

Walk Softly

Newsletter of the
Yukon Conservation Society
Fall 2021



Winning photo from "Created at
the Canyon 2021" Photo Contest
Photo by Taya Fraser

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Cover Photo: Annie Maheux at 'Created at the Canyon', by Taya Fraser

Spiffy togs!

We are excited to announce a YCS collaboration with local entrepreneur Anthony Gallo of Hook and Antler Apparel Co.

Anthony Gallo has created a line of clothing which is 'Made in Canada', and he will be designing a collection for YCS.

Hook & Antler has been up and running for almost two years and has seen a lot of local success. His focus is on, "bringing social responsibility into profit driven business, and to raise awareness around conservation, particularly in the North."

In addition to designing a line of clothing for YCS, he will be contributing 10% of his profits to YCS.



Upcoming Environmental Dates to Note (2021) Fall

September 16 – International Day for the Preservation of the Ozone Layer <https://www.un.org/en/observances/ozone-day>

September 21 – Zero Emissions Day <http://zeroemissionsday.org/>

September 21 – International Day of Peace <https://www.un.org/en/observances/international-day-peace>

September 26 – World Rivers Day <https://worldriversday.com/>

October 1 – International Coffee Day <http://www.ico.org/>

October 4 – World Habitat Day <https://unhabitat.org/events/world-habitat-day-2021>

October 9 – World Migratory Bird Day (Fall) <https://www.worldmigratorybirdday.org/>

October 23 – International Snow Leopard Day <https://snowleopardconservancy.org/2019/02/08/the-history-of-snow-leopard-day/>

November 30 - Giving Tuesday <https://givingtuesday.ca/>

Photo Contest

YCS held a photo contest during the 2-day outdoor event of Created at the Canyon with two categories: Artist(s) in Action, and Nature in the Canyon. There were five prizes from sponsored donations offered for the winner and runner-up in each category, and an overall prize which was displayed at the Yukon Arts Centre, along with the works created by the participants of 'Created at the Canyon'.

Overall Prize: Photo of Annie Maheux by Taya Fraser (You saw it on our cover!)



Prize Sponsors:

We are very grateful to the above sponsors who provided prizes for the contest. Thank you!



Artist(s) in Action - Winner: Jerry Lum



Runner-up: Josh Lauer



Nature in the Canyon - Winner: Cat Taylor



Runner-up: Josh Lauer

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Editorial

Coral Voss

We are busy harvesting our gardens and preparing for the end of Summer. Staff and volunteers have been enjoying some of the bounty from the gardens and we have enjoyed seeing our neighbours also appreciating the fruits of our labours. It has been a very busy but successful summer with a full Trail Guide season ranging from Wild Edibles to Bear Awareness to Geology of the Canyon. The success of these educational and informative hikes is directly attributable to the direction of Deborah Donnelly and the leadership of Lorijane Émond-Quémeré, the Trail Guide Coordinator. A special thanks to the Trail Guides, and their friendliness and ingenuity, Vincent Boisclair, Anna Tölgyesi and Annie Li. The 10th Anniversary of Created at the Canyon was an amazing two days of beauty, art and laughter with ten incredibly talented artists. The two days were filled with inspired artwork, dance and music. This was followed up with an exhibition of the artist's work at the Yukon Art Centre including our photo contest winner.

YCS is also busy collaborating with the Yukon South Beringia Priority Place Initiative (YSB PPI) project partners to publicize the breadth of research happening in this unique region. The YSB PPI is a multi-year, multi-partner project that includes the southern half of the Beringia region. The YSB PPI involves scientific teams studying the diverse ecosystems in the South Beringia area to understand how they function, and how they are changing in these times of ever-increasing fluctuations of the climate. Supporting this project, Sebastian Jones and Toshibaa Govindaraj participated in the recent Tr'ondëk Hwëch'in BioBlitz focused on the area near downtown Dawson, Klondike Valley wetlands and the alpine environment near the Top of the World Highway. A BioBlitz brings together experts and aspiring citizen scientists for an intensive day of counting and identifying as many species as possible in one to three days in one location. Sebastian and Toshibaa were indispensable in photographing, recording and documenting the research being conducted during the BioBlitz.

We recently released our 5-year Strategic Plan after a great deal of work by the Board and Staff. More collaborations and the release of our new website are all wonderful things that we are working on and looking forward to in the coming weeks and months. The past few months have continued to be busy here at YCS with YESAB, Water Board and electric submissions as well as with the release of the draft Dawson Region Land Use Plan (DRLUP).

Welcome to the cool evenings of the approaching autumn as we enjoy these last warm days of summer!

Coral

A Victory Recommendation!

For those familiar with the arcane processes involved with environmental assessments within the Yukon, there has been an encouraging recommendation from the Yukon Environmental and Socio-economic Assessment Board (YESAB).

YESAB has just recommended AGAINST the Nidd Quartz Exploration Project proceeding. The Nidd Project is located approximately 199 km northeast of Ross River off the North Canol Road near the Macmillan Pass by the Yukon/Northwest Territories border. One of the issues that YESAB could not find adequate mitigations for is the opening up of the area that would have been caused by the access road and trails needed by the proponent to get equipment in. These roads and trails would have permitted access to a lot of people not affiliated with the mining project, for example, causing increased hunting pressures.

The text within the YESAB recommendation report states “the Designated Office determined that the Project is likely to have significant adverse effects to traditional land use and wildlife in relation to access that cannot be mitigated, and recommends the proposed project not proceed.”

To the Yukon Conservation Society’s immense satisfaction and gratification, YESAB is rejecting this mining exploration project. Whether the Yukon Government will initiate a Cumulative Effects Study and initiate Regional Land Use Planning in this area (as YCS has requested for this project), prior to considering any more mining projects, remains to be seen but in the short term at least this particular mining project will be on hold.



That is, of course, assuming the Decision Bodies for this particular project accept the YESAB recommendation. It is possible for the Decision Bodies, in this case Fisheries and Oceans Canada, Transport Canada, and the Yukon Government Energy Mines and Resources Minerals Resources Branch to reject or vary the recommendations.

It is worth noting that in 2012, YESAB recommended against a very similar road project in this area as well, stating: “the Designated Office determined that the proposed project will result in significant adverse effects to all of the valued components, for which those to Wildlife and Wildlife Habitat, Aquatic Resources and Outfitting could not be mitigated.” (YESAB 2012-0060, Nidd Road Upgrade/Camp Re-location - Oro Property Quartz Exploration Program). To their shame the Decision Bodies back then rejected YESAB’s recommendation and allowed the project to proceed. Here is to hoping history does not repeat itself.

For those interested in reading more about the current YESAB recommendation against this project check out YESAB project 2020-0168, all the documentation being online at <https://yesabregistry.ca/projects/dcaf7672-54e6-45b0-8113-be908e6639bd>.

The same webpage will also post the Decision Document, which will decide the eventual fate of this project. YCS will be checking this page often.

Lewis Rifkind, Mining Analyst, Yukon Conservation Society

We are on our own.

