

# Walk Softly

Newsletter of the Yukon Conservation Society Summer 2017



photo: Justin Van Leeuwen

The Yukon Conservation Society, with generous financial support from the Western Mining Action Network and the Indigenous Environmental Network mini-grant program, has developed some infograms about water contamination caused by mining. These will familiarize concerned citizens with mining water contaminants.

Contaminants addressed include the most common environmental contaminants associated with Yukon mining operations: Arsenic

Lead

 Nickel • Selenium

Radium

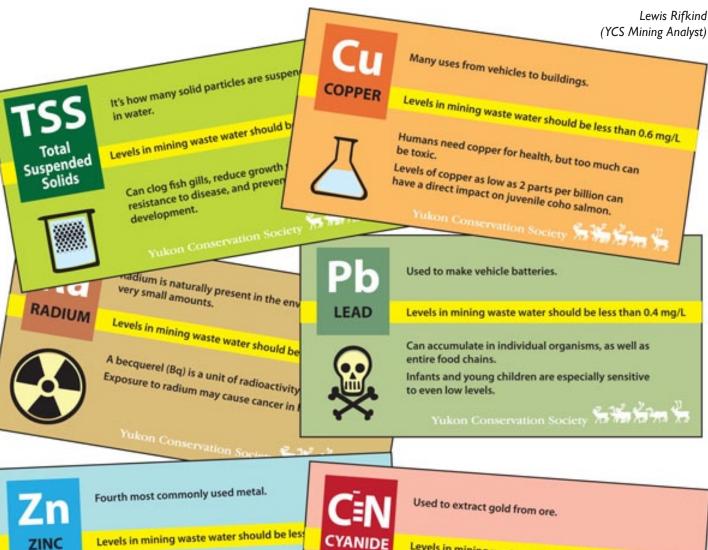
Copper

Cyanide

• Zinc

• Total Suspended Solids

They can be found online at http:// yukonconservation.org/programs/mining/



Levels in mining waste water should be less ZINC Human exposure to very high zinc doses of Zinc-rich soils limit plant survival.

Levels in mining waste water should be less than 2 mg/L

Can be produced naturally in the environment. Toxic to humans. Fish are 1000 times more sensitive to it than humans.





## Yukon Should Adopt A Carbon Tax And **Do Wonderful Things With It**

There is a message from some in leadership positions in Yukon that because of our climate and location, Yukon has higher energy needs, and that it would be impractical and unfair to expect Yukon to reduce its energy consumption, particularly if placing a price on carbon is to be part of a carbon reduction policy.

However, there is another message, one of hope, vision and forward thinking: There is no reason Yukon cannot massively reduce its consumption of fossil fuel, reduce its overall energy consumption and, most importantly, direct its resources away from behaviours that harm the climate and our society and towards beneficial actions.

Experience around the world shows that putting a price on carbon through a revenue-neutral carbon tax is a most effective way of discouraging fossil fuel consumption and opens a door for lots of exciting initiatives, some of which are listed below.

Two sectors account for most of Yukon's carbon emissions: transportation and building heating. Yukon's biomass strategy combined with improved building codes mandating ever more efficient buildings will massively reduce fossil fuel consumption by buildings, so the ideas below are focused on transportation.

Part 1: Encouraging Plug In Electric Vehicles (PEVs), including both Hybrids, which have rangeextending gas engines, and pure battery vehicles.

- Network of Level 2 (240 volt) FREE PEV charging stations installed at a maximum interval of 150 km on all Yukon highways with grid access.
- PEVs can become GST free
- PEVs can have free parking
- PEVs can have reduced insurance
- PEVs can have FREE level 2 charging stations around Yukon
- PEVs can be exempt from battery deposits systems but be included in refund programs
- Carbon tax \$ can be directed to reduce other taxes
- PEV rebates (B.C. rebates \$5,000/ PEV until a defined level of market penetration is achieved – in Ontario it is 5% which translates to about 1000 PEVs in Yukon)
- Cheaper/ free licensing for PEV taxis
- Tax refunds for developers / landlords who install level 2 charging stations
- Installation costs for residential PEV charging stations
- In partnership with other levels of government, including municipal and First Nations:
  - PEV charging parking stalls
  - Charging stations
  - A legislated target: 20% of new publicly owned vehicles shall be PEVs by 2020

### Part 2: Subsidies (rebates) for other carbon-reducing tech:

- Low emission wood burning stoves
- PV arrays
- Wind turbines
- Micro hvdro
- Research (NSERC Chair at Yukon College)
- Enhanced Public transportation

### Could we really do all this with a simple carbon tax? How much money would a Yukon carbon tax generate?

Yukon emits, according to Environment Canada, about 0.4 megatons, or 400,000 tons of CO2 a

The proposed price that the federal government has suggested is \$10/ton.

This works out to \$4,000,000 a year

B.C. charges \$30/ton. = \$12,000,000/yr

Norway charges \$100/ton= \$40,000,000/yr

The B.C. Climate Leadership team has worked out that to achieve the Paris goals, it needs to escalate the carbon tax to \$130/ton= \$52,000,000

A made-in-Yukon carbon tax would give us the resources to be truly innovative and move towards a prosperous, energy-secure and greener future.

