities that result in increased numbers of predators
- Collisions with motor vehicles, particularly on gravel roads.
- such as domestic cats, ravens, gulls, and foxes.

DID YOU KNOW?

- Common Nighthawks actively pursue flying insects in the long summer twilight.
- The sexes can be distinguished by the colour of their throat: white in males and buff in females.
- Common Nighthawks are long-distance migrants, wintering in South America.
- During the breeding season, males perform an aerial courtship display. They dive straight down from a great height, then pull up—the air rushing through their wingtips at the bottom of the dive makes a deep booming sound.

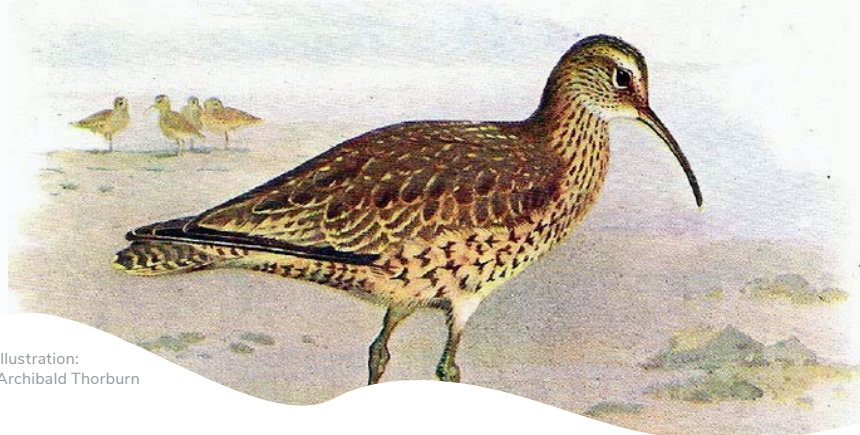


Illustration:
Archibald Thorburn

Eskimo Curlew

Numenius borealis

ENDANGERED (2009)

The Eskimo Curlew is a shorebird with 100% of its known breeding range in Arctic Canada. Formerly abundant, the population collapsed in the late 1800s, primarily owing to uncontrolled market hunting and dramatic losses in the native grasslands of the central Great Plains, which were its primary spring stopover habitat. One of its primary food items during migration was the Rocky Mountain Locust, which went extinct at the same time. The population has never recovered, and there have been no confirmed breeding records for over 100 years, nor any confirmed records of birds (photographs/specimens) since 1963.

Description

The Eskimo Curlew is a medium-sized shorebird about 32-37 cm in length (about the same size as a

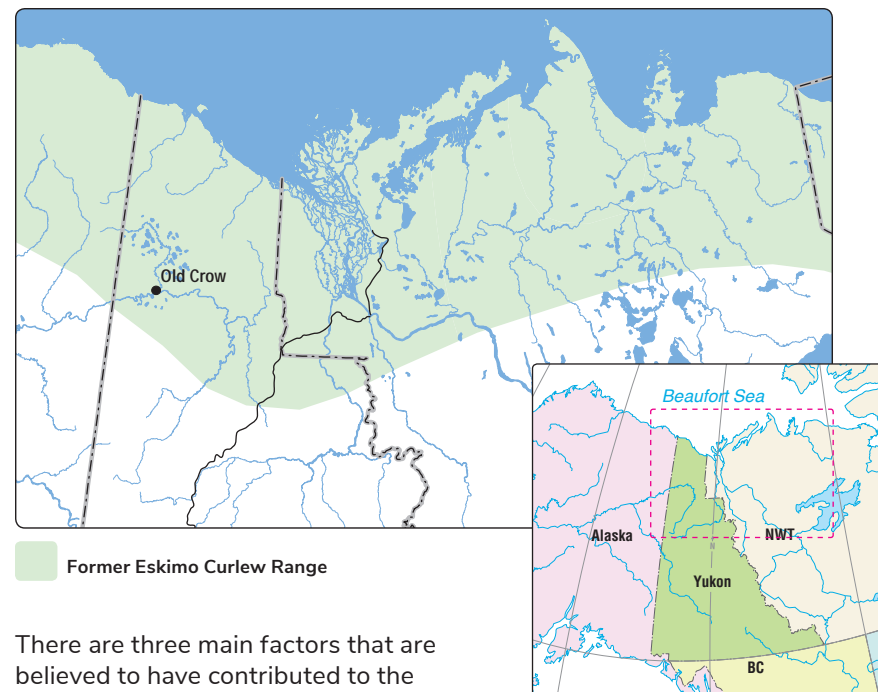
Rock Pigeon), with a long, slender and slightly down-curved bill.

