

A WALK THROUGH MCINTYRE CREEK

its heritage, history, and all it has
to offer!



Yukon Conservation Society

CPAWS
CANADIAN PARKS AND WILDERNESS SOCIETY
FOUNDED 1971

A collaboration between the Canadian Parks and Wilderness Society (CPAWS) and the Yukon Conservation Society (YCS)

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This booklet would not have been possible without the input and help of the following people and their organizations:

- Leyla Weston the Outreach Geologist of the Yukon Geological Survey.
- Anne-Marie Miller of the Ta'an Kwäch'än Council.
- Ty Heffner the Yukon Archaeologist of the Yukon Government.
- Jeff Bond of the Yukon Geological Survey.
- Dorothy Bradley of Friends of McIntyre Creek.
- Our respective organizations and their staff who helped us immensely, the Canadian Parks and Wilderness Society - Yukon Chapter & Yukon Conservation Society

We respectfully acknowledge that Chasàn Chùà (McIntyre Creek) is situated on the traditional territories of the Kwanlin Dün First Nation and Ta'an Kwäch'än Council.

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Exploring McIntyre Creek/Chasàn Chùà

McIntyre Creek, also known as Chasàn Chùà, is located on the traditional territories of the Kwanlin Dün First Nation and Ta'an Kwäch'än Council. The Creek is the heart of a wildlife corridor that flows through Whitehorse, Yukon. Wildlife corridors are areas that link larger habitat patches and are vital for animal movement allowing them to feed, reproduce, and find shelter, which are all necessary for survival and enabling biodiversity to thrive.¹ McIntyre Creek offers an abundance of opportunities to explore the Yukon's wilderness in central Whitehorse. This self-guided hike is designed to provide you with information on a variety of topics pertaining to McIntyre Creek such as its inception, living inhabitants, historical importance, and more!

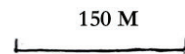
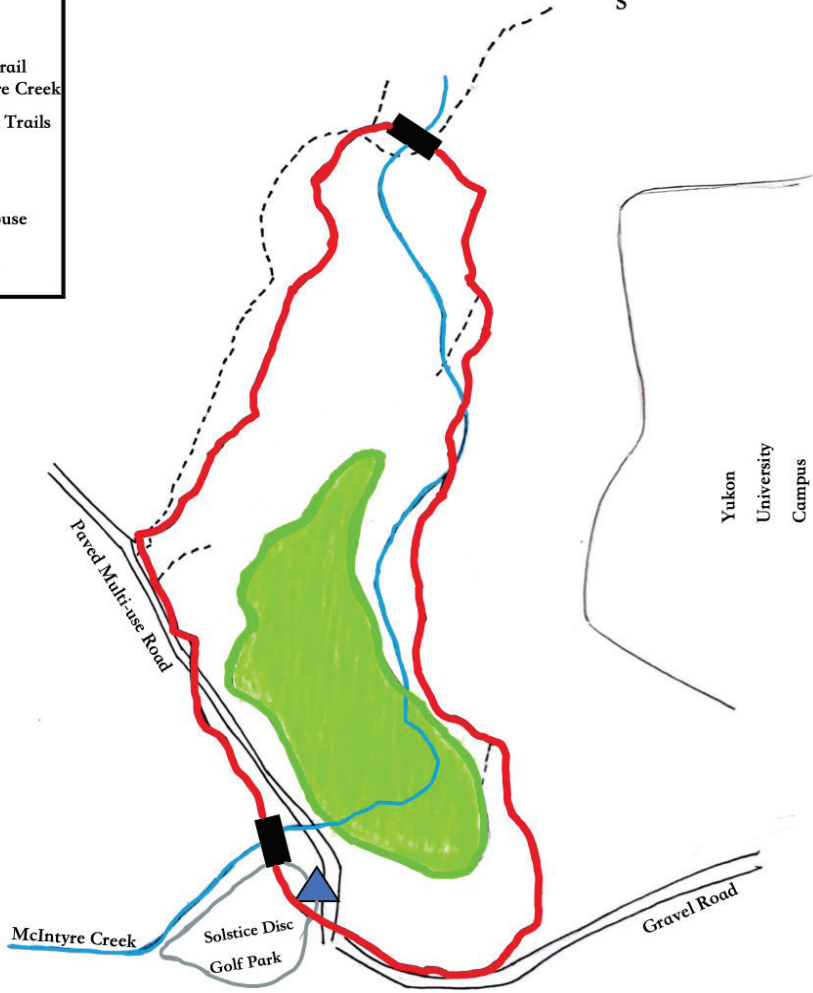
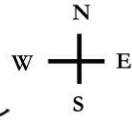


Please read the directions and map to follow the trail.

1. Park at the blue University Pumphouse Pond. Access the area by turning left onto a dirt road about two-thirds of the way (or 600m) up University Drive/College Drive just before the Yukon University campus. Follow the road until the end where you will see a blue pumphouse.
2. Follow the paved, multi-use trail past the bridge, and continue the trail. Near the bridge on your right, you will notice a bat house in a clearing. Feel free to stop and have a look. Don't forget to stop and check out the signs along the way by Yukon Wildlife Viewing.
3. Continue the paved, multi-use trail for another 260 metres until you see a well-established trail on your right that enters the woods; it is marked by wood and cement blocks and a sign marked "Trans Canada Trail" that can also be called the "Great Trail".² Follow this trail.
4. After continuing approximately 450 metres on this trail, you will notice a small intersection/fork; do not go straight; take the right towards the bridge and cross it.
5. There will be a few forks in the trail from this area. Try to remain to the right and maintain the wetland on your right. This trail is intended to circle the wetland and return to the blue pumphouse.

Length: About 2 km

Difficulty: Uphill and downhills, not paved, roots, and subject to wetness in certain areas.



Adventuring the Outdoors

Situated near downtown Whitehorse, McIntyre Creek, or Chasàn Chùà, is an exciting and accessible region to explore and discover new things! While venturing into the outdoors, make sure to be prepared.

