Yukon Biodiversity Forum 2025

Friday April 11, 7pm – Yukon Beringia Interpretive Centre
Saturday April 12, 9am - Mt McIntyre Recreation Centre
Free! Register at eventbrite.ca

Friday April 11 – Yukon Beringia Interpretive Centre	
6:30pm	Doors open
7:00pm	Keynote Presentation: Richard R. Gordon[1] and Cameron D. Eckert[2] **Qikiqtaruk–Herschel Island: Caring for Land and Culture in a Time of Rapid Change** [1]Yukon Parks, [2]Yukon Department of Environment

Saturday April 12 – Mt McIntyre Recreation Centre	
9:00am	Welcome - Denny Bohmer (YCDC), Minister Nils Clarke
9:10am	**Syd Cannings** *Sand Pirates and Boreal Assassins: The Robber Flies of the Yukon*
9:30am	**Hilary Cooke**, Michael Quinn *Current and Future Management of Burned Forests to Protect Cavity-Nesting Birds and Other Boreal Wildlife* Wildlife Conservation Society Canada
9:50am	**Andrew Bronson** *Fish4Kenya Initiative* EDI Environmental Dynamics Inc.
10:00am	**Maya Chartier** *Ringed seal diet and body condition in the Inuvialuit Settlement Region*
10:10am	**Break**
10:40am	Rosana Paredes, Rachael A. Orben, Alexis Will, **Stephen J. Insley** *Where do Cape Perry NT thick-billed murres go in the winter?*
11:00am	**Kirsten Wilcox** *Updates on Canadian Wildlife Service Work*
11:10am	**Maria Leung** *Reducing Risks to Native Pollinators by Introduced Bees: A Review of Canada's Legislation with Recommendations for Yukon Territory*
11:30am	**Sylvie Binette** *Introduced, invasive and native plants: Uses of Yukon wild edibles in food dishes*
11:50am	**Justine Benjamin** *Remote Cameras for Biological Monitoring* EDI Environmental Dynamics Inc.
12:00pm	**Lunch and Poster Session**

1:00pm	**Denny Bohmer** *Haines Road Bioblitz 2024/Nt'qya kwàta naye uyennjia* Yukon Conservation Data Centre
1:20pm	**Thomas Jung**[1,2], Julie Thomas[1], Piia Kukka[1], Carrie McClelland[1], Heather Milligan[1], Hannah Miller[1], and Fiona K.A. Schmiegelow[2,3] *Science and stewardship in the city: conservation of an endangered bat* [1]Department of Environment, Government of Yukon, [2]Department of Renewable Resources, University of Alberta, [3]School of Applied Science, Yukon University
1:40pm	**Alexandra Heathcote**[1], Piia Kukka[1], Alice McCulley[2], Lolita Hughes[1], Caitlin Willier[1], Shannon Stotyn[1], Paul Boyce[1], Heather Milligan[1], Anna Smith[1], Hannah Miller[1] and Thomas Jung[1] *Long-term monitoring of a climate sentinel across a latitudinal and elevational gradient* [1]Department of Environment, Government of Yukon, [2] Tr'ondëk Hwëch'in Government
2:00pm	**Robin Bishop** *Honouring plants through knowledge sharing, collaboration and connection: establishing and envisioning with the YukonU Herbarium* YukonU Research Centre – Yukon University Herbarium
2:15pm	**Zach Fogel**[1,2,4], Anna Smith[1,2,4], Karlie Knight[3], Piia Kukka[4], Paul Boyce[4] , Alice McCulley[3], Thomas Jung[1,2,4], Fiona Schmiegelow[1,2] *After the Gold Rush: The Impact of Placer Mining on Wolverines, Lynx, and Marten in the Tr'ondëk Hwëch'in Traditional Territory*. [1]University of Alberta, [2]Yukon University, [3]Tr'ondëk Hwëch'in Department of Natural Resources, [4]Yukon Department of Environment
2:30pm	**Break**
2:45pm	**Mary Gamberg** *Contaminants in the Yukon*
3:05pm	**Grant Zazula** *Black footed ferrets and biodiversity in Beringia* Government of Yukon, Palaeontology Program
3:25pm	**William Halliday** *Patterns in Marine Mammal Presence in the Eastern Beaufort Sea and Amundsen Gulf based on Passive Acoustic Monitoring*
3:45pm	**Petra Szekeres** *EDI Fisheries Work Update* EDI Environmental Dynamics Inc.
4:05pm	**Megan Hornseth**[1]**, Chrystal Mantyka-Pringle**[2,3], Ludovick Brown[4], Jason Fisher[4], Joël Potié[4], Pascale Savage[4] *Niche partitioning between grizzly bears and black bears in response to anthropogenic landscape change within the Stewart River watershed* [1]Government of Yukon, [2]Wildlife Conservation Society Canada, [3]University of Saskatchewan, [4]First Nation of Na-Cho Nyäk Dun
4:25pm	**Closing Statement**