Typical Habitat

In the breeding areas, Eskimo Curlews historically occurred in arctic and subarctic tundra in the Northwest Territories. The vegetation is composed of ericaceous heath (including blueberries and cranberries) in largely treeless areas with dwarf shrubs and grassy tundra and grassy meadows, such as in the vicinity of Bathurst Peninsula. Other breeding habitats include the "shore" of Point Lake east of Great Bear Lake.

Potential Threats

The Eskimo Curlew was considered a delicacy. Its social habit of forming large, dense flocks during migration made it a popular target for 19th century market hunters. Moreover, its habit of circling back within gun range when flock members were shot, made it particularly susceptible to overexploitation.



There are three main factors that are believed to have contributed to the decline of the Eskimo Curlew:

- 1) uncontrolled market hunting in the 19th century;
- 2) habitat loss and fragmentation, and human interference with ecological processes (particularly fire, and replacement of native herbivores, such as bison with cattle) at stopover sites, and;
- 3) changes in invertebrate food supply (especially grasshoppers) at spring stopover sites. It is quite possible that changes in winter habitat may also have been an additional factor.

DID YOU KNOW?

- The Eskimo Curlew was a species seemingly so abundant that it was thought it could not possibly go extinct.
- Searches of the Eskimo Curlew's historical and potential breeding areas and wintering areas (in Argentina and Uruguay) have failed to produce any confirmed records.
- Breeding was suspected but has not been confirmed in Yukon, Nunavut, Alaska and the Chukchi Peninsula, Russia.



Photo:
Dick Cannings

Evening Grosbeak

Coccothraustes vespertinus

SPECIAL CONCERN (2016)

Evening Grosbeaks are large finches of the boreal and mountain forests of Canada. Over the last four decades, their population has declined by about 75%, but this decline has slowed in recent years. In the north, monitored populations in southwestern NWT have remained relatively stable, 1998-2011.

Description

The Evening Grosbeak is a stocky songbird with a massive, greenish-yellow bill. Males are boldly coloured, with a dark brown head and a brilliant yellow eyebrow; much of the body is yellow to yellow-

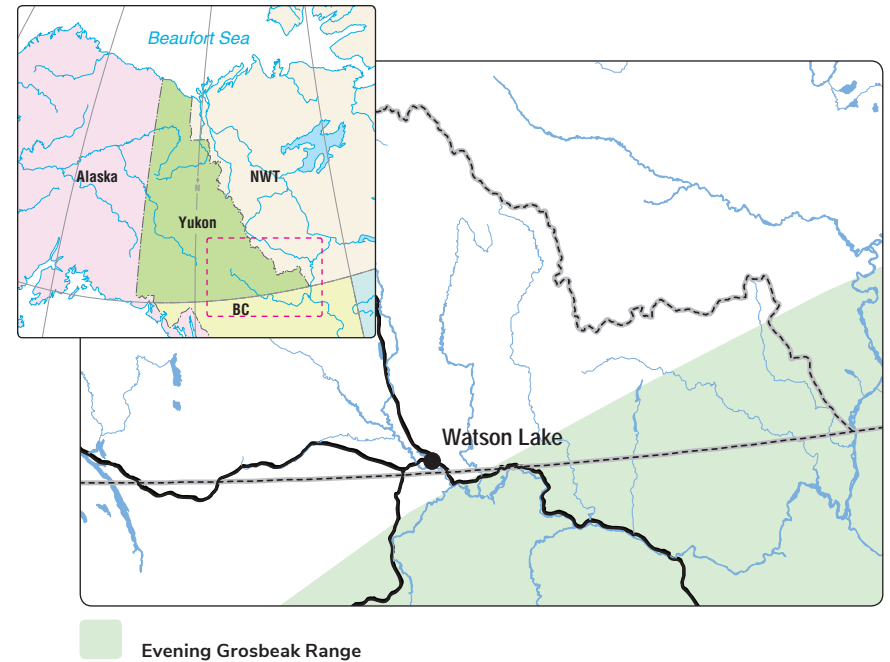
brown, contrasting with black-and-white wings and a black tail. Females and juveniles are greyish-brown with some yellow and the nape and flanks, and also have black-and-white wings and a black tail.

Typical Habitat

Evening Grosbeaks are particularly tied to Spruce Budworm outbreaks, so optimal habitat is mature coniferous forest where budworms are abundant. Outside the breeding season, they are dependent on seed crops from trees such as firs, spruces, and ornamental trees.

Potential Threats

The decline of Evening Grosbeaks is probably tied to a long-term decline in Spruce Budworm abundance, which in turn may be related



commercial logging reducing the amount of mature forest. In the west, this is complicated by the fact that there are several species of budworms. Spruce Budworms

naturally exhibit long-term fluctuations lasting about 25-40 years in eastern Canada and about 26 years in the west.