We cannot count on Canada to help rescue 'at risk' and 'endangered' species.

Canada has a Species at Risk Act (SARA) that is supposed to prevent species from going extinct, and to reverse declining trends in species assessed as vulnerable or endangered.

But recent decisions by Environment and Climate Change Canada, and by the Department of Fisheries and Oceans demonstrate beyond reasonable doubt that Canada will not take the difficult steps required to halt the decline of endangered fish and wildlife in Canada.

Steelhead in the Fraser are spiralling into extinction mostly because of logging destroying riparian habitat: <https://bcwf.bc.ca/bcwf-investigation-reveals-flawed-process-for-steelhead/>

Southern Mountain Caribou herds are winking out because of logging, mining, oil and gas and winter recreation in critical habitat: <https://ablawg.ca/2021/03/25/federal-government-declines-emergency-order-for-southern-mountain-caribou/>

Neither the federal nor provincial governments will step in to protect critical habitat, as they are legally required to do, almost always because they do not have the will, or the courage required to upset favoured groups that will be inconvenienced by action.

Not even National Parks are managed for wildlife, as demonstrated in Banff and Jasper where the ephemeral desires of tourists are consistently prioritized over the natural environment, and local caribou are vanishing.

Here in the Yukon, we have seen the refusal of the Territorial government to properly assess the impact of cumulative disturbance on the Finlayson Caribou Herd (FCH) range, and its eagerness to approve the building of a large open pit mine in the herd's key habitat. We don't know yet whether Canada will vote for the caribou or the mine, but bitter experience does not give much cause for optimism.

In the Yukon we are in a race against time. Disturbances are accumulating in key wildlife habitat faster than they are restored, and we are starting to see the results on caribou populations.

Miners regularly complain that their mines are not approved fast enough, but they are approved in lightning fashion compared to how we protect the habitat of the animals that have sustained people here since time immemorial.

Given the track record of provincial SARAs, even if the Yukon does eventually design and pass its own Species at Risk Act, it would be imprudent to rely solely upon governments to obey their own laws. Action occurs only when they are pushed and shamed into it by First Nations and ordinary Yukon residents.

We have a real chance, as First Nation Final Agreements are slowly implemented, that regional land use plans will identify and protect the important ranges of caribou herds.

One of the mechanisms available to protect caribou and their habitat is through the creation of Indigenous Protected and Conserved Areas or IPCAs. Indeed, these have proven to be by far the most, if not the only effective method of protecting caribou ranges:

Salteaux and West Moberly First Nations saving the Klinse-Za Caribou: <https://thetyee.ca/News/2020/09/25/Caribou-Recovery-Indigenous-Leadership/>

Spotted Owl barely hanging on in the last shreds of old growth forest. <https://thenarwhal.ca/logging-deferred-bc-valleys-spotted-owls/>

So, what does this mean for the Yukon, where accumulating disturbances mean that caribou herds are declining in many places?

We do know that the Kaska have been trying to establish an IPCA to protect the Finlayson Herd. The Tr'ondëk Hwëch'in have signalled that they want to protect the 40 Mile Caribou Herd range. So, perhaps the degradation of key caribou habitat will be arrested.

But thus far in Canada, when it comes down to choosing between international investors and threatened wildlife, governments invariably come down on the side of the big bucks. The dollar buck, that is, not the cervid bucks.

At this time, the draft Dawson Regional Land Use Plan is seeking input. It states that caribou protection is a principle, but it has not yet designated much range, and no migration corridors for the 40 Mile Caribou Herd.

We can help the caribou and support the Tr'ondëk Hwëch'in by asking the Planning Commission to protect critical caribou summer range and migration routes in Land Management Unit 23, by managing access from the Top of the World Highway and by recommending an Off Road Vehicle (ORV) Management Area in the high country west of the Yukon River (The Yukon ORV regulations only address the Alpine above 1400m, but in the Dawson region, the treeline can be as low as 700m).

The Planning Commission is accepting comments on the draft Plan until November 1st and is holding several workshops and meetings to engage the public.

Go to <https://dawson.planyukon.ca> to learn more!

10 Years of Created at the Canyon



July 2nd and 3rd, 2021, marked the 10th anniversary of our live art event – Created at the Canyon. To commemorate this important milestone, we invited 10 local artists to participate in the event, drawing inspiration on nature and their interactions with the public to create their own unique pieces. This year's artists included Horst Berlow, Amna Bhatti, Tom Connor, Marian Geary, Brent Liddle, Claire Lockett, Annie Maheux, Janet Patterson, Sadie Segriff and Jane Fergusson Storey. Final pieces were displayed in a public art exhibit at Yukon Arts Centre.

Special additions to this year's event included an opening ceremony with words from Chief Doris Bill of Kwanlin Dün First Nation, MP Larry Bagnell, and Mayor Dan Curtis. WildWise Yukon also attended the event with a live demo and information table teaching visitors about bear safety and human-wildlife coexistence. A special thanks to all of the local businesses who donated prizes for the photo contest.

Created at the Canyon artists and assistants. Photo by Vincent Boisclair.



The 'White Gold' Rush

As the world begins to shift towards electric vehicles (EVs) in response to climate change pressures, so begins a new-age gold rush for lithium—a 'white gold' rush. Lithium-ion batteries are championed for mass-use in EVs, as well as most other electronics, due to their performance and durability (1). In nature, however, lithium is not found in a readily available form. It is found as constituents of salts, minerals, and rocks, and thus, needs to be mined and processed (2). Although lithium-ion batteries contribute to environmentally positive initiatives, the extraction of lithium carries a large environmental burden.

Currently, there are two major methods to extract lithium from the earth, both having cons of their own. Hard rock mining, such as what is prominent in Australia, is the extraction of lithium from pegmatites, an igneous rock, which is a result of mineral-rich magma cooling slowly in the crust under high temperature and pressure (3; 4). These conditions, and the magmatic composition, allows for the growth of large crystals amidst the rock (3; 4). Spodumene, a mineral found in pegmatites, is sought for its high concentration of lithium (4). The mineral is extracted by building large open-pit mines which entails the displacement of acres of vegetation, and disturbing habitats near and far (1; 5). This process alone—excluding manufacturing, and transportation—releases nearly 15 tonnes of carbon dioxide, a greenhouse gas (GHG), and requires 170,000 litres of water per tonne of lithium extracted, enough to manufacture batteries for about a 100 EVs (6; 5). Furthermore, mine effluent leaks and discharges impact wildlife and people who rely on the soils and waters downstream from lithium mines, up to 240 kms downstream (2).

Lithium can also be found in the form of brine deposits in regions called salars, which are unique salt deserts that average 3,750 metres above sea level and encompass terrain unlike any other (6). Examples of such areas include the Atacama Desert in Chile. Just below the surface are these brines, which are lithium-rich accumulations of saline groundwater that take millions of years to form (7; 4). The brine is pumped to the surface and evaporated in a series of pools to achieve a higher purity of lithium (4; 7). From extraction alone, per tonne of lithium, 469,000 litres of water is consumed, and 5 tonnes of GHGs are emitted (5). This is more GHGs than is emitted by an average passenger vehicle in a year (6). The final product is then shipped to a chemical plant, often in a different country, to be further processed and manufactured into batteries, and thus emitting more GHGs (4).