Posters

- A Colouring Book on Seal Diet: And Original Tool to Communicate Research Results
- Use of bridges by bats in the Yukon and western Canada
- New Information on Small Carnivore Conservation
- Impacts of Placer Mine Revegetation on Songbird Communities in Central Yukon
- Get involved in collecting Trembling aspen (Populus tremuloides) seed for the Whitehorse firebreak
- Salvage science: learning from trapper-submitted marten, wolverine & lynx

Keynote Presentation – Friday April 11

Title: Qikiqtaruk–Herschel Island: Caring for Land and Culture in a Time of Rapid Change

Co-Presenters:
Richard R. Gordon, Yukon Parks
Cameron D. Eckert, Yukon Department of Environment

Abstract: Qikiqtaruk–Herschel Island, off the Yukon's Arctic Coast, is a place of deep Inuvialuit cultural connection, traditional use, and intergenerational knowledge sharing. Designated as a Yukon Territorial Park in 1987 through the Inuvialuit Final Agreement, the island has since been the focus of a comprehensive ecological monitoring program led by Yukon Parks, tracking the impacts of rapid environmental change in the Arctic. Inuvialuit connections to the island continue to be strengthened through the Elders and Youth Camp, hosted by the Aklavik Hunters and Trappers Committee and Yukon Parks. We highlight here an innovative initiative that deepens this connection: the Inuvialuit Student Internship, coordinated by Yukon Parks and Team Shrub of the University of British Columbia. This program supports Inuvialuit youth in engaging directly with ecological monitoring and research on Qikiqtaruk, fostering hands-on learning and leadership in Arctic conservation.

Speaker Series Abstracts – Saturday April 12

Current and Future Management of Burned Forests to Protect Cavity-Nesting Birds and Other Boreal Wildlife

Hilary A. Cooke and Michael Quinn, Wildlife Conservation Society Canada

In Yukon's boreal region, wildfire increases the heterogeneity of stands and landscapes across space and time, which in turn supports a diverse array of species including some that are dependent on recently burned forests. Specifically, cavity-using birds take advantage of the pulse of dead trees and beetle larvae which provide nesting and foraging opportunities. However, climate change and increased harvest for biomass threatens those boreal species that are dependent on recently burned forests.

Since 2021, we have been conducting systematic searches for active cavity nests in five study areas in recently burned forests in Yukon. We aim to describe structure and composition of the cavity-nesting community in recently burned forests, including identifying keystone excavators, and changes in community composition over time; and to describe nest tree selection and determine the influence of pre-fire forest condition and patterns of fire severity on the cavity-nesting community.

Thus far, we have recorded 377 occupied cavities during roughly 1207 person hours of nest searching in a combined area of around 42 square kilometers. The cavity-nesting community has comprised of 13 species: 5 woodpeckers, 3 songbirds, 2 owls, 2 small mammals, and one small raptor. Black-backed Woodpeckers and American Three-toed Woodpeckers are keystone excavators in the cavity nest web, while Tree Swallows and Mountain Bluebirds are the most common secondary cavity users. Preliminary results suggest the peak of nesting excavators is in the first 2-3 years following wildfire, though more research is needed to determine the peak of secondary cavity users.