Leave No Trace (LNT):

To keep outdoor spaces pristine, not only for wildlife but also for future generations, it is important to remember to “Leave No Trace.”³ Keep the following in mind when exploring McIntyre Creek to ensure minimal impact:

- Plan and prepare.³
- Stay on designated trails as much as possible, or travel on durable surfaces to minimize damage to the land.³
- Dispose of waste properly.³
- Leave what you find and take what you bring.
- Respect wildlife.³
- Be considerate of others, and the inhabitants of the area.³
- Be a steward of the land of which you are a guest.³



McIntyre Creek is also a great place to take your furry companions! Remember that these principles also apply to your pets

Do Not Feed Animals

Avoid feeding animals to minimize altering natural habitat, and to reduce human-to-animal conflicts in the future. Remember: a fed animal is a dead animal.³

Bear Safety

Be bear aware! You are in bear country, so remember to travel in groups, and make noise such as talking, singing, while on the trail especially in thick bushy areas with less visibility.³ Carry bear spray and know how to use it.³

Discovering Heritage Objects

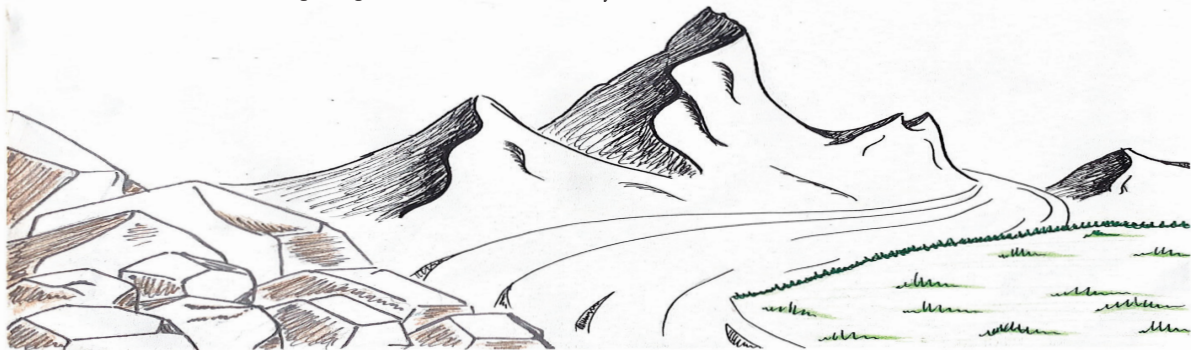
Heritage objects can sometimes become exposed through erosion or other ground disturbance. If you believe you have encountered an artifact or fossil, please leave it in place, note its location, and report it to the Government of Yukon Archaeology Program at 867-667-3771, and/or the local First Nations: Ta’an Kwäch’än Council at 867-668-3613 and/or Kwanlin Dun First Nation at 867-633-7800.

Formation of McIntyre Creek, and the Establishment of Whitehorse

During the last glacial maximum, nearly 20,000 years ago, McIntyre Creek was covered by a glacier over 1350 metres thick, overtopping Mount Granger whose summit is at 2087 metres above sea level (Leyla Weston, MSc, personal communication, July 2021)!⁴ As the ice eventually receded through the Whitehorse area, some 13,500 years ago, it left behind a network of creeks, lakes, and rivers due to the volume of melt water draining from the ice sheet.⁴ McIntyre Creek occupies one such channel carved by the glacier.⁴

This walk follows many hills and depressions, which are a remnants of the area's glacial past. This undulating topography is known as hummocky terrain, a landscape created at the end of the last glacial maximum (Leyla Weston, MSc, e-mail communication, July 2021).³⁰ As glaciers move, they pick up rocks of all shapes and sizes, as well as fine particles, and when the eventual retreat occurs, vast quantities of silt, sand and gravel are deposited along with large chunks of ice (Leyla Weston, MSc, e-mail communication, July 2021).⁵ Great accumulations of this debris occur when the former ice front remained in one location for an extended period of time;⁵ this happened in the Whitehorse area (Leyla Weston, MSc, e-mail communication, July 2021).³⁰ Eventually the buried ice bodies melt, creating depressions, and adding to the landscape complexity (Leyla Weston, MSc, e-mail communication, July 2021).³⁰ When walking through this landscape, think about its icy past.

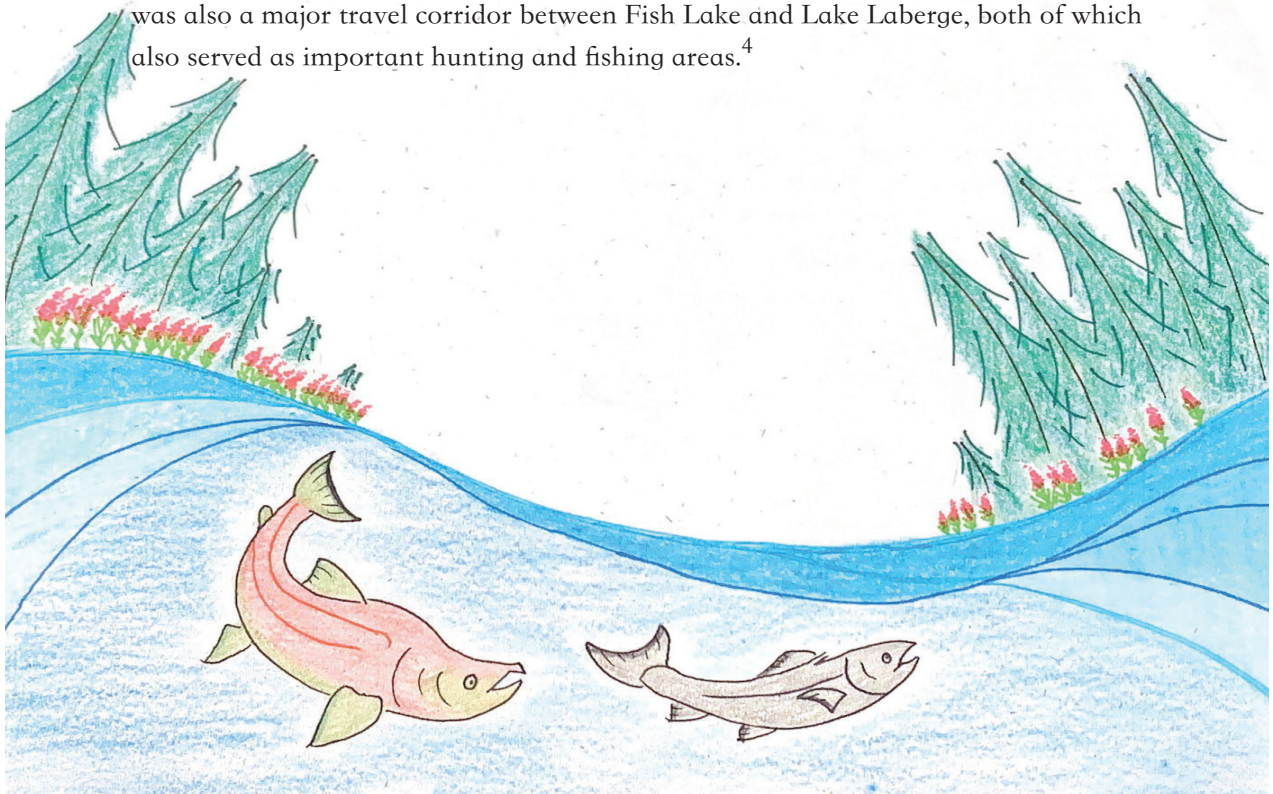
The Creek also has great significance to the establishment of Whitehorse as a town, as opposed to a staging ground for stampeders en route to Dawson during the Klondike Gold Rush (Leyla Weston, personal communication, July 2021). John (Jack) McIntyre, who the creek is now named after, was a prospector who took his chance in the Whitehorse area and discovered copper in the Creek in 1897.⁶ He staked the first (discovery) claim in 1898, which was known as the 'Copper King' claim.⁶ By 1899, most of the presently known copper deposits had been found and staked giving rise to the community of Whitehorse.⁷