> Sebastian Jones (YCS Energy Analyst)

### **Utility Controlled Charging**

Utility controlled charging occurs when an electric utility somehow controls the charging of PEVs. This may include the utility controlling the timing of PEV charging or the utility taking power from the PEV for use on the grid (i.e. vehicle-to-grid). Utility controlled charging has the potential to help manage load, reduce systems costs, or increase renewable integration associated with an electric grid.

Summer 2017

Summer 2017

is published by the Yukon Conservation Society for members and subscribers. Memberships and information about the Society can be obtained by contacting the YCS office.

> 302 Hawkins Street Whitehorse, Yukon YIA IX6 PHONE: 867 668-5678 FAX: 867 668-6637

EMAIL: info@yukonconservation.org WEBSITE: yukonconservation.org

We welcome newsletter submissions and letters to the editor. Deadlines for submissions are Feb 1, May 1, Aug 1, and Nov 1. Views expressed in Walk Softly are not necessarily those of the Society.

Publications Mail Agreement number 4154991 Changes of address or undeliverable copies should be sent to YCS at 302 Hawkins St., Whitehorse, Yukon YIA IX6

#### YCS BOARD OF DIRECTORS:

Shawna Smith (President) Matt Landry (Vice President) Stuart Clark (Treasurer) Mike Tribes (Secretary) Alberto Suárez-Esteban **Bonnie Burns** Dave Mossop Shyloh van Delft Skeeter Wright

#### STAFF

Christina Macdonald (Executive Director)

Roxanne McCutcheon (Finance Manager)

Lewis Rifkind (Mining Analyst)

Anne Middler (Energy Analyst)

Sebastian Jones (Energy Analyst)

Julia Duchesne (Communications & Outreach Manager)

Sarjana Amin (Trail Guide Program Coordinator)

#### **WORKERS ON THIS ISSUE**

Tanya Handley Julia Duchesne

printed on 100% recycled paper

## Yukon: the Once and Future Energy King

At this time – the spring of 2017 – the ground is shifting rapidly under the feet of the oil and gas industry in Yukon, so it seems appropriate to consider the current situation, how we got there and what might things look like in the next few years.

### The Present

In the South East, at the Kotaneelee gas site, there is an application before YESAB to plug and clean up four gas wells and their associated infrastructure.

The Kotaneelee site is where the only commercially viable petroleum (gas) was ever produced in Yukon.

The site is part owned by an oil company, and part owned by us, the taxpayers of Yukon. We own part of it, and will pay for the clean up, because the previous owner declared bankruptcy and walked away from their obligations, in much the same way that so many mining companies

At the other end of Yukon, in the Eagle Plain area, things are still evolving.

The current owner of the eight suspended wells there, Northern Cross, is thrashing around like a wounded snake, lashing out in all directions with lawsuits against Canada and Yukon, in a desperate effort to salvage some value out of its properties.

Northern Cross Yukon (NCY) is a small Calgary-based outfit; its only backer, the Chinese Overseas Oil Company (CNOOC), bailed on NCY after their YESAB debacle landed in

Northern Cross failed to adequately present its case to YESAB for approval to drill 20 wells. The wells were needed to quantify the amount and availability of oil and gas under its leases.

NCY is now retracting all of their promises and assurances that fracking was not needed at Eagle Plain and is suing Yukon for billions because it says that it does in fact need to frack, and that Yukon has a fracking moratorium which effectively renders their rights to exploit a (not fully understood) resource valueless.

Presumably NCY will soon go bankrupt too, and hopefully this time Yukon has obtained adequate bonds to cover the cleanup, otherwise we shall end up paying for that mess too.

Yukon has declined to let YCS know the amount of the bonds they hold.

As an environmental organization, YCS has mixed feelings about this.

On the one hand, we are pleased that it looks like the oil and gas industry's days are numbered, leaving time, space and energy for developing our renewable resources such as wind and solar.

On the other hand we are enraged that Yukon's regulators ignored our warnings and allowed us to get into the same situation with cleaning up the mess left by oil and gas as we do with big mines.

### The Past

OK, that is roughly where we are now, how did we get there?

The first big energy boondoggle that Yukon, during the Second World War, was afflicted with was the Canol project. It consisted of a pipeline and service road from Norman Wells to Whitehorse, the construction of a refinery in Whitehorse and a pipeline system to distribute the product where it was needed – so that oil, diesel and gasoline would not need to be trucked up the barely-finished Alaska Highway or shipped by tanker up the coast where it might be vulnerable to Japanese submarines.



It is hard to exaggerate how bad this project was. About a quarter of the oil sent down the pipeline failed to reach Whitehorse – it leaked into streams and rivers or onto the land. About a quarter of the rest was consumed in operating the refinery. Once one considers how much fuel was used in building the pipeline and the Canol Road, it is likely that the project was a net energy loser; at a cost of up to 300 million in 1940s dollars, it was most definitely a money loser.

The Canol project was just the first ill-conceived petroleum project in Yukon.

Aside from the outrageous cost, and the pollution that it caused (still causes; the refinery location is still a contaminated site), the most problematic result was that it convinced oil companies that there was a lot more oil to be had in the north, and that governments could be convinced that regulations could be avoided and that massive subsidies would be doled out in the scramble to turn the north into an oil patch.

