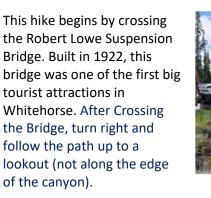
Yukon Conservation Society's Self-Guided Nature Hike (Kwanlin)



Staying Safe and Comfortable on the Trail

Welcome to Kwanlin (Miles Canyon)! Please be mindful of weather conditions and bear safety, and Leave No Trace while enjoying this area. You will follow the Upper Canyon City trail to Canyon City and return via the cross-country ski trail network. The total distance is 3.5 km, taking 1 to 2 hours.

Miles Canyon and Canyon City are on the traditional territory of the Kwanlin Dün First Nation and Ta'an Kwäch'än Council. In Southern Tutchone, Kwanlin means "running water through canyon" and Dün means "people". This is one of many indicators that this area is of great cultural significance to these people.



1. How Miles Canyon got its Name

The name Miles Canyon is a legacy of lieutenant Frederick Schwatka's exploration of the Yukon River Valley in 1883. As was customary of the time, Schwatka named this geological feature after the man who sent him: General Miles. This naming is somewhat controversial, as Miles was a rather unsavoury character with no connection to the area. The canyon had also already been named *Kwanlin* by the First Nations People of the area. Continue up the path to the top of the hill overlooking the canyon and take a moment to observe the geology of the area.

2. Geological History of Miles Canyon



8 million years ago, lava flowed from a vent 8 km south, cooling into the basalt rock you see before you today. Several million years passed between the formation of this basalt layer and the birth of the canyon. In this time a glacier formed, covering the southern Yukon.

20,000 years ago, this area would have been covered by a sheet of ice 1.5 - 2 km thick. As

temperatures warmed and ice began to melt, glacial lake Champagne was formed, eventually breaking free and carving Kwanlin. Staying right at the fork, carry on along the Upper Canyon City Trail until you come to a section of path that divides briefly into the forest then rejoins the Canyon City Trail. Stop here to look at some of the plants growing along the trail.

3. Edible Plants Along the Trail



Soapberry plants are found in abundance along the trail to Canyon City. Although edible for humans, many find the berries to be bitter and unpalatable. The most common way these berries are consumed is in soapberry ice cream, a desert invented by the First Nations people in the

Yukon. These berries can also be used as a natural soap product. Like soapberry, **kinnikinick** can be eaten by humans. The berries are very dry but full

of carbohydrates, making them an excellent food source in a starvation situation. The leaves of the plant can also be boiled to make an antimicrobial mouthwash. Continue following the trail up a steep hill to a grassy slope.

4. Beringia

Beringia refers to an area of land encompassing northern Yukon, Alaska, and a portion of Siberia during the last glaciation period. This area was very dry, lacking the precipitation required to form a



glacier. Ice sheets extended towards Beringia from the east and south, locking up massive amounts of water and causing the

sea level to drop by 120 m. This exposed a land bridge between Alaska and Siberia, allowing the migration of animals such as bison, caribou, woolly mammoth, and humans into North America. Animals originating in North America, for example the horse and camel, exited into Siberia. Southward facing slopes of the Yukon like the one you are standing on contain many of the flowering plants and grasses that once populated Beringia. Turn back along the path leading into the forest to the right, stopping when you get a good view of the Yukon river.

5. How the Yukon River Gets its Colour

The Yukon River is glacially fed. Suspended in its waters are tiny silt particles called glacial flour. These particles cause sunlight to refract at a different wavelength than clear water would. This is what gives the Yukon River its stunning blue-green colour.



6. Before it was Canyon City

Welcome to Canyon City. For many thousands of years, this area was used by First Nations people as a gathering place and fish camp during the summer months. Information and stories were shared and food stores were prepared for the long cold winter

ahead. Archaeologists have found artifacts up to 200 m from the river bank, signifying the large scale of this gathering place. When gold was found in Dawson City in 1896, all of this changed. As information spread south, thousands of prospectors made their way over the Chilkoot Pass and down the Yukon River.

7. The Birth of Canyon City

Before the hydroelectric dam was built in 1958, the water in the Yukon River was 10 meters lower and rapids raged through Miles Canyon. Many boats were lost, and prospectors were perishing in the rough waters. As a measure of safety, Sam Steele of the North West Mounted Police (NWMP) decreed that only certified river guides were permitted to take boats through the canyon. This resulted in a build-up of people in this area. Canyon City was a transient town, with the only permanent structures being a roadhouse and saloon, NWMP post, machine shop, store, stables, and a few cabins. Check out the interpretive sign for a layout of Canyon City. Then, follow the path to the left. You will find a large can dump in the forest.

8. Left Behind in the Rush for Gold

Prospectors were required to bring 1 ton of supplies with them on their journey for gold. This was a lot of weight, so garbage was quickly left

behind. We know these cans are from Gold Rush times because the method with which they were sealed (with lead) was discontinued after 1906. Return the way you came, then follow the path left to the replica tram cart.



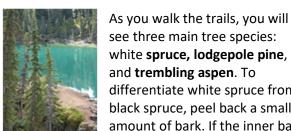
9. Norman McCulley's Tramway

Norman McCulley was a 28-year-old business man from Victoria who arrived in the Yukon in the fall of 1897. He anticipated the flood of prospectors in the rush for gold, and seeing that there was no easy way to shuttle gear through Miles Canyon, established a tram way. The tram way was built by 18 men in 21 days, and was completed in time for the massive rush of prospectors in 1898. McCulley charged 3 cents a pound and \$25 a boat. For context, a meal and a bunk at that time costed about 25 cents. After walking around Canyon City, return to the

bridge by any of the marked trails.



10. Trees along the Trail



see three main tree species: white spruce, lodgepole pine, and trembling aspen. To differentiate white spruce from black spruce, peel back a small amount of bark. If the inner bark is white, it is a white spruce. In

early spring, the new growth (referred to as spruce tips) can be eaten as a trail snack that is very high in vitamin C. The Lodgepole Pine has both female

and male cones on the same plant. The tree keeps these cones



separate, with the male being the smaller, bunched

cone, and the female the larger, woodier cone. You will also see stands of trembling aspen lining the



trail as you return to canyon. Although these trees appear to be separate, they are likely only one or two different plants, with individual trees growing in an interconnected root network. These trees can photosynthesize with their bark as well as their leaves. This

makes it very sensitive, so the tree produces a very fine white powder which has an SPF of 15.

11. White River Ash

Look closely at the path and you may see patches of white powder. This is volcanic ash, originating from the eruption of Mount Churchill 1,200 years ago. This eruption sent a thick blanket of ash across the Yukon, Northwest Territories, and Alaska. The

area became uninhabitable for 20 to 60 years, which is thought to have prompted a migration of people towards Arizona. The linguistic similarities between the languages of First Nations Groups in Canada and those in Arizona are so great that they can be understood by one another. This is indicative of rapid migration, leaving very little time for language to adapt.

Thank you for joining the Yukon Conservation Society on this self-guided hike! YCS is a grassroots environmental organization which has been around since 1968. We work to protect the Yukon's land, water and wildlife for future generations. Feel free to stop by our office or visit us online at http://yukonconservation.ca/.

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Contact outreach@yukonconservation.ca or call 867-668-5678 x1.



The Yukon Conservation Society is not responsible for the safety of hikers using this brochure. Please treat it as an informal quide and take responsibility for your own safety, including dressing for the weather, wearing supportive footwear, and being bear aware. The Visitor Information Centre has guidance on bear safety. Please respect the area. Do not touch artifacts. Pack out all garbage.