These brines are a result of the accumulation of the little precipitation to welcome the salars, some of the driest areas in the world, that receive less precipitation than the Sahara Desert (7). As such, these brines are not considered renewable; they are finite (7). This process uses more groundwater than is replenished by rainfall, which threatens the indigenous peoples of the area who have managed the water for centuries, and rely on it for their livelihood (7). As well, salars are an ancient and intricate ecosystem that house species highly specialized and unique for the hyper-arid and hypersaline conditions found here (7). In Chile's Salar de Atacama, 65% of the regions' water has been used for mining purposes (2).

Fortunately, there are more sustainable alternatives to these environmentally taxing methods coming to light. One such alternative is extracting the element from geothermal brine, a concentrated saline water from deep within the Earth (5). This method has a much smaller impact on the water and land, releases far fewer GHGs, and offers potential for geothermal energy which can then be fed into the grid (5). Another method is to simply recycle lithium from neglected electronics that lie waste in land-fills (5). This also prevents the breakdown of toxic and harmful metals that would otherwise go on to pollute the soil, and groundwater (2).

The production of a lithium ion batteries is not without environmental costs; the mining of lithium, its transport, and the construction of batteries all emit copious amounts of GHGs (6). As the Centre for Interdisciplinary Environmental Justice puts it, "current efforts to use EVs to transition to a "zero-emission" world reduce climate change to an emissions issue, without stopping the extraction and oppression [issues] (6)."

Mining and extraction for any resource comes at a cost, and usually at the cost of the environment, and/or the local indigenous peoples. In 5 years, demand for lithium is projected to increase by 100%, and as a crucial part of the transition to EVs (4). This demand is not going to decrease, or subside in the near future (4). The 'white gold' rush is a result of climate change pressures, but the extraction of lithium is inherently a large polluter. Low-impact methods exist, and should be championed as a step in producing the sustainable alternative to fossil fuel engines in a more sustainable way.

Toshibaa Govindaraj

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Yukon Invasive Species Council launches film on Clean Drain Dry

Did you know that 2 in 5 boats entering the Yukon come from jurisdictions where invasive zebra mussels have been introduced and established? These aquatic invaders have serious negative impacts on biodiversity in natural areas, and they also have huge economic impacts due to the damage they cause to infrastructure and the enormous costs of zebra mussel removal and management. Though zebra mussels (or quagga mussels – another damaging aquatic invasive) have not yet been detected in the territories, the risk of introducing these invasive species to Yukon waters is real!

The Yukon Invasive Species Council has spent this summer doing outreach in the Haines Junction area around aquatic invasive species. We have created and installed signage at key access points for the Alsek watershed, and developed educational materials. We also collaborated with the Yukon Fish and Wildlife Management Board to create a film about the importance of Clean Drain Dry! So, if you are getting out on Yukon waterways this summer and fall, please remember to:

- **CLEAN** plants, animals, and mud from your boat and gear
- **DRAIN** your boat and gear onto land
- **DRY** all parts of your boat and gear before relaunching in a new body of water

The Clean Drain Dry film will be published in the Yukon Invasive Species Council video library at <https://www.yukoninvasives.com/index.php/en/resources/video-library>. Please share this movie around with your friends, family, and colleagues. The best way to manage invasive species is to prevent their establishment, which we can all help do by practicing Clean Drain Dry!

The Role of Caribou in Climate Change

Caribou are an iconic species that are deeply rooted in the fabric of the North. Although their evolutionary history likely began in South America, they are now the best adapted deer species for the cold, desolate winters of the north (1). Many bones, ranging in age, showing signs of human use have been uncovered around the Yukon indicating that humans have relied on caribou for as long as humans have inhabited the north (1).

Currently, humans are the largest threat to caribou. As we expand our habitat and continue our unruly practices such as mining, oil and gas extraction, logging, etc., we rob caribou of their right to live in the lands they have occupied for over 2 million years (1; 2). Moreover, as the climate changes, caribou, a relic of the Pleistocene, are being subjected to more stress than ever before (3).

Our fight against climate change is unequivocally intertwined with conservation of species and land, and more specifically, the conservation of caribou and their habitat.

Barren-Ground Caribou

Barren-ground caribou inhabit massive expanses of land in impressive numbers and undergo the longest documented terrestrial mammal migration in the world (3). They are found in the arctic, subarctic, and northern forested regions (4). As well, they play a key ecological and cultural role making them a keystone species (4).

There is increasing evidence to suggest that the grazing habits of these caribou create a feedback loop that allows permafrost, permanently frozen ground that contains an immense amount of greenhouse gases, to stay cool and remain trapped (3). Barren-ground caribou graze on shrubs allowing grasses, sedges, and forbs to dominate the landscape (3; 5). Taller shrubs and other broad-leaved plants that cause earlier snowmelt and summer permafrost thawing by increasing the albedo are moving to higher latitudes due to climate change and enabling the tundra to be more conductive rather than reflective (3; 5). Grasses, sedges, and forbs, on the other hand, are thin, light-coloured, and are better able to reflect the sun's rays enabling the ground and permafrost to remain cool (5; 3). The decrease in albedo, or the increased reflection caused by a landscape dominated by grasses, sedges, and forbs, is "so dramatic that, at high grazing densities, reindeer reduced local heating by an amount equivalent to what's expected from the doubling of Earth's carbon dioxide levels. (5)"

When barren-ground caribou and their habitat are protected, you invest in the preservation of frozen permafrost, habitat for caribou to continue grazing, and greenhouse gases to remain in the ground. The protection of barren-ground caribou is an important step forward in the fight against climate change.

Caribou photo by Charles Cherrier





Woodland Caribou

Woodland caribou, an ecotype that exclusively inhabits the boreal forest, are sensitive to disturbances, and thrive in large, intact forests (2). They are an accredited species, known as both an indicator species, as they are indicative of the overall health of the boreal forest ecosystem, and an umbrella species since the conservation of woodland caribou ultimately leads to the conservation of many other species (2; 6; 7).

The boreal forests that the caribou calls home have soils that contain little nutrients and bacteria which allows for slow decomposition and the eventual accumulation of an extensive, and deep soil layer rich in carbon (2). An acre of boreal forest can store twice the amount of carbon as the same area of rainforest (2). When undisturbed, boreal forests are considered carbon sinks because they absorb more carbon than they emit (7). But as anthropogenic disturbances such as mining, logging, or development, and fires surge through the forests, the ability of the soil to develop and store that carbon-rich layer is hindered (7; 2) As well, the considerable amount of carbon that was once stored will be released (2). This leads to the acceleration of climate change, and the disappearance of an area that was once crucial in the fight against it (2).

Conserving large, connected, unmarked forests that woodland caribou occupy, in turn, helps us mitigate climate change by sequestering and storing carbon. Barren-ground caribou, on the other hand, help mitigate the changing climate by acting as “sunscreen to an overheating planet (5),” by allowing the arctic to stay cool, and ultimately, the Earth.