Oil companies utilizing the same disastrous technology pioneered by the Canol project – massive cat trains - scoured their way across the taiga and tundra of the Yukon, across the Peel and all the way into Old Crow

Nobody asked the Vuntut Gwitchin for permission to do this; cat trains just ploughed their way into and past the village into the heart of the flats. When things did not work out well for the company, they generously donated their stranded equipment and garbage to Old Crow.

Just like the Canol project, this method of moving equipment destroyed the surface vegetation resulting in melting permafrost and effectively permanent scars on the landscape that are visible to this day, 60 years later.



Despite poor results, oil companies licked their wounds and, driven by dreams of immeasurable wealth, and encouraged by remote governments, repeatedly thrust into northern Yukon until, by the time they finally quit in the early 70s, a total of 55 wells had been drilled - none of which have ever produced any oil.

After a hiatus of 20 years or so, a couple wells more were drilled, this time using the now completed Dempster Highway (which can also be seen as an expensive boondoggle, given that it was conceived as a "road to resources" and was built with no socio-economic or environmental assessment review. To date no operating mines or producing oil wells have been able to use the Dempster.).

It was then that NCY swooped in and started scavenging the leftovers of the early exploration efforts.

### The Future

While global demand for oil is weaker than projected (mostly because GDP is rising slower than projected), oil prices remain lower than expected - currently just below \$50/barrel (May 2017) – which is keeping the more difficult and expensive oil in the ground.

All the petroleum resources in Yukon count as difficult and expensive some call this extreme petroleum. A result of this situation is that oil companies are not developing new sources of supply, so within a few years, there will probably be a shortage of oil and as a result its price will (temporarily) leap.

The implications for Yukon's energy policy are significant, and lead to starkly different paths forward.

The first, utilizing old thinking, would be to develop oil and gas resources in Yukon so that oil companies could profit from an increase in global prices by exporting our surplus.

The alternative, sustainable, path is to invest in renewable alternatives to petroleum for our energy supply, so that we are self sufficient for energy, and really don't care what happens to the global oil price.

A combination of rapidly falling prices for electricity-producing solar panels and wind turbines and a change in energy policy towards multiple distributed sources of generation is resulting in a movement in Yukon.

It is no longer a rare sight to spot solar panels on rooftops and in open spaces – people and communities are becoming their own energy companies.

The Haeckel Hill wind turbine site is being revived with modern, winterized technology and soon a new wind farm will be generating electricity near Kluane Lake.

Micro-hydro sites are popping up in communities like Atlin.

If we can keep this trend going, soon we shall be able to complete the cleanup of the remains of the abortive oil industry in Yukon and embrace a clean, renewable energy future powered by the sun, the wind and the rain.

> Sebastian Jones (YCS Energy Analyst)

#### Read more:

- http://www.emr.gov.yk.ca/oilandgas/ pdf/History-of-oil-and-gas-in-Yukoninformation-sheet.pdf
- https://www.iea.org/oilmarketreport/
  - www.yes.yukonconservation.org

Summer 2017

Summer 2017 -

### **Caribou Celebration**

Caribou – the iconic animal of the north. Throughout Canada, caribou are severely threatened by habitat fragmentation and loss, caused by urban sprawl and resource development, and climate change. In southern Yukon, herds like the Southern Lakes herd are a fraction of what they once were. The northern barren ground caribou are also facing major challenges. The Yukon is fortunate to be home to the only barren ground caribou herd that is currently thriving in Canada – the Porcupine Caribou Herd (PCH). In April, YCS held an event in partnership with the Porcupine Caribou Management Board (PCMB) and the Vuntut Gwich'in First Nation (VGFN) to celebrate and raise awareness about this herd and its unique management.

Famous for their long migration, the caribou have sustained the Gwich'in and Inuit people since time immemorial and more recently have provided harvest opportunities for other Yukoners. The Porcupine caribou are so central to the survival of the Gwich'in that when the American government proposed drilling for oil on their calving grounds (on the Arctic National Wildlife Refuge's 1002 land), the Gwich'in, a tiny northern nation, took on the might of the U.S. congress and fought them to a draw - not just once but several times.

On this side of the border, a portion of the wintering range of the Porcupine Caribou Herd called Eagle Plain is threatened by oil and gas development: a proposal by Northern Cross Yukon to develop conventional and unconventional oil and gas resources in this region is working its way through the territory's assessment process, although it is currently tied up in the courts. Further, new interest has been expressed in the resources of the Kandik basin to the west of Fishing Branch Park. Fortunately, the newly elected Yukon Government has committed to both a moratorium on fracking and investment in renewable energy sources. We have a critical role to play in keeping the PCH healthy by calling on the Yukon Government to move Yukon's energy trajectory away from fossil fuels and towards clean renewables.

Recently, the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) recommended that the Species At Risk Act (SARA) list barren ground caribou as "threatened". This happened because almost every barren ground herd in the world (the Porcupine herd is an exception) is undergoing rapid decline and if measures are not taken to bring them back and to protect their critical habitat, there is a risk they could decline further and potentially die out.

The Caribou Celebration took place on April 21 and 22 at the Beringia Centre. Friday's speakers included Joe Tetlichi, Chair of the PCMB, who addressed the groundbreaking and unique approach the PCMB has taken and how it has led to a sense of ownership of caribou management, and therefore effective management. Sebastian Jones, Energy Analyst at YCS, drew the connection between the PCH and the petroleum industry that threatens its habitat, and gave an overview of alternative, cariboufriendly energy systems. Justina Ray of COSEWIC explained how COSEWIC concluded that barren ground caribou are threatened.