DID YOU KNOW?

- Evening Grosbeaks are particularly attracted to feeders stocked with sunflower seeds.
- Despite being loud and frequent visitors to feeders during the winter, Evening Grosbeaks become

almost reclusive during the breeding season; nests are rarely found.

- Two distinct 'call types' of Evening Grosbeaks exist, one in the east and one in the west. The boundary between these two populations is poorly understood.



Photo:
Donna Dewhurst,
USFWS

Horned Grebe

Podiceps auritus

SPECIAL CONCERN (2009)

Although limited trend information is available from Yukon, Horned Grebes have suffered a 30% decline across Canada between 1986 and 2006, and a significant decline of 65% has been reported for Alberta. Horned Grebes are still relatively common on small lakes and wetlands in southern Yukon, but become less common as one travels north. Early migrants arrive in late April, but numbers quickly rise, peaking in the second week of May—up to 250 have been seen on Swan Lake, near Whitehorse. Between one and six eggs are laid in closely-guarded, floating nests. Horned Grebes feed on aquatic insects and small fish and frogs. The

last fall migrants have usually left the territory by the end of October.

Description

The Horned Grebe is a small waterbird with striking breeding plumage: bright golden feathers flare out behind the startlingly red eye, contrasting with a chunky, black head and back. The underparts are a rich, rusty brown.

Typical Habitat

- Horned Grebes nest on ponds and small lakes with marshy margins. The adults dive for food in open water, but the floating nests are anchored in shallow water in the midst of dense stands of sedge, reeds, or horsetails.

Potential Threats

- Wetland loss and degradation.



Horned Grebe Range

DID YOU KNOW?

- Unlike ducks, grebes do not have fully webbed feet; instead, each toe has its own lobe of skin that helps the grebe swim through the water.
- Baby Horned Grebes have striking, black-and-white zebra stripes on their heads and necks.
- Horned Grebes are aggressive defenders of their nesting territories, so they usually nest as single pairs. But if the lake is large enough or food plentiful enough, several pairs may share the shoreline.
- Breeding Horned Grebes engage in a series of complex and spectacular ceremonial displays.



Photos:
Ted Murphy-Kelly

Olive-sided Flycatcher *

Contopus cooperi

THREATENED (2007)

Like the Common Nighthawk, the Olive-sided Flycatcher is an insectivorous bird that makes long migrations between Canada and South America. For unknown reasons, but perhaps related to its migratory or wintering habitat, it has shown a widespread population decline over the last 30 years; the Canadian population is estimated to have declined by 79% from 1968 to 2006.

Description

This large flycatcher is between a bluebird and robin in size. It has a dark face and back, and dark olive sides on its chest.

Typical Habitat

- Found in a wide variety of open forests and woodlands, especially along edges of burns or peatlands with standing dead trees.

Potential Threats

- Fire suppression can create closed forests that these birds avoid.
- Clearcut logging removes breeding habitat.
- Habitat alteration and loss on the wintering grounds of this migratory bird may also pose serious threats to these birds' populations.



Olive-sided Flycatcher Range

DID YOU KNOW?

- The Olive-sided Flycatcher is one of the very few Yukon songbirds that migrate as far south as South America—others in this exclusive club include Swainson's Thrush, Blackpoll Warbler, and Cliff, Barn, and Bank swallows.
- The male's loud, ringing song has been transcribed as "Quick, three

beers!" or the shorter "Free beer!" A "pip-pip-pip" call is believed to be given in close proximity to the nest.

- Although they attack many flying insects, the most common prey recorded in a central Alaska study were yellowjacket wasps and small dragonflies.



Photo:
Gordon Court

Peregrine Falcon *

Falco peregrinus

SPECIAL CONCERN (2007)

The Peregrine Falcon was one of the first species assessed by COSEWIC. It was initially evaluated as three subspecies. In the late 1940s, their populations suffered a rapid decline reducing the populations by 80-90% by the mid-1970s. Following the ban of organochlorine pesticides, populations have recovered to near historical numbers.

Description

Peregrine Falcons are about the size of a small hawk, with long, pointed wings. They have black cheek patches and dark "cap" on the top of their head.

Typical Habitat

- Peregrines primarily hunt waterfowl and shorebirds, so require healthy wetlands, lakes, rivers and oceans to survive. In Yukon, most nest on protected cliff ledges or crevices near water.

Potential Threats

- Because of their long migrations through a number of countries, peregrines remain highly susceptible to organochlorine pesticide contamination (causes a softening of the eggs and widespread reproductive failure).
- Human disturbance at nest sites.
- Loss or degradation of foraging habitat and decline of prey populations.
- Loss of habitat.