First Peoples' History

The retreat of the glacier allowed the land to be colonized by vegetation; first by grasses and shrubs, then by trees.⁴ The glacial retreat allowed species once confined to Beringia to expand their ranges to the south.⁴ With animals and fish moving into McIntyre Creek, so came the First Peoples.⁴

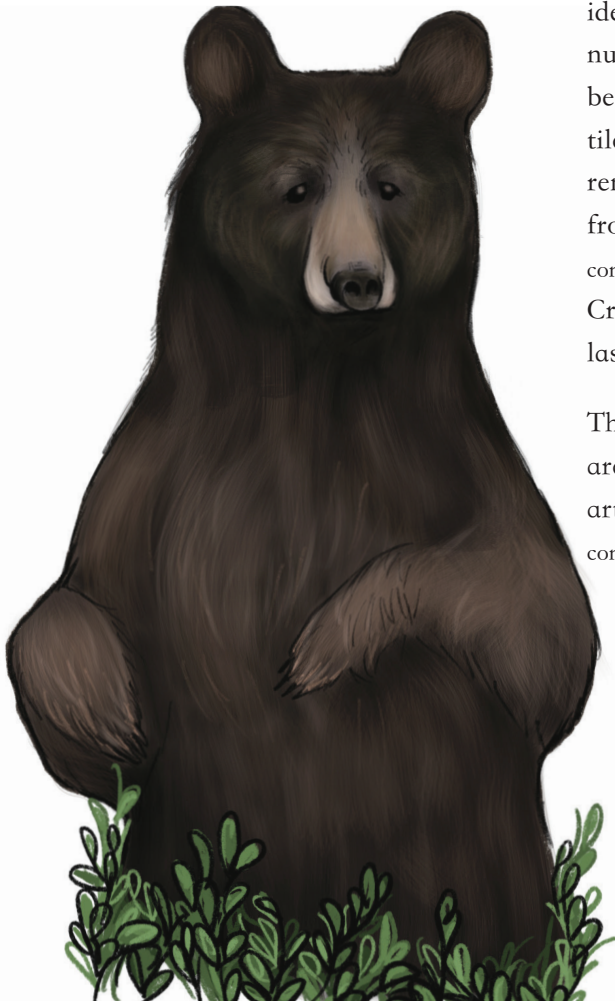
McIntyre Creek, or Chasàn Chùà as it is known in Southern Tutchone, holds great cultural significance to the Kwanlin Dün First Nations and the Ta'an Kwäch'an Council of whose traditional territory it lies within.⁴ McIntyre Creek served as a traditional site for harvest, a travel route, a burial site and more to the First Peoples.⁴ Near the confluence of McIntyre Creek and the Yukon River, the First Peoples had fishing camps including one called "The Point" or "High Banks" also known as Dàmäwtän in Southern Tutchone, the native tongue.⁴ As well as these permanent camps, there have been many sites along the creek that indicate consistent, seasonal use of this corridor for resources such as caribou, moose, bison, fish etc. The Creek was also a major travel corridor between Fish Lake and Lake Laberge, both of which also served as important hunting and fishing areas.⁴



The Southern Tutchone name of the Creek, Chasàn Chùà, translates to Copper Creek, which indicates that the First Peoples were aware of the presence of copper in the region.⁴ But, the majority of copper found in the copper belt is found in the form of copper ore,⁶ meaning the copper is trapped within a rock, in the form of several copper minerals, and is otherwise not easily accessible.⁷ The copper artifacts recovered from the surrounding area were made of native copper, or copper in its purest form, that originated near the Beaver Creek region (Ty Heffner, MA, oral communication, July 2021). This is indicative of the expansive trade routes between the First Peoples of the Yukon, as well as with neighbouring provinces and territories (Ty Heffner, MA, oral communication, July 2021).

Several archaeological sites have been identified along McIntyre Creek and numerous artifacts and features have been uncovered.⁴ These include projectile points, stone knives, microblades, remains of ancient campfires, and bones from hunted animals (Ty Heffner, MA, oral communication, July 2021). This indicates the Creek area was consistently used for the last 8,000 years.⁴

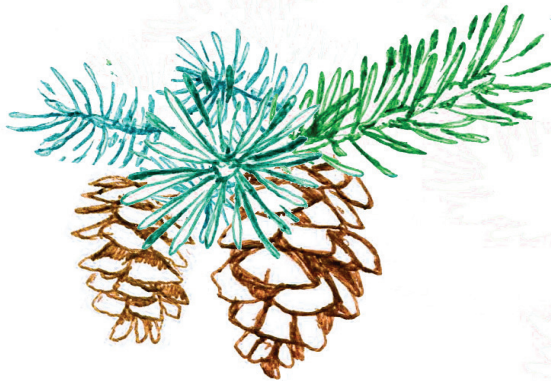
The portion of McIntyre Creek that you are standing on today has had several artifacts uncovered (Ty Heffner, MA, oral communication, July 2021)..