During the lunch break, we learned about Vadzaih, the new PCMB cookbook featuring antler-to-hoof caribou recipes. We even got to sample caribou cooked according to recipes from the book!

After lunch, Anne Gunn and Don Russell, senior caribou biologists who have worked extensively with the PCH and other herds, presented their findings on the reaction of caribou to disturbance, and how the PCH has escaped the fate of other herds. The day concluded with a panel discussion that examined how we can keep the PCH thriving, featuring Joe Tetlichi, Brandon Kyikavichik (VGFN), Joyce Majiski (artist, guide, biologist) and Justina Ray.



Summer 2017





Margret Njootli (Vuntut Gwitchin) sharing her stories and handicraft

Thank you to all who made this event possible, including:

- the Porcupine Caribou Management Board and Vuntut Gwitchin First Nation
- the speakers who shared their knowledge and stories
- the artists who shared their beading, painting, films, and design talents
- everyone who worked so hard to ensure the eventgoers could taste delicious caribou
- the volunteers who gave their time to make the event happen
- the many curious and passionate people who came to learn about and celebrate the caribou, including the kids who loved learning about caribou!
- the Beringia Centre staff
- and the funders who made the event possible, including: the City of Whitehorse Environmental Grant, the Community Fund for Canada's I50th, the Environmental Awareness Fund, and the Friends of Dempster Country Society.

Friday evening featured the films The Refuge (about the Gwich'in struggle to protect the Arctic National Wildlife Refuge) with an introduction by veteran Gwich'in activist Lorraine Netro, and a sneak preview of Camera Trap about Yukon photographer Peter Mather's quest to take the perfect caribou photo. The **ENGO Friends of Dempster Country** released a new book about the Dempster Highway country (available to buy at the YCS office for \$15). This book is an updated version of a YCS publication from decades ago – thanks to Julie Frisch for working so hard on the book and inviting YCS to write the foreword!

Saturday morning was devoted to children and caribou, with arts and crafts, caribou-themed activities and a screening of *Chi'igii: A Caribou* Calf. On Saturday afternoon, VGFN citizen Margret Njootli showed personal pictures of her family and living traditionally with caribou; she also showcased her intricate and beautiful caribou handiwork, showing how all parts of the animal are used. Brandon Kyikavichik, VGFN Heritage Interpreter, gave a monologue on the relationship between the Gwich'in and caribou from early pre-history to the present. The event wrapped with an address by caribou campaign scholar Shirley Roburn introducing the classic film *Being Caribou*.

All in all, approximately 250 people – kids, Elders, managers, scientists, artists, and the public – attended the events over two days. We learned about how caribou culture continues in the Yukon, how caribou interact with development and disturbance, and much more. It was amazing to see how caribou are woven into every aspect of Yukon life. All presentations and talks were livestreamed on YouTube and recordings are available at *yukonconservation*. org (go to Programs – Wildlife).

Julia Duchesne (YCS Outreach Manager)



Kids working on the caribou hoofprints banner.

The Peel Watershed delegation at the Supreme Court of Canada. Justin Van Leeuwen photo.

This March, we made history with the Peel Watershed. More than three years after the legal battle began and 13 years after land use planning for the region began, the Supreme Court of Canada heard the Peel Watershed case on March 22, 2017.

It was a powerful week, packed with events in Whitehorse and Ottawa as we brought the voices of the Peel Watershed to the country's capital. For many people, this was a culmination of decades of advocacy to protect the Peel. Speaking with most people, especially elders, we heard a similar refrain: We are protecting the Peel for future generations. We are preserving clean water and a healthy lifestyle for our grandchildren.

The week began with a send-off event at the Kwanlin Dün Cultural Centre. The event brought together those who care deeply about the Peel and sent the Yukon delegation to Ottawa with good energy and the support of Yukoners. The delegation, including people from YCS, CPAWS Yukon, Tr'ond ëk Hwëch'in, Na Cho Nyäk Dän, Vuntut Gwitchin and the Gwich'in Tribal Council, then journeyed to Ottawa for the hearing.

The day of the hearing started at the crack of dawn on a Yukon-cold day. In a -3oC windchill on the steps of the Supreme Court, grandmothers of the Kitigan Zibi Anishnabeg, a local First Nation, welcomed and carried out a water ceremony for us. In attendance were Yukon Premier Sandy Silver: Peter Johnston, the Grand Chief of the Council of Yukon First Nations; Yukon MP Larry Bagnell; and Perry Bellegarde, the National Chief of the Assembly of First Nations.

Following the ceremony, we all headed into the Supreme Court of Canada building. There was such high demand that not everyone could get a seat in the main room, and additional seating had to be added to the overflow room. Over 100 Peel supporters and law students from different universities had gathered to witness the case.

In the courtroom, Thomas Berger made a series of passionate arguments for why the Government of Yukon should not be granted a do-over. To give the government a second chance to express its views, he argued, would be to reward its misconduct and create uncertainty in land-use planning in the future. Berger and the intervenors (Council of Yukon First Nations and Gwich'in Tribal Council) argued that additional dialogue and process are not always the path to reconciliation. In fact, when a serious violation of treaty obligations has occurred, such as this case, the goal should be to deter such actions in the future.