DID YOU KNOW?

- Yukon's *Wildlife Act* protects all raptor (predatory bird) eggs, nests and individuals. Therefore it is illegal in Yukon to hunt or possess live Peregrines, possess whole or parts of dead Peregrines, or export individuals, their eggs or parts of a Peregrine without a permit.
- Peregrines can reach speeds of more than 320 kph when diving or 'stooping' at their prey.

- "Peregrine" means traveler. They are long-distance migrants - most Yukon Peregrines apparently cross the Gulf of Mexico in migration and will occasionally reach places as far south as Argentina.
- The Peregrine Falcon is one of the most widely distributed bird species in the world.



Photo:
Cameron Eckert

Red-necked Phalarope

Phalaropus lobatus

SPECIAL CONCERN (2014)

The Red-necked Phalarope has declined across the continent over the past 40 years. In Yukon declines have been noted particularly at Herschel Island, Shingle Point, and Old Crow Flats. In Yukon, it breeds primarily in the north, but can be found on ponds throughout most of the territory. Red-necked Phalaropes spend the winter in large flocks at sea, primarily at upwellings off Peru, eating surface zooplankton.

Description

A small shorebird; in breeding season blue-grey and white, easily recognized by the brick-red colour of the sides and base of the neck. Females are larger and

more brightly-coloured than males. Outside the breeding season, Red-necked Phalaropes are white below and around the face, with a dark eye stripe, crown and back.

Typical Habitat in Yukon

- Breeds in low Arctic and subarctic wetlands; near ponds, lakes, or streams.
- Open areas near wetlands are required for nesting.

Potential Threats in Yukon

- The likely greatest local threat is a rapidly changing climate with associated habitat and food-web effects.
- Threats during the non-breeding season include changes in ocean temperature, salinity and currents as a result of climate change; chronic oiling and point-source oil spills; and ingestion of microplastics.



Red-necked Phalarope Range

DID YOU KNOW?

- All phalaropes exhibit gender-role reversal: unlike most other birds, females are larger and more brightly coloured than the males.
- Shortly after egg-laying, females desert the nest and leave to search for other mates.
- Males incubate the eggs and care for the young when they are small.
- Unlike other shorebirds, phalaropes have lobed feet and swim on the surface of ponds and lakes.



Photo:
Getty Images/
iStockphoto

Red Knot

Calidris canutus

THREATENED (2007)

The Red Knot *roselaari* type includes the *roselaari* subspecies and two other populations that winter in Florida and northern Brazil. They seem to share the same characteristics of the subspecies. The subspecies migrates through BC and breeds in Alaska. This group has declined by 47% in the last 15 years. Red Knots are not known to be regularly occurring in Yukon, and are considered an accidental species here.

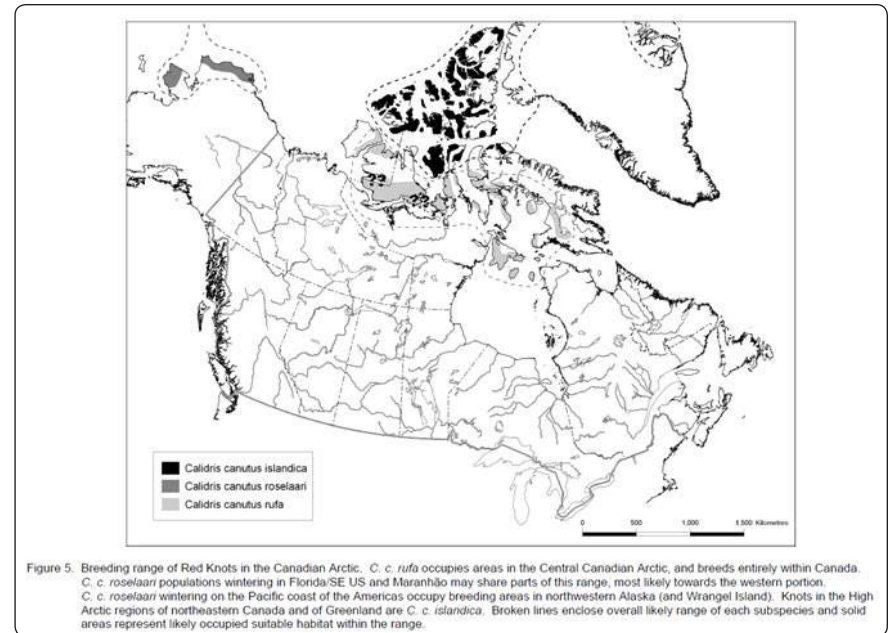
Description

The Red Knot is a medium-sized shorebird with a typical "sandpiper" profile: long bill and small head, long tapered wings that give the body an elongated streamlined profile, and

longish legs. In breeding plumage, knots are highly distinctive, with face, neck, breast, and much of the underparts coloured a rufous chestnut red. Feathers on the upperparts are dark brown of black with rufous and grey, with white underparts and pale grey back. Six subspecies are currently recognized worldwide, all of which form distinct biogeographical populations.