Combating climate change is a nuanced issue with many solutions, one of which is protecting caribou and their habitat. Defending and protecting caribou inherently strengthens our fight against climate change, and is an important leap forward that we, as a society, take in defending and preserving our future for generations to come.

Caribou are a staple of the north and have been integral to humans since we moved to this new world (1) Now, the iconic species are threatened, and need our help (4). The loss of caribou will be the loss of our identity, and the loss of our fight against climate change.

Toshibaa Govindaraj
Helmut Grunberg Conservation Intern

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The Diversity of a Trail Guide

Working as a Trail Guide is not your most typical 9-5 job and strangely enough, working as one is not entirely what you'd expect. My name is Annie Li and I'm currently a high school student completing my last year of high school at Porter Creek Secondary. Last summer (2020) during the height of the COVID-19 pandemic, I emailed several organizations from human rights commissions to clinics and youth organizations with the sole purpose of extinguishing my boredom. The only reply I got was from the Yukon Conservation Society, a non-profit organization I had never even heard of until googling the words "Yukon Conservation". They called me to an interview and simply asked me if I wanted to become a Volunteer Trail Guide.

Starting then, I would come in for one of the guided hikes a week and in the rare situation that hikers would actually show, I would talk about one plant (it was bedstraw) and just enjoy myself. While I definitely learned a lot about Miles Canyon/Kwanlin, I didn't really know quite exactly how my summer would work as an official, paid Trail Guide when hired for the summer of 2021.

I feel like people don't value versatility as much as they used to; when we graduate high school, we choose one subject to master. It isn't difficult to find students who regretted choosing a course they weren't truly interested in or were still interested in searching. My best friend, who is also attending her last year of high school, constantly says to me, "I don't get people who actually know what they want to do with their lives". I cannot agree more. While the two of us both know what programs we want to apply to, there is also a nagging in our mind that we could choose wrong. For me, there are too many interesting subjects to choose from, in her mind, too few. To have one passion that you are so sure you want to pursue is an enormous privilege, but also, why should it be? Why can't you have multiple little interests that you can utilize simultaneously?

Don't worry, this article isn't a philosophical analysis of our society and why we should hire those who consider themselves "jacks of all trades". Instead, I'm just expressing my surprise at how many of my passions have managed to come together during my time as a Trail Guide.

As a student in the Yukon, I've definitely met a lot of different people through the many Wood Street programs I've attended, many of which were people who were very passionate about spending time outdoors. It was hard to believe that my peers could competitively cross-country ski, do backflips, pursue a photography career, fight fires, and do all sorts of things that seemed superhuman. I consider myself someone who really tries their best to care for the environment, so being hired as a Trail Guide made me wonder if perhaps I should be mountain biking every day or spending even more time outdoors. After all, while I loved the impact I felt like I was making on every hike, it wasn't my only passion.

Strangely enough, I managed to practice many other subjects that were not what you'd typically associate with being a Trail Guide. I explicitly remember listing down on my resume "skilled in Adobe software such as Premiere Pro, Illustrator, and Photoshop". From my past experience as a volunteer, I was well aware that the Trail Guides had to make YouTube videos, but I didn't expect that I would be using these skills to such an extent.



It had started with a few Instagram stories, a brief picture and an advertisement on the page @ *yukonconservation*. My coworker Anna and I often created these stories out of boredom, taking pictures of the canyon that we deemed aesthetically pleasing. We started to advertise specialty hikes; we stumbled across a bear the day before the Bear Awareness Hike and while it did give us a good scare, we had a photo of a juvenile black bear playing beneath the bridge. Talk about perfect timing.

Our personal favourite was the advertisement for the Fish Ladder Hike, where we really had to turn on our creative gears because apparently seeing a bear is more common than seeing a single fish in the Canyon. While the two of us were experts on navigating social media as Gen Z, we were not God, therefore didn't have the ability to just "create" fish.

Not exactly.

I whipped out my notepad, drew rough sketches of a Chilkoot Salmon and a Lake Trout, then placed it onto the water. Anna had been taking the video but the paper stayed afloat a little too well and the "Lake Trout" floated downstream, never to be seen again.

Then I started to film Instagram reels, the first one being a recipe for a dandelion mug cake. I simply collected my trusty iPhone camera, walked ten minutes out to a field of dandelions in mid-June, and picked as many dandelions as I could. I went home, filled a tote bag with almond milk, flour, and baking powder, then began filming the reel, balancing my phone over a tower of bowls and cutting boards. The cake was actually quite good, being incredibly moist and fluffy though not with a distinct dandelion flavour. However, the reel ended up accumulating over 2000 views on Instagram, which was more than many of the TikToks I had even made on my personal account.

During the 'Created at the Canyon' art event, I jumped around different artists, capturing brief clips of the progress and ended up spending an entire day dedicated to editing them. Now there are 10 reels of the artists sitting happily on the Instagram page and I'm proud to say that I created at the canyon too!

Of course with the progression from story to reel, I ended up filming a full-on YouTube video. It was quite a simple concept: painting some of the flowers from the Canyon. Unfortunately, the process was much harder. The first technical difficulty happened to be that Vincent, my other colleague, had an amazing camera but not a lot of storage. I filmed my painting but halfway through, it stopped without me realizing it. I then had to completely refilm the video after he deleted several of the videos he had to free up space.

When it came to the actual editing, it was even more difficult. While the small laptop that the Trail Guides use was quite powerful for its size, it wasn't enough. I had spent an entire day at the office sitting at the computer, patiently waiting for it to load before I finally figured out how to efficiently edit the project without having it crash every 5 minutes. I also had not expected that when editing this video I would utilize a few skills I picked up when attending a theatre program. When creating the voiceover, I messed up so many times that I drank an entire litre of water and ended up reciting tongue twisters in desperate hope to assist my accentuation.

The painting of the flower is on display in my room, the process is displayed on the YouTube channel.

When I created the watercolour painting, what was more important was the process, not the painting itself, but that wasn't always the case. For Created at the Canyon, I made a map of the Canyon for the artist's location but also digitally created stickers for YCS! I was quite proud of these stickers that we sold for donation at our information booth at the Fireweed market. The day after my contract ended, I noticed that one of the stickers on the speaker's laptop had the bumblebee I created! Now, I am just waiting to get my hands on the McIntyre Creek booklet, for which I drew the cover. My expectations are very high.

As a Trail Guide, my primary job is to speak and educate people about diversity. However, it's usually expected that this diversity applies to the history and ecosystem rather than the job itself. I was pleasantly surprised to have obtained further experience in so many areas, even to be writing this article. For anyone who is considering being a Trail Guide for the Yukon Conservation Society, I'm sure you will have an amazing experience, and completely different from mine!

Annie Li



How the Dawson Region Land Use Plan can be a Beacon for Change. With a Couple of Changes...

How much land should be set aside for conservation? Nature needs Half, Canada promises 30% by 2030, but the Dawson Plan commits to only 3.8%.