Plenty of Plants

South-facing slopes; cool, dark boreal forests; open lodgepole pine forests; uplands; wetlands etc.—McIntyre Creek is rich with diverse ecosystems filled with a large variety of plant life. There are many kinds of trees, flowers, berries, and other forms of plant life. Additionally, many trees and plants have cultural value and social significance to the Yukon First Nations.⁴ While on the trail, explore, and see what you can find!

Disclaimer: Consume plants at your own risk.

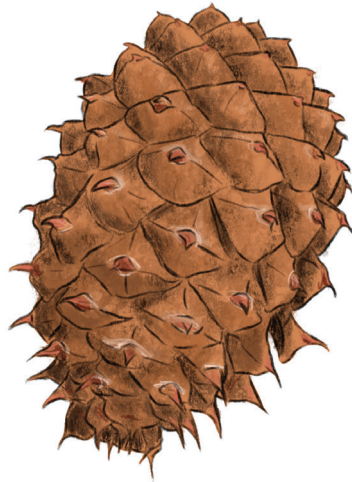


White Spruce

White spruce trees have shorter four-sided needles that grow all along the twigs and branches and are attached individually.⁸ This tree is also a conifer that have light brown and flexible cones.⁸

Lodgepole Pine

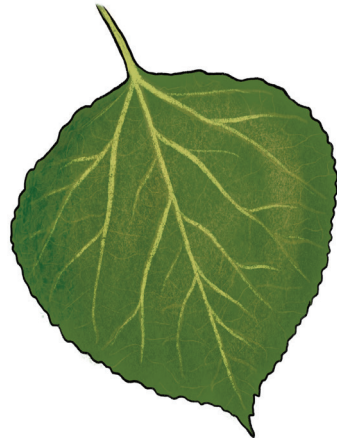
Lodgepole Pines are conifers, or cone-bearing trees, that have straight and narrow trunks with long needles that grow in pairs. The cones of this tree are sealed shut, with flat scales. As well, this is the only type of pine in the Yukon.⁸ You may notice that some of the pine trees have had their bark stripped. In the past, during times of little food, the First Nations would remove the bark and eat the underlying cambium.⁴ These trees, that served as a vital food source and are remnants of the First Peoples, are known as Culturally Modified Trees, or CMTs.



Trembling Aspen

These trees are deciduous, which means they lose their leaves come autumn. The leaves are green, and oval shaped with flat stems, and are attached to a light-coloured trunk with black nodes.⁸ The trunks are covered in a white powdery substance.⁸

Check out the leaves of the trembling aspen!



Arctic Lupine

These perennial flowers are usually seen in McIntyre Creek in the late spring and early summer. The flowers are purple and white while the leaves are made of five to six pointed leaflets.⁸ Lupines help to improve the soil by adding nitrogen—a valuable nutrient. As part of the pea family, these beautiful flowers can be poisonous to animals who consume them.⁸

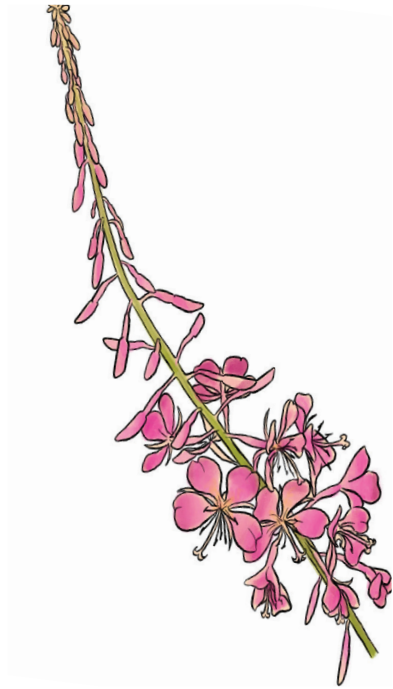
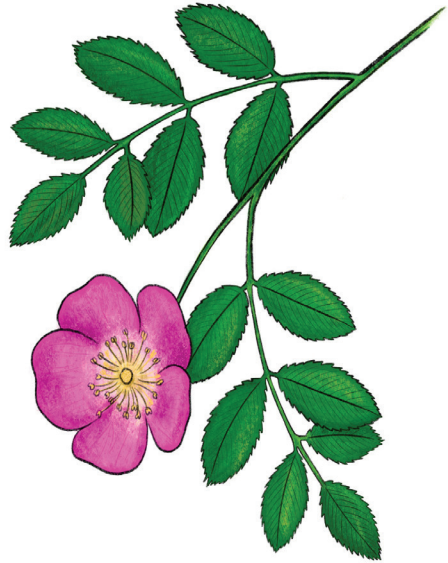
Labrador Tea

Common in McIntyre Creek, Labrador tea is a shrub with fuzzy, dark, glossy green leaves that develop a rust-coloured underside with age.⁸ This evergreen shrub grows in moist soils and has white flowers that bloom in June-July. Once the leaves develop the rust-coloured underside, they were harvested by the First Peoples for herbal tea.⁸



Wild Rose

This shrub usually blooms in mid-June and has thorny stems and pink flowers.⁸ It is part of the rose family with each flower having five petals.⁸ In mid to late summer, the flowers will seed into rosehips, bright red berries rich in Vitamin C. In early fall, and after the first frost, the berries are ready for harvest.⁸



Fireweed

Fireweed is a popular flower in the Yukon as it is the territorial flower.⁸ The flowers are a brilliant pink and come out in late June until September. The stems are covered in the narrow pointed leaves. These plants can grow as tall as 3 meters high.⁸ Fireweeds get their name as they are the first flower to bloom after a forest fire.⁸

Rare Find: Seep Monkey Flower

Seep Monkey Flowers prefer to grow in permanent freshwater springs and can be spotted in McIntyre Creek!⁴ They are listed as a vulnerable species on the Species at Risk Act (SARA).⁴