Typical Habitat

In the Arctic, knots nest on barren habitats such as windswept ridges, slopes, or plateaus, often with less than 5% vegetation. On migration and wintering areas, knots use coastal areas with extensive sandflats (sometimes mudflats), where the birds feed on bivalves and other invertebrates. They are also known to use peat banks, salt marshes, and brackish lagoons.



Potential Threats

Ongoing threats include habitat loss and degradation on wintering sites.

DID YOU KNOW?

- Knots are typically monogamous (pair with one individual at a time).
- Soon after the eggs hatch the female departs, leaving the males to accompany the young until they can fly.
- As of 2006, the Pacific population was estimated to be 1,500-3,000 adults.



Photo:
Cameron Eckert

Rusty Blackbird

Euphagus carolinus

SPECIAL CONCERN (2017)

Rusty Blackbirds live in boreal forest wetlands across North America, from Alaska to Newfoundland. In Yukon, they can be found right up to the tundra's edge. Not much is known about their numbers in Yukon, but there has been a 90% reduction in the overall North American population over the last 30 years.

In August, both sexes moult into their winter plumage, which is brown and black due to the rusty and beige feather edges, which wear off by spring.

Description

Females are brownish-grey with no gloss; males are glossy black. Both sexes have white eyes. In August, both sexes moult into their winter plumage, which is brown and black due to the rusty and beige feather edges, which wear off by spring.

Typical Habitat

- Present in Yukon from April to October, Rusty Blackbirds live throughout the boreal forest in brushy wetland areas.



Rusty Blackbird Range

Potential Threats

- Many Rusty Blackbirds have been killed during control programs

for Red-winged Blackbirds in agricultural areas in southern agricultural areas.

DID YOU KNOW?

- Rusty Blackbirds usually nest alone or in small, loose colonies, and pair with the same mate every year.

- Blackbirds are some of the few migratory birds (along with pelicans, cormorants, and raptors) not protected by the Migratory Birds Convention Act.



Photos:
Ian Routley

Short-eared Owl

Asio flammeus

SPECIAL CONCERN (2008)

Short-eared Owls are owls of open country that are active in the daytime, especially at dawn and dusk. In Yukon, breeding is tied to population cycles of lemmings and voles, causing their distribution and numbers to change markedly from year to year. In southern Canada, large-scale destruction of native prairie grasslands has been particularly hard on them, and natural wetland drainage, urban expansion and increasingly intensive farming have contributed to their decline. They are exposed to danger from predators and agricultural machinery because they nest on the ground. Shooting, collisions with aircraft, trains, cars, barbed wire and farm machinery are added factors.

Description

Short-eared Owls are medium-sized, long-winged owls with small, feather “ear tufts”, and black bands that frame their yellow eyes. Females are larger and darker with heavier streaking than males.

Typical Habitat

- Nesting on the ground in grasslands, tundra, bogs, marshes and other open forest areas with abundant small mammals.

Potential Threats

- There are limited threats to Short-eared Owls in Yukon. Their primary limiting factor is loss of their native habitat to agricultural crops or pastureland. However, these owls are sensitive to human disturbances during egg laying and incubation as females easily desert the nest if disturbed.



Short-eared Owl Range

- The collision of adults with vehicles, utility lines and barbed-wire fences, may also contribute to population decline.
- Concentrations of pesticides, particularly organochlorines, have been detected in Short-eared Owl eggs; the effects of these contaminants are not yet well known.

DID YOU KNOW?

- One of the best ways to identify a Short-eared Owl is to watch its distinct moth-like flight when hunting (deep wing-beats, occasional hovering, and cutting low over patches of grassland or marsh).
- Short-eared Owls are the only owls that build their own nests.
- They typically search for food during dusk and dawn.



Why Do Species Become At Risk?

In the past, over-hunting and over-fishing were among the prime causes of wild species' declines—the stories of the beaver, the bison, and the great whales are all prime examples of this. But today, with better wildlife management, the main cause of the decline and disappearance of animals and plants is **the destruction and degradation of their habitats**. Although Yukon's environment has been more fortunate than areas elsewhere in this regard, we have a real opportunity to learn from the lessons learned to the south.

"Invasive" animals and plants are another potentially serious problem to native wildlife. These are species that, for the most part, have come from other continents and have been introduced into Canada through human activity.