The Dawson region has long been emblematic of dramatic landscapes, ecologically rich yet sensitive environments, and cultural significance to First Nations peoples. In many ways, it's one of the few remaining areas of the world where these unique environmental features remain relatively intact. On June 15th, a draft land use plan that could eventually determine the fate of its future was published by the Dawson Regional Land Use Planning Commission - covering 40,000 square kilometres of the western central Yukon, bordering Tombstone Territorial Park and encompassing much of Yukon Beringia.

Entitled 'On the Land We Walk Together'/'Nän kāk ndä tr'ädäl', the plan has been in the making since 2005, following a request from the Tr'ondëk Hwëch'in Government to establish a land use planning commission for the region. Although work on the plan began in 2013, it was put on pause while legal actions around the Peel Watershed Land Use Plan were underway. Efforts resumed in 2019 under a newly formed commission leading the draft plan development and public engagement phases. Today, the draft plan is available for public input until November 1st, 2021.

Since the early stages of the plan's development, Yukon Conservation Society has played an important role, contributing recommendations and perspectives highlighting the environmental needs of the region.

The Dawson Regional Planning Commission states that their philosophy strives to balance community values, sustainable economy, and ecological and cultural preservation, and the draft plan is a great start. However, a few key implementations would ensure this goal moves from lip service to actionable sustainability.

Increase Percentage of Fully Protected Areas

In September 2020, Canada pledged to protect 30% of their land and sea by 2030, while research under initiatives like Nature Needs Half show that nature needs 50% protection to adequately support Earth's life systems. Both the North Yukon and Peel Watershed plans protected at least half of the land in their regions. However, the DRLUP fully protects only 3.8% of the region, with 60.7% open to industrialization. Further to this, these suggestions allow for existing yet currently undeveloped claims to be open to growth in the future.

In his advice to YCS and to the Commission, Wildlife Analyst Sebastian Jones recommended that, consistent with the latest thinking, globally, on conservation planning and consistent with the precedents set by the North Yukon and Peel plans, that at least 50% of the planning region be set aside for conservation - both in the Dawson and other future regional land use plans. Currently, the draft plan fully protects only 3.8% of the region while recommending varying levels of protection for an additional 35.5%.

Reconsider Special Management Area (SMA) Classifications

The above-mentioned fully protected areas fall under Special Management Area (SMA) 1 classification, defined within the plan as "an area managed for maximum conservation and no new industrial land use or surface access is allowed". A second designation, SMA 2, is defined as "an area managed for high conservation of ecological and cultural values and the intent is for long-term maintenance of wilderness character". However, Jones says that the level of disturbance threshold allotted to some of the SMA 2 areas is equivalent to the Integrated Stewardship Area (ISA) 1 or ISA 2 designation, where varying levels of development, industrial or otherwise, can occur. This is part of the reason most of the SMA 2 areas fail to meet national and international standards for designation as protected areas.

The International Union for Conservation of Nature's definition of a protected area is as "a clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values". Therefore, although SMA 2 designated areas account for 35.5% of the region in the plan, they do not contribute to Canada's protected area goals of 30% by 2030. Additionally, Landscape Management Units (LMU) under SMA 2 designation have no legal protection or management plans.

Prioritize Protecting Caribou

Although the draft plan lists caribou among the key priorities, the location of SMA 1 and 2 regions along with the allocated threshold disturbances for SMA 2 areas are not adequate to protect healthy caribou habitat. For example, under the draft plan, habitat fragmentation occurs with the Matson Highlands, an SMA 1 area surrounded by ISAs. The Matson Uplands is a conservation area that the Fortymile caribou herd depends on.

As well, further research needs to be done to determine the differentiation between the threshold disturbance levels of SMA 2 areas, some of which encompass caribou ranges, with the threshold disturbance levels for caribou.

“Caribou are exquisitely sensitive to disturbance, and caribou herds have declined or died out across most of Canada due to the cumulative effects of human disturbance,” said Jones. “It is likely that the amount of disturbance allowed in some Dawson region LMUs exceeds levels consistent with stable caribou populations.”

Tera Swanson



There’s still time to provide your feedback! Visit engagedawson.planyukon.ca until November 1st to read over the draft Dawson Region Land Use Plan and submit your thoughts and recommendations.



Placer mining along the Indian River near Sulphur Creek, Yukon Territory - Photo by Malkolm Boothroyd

Here what YCS wants in the Plan:

- A plan that puts Conservation as its top priority and retains the wilderness characteristic of most of the Planning Region
- At least 50% of the planning region set aside for conservation
- A Special Management Area for the Yukon River Corridor
- A moratorium on staking while the Plan is under development
- A threshold approach to development impacts, including roads.
- This means setting a maximum area per square km that can be developed in any one Land Management Unit
- Any new road proposals must include a fully funded decommissioning plan



Trail Guiding Program – Summer 2021

From June 8th to August 14th, the trail guide team led two free daily guided hikes at Kwanlin/Miles Canyon (Tuesday to Saturday). The trail guide team was composed of Anna Tölgyesi, Annie Li, Vincent Boisclair (Trail Guides) and Lorijane Émond-Quéméré (Trail Guide Coordinator). We started the season with two weeks of training in which we had the chance to meet and learn from local experts. They shared with us their passion for nature and we were educated on diverse topics such as interpretation, plants, birds, insects, wildlife, geology, First Nations, the ice-age, and human history in the Yukon.

We had a total of 478 hikers this summer which is an amazing number considering the travel, health and safety restrictions. We were happy to welcome tourists following the completion of a 14-day quarantine, as well as locals. A guided hike is such a great way to discover the territory even after many years of living here in the Yukon. We also had great themed hikes with local specialists which included hikes centred on Bear Awareness, Yukon River Fish Species, History, Geology, and Wild Edibles, as well as Kid-Friendly hikes and hikes at Chasán Chúa/McIntyre Creek for the Backyard Biodiversity event.

Lorijane Émond-Quéméré, Trail Guide Coordinator

“I had so many enjoyable and enlightening experiences over the summer as the Trail Guide Coordinator for YCS. I feel so lucky to have had the opportunity to meet local experts and take part in museum tours to further develop my knowledge of the natural and human history of the Kwanlin area during our training.



Yukon River Fish Species Specialty Hike

I am also pleased to have had the chance to develop French Hikes for YCS this summer. We were able to collaborate with the Yukon’s vibrant French community to organize group hikes in French and we offered French Hikes every Thursday of the summer. I think that this is such a great program and I like that this enables our programs to reach a broader audience.

I enjoyed seeing how the trail guides shared their knowledge gained during our 2-week training; Vincent’s reading on First Nations culture, Anna’s discoveries on the northern plants, Annie’s wonderful art of the Canyon! I also enjoyed the Thursdays we spent at the Fireweed Market for a chance of meeting future hikers.

Another challenging but fulfilling part of the season was the organization of the 10th Annual Created at the Canyon event. It was fun to be part of an event like this from start to finish. I liked to witness the artistic process and amazing work of the 10 talented artists. This was a summer of discoveries, learning, exploration & collaboration. Thanks for a wonderful summer YCS!”