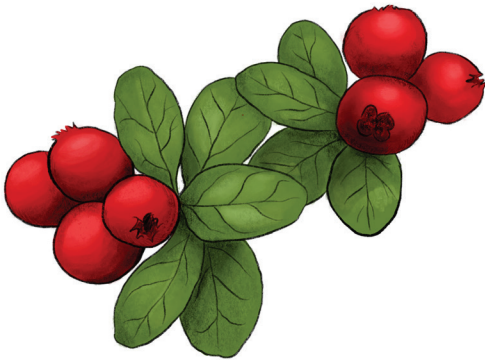
Kinnikinic or Stone berry:

Kinnikinic berries are red with a dry and mealy texture. The green oval shaped leaves of this shrub can be seen throughout the forest floor forming 'mats'.⁸ The flowers are light pink, edible, and are known as honeysuckles.⁸



Low-bush Cranberry:

Low-bush cranberries can be easily confused with kinnikinic's. However, low-bush cranberries have slightly darker leaves with a prominent line down the centre.⁸ The leaves are also rounder than that of the kinnikinic. As well, low-bush cranberries are moist and have a pink interior compared to the dry texture of the kinnikinic. Cranberries are also darker in colour and are usually gathered after the first frost.⁸



Soapberry

These bushes have green leaves and tiny yellow flowers, which turn into bright red berries in late summer; the berries are only found on the female bushes.⁸ Soapberries are an important food source for wildlife such as bears and birds, and to the First Nations who use them to make ice-cream! The ripening of the berries signals the opening of fish camps, and the arrival of salmon!⁸



Wonderful Wildlife

McIntyre Creek is home to a variety of wildlife but is also an important wildlife corridor. This means several animals use it to refuge on their journey to distant lands, or between habitats. The versatility of the Creek as well as its abundance of resources allows it to accommodate a great diversity of life. See the information below to learn about some of the different animals that use the Creek.



Red Squirrel

This small creature is an easy find with its big bushy tail and copper coat. Red squirrels are omnivores and feed on a variety of food including seeds, flowers, mushrooms, eggs, bugs, lichens, and berries. Squirrels are territorial and will remain near familiar trees.⁹ You may encounter squirrel middens, where they have stored their seeds, near spruce or pine woods.⁹ These are sensitive areas that help squirrels stay fed during the winter, but also aid in foresting the land if forgotten by the rodent.

Red Fox

Foxes are widely found throughout the Yukon and in the Whitehorse region. These are small canines with an orange, brown, silver, or black coat with black stockings and a white underside.¹⁰ They are generalists that eat small mammals, berries, eggs, grasses, etc.¹⁰



Beaver

Beavers are large, brown, semi-aquatic rodents that are well known for their flat tails, large teeth, and extraordinary homes.⁹ Often referred to as the engineers of the natural world, they gnaw down large trees with their impressive teeth to build lodges and dams.⁹ Beavers are important to the McIntyre Creek ecosystem as they help maintain the wetland by stabilizing water levels and creating habitats for a variety of other species.⁹



Muskrat

Musk rats prefer to live near small lakes and ponds where there are plenty of aquatic plants to feed upon.⁹ Although they look like beavers, they are smaller in size and have a long, hairless tails that move side-to-side in contrast to the beaver who swings its tail up and down.⁹ Musk rats also do not build dams, and instead live-in burrows along riverbanks.⁹



Moose

Moose rely on McIntyre Creek as a feeding ground and a corridor that links habitats. In the summer, most of a moose's diet is made up of aquatic plants found in riparian zones,¹¹ like McIntyre Creek. Moose are well-adapted to wetlands as seen by their stinky legs that are used for walking through the land, and their ability to dive to up to five metres and reach speeds of nearly nine kilometres an hour in search of underwater food sources!¹¹

Fish in the Creek

McIntyre Creek is an important habitat and food source for many freshwater fish, as well as some fish who spend part of their lives in saltwater, such as salmon. For the Yukon First Nations, McIntyre Creek was an important site for fish camps, both temporary and permanent. The following is a list of a few different fish species that rely on the Creek:

Rainbow Trout

Rainbow Trout are a non-native species in the Yukon that were introduced in the 1950s. These fish have a rounded snout and spots on the back sides and dorsa.¹²

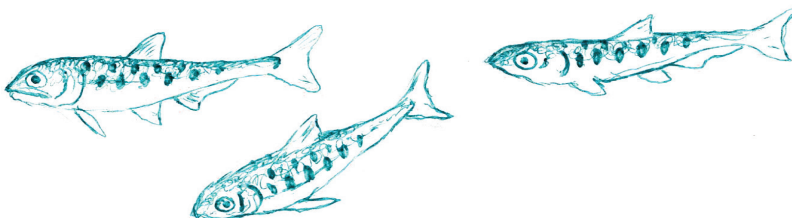
Rainbow trout are known for their beautiful silver-blue, green, and yellow colours along the body with a pink lateral line.¹²

Arctic Grayling

Arctic graylings are small to medium-sized freshwater fish with a large colourful dorsal fin. These fish feed on insects, fish eggs, and smaller fish.¹² The dorsal fin of a male arctic grayling is larger than the dorsal fin of the female.¹²

Chinook Salmon

McIntyre Creek is an important habitat for juvenile chinook salmon. Before their journey to the ocean where they will spend most of their adult lives, juveniles will feed on insects and plants in areas such as McIntyre Creek.¹² Juvenile chinooks are silver with parr marks, or stripe-like patterns, on their sides while the adults are significantly larger and red in colour.¹² Adult salmon come to spawn in the creek where they hatched. The handful of salmon that spend their early lives here, will eventually return to spawn, and later die here, which is crucial for nutrient cycling, especially nitrogen, in the terrestrial ecosystem.¹²



Birds of the Creek

McIntyre creek supports a wide variety of bird species ranging from old-forest dwellers, to waterfowl, to raptors and many more. The Creek is of great importance because it serves as a migratory route, a summer breeding habitat, or a year-round home to a multitude of feathered species.