"Invasive" animals and plants are another potentially serious problem to native wildlife.

Although many such exotic species don't move much beyond parking lots or roadsides, some invade the territories of native wildlife species and replace them, or substantially alter and degrade their habitat. Yukon again has been fortunate to see very few of these exotic species so far.

Some animals are taking up and concentrating the **chemical contaminants** in their habitat or food. Still others face the threat of **exotic diseases and parasites**.

Global climate change is now acknowledged as real and accelerating, especially in Arctic regions. The effects are already apparent in the north, through permafrost melting and the disappearance of Arctic sea ice. Many Yukon species will be affected as the climate and environment change rapidly around them.

Finally, some species are at risk because, for historical reasons, they are already very rare. In Yukon, a number of the unique species that thrived in the ice-free lands of Beringia during the Ice Ages had their habitats and ranges shrink drastically during the extreme

White Sweetclover. Photo: Syd Cannings



Boreal Glasswort.
Photo: Bruce Bennett (YG)

climatic changes following that period. For example, the Baikal Sedge now lives only in a handful of dunes, and Yukon Draba lives only in a few meadows both only in southwest Yukon. These species

were likely once more widespread, but now could be accidentally wiped out by human activity.

Salt flats are home to a unique Boreal Glasswort. Photo: Syd Cannings

In Yukon, a number of the unique species that thrived in the ice-free lands of Beringia during the Ice Ages had their habitats and ranges shrink drastically during the extreme climatic changes following that period.



Why Should We Be Concerned?

Species extinction has occurred since life first appeared on Earth. When organisms are unable to adapt to changes in their natural environment, they die and others, better adapted to the new situation, take over. Why then should we be concerned about the disappearance of wildlife species today if extinction is the outcome of a natural process? The answer is twofold: first, it is happening at an alarming rate, and second, human-caused changes are largely to blame.

An ecosystem is a natural community—like a forest, a grassland, or a marsh—in which all the species depend on one another and their environment. When one component of the ecosystem is modified, the entire balance of the community changes.

In the short term, there are also practical reasons for conserving wildlife species:

- Many Yukoners count on wildlife species for food, clothing, and as a source of spiritual inspiration.
- Wild animal and plant species are an important source of basic ingredients for traditional remedies and pharmaceutical formulations. Many plants have healing properties.
- Some Yukoners depend on the income they earn from activities like hunting, fishing, trapping, and nature tours that are closely tied to wild animals and plants.
- Plants, animals, and micro-organisms all play essential roles in the natural processes that keep Earth's atmosphere, climate, landscape, and water in balance. Humans depend upon ecosystems, too.
- The gene pool of wildlife species continues to provide basic materials often used to improve livestock and food crops. In genetic diversity is the strength to adapt and survive.
- Nature is beautiful and interesting. Our lives are enriched by it. Our artists and writers are inspired by it. We all lose when such beauty is lost.

Peregrine Falcon - A Yukon Success Story

All is not doom and gloom—the status of certain species has improved, in some cases in a dramatic fashion. In the 1970s, things were not looking good for the Peregrine Falcon. This bird of prey had been declining as a result of the use of pesticides such as DDT, which had been banned in Canada since 1969. In 1975 it was estimated that only 34 breeding pairs remained in Canada. In 1978, the southern (anatum) subspecies of the Peregrine Falcon was designated Endangered by COSEWIC. Between 1975 and 1980, when only one bird was found along the Yukon River. In 1971, the Canadian Wildlife Service established a captive-breeding facility. In 1978, the first captive-



Photo: Dave Mossop

raised Peregrine chicks were placed in nests in Yukon. More than 1,550 chicks were raised in captivity and released into the wild across Canada. In 1995, only seventeen years after the first Yukon release, a survey estimated 200 pairs nested in the Peel River and Yukon River watersheds. In 1999, the subspecies was reassessed as Threatened, then, in 2007, the species was reassessed as Special Concern.