Anna Tölgyesi, Trail Guide

“My summer as a Trail Guide for YCS has been nothing short of unforgettable. Whether I was hiking to Canyon City, meeting interesting and knowledgeable people or simply working on my watch tan, I loved every minute of it.

My favorite moments of the summer would have to include my discovery of how blue bells leaves taste (almost identical to cucumbers!) and running into familiar faces who enjoyed our hikes so much, they came back for another! I fairly enjoyed looking at all the different reactions hikers had after tasting soapberries. These ranged from a slight discomfort to being completely disgusted followed by a large gulp of water.

Throughout our summer at the Canyon we’ve ran into a couple of past Trail Guides who have all told us the same thing. First, that they also had camping chairs to sit in, but more importantly that they are happy to see YCS is still offering these free guided hikes. I too hope to see in the future new Trail Guides by the bridge, sharing their knowledge on this wonderful place I call home. I’m glad to have spent my summer outside with Vincent, Annie and Lorijane who helped me learn to take a closer look at nature around me and appreciate all its mysteries.

Thank you again for a great trail guiding season!

Annie Li, Trail Guide

“Working as a Trail Guide for YCS has truly been a rewarding experience. Every day is shown to be unpredictable (proved by our terrible betting skills and trail conditions) and every hiker has something different to offer. You never know what you’re going to get, whether that is a group who asks so many questions that you’re searching your mind for every little piece of knowledge you can give or if the group spends so much time laughing and taking selfies that you only hike half as far as planned.

I’ve learned so much from not only the groups we’ve talked to but the trail guides, special guests, and staff at YCS, who not only had such a diverse range of passions, but a different way of expressing them as well. Yet even on the days where I wasn’t leading hikes, so many opportunities have been opened to me in regards to creating media and art for YCS I feel such a strong sense of community to nature and nature lovers alike. This has certainly been one amazing summer!”



During the bear awareness training: Madison Hurst – WildWise Yukon, Anna – Trail Guide, Lorijane – Trail Guide Coordinator, Vincent – Trail Guide, Toshibaa – Conservation Intern

Vincent Boisclair, Trail Guide

“This summer has been an incredible human experience that was built around an astonishing natural landscape. When I’ll look back at this job, I am certain I’ll remember the questions bounded by the smiles of the curious learners from the Cultural Centre. I’ll see the Indigenous lady of the so-called “British-Colombia” that came with the determination to learn local medicines - and that we sadly couldn’t help her much... And I’ll smell the fresh air from Kwanlin.

I’ll nourish those beautiful souvenirs that all started sitting on my camping chair while sharing gentle conversations with Annie or Anna, as we were waiting under the YCS banner for local people or tourists.

And when I’ll be away from Yukon, be reassured that it’s now tattooed on my brain that the lodgepole pine tree is the Phoenix of the North; that soapberry is the McDonald’s of bears, and that the elegant sunburst lichen is the result of birds’ poop.”



Wild Edibles Specialty Hike



Species at Risk: The Buzz about Bumblebees

Many people can quickly connect honeybees with a scrumptious spoon of honey. However, beyond contribution to honey production, bees play a vital role in ecosystems as key pollinators! Pollination is important in supporting biodiversity as it is needed for plants to successfully produce seeds, which is an important food source for wildlife and people. And there are many more bees than the honeybee.

The Yukon is home to at least 92 species of native bees. The honeybee is an exotic, domesticated species here and may compete with native bees in some situations. Of the 92 native species, 29 are bumblebees. Both bumblebees and honeybees belong to the Apidae family of bees; however, they differ from each other in a number of ways. Bumblebees have large, round fuzzy bodies whereas honeybees are much more slender and less hairy. Bumblebees come in a variety of patterns of yellow, black, red and white, whereas honeybees tend to be pale orange and grey.

Both bees can be important pollinators, but bumblebees are much more efficient. Their large hairy legs allow them to carry more pollen and they can tolerate colder temperatures, allowing them to be more active in colder weather (which is important in the Yukon!). Furthermore, bumblebees can buzz pollinate. Buzz pollination is the ability to vigorously shake the anthers (pollen holding structures) and hang below the flower. This is important as many of the important berry plants in the Yukon (e.g. blueberries, low bush cranberries) require pollen to be shaken from their anthers to become accessible for reproduction.

In North America, some bumblebee species have seen dramatic declines caused by pathogens, pesticides, and damage to or loss of habitat. Furthermore, threats due to climate change can also be linked to the decline of bumblebee populations.

The Committee on the Status of Endangered Wildlife in Canada (COSEWIC) evaluates the status of Canadian wildlife species while using the following categories to determine species at risk.

Extinct:

A species that no longer exists.

Extirpated:

A species that no longer exists in the wild in Canada but exists elsewhere.

Endangered:

A species facing imminent extirpation or extinction.

Threatened:

A species likely to become endangered if limiting factors are not reversed.

Special Concern:

A species with characteristics that make it particularly sensitive to human activities or natural events.

Yukon bees at risk include: the Gypsy Cuckoo Bumble Bee (*Bombus bohemicus*) (Endangered), the Suckley's Cuckoo Bumble Bee (Threatened), Yellow-Banded Bumble Bee (*Bombus terricola*) (Special Concern) and the McKay's Western Bumble Bee (*Bombus occidentalis mckayi*) (Special Concern).



During my summer internship at CPAWS I found myself intrigued with species at risk, with a particular interest in bumblebees. With previous knowledge on the importance of bees and declines of certain species, I wondered what kind of bees exist in the McIntyre Creek area and whether any of these species would be considered at risk. Species at risk is an important matter as the loss of species can result in further ecological threats. With the help of local species at risk biologist Syd Cannings, I was able to set up blue vane traps (BVTs) for several weeks to monitor bumblebee diversity in the McIntyre Creek area.

During the first week, I was able to record McKay's Bumblebee. This is a northern, Beringian subspecies of the Western Bumblebee (it may actually be a separate species) that ranges across northern BC, western NWT, the Yukon, and Alaska. As the relatives of these species face decline in southern regions, the northern subspecies may be subject to the same fate. Potential threats that this species faces are fungal pathogens, pesticides, and habitat loss.

The case of the Western Bumblebee is especially interesting--in southern British Columbia, Alberta, and the western United States (where it was once one of the most abundant bumble bees) this species has dramatically declined (>30%) in recent years and is essentially gone in some areas. While southern species have been primarily affected by these declines and have received more survey effort, there is concern that the future of this species in the north is uncertain.

Wild bumblebee populations are essential for the well-being of ecosystems. Without these key pollinators, the rate of reproduction of plants and berries and wildflowers may decline. This can cause further adverse effects on humans and animals who depend on these plants as an important source of food.

While the Western Bumblebee is only one species it demonstrates the importance of the ecological role that a species plays on a larger scale. Species at risk are an important matter. As different species continue to face threats caused by climate change, habitat loss, disease, and pollution the loss of these species can have further consequences on ecosystems.