Ringed Seal Diet and Body Condition in the Inuvialuit Settlement Region

Maya Chartier, Lila Tauzer, Jeff Kuptana, Joe Illasiak, Ryan Green, Adam Kudlak, Patrick Akhiatak, Logan Memogana, William Halliday, Stephen Insley.

Ringed and bearded seals are culturally important species for Inuvialuit, and knowing what seals eat can inform us on how they are adapting to climate change, if they are healthy, and what species are present in their environment. Since 2015, WCS Canada has been sampling ringed and bearded seals in the Inuvialuit Settlement Region in partnership with the Hunters and Trappers Committee of three coastal communities: Paulatuk, Ulukhaktok and Sachs Harbour. Seal monitors work in collaboration with hunters in their community to sample seals harvested locally for subsistence. They collect the stomach, a blubber sample, a blood sample, whiskers, teeth, a swab of important tissues, as well as body measurements (length, girth, blubber thickness, etc.). This presentation will focus on the results of the diet analysis of stomach contents and body condition of ringed seals since the beginning of this program. We will also share a communication tool that has been developed for this project: a colouring book on ringed seal diet.

Where do Cape Perry (Nunavut) Thick-billed Murres go in the Winter?

Rosana Paredes, Rachael A. Orben, Alexis Will, Stephen J. Insley

Cape Parry NWT is home to one of the smallest, most remote, and least studied populations of thick-billed murres (*Uria lomvia*) globally. Here, we report on the spatial distribution, using biologging, and trophic levels and nutritional stress, using stable isotope and corticosterone analysis of feather samples, from 41 murres (15 females and 26 males) during the 2021-2022 non-breeding period. In the fall, murres migrated unidirectionally westward, and core-use areas were mainly on the continental shelves of the Beaufort, Chukchi and Northern Bering Seas. Their migratory speed coincided with sex: most (73%) slow migrants were males, likely with chicks, while effectively all (99%) fast migrants were females. Sex differences in core-use areas only occurred in the fall and point to female moult (flightless period) occurring in the Chukchi Sea and male-chick moult/nursery occurring in the Amundsen Gulf. Both sexes overwintered in the Northeastern Bering Sea over the continental shelf. Spring migration was synchronous, beginning in early May with ice breakup in the Chukchi Sea. All murres foraged at higher trophic levels (more fish than invertebrates) both in the fall and winter seasons. A higher trophic level diet correlated with lower nutritional stress, although increased ice and wind coincided with higher nutritional stress in 2020-21 compared with 2021-22. Our results highlight the importance of the Beaufort, Chukchi and Eastern Bering Seas for non-breeding murres from Cape Parry. Identifying potential threats along their migratory route, especially when flightless during moult and at-sea parental care, is critical for the conservation of this unique colony.

Reducing Risks to Native Pollinators by Introduced Bees: A Review of Canada's Legislation with Recommendations for Yukon Territory

Maria Leung

Imported, non-native, honey bees and bumble bees threaten native pollinators by spreading pathogens (disease and parasites) and outcompeting native pollinators for nectar and pollen. We reviewed Canadian federal, provincial/territorial, and municipal legislation to find governance requirements that potentially reduce these threats. We classified requirements as: tracking the number and location of honey bee hives (registry); controlling the spread of pathogens (registry with inspections, quarantines, and cleaning regimes); controlling competition with native pollinators (limiting shared use of space); and making regulations applicable to all domesticated bees in addition to honey bees. Based on the identified requirements, we recommend amendments to legislation in Yukon Territory, a jurisdiction still with healthy native pollinator communities. Recommendations include tracking hives and their pathogen status with beekeeping regulations enabled by the Animal Health Act, controlling use of imported bumble bees with changes to the Animal Protection and Control Act and/or the Wildlife Act, and restricting use of public lands for apiaries with the Public Lands Act.