ASSESSMENT HISTORY

- Bering Cisco – Data Deficient 1990, Special Concern 2004, 2017
- Baikal Sedge - Threatened 2005, Special Concern 2016
- Bowhead – Endangered 1980, 1986, Special Concern 2005, 2009
- Rusty Blackbird - Special Concern 2006, 2017
- Caribou, Boreal Population – Threatened 2000, 2002, 2014
- Caribou, Northern Mountain population – Not At Risk 2000, Special Concern 2002, 2014
- Grey Whale – Not At Risk 1987, Special Concern 2004, , Not At Risk 2017
- Grizzly Bear – Not At Risk 1979, Special Concern 1991, 2002, 2012
- Little Brown Myotis – Endangered 2012, 2013
- Northern Myotis – Endangered 2012, 2013
- Peregrine Falcon – Endangered 1978, Threatened 1999, 2000, Special Concern 2007, Not At Risk 2017
- Polar Bear – Not At Risk 1986, Special Concern 1991, 1999, 2002, 2008
- Short-eared Owl – Special Concern 1994, 2008
- Western Toad – Special Concern 2002, 2012
- Wood Bison – Endangered 1978, Threatened 1988, 2000, Special Concern 2013

Data Deficient (DD) - A category that applies when the available information is insufficient:

- (a) to resolve a wildlife species' eligibility for assessment, or;
- (b) to permit an assessment of the wildlife species' risk of extinction.

Not At Risk (NAR) - A wildlife species that has been evaluated and found to be not at risk of extinction given the current circumstances. (date of last assessment)

Species Designated As Data Deficient

Mammals

- Bearded Seal – Data Deficient (2007)

Fish

- Blackline Prickleback - Data Deficient (2003)
- Bull Trout, Upper Yukon Watershed population - Data Deficient (2012)
- Pygmy Whitefish, Pacific populations - Data deficient, Southwestern Yukon and Yukon River populations

Species Assessed As Not At Risk

Mammals

- American Black Bear (1999)
- Beluga Whale, Eastern Beaufort Sea population (2004)
- Canada Lynx (2001)
- Northern Grey Wolf (1999)
- Ringed Seal (1989)

Plants

- Narrow-leaved Wallflower (1993)
- Wood's Sagebrush (1997)

- Yukon Aster (1996)
- Yukon Goldenweed (1997)

Fishes

- Pygmy Whitefish (Pacific populations) (2016)
- Spoonhead Sculpin (1989)

Amphibians

- Columbia Spotted Frog (2000)



Columbia Spotted Frog. Photo: Bruce Bennett

Birds

- American Coot (1991)
- Bald Eagle (1984)
- Black Tern (1984)
- Boreal Owl (1995)
- Caspian Tern (1999)
- Common Loon (1997)
- Double-crested Cormorant (1978)
- Golden Eagle (1984)
- Great Grey Owl (1996)
- Gyrfalcon (1987)
- Merlin (1985)
- Northern Goshawk, atricapillus subspecies (1995)
- Northern Harrier (1993)
- Northern Hawk Owl (1992)
- Red-necked Grebe (1982)
- Red-tailed Hawk (1995)
- Rough-legged Hawk (1995)
- Sharp-shinned Hawk (1997)
- Snowy Owl (1995)
- Trumpeter Swan (1996)
- Yellow-billed Loon (1997)



Photo:
Government of Yukon

Stewardship is the management of spaces and species to ensure that they will be preserved for future generations of Canadians. It encompasses all kinds of habitat restoration and conservation initiatives.

Get Involved!

Everyone can help species at risk. First Nations and communities can get involved with stewardship and conservation efforts, while anyone can help by reporting sightings.

Yukon is a big place—everyone who gets out in the backcountry can add to our information base on the whereabouts and status of these Yukon species at risk.

You can use the form provided on the following page to record your sightings. Make sure you report them to:

Yukon Conservation Data Centre
Suite 210, 419 Range Road
Whitehorse, Yukon Y1A 4Y9

Ph. (867) 667-5331
Fax. (867) 393-6263
Toll - Free 1-800-661-0525 ex. 5331

Email: yukoncdc@gov.yk.ca

For more information on species at risk in Yukon, go to:
www.yukon.ca/species-risk#how-are-at-risk-species-identified

The Accord for the Protection of Species at Risk

In October 1996, federal, provincial and territorial ministers responsible for wildlife signed the Accord for the Protection of Species at Risk that lays out basic principles of national cooperation on species conservation as well as a number of strong commitments to monitor, assess, and protect species at risk. Under the Accord, the ministers recognized that intergovernmental cooperation is crucial to the conservation and protection of species at risk, that they must play a leadership role, and that complementary legislation and programs are essential to provide effective protection for species at risk and their habitats throughout the country. In September 1998, the ministers strengthened provisions of the Accord by placing greater emphasis and recognition on stewardship.

The federal Species at Risk Act

The federal Species at Risk Act lists species Extirpated (extinct in Canada but occurring elsewhere), Endangered, Threatened, or of Special Concern. Under the Species

The federal Species at Risk Act lists species extirpated (extinct in Canada but occurring elsewhere), endangered, threatened, or of special concern.

at Risk Act, species can receive protection for their residences (e.g. nest or den) and their critical habitats. Species listed as species of Special Concern have their habitats managed through development and implementation of management plans.