Preet Dhillon

Parnell Scholarship Winner

Congratulations to Iliana Stehelin - the 2021 Parnell Scholarship Winner. She is currently undertaking studies in a Resource Management Officer Technology program at Vancouver Island University.

On being notified of her earning the scholarship, Iliana wanted to, "thank the Yukon Conservation Society for helping me achieve my dream of pursuing conservation as a career."

You're welcome Iliana, and best of luck in your studies!

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Heat Pumps in the Yukon

Introduction to Heat Pumps

You may have heard some of the hub-bub about heat pumps lately, either through the Yukon's *Our Clean Future* plan, the Energy Branch's Good Energy program, or elsewhere. But, what is a heat pump? How do they work, and can they be used here in the Yukon?

Well, heat pumps are used to move heat from one place to another. Heat naturally moves from hot areas to cold, but a heat pump can move it in the other direction by using electricity. This is advantageous for producing heat, such as with electric baseboards or an oil furnace, because you are only using electricity to “transport” the heat when needed – not producing it outright.

Most of us already have a heat pump in our homes; refrigerators and freezers use heat pumps to keep their contents cool, moving heat from their cool interior out into the warm space around them. They can also be used to heat or cool a home. When used for space heating, the system will move heat from outside a home to inside for heating, or from inside to outside for cooling.

From a consumption point of view, this is advantageous because you are only using electricity to “transport” heat rather than producing heat with resistance heating (like baseboards) or fossil fuels. As long as the heat pump can make its refrigerant cooler than the outside air, heat can be captured from outside and brought into the home, allowing heat pumps to be used in surprisingly cold temperatures.

Squeezing some heat out of cold outside air!



Types of Heat Pumps

There are two main types of heat pumps used to heat or cool homes. Most heat pumps are air-source heat pumps, commonly referred to as ASHP, meaning the heat extracted from outside is taken from the air around the home. There are also ground-source heat pumps, which use the ground instead. While ground-source heat pumps can operate in much colder temperatures than air-source heat pumps, they are typically much more complicated and expensive to install. As such, air-source heat pumps have been more popular in the Yukon and are the focus of this article. There are two main types of air-source heat pumps, namely central ducted heat pumps, which look and work like a furnace, and mini-split heat pumps, which include a number of smaller units throughout the home.

The Yukon Conservation Society and Yukon Government Energy Branch have been supporting the adoption of cold-climate air-source heat pumps in the Yukon – a type of heat pump that is specifically designed to operate in cold regions like ours. Cold-climate air-source heat pumps were developed through years of research to be able to operate at rather low temperatures. Most are able to extract heat from outside even when temperatures dip to around -25°C . They can also be used to provide cooling in the summer, and in some cases can be used to help your home's water heater.

Cold-Climate Air-Source Heat Pumps

The efficacy of an Air-Source Heat Pump is measured by its Coefficient of Performance (or COP). The higher the coefficient, the better the system. It is defined as the ratio of the amount of heat being moved by the heat pump to the amount of electricity it uses to move that heat. A cold-climate air-source heat pump (or ccASHP) can achieve a COP of 3 to 4 even at -15°C . That means for every unit of electricity consumed by the system, three or more times as much heat is being moved into the home. Electric baseboards, for comparison, provide exactly as much heat as the amount of electricity they consume – similar to a COP of 1. Fossil fuel systems, like oil furnaces, provide less heat to the home than the amount of energy contained in the fuel – similar to a COP of less than 1.

The COP for cold-climate air-source heat pumps is typically greater than 1 down to around 25°C . Below that, they usually use built-in backup resistance heating, like having built-in baseboards, to heat the home. Alternatively, a secondary heat source such as a furnace, electric thermal storage system, or wood stove could be used in those colder temperatures. When a heat pump is installed along with an electric thermal storage system, the heat pump provides low-cost heat most of the winter, with the electric thermal storage providing clean, reliable heat when it gets too cold out for the heat pump to operate.

Heat Pump Rebates & Resources

There are a variety of rebates and resources available for homeowners considering installing a heat pump in their home. The first step is usually an Energy Assessment, which can be arranged at a discounted rate through the Yukon Government's Energy Branch. The Energy Assessment will also identify other cost-effective ways that homeowners can make their homes more efficient and less expensive to heat. Your Energy Assessment will open the door to the wide variety of energy rebates available. This includes rebates for heat pumps, but also for solar panels, insulation, windows, and more and both territorial rebates, through the Energy Branch's Good Energy program, and federal rebates, through the Canada Greener Homes Grant program. The Yukon Conservation Society's Energy Analyst, Scott Pressnail, is available to help you navigate those rebate programs. He can be reached at energy@yukonconservation.org or 867-668-5678 x5. The Yukon Government Energy Branch can be reached at energy@yukon.ca or 867-393-7063.

Clément Richard & Eric Labrecque

Vegetable Renewal

Gardening, for me, is all about the enjoyment of the outdoors coupled with growing my own food. Sometimes those vegetables surprise me in their hardiness and ability to take whatever has been thrown at them and thrive.

I have had potatoes growing in my compost; a mixture of plants starting from a wilted salad I threw out; spinach, lettuce & broccoli raab all naturalizing themselves in my Yukon garden and now I have baby potatoes growing on last year's harvest while still in the cold storage. I had heard that you could grow potatoes just by covering them with straw but I thought there needed to be at least some heat or sun involved in the process. Apparently, that isn't the case. I was going through our potato storage bins recently and I knew the potatoes had been sending out shoots, it's what they do every year. I was sorting through them seeing if there were any potatoes that were still usable. I didn't need any to plant, there was no more room in my garden so I had waited to clear things out. But with the end of the season creeping up on us, it was a job that still needed to be done. When I opened the bin, the potatoes had their shoots as expected but they also had tiny potatoes growing out of them as well. It was almost as if the old potato was putting all of its energy into the new potato so the plant would continue into another season. The sprouts had only gone about 6 inches and had already started to die off but the little potatoes looked fresh and healthy. I decided to harvest the larger of the baby potatoes and use them as new potatoes. I also didn't end up cleaning out the potato storage bin, who knows, they may continue producing if left on their own. After all, new potatoes are new potatoes.