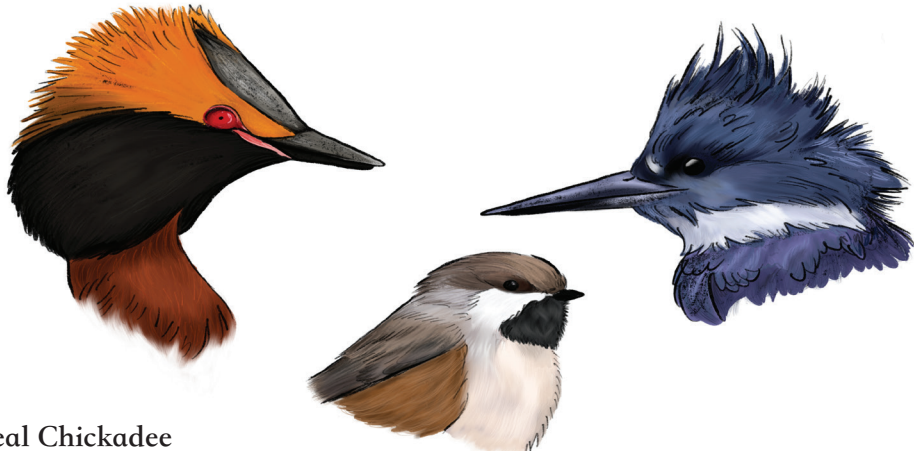
Bald Eagle

A staple of the Yukon, and one of the most common birds of prey you may encounter on the walk. Look for their white-feathered heads that are a sharp contrast to their dark brown bodies.¹³ They build their nests on tall conifers that usually protrude above the surrounding forest canopy.¹⁴ You will likely see them soaring above you, chasing other birds, scavenging, or majestically perched on a tree.

Yellow-rumped Warbler

These beautifully coloured birds are usually found in the forests adjacent to the wetland.¹⁸ Warblers have narrow and pointed beaks for catching insects in the air, or picking off food from grasses, trees, etc.¹⁸ You will likely see their yellow rumps as they flit through the boreal forest.¹⁸



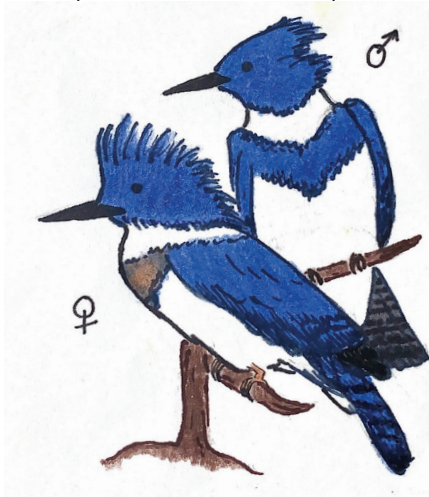


Boreal Chickadee

Another common sight in the surrounding forests of McIntyre Creek,¹⁵ these palm-sized, sharp-beaked birds usually eat insects, and seeds. They are commonly spotted in conifers, or willows and alders.¹⁵ Boreal Chickadees are browner than Black-capped Chickadees, and their chickadee call is more nasal sounding. (Malkolm Boothroyd, personal communication, July 2021)

Horned Grebe

These aquatic birds have a striking blue-red colour during their breeding period, that changes to a white-black colour during their non-mating phase.¹⁶ These elegant, diving birds build nests that float on water, in contrast to most water birds that generally nest along the shore.¹⁷ If you are lucky, you might see the Grebe's chicks hitching a ride on the adult's back.¹⁸ The horned Grebe is an endangered species, and is protected under the Species at Risk Act (SARA).⁴



Belted Kingfisher

These spiky-feathered birds are generally seen perched over a body of water on the hunt for small fish or fry.¹⁸ To capture their prey, the kingfisher will dive, cutting a line through the air and water, to seize its prey in its sharp, long beak.¹⁸

Illustrated above from left to right: Horned Grebe, Boreal Chickadee & Belted Kingfisher

Mallards

These ducks forage by tipping forward, or dabbling, into the water to collect seeds and vegetation near the surface.¹⁹ Their diet changes to insect larvae, earthworms, and other animal matter during breeding season in spring.¹⁹ If you encounter these iconic wetlands species, remember to keep your space, as they nest near dry land.¹⁹



Rare Find: Great Horned Owl

During years of high hare population, these large, nocturnal owls can be seen at the Creek! (Dave Mossop, Professor emeritus, oral communication, July 2021)

Community Science!

McIntyre Creek has a lot of life to offer, but for experts to better understand what inhabits the Creek, we need your help! Take pictures of the wildlife that you see in the area, and upload them to iNaturalist, or inform experts. This will help track down invasive species, and to better catalogue the living inhabitants of this unique habitat!

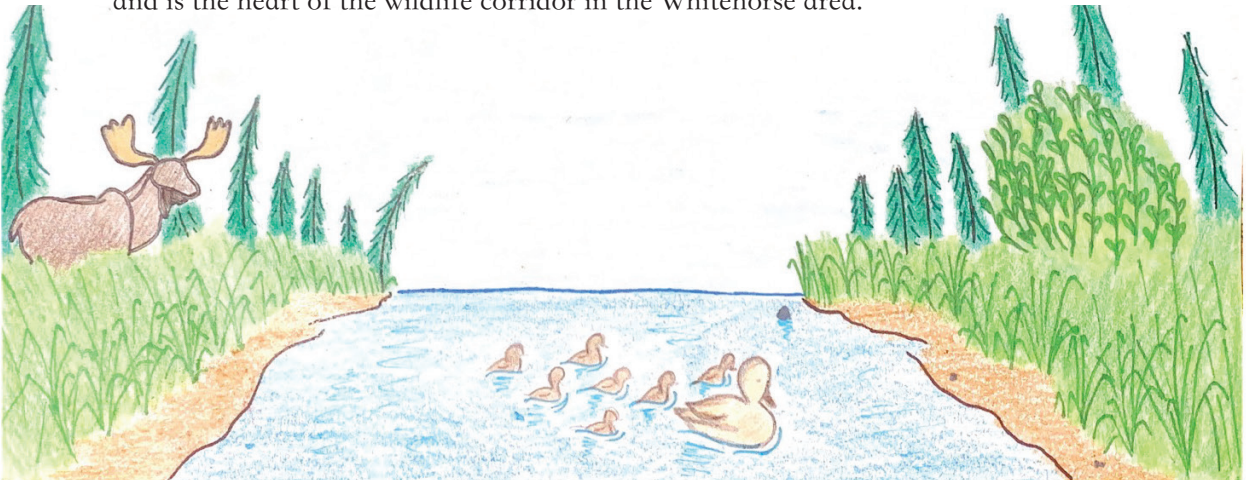


Wild Wetlands

Wetlands are areas that are either partially or completely submerged in water.²⁰ The water is usually from groundwater trickling through an aquifer, but it can also be from a multitude of different sources including seawater, rivers, floodwater, or lakes.²⁰ There are many different types of wetlands, all of which are varied by their inhabitants, water-source, and environment.²¹ Wetlands exist on every continent except Antarctica, and vary in size, ranging from potholes to massive expanses of land.²⁰