The purposes of the Species at Risk Act are:

- 1) to prevent wildlife species from becoming extinct or extirpated;
- 2) to help recover extirpated, endangered and threatened species; and
- 3) to ensure that species of special concern do not become endangered or threatened.

For more information visit:
www.sararegistry.gc.ca.



Hudsonian Godwit is a species that migrates through Yukon and may breed along its northeast coast. It will be assessed by COSEWIC in 2019. Photo: Cameron Eckert

Who Decides Which Wildlife Are “At Risk” in Canada? (The Listing Process)

On the national stage, there are two steps involved in determining whether a species is “at risk” under the Species at Risk Act.

1. **Assessment:** The Committee on the Status of Endangered Wildlife in Canada (COSEWIC) is a group of scientists and traditional knowledge specialists that assesses the biological status of species and assigns each one a conservation status. COSEWIC makes a recommendation on risk level to the Canadian (federal, provincial and territorial) ministers responsible for fish and wildlife who, in turn, advise the

federal minister on a course of action. All species recommended by COSEWIC to be listed as at risk or of special concern make up the **COSEWIC list**.

2. **Legal Listing:** After receiving COSEWIC’s recommendations and consulting with stakeholders, the federal minister decides whether or not to add species to the legal list of species at risk in Canada under the Species at Risk Act (**SARA**).

This booklet highlights both **SARA** and the **COSEWIC** list of species found in Yukon. The full list is on page 3.

Categories Of Species At Risk

Species at risk are listed in one of seven primary categories:

Extinct: a wildlife species that no longer exists anywhere in the world

Extirpated: a wildlife species that no longer exists in the wild in Canada, but exists elsewhere

Endangered: a wildlife species that is facing imminent extirpation or extinction

Threatened: a wildlife species likely to become an endangered species if nothing is done to reverse the factors leading to its extirpation or extinction

Special Concern: a wildlife species that may become a threatened or an endangered species because of a combination of biological characteristics and identified threats

Data Deficient: a wildlife species for which the available information is insufficient to resolve the species' eligibility for assessment or to permit an assessment of its risk of extinction.

Not At Risk: a wildlife species that has been evaluated and found to be not at risk of extinction given the current circumstances

Funding Programs

The federal government has funding programs to assist communities and organizations with species at risk issues.

Habitat Stewardship Program

The Habitat Stewardship Program for Species at Risk (www.recovery.gc.ca/hsp-pih) provides funding to non-governmental organizations, aboriginal organizations, communities, individuals, the private sector, and government to support the conservation and recovery of species at risk and their habitats.

Aboriginal Funds for Species at Risk

The Aboriginal Funds for Species at Risk (www.recovery.gc.ca/AFSAR-FAEP) helps build capacity in Aboriginal communities and organizations for their participation in the implementation of the Species at Risk Act, and to support Aboriginal involvement in activities that protect or conserve habitats for species at risk.

A SUCCESS STORY

From a breeding population of less than 200 birds in 1933, the Trumpeter Swan was delisted as Not At Risk in 1996.

Photo: Government of Yukon



**FOR FURTHER INFORMATION, DATA FORMS, OR
ADDITIONAL BROCHURES, PLEASE CONTACT THE
FOLLOWING:**

**Yukon Conservation Data Centre
Department of Environment**

Suite 210, 419 Range Road
Whitehorse, Yukon Y1A 4Y9

Ph: (867) 667-5331

Email: yukoncdc@gov.yk.ca

Website: [www.yukon.ca/en/outdoor-recreation-and-wildlife/
wildlife-viewing/report-rare-yukon-species-sighting#how-to-
report-a-species-of-conservation-concern](http://www.yukon.ca/en/outdoor-recreation-and-wildlife/wildlife-viewing/report-rare-yukon-species-sighting#how-to-report-a-species-of-conservation-concern)

The Yukon Conservation Data Centre is a joint program of Government of Yukon, Environment and Climate Change Canada (Canadian Wildlife Service), Parks Canada, and NatureServe Canada. It gathers, organizes, and distributes information on the status and distribution of wild species of plants, animals, and fungi in Yukon.

**Environment and Climate Change Canada,
Canadian Wildlife Service**

Mile 91780 Alaska Highway

Whitehorse, YT

Y1A 5X7

Ph: (867) 393-6700

Useful Internet References

More general information, full COSEWIC status reports, and recovery plans for a number of the SARA-listed species can be downloaded from the federal Species at Risk Act website: www.sararegistry.gc.ca.

NatureServe Explorer is a gateway to information on all North American animals and plants, especially those of conservation concern: www.natureserve.org/explorer.

Wild Species 2015 is a summary of the status of Canadian wildlife: www.wildspecies.ca.

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