Joan Norberg

Living dead potatoes!: New potatoes growing on stored potatoes

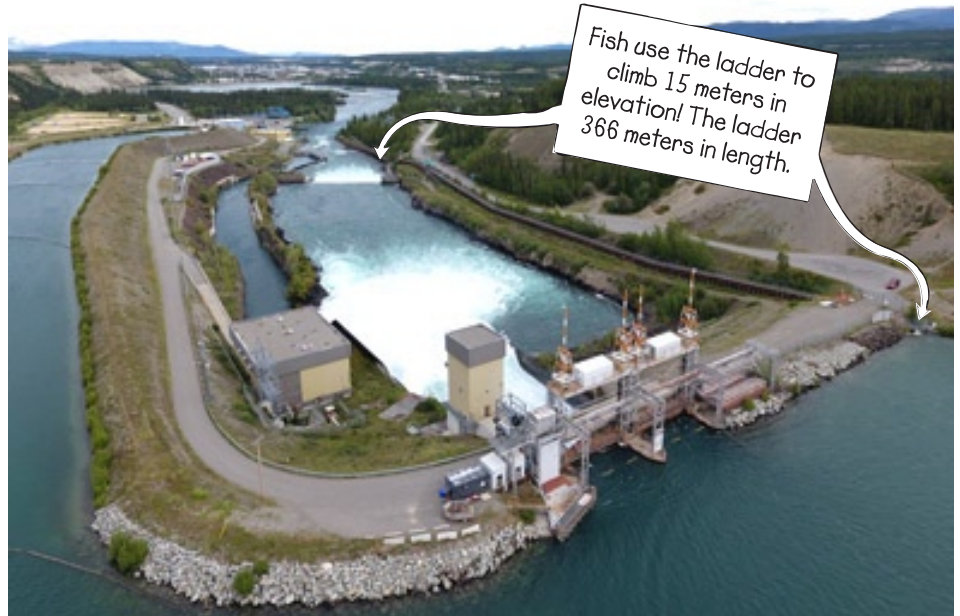


Whitehorse Rapids Fishway - more than a bypass

The Whitehorse Rapids Fishway, known colloquially as the fish ladder, is more than a way for migrating salmon to pass the hydro dam. The fish ladder also allows for the passage of local fish, counts all fish species, assists in research, and aims to instruct the public about fish, conservation, and the environment.

Located in Riverdale at the end of Nisutlin drive, the fish ladder sits beside the hydro dam connecting the upstream and downstream sections of the Yukon River. The Whitehorse Rapids Fishway, which is the world's longest fish ladder, measures 366 meters in length and covers 15 meters elevation. Both the fish ladder and hydro facilities have been owned by Yukon Energy Corporation since their construction in 1957. Since then, there have been many additions to the ladder including viewing windows to look into the ladder, a boardwalk to walk over the ladder, and an interpretive center to provide tours and information.

Although the main purpose of the fish ladder is to allow migrating Chinook salmon to continue past Whitehorse to their destinations in Wolf creek, Mitchie creek, and M'Clintock River, the ladder does so much more. Many of Whitehorse's local fish, including lake trout, arctic grayling, and whitefish, use the ladder to migrate past the dam. These locals can often be seen in the ladder swimming by, resting in its upper sections, or eating anything that happens to float by in the viewing windows. Seeing, counting, and assessing our local fish each year gives Yukon residents and biologists a good idea of population health and abundance for our beloved fish.



The Whitehorse Rapids Fishway is the world's longest fish ladder.

Beyond visually recording fish, the fish ladder has assisted in several scientific studies relating to Yukon fish species. From 2017 to 2020 the fish ladder was one of the sites used to conduct a study performed by Carleton University. Acoustic receivers were placed along the fish ladder to count and record salmon passage. Salmon were caught and tagged with acoustic tags that would communicate with the receivers to determine how long fish took to migrate and how many fish used the fish ladder. The fish ladder also assists with governmental research and monitoring by providing tissue samples, counts, and measurements of migrating salmon to governmental organizations. From these findings and projects, the ladder can better itself and other fishways around the world and better assist in fish migrations.

Each summer the Yukon Fish and Game Association employs returning university students to work at the fish ladder. These students are tasked with assisting research projects, managing returning salmon, and providing tours and information to those who visit the ladder. Each summer the fish ladder receives thousands of visitors, both local and foreign who wish to learn more about Yukon's wildlife and wilderness. These visitors are greeted by a friendly, knowledgeable staff who spent their days talking about fish and educating their visitors. Through public education, ladder staff hopes to deepen the understanding and appreciation of the fish and wildlife that call the Yukon home. With a greater understanding, we are then able to better preserve and care for our wildlife diversity and understand the importance of conservation.

Ross McBee

YES! I want to help protect Yukon's environment by supporting the Yukon Conservation Society!



Send or drop off form to:

302 Hawkins St. Whitehorse, YT Y1A 1X6
 info@yukonconservation.org

Name(s): _____

Address: _____

Postal code: _____

Email: _____


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Send me a digital copy of *Walk Softly* instead of a paper one

I want to volunteer, please send me information.

I would like to receive a twice-monthly email with YCS news and events.

I would like a paper tax receipt.
 emailed tax receipt.



Yukon Conservation Society

YCS has been working since 1968 to protect the Yukon's land, water and wildlife – thanks to the support of members, donors and volunteers like you!

Charitable Org. # 119307890RR0001

** PLEASE PRINT CLEARLY.*

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\$60, \$200, \$500, Surprise us! \$ _____

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MEMBERSHIP: (*valid for one year*) Chose 1:

Student (\$10), Individual (\$25) or Family 2

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Thank You to

The staff at YCS would like to thank everyone who helped out or attended our 10th Anniversary of 'Created at the Canyon'.

We would like to thank Satomi Hara for helping out posting photos on the YCS Instagram account, Luc Garceau for watering the garden, Remy Aguilera, Max Clarke and Donald Halliday who helped out at 'Created at the Canyon', and all the volunteers who helped set-up, take down, cook or serve at our Annual BBQ!

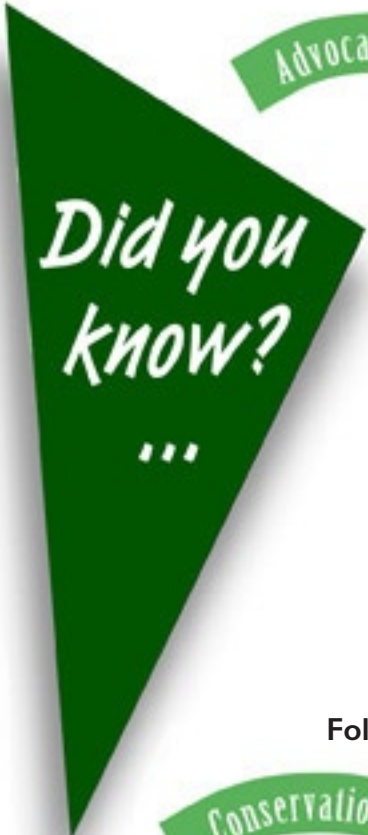
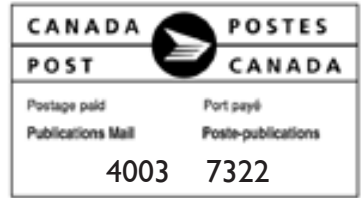


Thank you to all our volunteers on the various committees (Energy, Mining and Wildlife) for the work and expertise you provide to YCS.

As always, a big thank you to Tanya Handley for her amazing work on formatting and preparing *Walk Softly* for publication.

And thank you to our members, supporters and partners who make the work YCS does possible!

Thank You Volunteers!



You could be reading this newsletter online and in colour!

We are a conservation organisation and as such would encourage you to choose to receive *Walk Softly* by email in order to reduce our carbon footprint. If you want to switch from a paper copy to digital – please call us, or send us an email at outreach@yukonconservation.org.



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