Wetlands are important because they support diverse and thriving ecosystems.²¹ They function as sanctuaries and nurseries for a large number of species.²¹ Humans also depend on wetlands for fire protection, flood control, storm protection, sequestration of carbon, purification of water, and for everyday items such as rice, a staple in nearly half of the world's diet.²² Moreover, as a carbon sink, they help minimize greenhouse gases by trapping it in the ground, and ultimately help in protecting us from a graver acceleration of climate change.²³ Canada is home to nearly 25% of the world's wetlands.²⁴ Of the world's wetlands, over 64% have been degraded, or lost since 1900.²⁴

At the Yukon University's Pumphouse Pond, you are looking at one of the many wetlands in the Yukon, and one of the most accessible. McIntyre Creek is spring fed, furthermore, it has many other smaller tributaries that flow into it resulting in this vast, wetland complex.⁴ This area has significant social, cultural, ecological value, and is the heart of the wildlife corridor in the Whitehorse area.⁴



Climate Change and Wetlands

Wetlands play a crucial role in climate change. Although wetlands only make up 5 – 8% of the Earth's surface, they sequester 20 – 30% of all soil carbon.²⁵ This is due to the lack of oxygen in the soil of a wetland, which allows for slower decomposition rates.²⁵ This leads to an accumulation of carbon in the soil that would otherwise be released as the organic matter broke down.²⁵ The destruction of wetlands leads to the emission of greenhouse gases, and ultimately, the acceleration of climate change.²⁵

Canada is warming up at nearly twice the rate of the rest of the world.²⁶ The Yukon has warmed just over 2°C in the past century. This is nearly three times the global average.²⁶ Over time, McIntyre Creek, because of climate change, will look drastically different to what you are seeing today.²⁷

As the climate changes, there will be more extreme weather events such as floods, storms, fires, droughts etc.²⁸ Wetlands act as natural buffers, and protective barriers that help shield us from these extreme events.²⁹ Therefore, it is critical to protect wetlands and ensure their longevity, because our persistence is, in part, dependent on that of wetlands.



How to Get Involved!

Want to learn more about conservation, and/or preserving McIntyre Creek? Here is a list of local NGOs to reach out to see how you can get involved in conservation in the Yukon, or specific to McIntyre Creek!

Canadian Parks and Wilderness Society - Yukon Chapter (CPAWS)

CPAWS is Canada's only nationwide environmental charity dedicated solely to the protection of our public land and water, and ensuring our parks are managed to protect the nature within them. The Yukon chapter provides a voice for the wilderness in the territory, helping to keep Canada's "true" north wild and free.

Tel: (867) 393-8080

Email: info@cpawsyukon.org



Yukon Conservation Society (YCS)

YCS is a grassroots environmental non-profit organization, established in 1968. Through a broad program of conservation education and input into public policy, they strive to ensure wise management of the Yukon's natural resources, wilderness protection and that development is informed by land use planning. YCS advocates, educates, and conducts research in the Yukon concerning environmental issues.

Tel: 867-668-5678

Email: info@yukonconservation.org



Friends of McIntyre Creek

The Friends of McIntyre Creek is an advocacy group dedicated to the protection of the proposed park for the benefit of all. The objectives of the Friends include education, awareness-raising activities, and wildlife and fish habitat enhancement and improvement projects. The Friends will provide the community with an opportunity to exchange ideas and to become involved in the management of McIntyre Creek Urban Natural Park.

Email: friendsofmcintyre@gmail.com



Ducks Unlimited

The National Boreal Program of Ducks Unlimited Canada has over 20 years of experience working with governments, Indigenous Peoples, and industry to develop comprehensive, science-based solutions for conserving boreal wetlands.

Learn how to get involved:

Tel: (867)-668-3824

Email: j_kenyon@ducks.ca



WildWise Yukon

WildWise Yukon (WWY), and its umbrella organization, The Centre for Human-Wildlife Conflict Solutions (CHWCS), is a community driven, non-profit society established in 2012. WildWise Yukon's purpose is to help Yukoners prevent and reduce the number of human-wildlife conflicts in the Yukon through research, education and public outreach programs.

Learn how to get involved:

Phone: (867)-335-5212

Email: info@wildwise.ca



Yukon Invasive Species Council (YISC)

The Yukon Invasive Species Council (YISC) is a registered non-profit society formed to prevent the introduction and manage the spread of invasive species in the Yukon.

Learn how to help and get involved:

Email: info@yukoninvasives.com



Learn Southern Tutchone Vocabulary!

Both Kwanlin Dün First Nations and the Ta'an Kwäch'an Council are Southern Tutchone speaking peoples. Below you will be able to learn Southern Tutchone words for some things mentioned in the booklet, or that you might encounter on the walk!

Plants and Wildlife

Arctic Grayling	T'àwa
Aspen	Tàgüa
Bald Eagle	Chùnday
Bear	Shár
Beaver	Tsà'
Chickadee	Ts'ággàgia
Chinook Salmon	Gyü
Coyote	Kàyudi
Duck	Chăt
Female Mallard	Chăt shāw ts'ān
Fireweed	Nàkhela
Fox	Ñtthe
Great Horned Owl	Mäddhı
High Bush Cranberries	Gùkhyāw
Horned Grebe	Łu chăt
Kingfisher	Tàch'äl
Kinnikinnick	.Zhür
Low bush cranberries	Ñtl'ät
Lupine	Tsäł njı
Male Mallard	Chăt shāw

Moose
Muskrat
Rainbow trout
Red Squirrel
Ripe berries
Rose hips
Soapberries
Spruce
Spruce cones
Unripe berries
Warbler
Wolf

Kanday
Dzäna
Mbeda
Dlùra dät'äl
Zhùr ghàjäñdзі
Khúr zhùr
Nìghru
Ts'ú
Ts'ú dadzēl
Zhùr äju ghàjäñdзі
Tsuā chāntthāwa
Ägay