Back in Whitehorse, a crowd gathered at the KDCC to watch the hearing livestream, starting at 6am. We underestimated Yukoners' commitment to seeing the case through – both the main and overflow rooms were packed for this early-morning viewing!

After the hearing was adjourned we held a press conference. The chiefs emphasized that the land is to be shared, stewarded and protected for plants and animals and future generations. YCS Executive Director Christina Macdonald spoke about how the Peel court case is challenging the stereotype that the Yukon is only a place of barren land and minerals where you go to 'get rich quick'. We were pleased that media coverage of the hearing included Peel stories on APTN, CBC, the Walrus, CBC, VICE, DeSmog Canada, and Rabble, alongside op-eds by Maude Barlow in the Globe & Mail, Chief Joseph in the National Observer, and David Suzuki in the Huffington Post.

After the press conference, we hosted a reception for the Peel Portrait Project in an Ottawa art gallery. This new exhibit features the portraits and stories of people who have a deep connection to the Peel Watershed. It was just in Old Crow for Caribou Days and will be touring the Yukon in the coming year. The large audience was captivated – you could tell that this is not the sort of exhibition that comes to Ottawa very often. We heard from a range of speakers, including Tom Berger, who received a standing ovation for his work, and who commented on the continued fight to protect northern environments. The most powerful words of the evening were the stories of people from Peel communities who were willing to open up about their experiences with the Peel Watershed and how it has shaped their lives.

The River of Names – 7500 names of those who support the Final Recommended Plan for the Peel Watershed – with Peel supporters on the steps of the Supreme Court of Canada.



Our final day in Ottawa ended with a panel event at Carleton University. "Indigenous Rights, Conservation, and the Law" featured Thomas Berger, Dana Tizya-Tramm (Councillor with Vuntut Gwitchin First Nation), Chief Roberta Joseph (Tr'ondek Hwech'in First Nation), and YCS Executive Director Christina Macdonald. Moved to the main Library lobby due to high levels of interest, the panel was attended by about 200 students, faculty, and interested members of the public. Elders and other members of the Watershed delegation were also present. Prior to the panel, we took part in a smudging ceremony in the beautiful Aboriginal Centre at Carleton designed by Douglas Cardinal. Because it was Thomas Berger's birthday, there was also a birthday cake – and the treat of Happy Birthday sung in Northern Tutchone by Jimmy Johnny!

The panellists gave interesting and inspiring speeches before answering a series of thoughtful questions from the audience. The event coincided with the Berger Inquiry Exhibit at Carleton University. In the 1970s, the Mackenzie Valley Pipeline Inquiry was a precedent-setting process for listening to the social and environmental concerns of First Nations regarding resource development. Justice Berger travelled throughout the Yukon and Northwest Territories for community hearings. Berger reflected on how far society has come in the forty years since the inquiry, and how far we still have to

After the event, the reception room was filled with the buzz of conversation as old friends reunited and new connections were made.

In addition to these events, we also shared the Peel story in Toronto at the Water Docs Film Festival, where The Peel Project, a documentary about six Canadian artists who travel through the watershed seeking artistic inspiration, was screened on opening night to nearly 300 people. The film also screened in Ottawa at a local indie cinema the week of the hearing.

After a whirlwind week, most of the delegation took the next flight back to Whitehorse – proud to have been in Ottawa as we made history at the Supreme Court, but eager to return home to the place we are fighting for and the land we love.

Thank you to everyone who pitched in to make these events unforgettable, and thanks to you, our members, for your deep commitment to protecting the Peel Watershed. We're honoured to be doing this work on your behalf!

The Supreme Court of Canada reserved their judgement after the hearing concluded; the ruling will be released up to 7 months from now.

> Jason LaChappelle and Julia Duchesne



Summer 2017 Summer 2017 Walk Softly Walk Softly

### **YCS SUMMER PROGRAMS**

# Free Guided Nature Hikes:

It is that time again – our free guided hikes from Miles Canyon to Canyon City start soon!

When: 10am & 2pm, Tuesday through Saturday, June 10-August 19

Where: Meet at the Robert Lowe Suspension Bridge below the Miles Canyon parking lot

The 2 hour, easy walking hikes are fun for avid nature enthusiasts, hikers and families alike. Learn about the Gold Rush, First Nations history, geology, plants, animals and so much more! The hikes with our knowledgeable guides will run rain or shine. To keep things interesting for repeat hikers, we frequently host special themed hikes on topics such as Mushrooms, Northern Adaptations, Art and more. This year, we will also be holding more lunchtime events such as Yoga with Erica Heuer or Wild Edibles hikes – and continuing our popular walks with the Yukon ElderActive Association. Check our website for the evolving list of special events and themed hikes.



### We Take Requests:

Do you have a larger group that would like to join us for a hike?

Do you have a specific theme you would like to hear more about?

Would you like to schedule a specialized Kids Ed-Venture Program for your camp, daycare, or other kids' group?