Introduced, Invasive, and Native Plants: Uses of Five Yukon Wild Edibles in Food Dishes

Sylvie Binette

The Yukon is home to a great diversity of plants traditionally used by Indigenous people as food and medicine. Plants of the boreal forests have sustained population across the circumpolar north for thousands of years. Many Yukon native plants species are the results of long-distance dispersal events following the last (or several) glaciations while other are relics of ice-free refugia. The arrival of settlers in the late 15th century saw with it the introduction of non-native plants species, some unintentional and some for medicinal, agricultural and ornamental purposes. Industrialization of our country and climate change are factors that have and are still influencing the introduction and dispersal of non-native species, including invasive ones. Food security, having access to sufficient, affordable and nutritious food, is an issue that affects all Yukoners. Many Yukon plants species, whether native, introduced and even invasive, offer all these characteristics and give your meal a taste of Yukon terroir. Join me in this presentation in discovering five Yukon plants species that could change the composition of your meals and appreciation for them.

Remote Cameras for Biological Monitoring

Justine Benjamin, EDI Environmental Dynamics Inc.

Remote cameras provide ecologists and biologists with a means of observing and documenting wildlife and biological settings without having to physically be present. Historically, remote cameras have been extensively used for observing wildlife, but that's not always the case and their uses can be varied. EDI Environmental Dynamics Inc. utilizes remote cameras in a wide array of settings and targets that are continuously evolving and expanding. This presentation will highlight some of the various jobs we use remote cameras for and open up ideas for how we can continue to use these invaluable tools in other settings.

Haines Road Bioblitz 2024/Nt'ąya kwàta naye uyennjia

Denny Bohmer, Coordinator, Yukon Conservation Data Centre, Department of Environment, Yukon Government

The Yukon Conservation Data Centre (YCDC) is committed to gathering, storing, and distributing data on all species known to be present in Yukon, with a focus on species that are rare or of conservation concern. In 2024, we organized a Bioblitz in in the southwest Yukon, centred around the Haines Road and Tatshenshini River. This presentation will provide a brief overview of the Bioblitz and a summary of preliminary results from the weekend, including total numbers of observers, number of species observed, and species of note observed during the event.

Science and stewardship in the city: conservation of an endangered bat

Thomas Jung[1,2], Julie Thomas[1], Piia Kukka[1], Carrie McClelland[1], Heather Milligan[1], Hannah Miller[1], and Fiona K.A. Schmiegelow[2,3]

[1]Department of Environment, Government of Yukon, Whitehorse, Yukon, [2]Department of Renewable Resources, University of Alberta, Edmonton, Alberta, [3]School of Applied Science, Yukon University, Whitehorse, Yukon

Endangered little brown bats (*Myotis lucifugus*) can live commensally with humans where large maternity roosts are sometimes located in buildings, creating human-wildlife co-existence challenges. We conducted a small series of studies using non-invasive ultrasonic monitors to understand habitat choices made by bats along a rural-urban gradient. Our focus was on Teslin, Haines Junction, Carmacks and, especially, the City of Whitehorse. Stewardship initiatives included education and outreach regarding the natural history and conservation of bats, providing materials regarding human-bat conflicts, providing bat houses for maternal colonies at risk. We will present a synopsis of our work and findings, with notes on future directions and guidelines aimed at conserving Yukon's synurbic bats.

Long-term monitoring of a climate sentinel across a latitudinal and elevational gradient

Alexandra Heathcote[1], Piia Kukka[1], Alice McCulley[2], Lolita Hughes[1], Caitlin Willier[1], Shannon Stotyn[1], Paul Boyce[1], Heather Milligan[1], Anna Smith[1], Hannah Miller[1], and Thomas Jung[1]

[1]Department of Environment, Government of Yukon, [2] Tr'ondëk Hwëch'in Government

Collared Pika (Ochotona collaris) are a cold-adapted species that evolved in the unglaciated regions of Beringia. These small alpine-dwelling mammals are sensitive to temperature extremes, have limited dispersal ability, and exist in naturally fragmented populations, making them particularly vulnerable to rapid shifts in climate. The Yukon Government, in collaboration with citizen scientists, have monitored for the presence and persistence of Collared Pika across a latitudinal and elevational gradient in the Yukon. We will share monitoring methods and preliminary results and point to next steps to better understand the potential impacts of climate change on this species.