Natural Features

Confluence
Copper
Creek
Glacier
Hill
Outdoors
River
Stream
Trail
Wet Ground
Woods

Dashe
Chätsàn
Tágàya
Tánzhí
Tl'äwtsän tl'ay
Chích'a
Tágà
Taghru
Tän gà
Nän kay kwàdlät
Kwäta

Works Cited

1. Natureconservancy.ca. 2021. Connectivity: Passages for species to migrate. [online] Available at: <<https://www.natureconservancy.ca/en/where-we-work/quebec/our-work/connectivity.html>> [Accessed 2 August 2021].
2. Trans Canada Trail. 2021. Trans Canada Trail. [online] Available at: <<https://tctrail.ca>> [Accessed 2 August 2021].
3. Government of Yukon Department of Environment, 2019. Into the Yukon wilderness: What you need to know to travel safely and gently through the Yukon wilderness.
4. CPAWS Yukon, 2020. The Story of McIntyre Creek (Chasàn Chùà) The History, Social Values, and Biodiversity of a Creek System in the Wilderness City. [online] Available at: <https://cpawsyukon.org/wp-content/uploads/2020/12/McIntyreCreekBiodiversity_2020_FINAL-appendices.pdf> [Accessed 2 August 2021].
5. Panchuk K, Earle S. Physical Geology - 2nd Edition. Physical Geology 2nd Edition. <https://opentextbc.ca/physical-geology2ed/>. Published September 23, 2019. Accessed July 21, 2021.
6. McLaughlin L. Copper Belt - Whitehorse. Yukon Nuggets. <https://yukonnuggets.com/stories/copper-belt-whitehorse>. Accessed July 21, 2021.
7. Find publications, data and maps managed by the Yukon Geological Survey. Yukon Geological Survey. <https://data.geology.gov.yk.ca/Occurrence/16744#InfoTab>. Accessed July 21, 2021.
8. Government of Yukon Wildlife Viewing Program, 2019. Common Yukon roadside flowers. Government of Yukon.
9. Government of Yukon Wildlife Viewing Program, 2019. Yukon rodents and lagomorphs.
10. Yukon.ca. 2021. Red Fox | Government of Yukon. [online] Available at: <<https://yukon.ca/en/red-fox>> [Accessed 2 August 2021].
11. CanMooseReallyDive?TetonScience-Schools. <https://www.tetonscience.org/can-moose-really-dive/>. Published June 18, 2020. Accessed July 21, 2021.
12. Government of Yukon Wildlife Viewing Program, 2019. Yukon freshwater fishes.
13. Bald Eagle Overview, All About Birds, Cornell Lab of Ornithology. Overview, All About Birds, Cornell Lab of Ornithology. https://www.allaboutbirds.org/guide/Bald_Eagle/overview. Accessed July 21, 2021.
14. Bald Eagle Life History, All About Birds, Cornell Lab of Ornithology. , All About Birds, Cornell Lab of Ornithology. https://www.allaboutbirds.org/guide/Bald_Eagle/lifehistory. Accessed July 21, 2021.
15. Boreal Chickadee Life History, All About Birds, Cornell Lab of Ornithology. , All About Birds, Cornell Lab of Ornithology. https://www.allaboutbirds.org/guide/Boreal_Chickadee/lifehistory. Accessed July 21, 2021.
16. Horned Grebe Overview, All About Birds, Cornell Lab of Ornithology. Overview, All About Birds, Cornell Lab of Ornithology. <https://www.allabout->

- birds.org/guide/Horned_Grebe/overview. Accessed July 21, 2021.
17. Horned Grebe Life History, All About Birds, Cornell Lab of Ornithology. , All About Birds, Cornell Lab of Ornithology. https://www.allaboutbirds.org/guide/Horned_Grebe/lifehistory. Accessed July 21, 2021.
 18. Yukon Government. Common Yukon Birds . 2019.
 19. Mallard Life History, All About Birds, Cornell Lab of Ornithology. All About Birds, Cornell Lab of Ornithology. <https://www.allaboutbirds.org/guide/Mallard/lifehistory>. Accessed July 21, 2021.
 20. National Geographic Society, ed. Wetland. National Geographic Society. <https://www.nationalgeographic.org/encyclopedia/wetland/>. Published October 9, 2012. Accessed July 21, 2021. Resource Library | Encyclopedic Entry
 21. WetlandPolicy,ed.CanadianWetlandClassificationSystem.WetlandPolicy. <http://www.wetlandpolicy.ca/canadian-wetland-classification-system>. Accessed July 21, 2021.
 22. Wetlands. WWF. <https://www.worldwildlife.org/habitats/wetlands>. Accessed July 21, 2021.
 23. Wetlands. Ducks Unlimited Canada. <https://www.ducks.ca/our-work/wetlands/>. Accessed July 21, 2021.
 24. KrausD.Wetlandsaredisappearingfast. NCC. <https://www.natureconservancy.ca/en/where-we-work/manitoba/stories/wetlands-are-disappearing.html>. Accessed July 21, 2021.
 25. Michael Walton Consulting, ed. McIntyre Creek Protected Area Report. <https://yukon.ca/sites/yukon.ca/files/emr/emr-mcintyre-creek-protected-area-report.pdf>. Published March 2021.
 26. Nahlik AM, Fennessy MS. Carbon storage in US wetlands. Nature Communications. 2016;7(1). doi:10.1038/ncomms13835
 27. Our Clean Future: A Yukon strategy for climate change, energy and a green economy. <https://yukon.ca/sites/yukon.ca/files/env/env-our-clean-future.pdf>.
 28. HowClimateChangeIsFuelingExtremeWeather.Earthjustice. <https://earthjustice.org/features/how-climate-change-is-fueling-extreme-weather>. Published June 1, 2021. Accessed July 21, 2021.
 29. Guyn DK. Wetlands are Canada’s Climate Change Defenders-DU Canada. Ducks Unlimited Canada. <https://www.ducks.ca/stories/wetlands/world-wetlands-day-letter/>. Published January 30, 2019. Accessed July 21, 2021.
 30. Bond J, Edmond D.S., Lewis L.L. Late Wisconsinan McConnell glaciation of the Whitehorse map area (105D), Yukon. Yukon Exploration and Geology 2003, Yukon Geological Survey. 2004; 2003:73-88.





**Happy
Trails!**