## **Kids' Ed-Ventures:**

Our regular hikes are great for people of all ages who are capable of walking 3.5km over mostly gentle terrain, including children. Additionally, we offer nature and conservation themed drop-in activities and games for children of all ages at our YCS tent at the Fireweed Market at Shipyards Park every Thursday starting June 16. We are happy to book Kids' Ed-Ventures as well. Do you know a group of kids who would like to have a special Ed-Venture tailored just for them? YCS is happy to accommodate theme, location, and special time requests for your group!

# Message from the Trail Guiding Team:

Hi! I'm Sarjana and I'm this summer's Trail Guide coordinator. I moved to the Yukon 10 years ago from a big city and I've been in love with the outdoors ever since. Some of my favorite activities are having lake side BBQs, hiking, and taking rafts out onto a lake. I am passionate about conserving the environment and reducing climate change within our community and globally, and I hope to make a positive impact on our environment this summer. I am excited to be a part of this year's Trail Guiding team and to have the opportunity to help locals and visitors learn about conservation, Yukon's ecosystems, and the rich history of our territory.

Sarjana was a trail guide for YCS last year. Here she is pictured on the right with Bella, our other 2016 trail guide, after a rainstorm hike!



# Volunteer this summer!

YCS fosters the love of nature by helping Yukoners and visitors explore the outdoors and learn about local heritage. We provide free, fun interpretive programming throughout the summer. You can help spread the love too!

We're looking for:

# Art-loving volunteers for Created at the Canyon!

We are looking for volunteers to assist with our Created at the Canyon live multi-media art event on Friday July 14th and Saturday 15th at Miles Canyon/Canyon City, and the following open exhibit in August at the Northern Front Studio. We require volunteers to help in the planning process and also on the day of the events. Come join our creative team in making this community event a reality!

# Guest guides with knowledge to share!

Do you have specific knowledge and passions that you want to share? For example, are you a mushroom expert, passionate birder or Yukon history enthusiast? We are looking for guest speakers from all walks of life to join our guides at Miles Canyon and Canyon City on special themed hikes. If you have knowledge that you want to share with tourists and locals alike with the goal of connecting with nature and/or history, contact us!

For more information contact our Trail Guide Coordinator, Sarjana Amin, at *hikes@yukonconservation*. *org* or 668-5678.

## **Created at the Canyon**

Original live art and performances inspired by the natural and cultural history of Miles Canyon & Canyon City.

When: Friday, July 14th from 2pm-8pm &

Saturday, July 15th from 10am-4pm

Where: Miles Canyon

Join us this July as we bring art outdoors! Visit six local artists as they create art inspired by the stunning beauty and fascinating history of the canyon and Yukon River. Artists will be in place at the Canyon on Friday afternoon and all day Saturday, and YCS will be there to provide maps, information, and our regular guided hikes running 10-12 and 2-4. This event will be followed by an art exhibit in August at the Northern Front Studio. All events are free.

### Artist Call-Out - Created at the Canyon

The Yukon Conservation Society is accepting applications until June 19th from artists and performers. The selected six artists will create original art in Miles Canyon over the two days of the event. This is a great opportunity for artists to connect with each other and the public, to make art outdoors, and to be exhibited

YCS invites artists in all media, including (but not limited to) performance art, dance, music, installation, mixed media, writing, storytelling, photography and sculpture, to apply for this event. Youth and Indigenous artists are especially encouraged to apply.

Artists will be required to be at Miles Canyon from 2-8pm Friday July 14 and 10am-4pm Saturday July 15, and are also encouraged to attend an introductory hike on Saturday July 8 and the exhibit launch in August. Artists will receive an honorarium of \$30/hour and are responsible for providing their own materials and creating at least one piece of art suitable for some form of display in a month-long exhibit.

Please contact Sarjana at *hikes@yukonconservation.org* or 668-5678 for more information and artist application packages, or visit *www.yukonconservation.org*.

Funding for this project is made possible through the assistance of Arts Fund, Department of Tourism and Culture, Government of Yukon, Jeanie Dendys, Minister.



# How Mining Works in the Yukon

Let us consider the Peel Watershed: while the legal battle over the plan is being worked out, there is a moratorium on mineral staking in the watershed. Once the plan is implemented, the staking moratorium will be lifted, at least in the areas where the Plan allows for this

And then it is pretty fair to assume that a mineral staking rush would occur. Even though portions of the Peel Watershed have some valid mining claims (about 8,500), the vast majority of this wilderness area is un-staked.

No-one knows if there is the possibility of an economically viable ore body somewhere in the Peel Watershed, as there has never been a producing mine. But that's never stopped those who stake mineral claims. And once an area is staked in the Yukon, it is assumed that mining is the first and best possible use for the land.

A staking rush in this relatively untouched corner of the world would probably resemble what happened in the central Yukon from 2008 to about 2011, when high metal prices drove the last staking rush. Crews worked throughout the summer and winter establishing mineral claims.

Prior to staking, geologists would be out walking the land, looking for interesting rocks etc. Airborne geophysical surveys would also happen (the helicopters with the huge circular radio-style antennas, or the planes with ground-penetrating radar attachments) to see which areas should be staked.

Staking in the Yukon is a physical activity (unlike some other jurisdictions where map-based staking is permitted – basically, you stake land by clicking on a computer). As an aside, anyone can stake a claim in the Yukon.

You pound a wooden stake into the ground and attach a metal tag. Each claim requires two stakes. Metal tags are two bucks a pair, filing the paperwork is ten bucks a claim.

Anyone got twelve bucks? Anyone want exclusive rights to look for minerals in a 1500 ft by 1500 ft section of the Yukon? You only have to do \$100 worth of work a year on your claim. What, you're lazy? Fine, pay \$100 (plus a \$5 fee) and you don't even have to do the work.

Putting the stakes in the ground means you physically have to be on site. This usually means a helicopter ride in, and a helicopter ride out. If staking a lot of claims, sometimes a staking crew will be dropped off with all-terrain vehicles (ATVs). Both the air activity and the ground activity are environmentally damaging. Animals move away from noise and human disturbance. If a lot of staking is going on at the same time that means a lot of helicopters and/or ATVs.

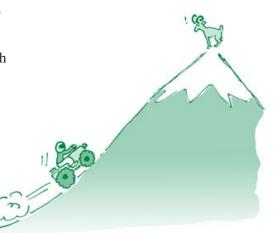
Another impact is on the wilderness tourism and outfitting industries. Nobody goes on holiday to what has been advertised as a remote northern wilderness to be constantly buzzed by aircraft or to witness ATVs zooming over the land.

The Yukon wilderness tourism and outfitter industries are in competition with other jurisdictions such as the NWT, Alaska, and even Siberia, to provide these remote northern experiences. A staking rush would, at least temporarily, make Yukon less competitive.

Once the claims have been staked, exploration kicks in. More geophysical surveys from aircraft (note: this sometimes happens before staking), or resistivity surveys on the ground, and more geologists walking the staked areas. Then surface sampling happens. This can range from hand-dug pits to bringing in backhoes to dig trenches. This provides the miners with the rock samples they need to do further analysis on potential ore bodies.

Sometimes concurrently, but usually afterwards, drilling rigs are brought in to take deeper rock samples. The rigs are smaller than an oil rig, on average about the size of a large pick-up truck. They can often be helicoptered into remote sites. However, rigs need crews and there is often a campsite set up to provide shelter. These campsites can be quite large (up to thirty people) and semi-permanent. They might be required for three or five years.

Trails or even roads from the campsite often lead to where the drilling is occurring. Sometimes a dirt airstrip is constructed to ensure plane access to the camps. In a few cases, winter roads are constructed from the existing highway grid to the camp area.





As can be imagined the trenches, the drill rigs, the campsites, the trails, the roads, and the airstrips are all surface disturbances that large animals tend to avoid. Remediation of such sites is also difficult as the surface scarring can take decades (if not longer) to be totally reclaimed by nature. Should this happen in the Peel, where very little of this has occurred, the landscape will be 'changed'.

Once an ore body has been identified and looks promising, further exploration is required to define it. Surface seismic work might occur (a grid of lines about 100 metres apart, along which seismic lines and plates can be laid – similar to what happens in the fossil fuel industry). A lot of drilling will occur close together. Sometimes quite large test pits will be dug, sometimes to remove tonnes of sample rock. This rock will then be used to decide how the ore body can be processed to extract the metal of interest.

At this stage, there is most likely a full-blown camp on site (at least 50 people), an airstrip, and some form of access road (be it a winter-only trail or something permanent such as a gravel all-season trail).

Should it make fiscal sense, then we get into actual mining. Depending on the type of mine the environmental impacts can be all over the place. Typically, though, an all-season road will be required. There will be on-site power generation (or if close enough to the existing grid, hydro lines will be run to it), a large camp, mining pits or underground shafts, waste rock piles, tailing piles, and a wet tailings dam if we're unlucky.

And that, gentle reader, is more or less how mining currently operates in the Yukon.

Lewis Rifkind (YCS Mining Analyst)



## **FUNDING THE ENVIRONMENT**

Any budget that both the Yukon Conservation Society and the Yukon Chamber of Mines are not entirely happy with is probably good news for the government that issued it. That way they cannot be accused of favouritism. This lack of happiness is exactly what happened at the end of April.

The Yukon Territorial Budget for 2017/18 was released, and local media reported both groups saying that it was okay, but there was nothing special.

However there was one little aspect that could be very useful for future budgets, and for the future of the Yukon's environment. The Yukon Government will be establishing a Financial Advisory Panel. From what YCS can gather it is essentially a sounding board for ideas on how the Yukon should manage its financial position.

This does raise the possibility that the Panel will be receptive to some of the ideas that YCS has been suggesting for a long time, without much reception from previous administrations.

These ideas including raising resource royalties, establishing a heritage fund from a portion of the royalties, ensuring taxpayers are not on the hook for abandoned mine cleanups and oil well decommissions, and implementing an extended producer responsibility system to ensure all consumer products have the cost of their end-of-life disposal or recycling included in their purchase price.

YCS looks forward to seeing how this Panel will proceed, and how receptive it will be to ideas that are both fiscally prudent and environmentally aware. To read the budget speech visit the Yukon Government website (www.gov.yk.ca) and follow the links.

# **Spring into Geocaching!**

The snow has been melting and the mosquitoes are still mostly at bay, so now is the perfect time to bring out that GPS and find some hidden Tupperware in the woods. That's right – I'm talking about geocaching! But what is geocaching? Geocaching is an outdoor (secret) treasure hunt using GPS technology that began in May 2000 when governments made satellite data officially available to the public. Soon after, the first container was placed in the Oregon woods (with a logbook and pen) with its GPS coordinates posted to an online group. Placed as a means to test the navigational accuracy of the satellite data, the concept of using GPSs to embark on a journey to find hidden objects has taken off. There are now millions of geocaches placed all around the world, just waiting for you to find them!

I got into geocaching around two years ago, but now incorporate it into all of my travels and adventures. I have been drawn to this game because it is a great tool to connect people of all ages with nature, and because it can be done just about anywhere. For example, I have found geocaches in the populated downtown streets of Toronto and Rome, and have also found them hiking up mountains in remote areas here in the Yukon. No matter where you are, there are likely multiple geocaches around – including quite a few in the Whitehorse area! Geocaching can be as easy or hard as you want, with people placing varying sizes and types of caches. Some people get very creative with their caches, sometimes using deceptive containers. Once I found a logbook in a fake pile of dog poo – I bet you can imagine the fun I had picking that one up!



If you are thinking about giving geocaching a try, start by creating a free account at geocaching.com. This is the site where you can see all the geocaches around the world, their coordinates, and where you can track your finds (every time you log a find you will see that cache on the map turn into a smiley face!). You will also be asked to come up with your geocaching name, so let your creativity run wild! You will use this name while signing the logbooks in the caches. From here, you can start searching – but be aware of muggles (how the geocaching community refers to non-geocaching folks), as they tend to be curious, and we want the caches to remain hidden from them. You'll need a GPS device or a smartphone with GPS.

If you think that you might give geocaching a try, here are a couple easy ones to get you started:

- Re-tern: N 60° 44.089 W 135° 04.120
- Larger than Life: N 60° 42.876 W 135° 04.875

I hope you have as much fun as I have with geocaching. For me, it has been a great way to learn about the places I am in, and to go to places that hold a special connection to the cache owners. It is a fun community, a fun challenge, and a great way to explore nature. Happy caching, and remember to stay bear aware and away from muggles!

Shailyn Drukis



Caches can be found in the unlikeliest places... make sure to look carefully!



### **Weed Warrior**

The Yukon Invasive Species Council (YISC) is extending the invasive species awareness program into the class rooms. This spring and summer YISC will lead classroom sessions for grade 4 classes. A short information on invasive species is followed by an interactive game, supported by additional craft activities and a word search.

Spring and gardening season are just around the corner. YISC invites all gardeners to take advantage of the Grow Me Instead Program. Horticulture is one of the primary sources of introduction of invasive plants. Get informed on steps you can follow to avoid introducing or spreading invasive species. Find information on invasive garden species and recommended alternative ornamental plants on the website https:// www.yukoninvasives.com/ horticulture.html . Participating horticulture businesses will label recommended plants with the yellow sticker: Good to grow.

Summer 2017



**Yukon Conservation Society** 

YES! I want to protect the Yukon's environment and support the Yukon Conservation Society!

I'd like to make a tax deductible gift! \$60\$200\$500\$1000Surprise us! I'd like to make a monthly pledge by credit card of \$ I have made a bequest to YCS in my will	
Please, sign me up as a member:  Student \$10 Individual \$25 Family \$40 (2 or more peo I am a new member! I am renewing my membership for 2017!  Do not send me newsletters. Instead, notify me by email when the	include a subscription to the Walk Softly newsletter. Both donations and memberships are
Payment Method: Total \$	
Cheque # enclosed (payable to Yukon Conservation s	Society)
Visa/Mastercard # Expiry	Signature
Name(s):Phone: _	
Address:	
Email – for Tax Receipt and YCS Email List	

Mail completed slip to: 302 Hawkins St. Whitehorse, YT Y1A 1X6 - Phone: 668-5678 - info@yukonconservation.org

### **Thank You Volunteers!**



### Thanks also to...

Julie, Jason, Kaitlin, Nathalie, Jason, Mary, Karen, Megan and everyone who helped with the Porcupine Caribou celebration!

Joshua Hunt, and Mary Amerongen for keeping our computers and membership database working smoothly.

Our departing and new board members for all the work you've done and continue to do for YCS.

All the experts who help get the Trail Guiding team ready to lead great hikes all summer.

Luc, Paul, and Skeeter for their help sprucing up the YCS yard this

**Summer 2017** 

### Yukon Conservation Society

302 Hawkins St., Whitehorse, YT YIA IX6





Publications Mail Poste-publications 4003 7322





# Advocacy Research Environmental Education Planning Consultation

# Did you know?

### **Ted Parnell Scholarship**

YCS is happy to offer its annual scholarship of \$500 for 2017. This scholarship is awarded to a student pursuing any aspect of environmental studies, demonstrating outstanding interest and motivation in the field. Interests pertaining to northern environments such as wildlife, ecology, renewable resources, energy, and environmental education are appropriate areas for eligibility.

**Requirements:** Applicants must be Yukon residents and should be entering or currently enrolled in a post-secondary school program (excluding graduate work). Proof of acceptance will be required before the scholarship is awarded.

Applications should be made in writing by July 1, 2017. Details regarding the application can be found on our website, www.yukonconservation.org/resources/.

For more information, call Julia at YCS: (867) 668-5678 or email outreach@yukonconservation.org

Follow us!

**f** YukonConservationSociety