Honouring Plants Through Knowledge Sharing, Collaboration, and Connection: Establishing and Envisioning with the YukonU Herbarium

Robin Bishop, YukonU Research Centre – Yukon University Herbarium, Yukon University

An herbarium is a collection of dried plant specimens— essentially, a library for plants. Maintaining optimal preservation of these plant specimens over a long period of time is the intention of an herbarium, supporting endeavors in research, education, and public engagement. The Yukon University Herbarium documents plant diversity throughout the Yukon Territory from the 1960s onwards, and it contains over 8,000 vascular plant specimens and over 2,000 cryptogam specimens (cryptogams include lichen, moss, and fungi). This collection was transferred to the Yukon University recently from the Yukon Government; since this time, the YukonU Research Centre team has been organizing the collection, working with researchers near and far, connecting with various student groups, and sharing about the collection within our local community. Notably, the team has recently completed the digitization of the current vascular plant collection; cataloguing, transcribing, and imaging each specimen for publication in an online database. The database is now publicly accessible, allowing anyone in the world to explore Yukon plant diversity and connect with the herbarium. Ensuring sustainable access to the collection for learning, teaching, research, and creative collaboration is an important part of operating an herbarium. By recognizing the integral role of herbaria in biodiversity and knowledge-preserving efforts, and by reflecting on our own relationships with plants, we can support deeper community engagement and envision new ways to connect with and preserve the Yukon's botanical heritage. This presentation will discuss the YukonU Herbarium collections, the digitization process, and various opportunities for collaboration and public involvement.

After the Gold Rush: The Impact of Placer Mining on Wolverines, Lynx, and Marten in the Tr'ondëk Hwëch'in Traditional Territory.

Zach Fogel[1,2,4], Anna Smith[1,2,4], Karlie Knight[3], Piia Kukka[4], Paul Boyce[4] , Alice McCulley[3], Thomas Jung[1,2,4], Fiona Schmiegelow[1,2]

[1] University of Alberta [2] Yukon University [3] Tr'ondëk Hwëch'in Department of Natural Resources [4] Yukon Department of Environment

Wolverines (Nähträ, *Gulo gulo*), Canada lynx (Ninju, *Lynx canadensis*), and American marten (Tsŭk, *Martes americana*) are impacted by industrial activity across their ranges. In the Tr'ondëk Hwëch'in First Nation (THFN) Traditional Territory in the Yukon, THFN's stewardship of the land and its inhabitants has been interrupted by industrial placer gold mining in the Klondike Goldfields. Wolverines, lynx, and marten are all bioculturally significant species for THFN, who have identified mining as a threat to all three species in their Traditional Territory. Academic research has found that those species are affected by industrial activity, but little research has focused on mining specifically. In response to its high biodiversity value and currently changing landscape, Yukon South Beringia, which includes the THFN Traditional Territory, has been identified as a Priority Place. The Priority Places Initiative is a commitment to shift toward collaborative management that explicitly includes Indigenous Peoples. To meet this commitment, a partnership between University of Alberta, THFN, and Yukon government sought to quantify the relationship between industrial mining and the abundance and distribution of wolverines, lynx, and mining in the THFN Traditional Territory/Klondike Goldfields. We deployed trail cameras and sound records across a gradient of mining disturbance and quantified species abundance, industrial soundscape, and mining habitat disturbance (from aerial imagery). For all three species, abundance was negatively related to mining disturbance. The knowledge gained will

inform regional land use planning, support THFN's stewardship responsibilities, and inform global small carnivore conservation.

Contaminants in the Yukon

Mary Gamberg

Contaminants have been a concern in the Yukon for decades, from both a human health standpoint of consuming wild harvested foods, and from an ecosystem perspective of contaminants having potentially detrimental effects on wildlife and their habitats. In addition to the obvious mining-related concerns, much research is being done on the effect of long-range transport of contaminants, local hot spots and the potential effects of permafrost and glacial melting. Recent and current research includes monitoring contaminants in air, water, fish, caribou and people. A wide range of contaminants are being measured, depending on the project, including mercury and other elements, legacy pollutants like PCBs and DDTs, current-use pesticides, relatively new man-made contaminants found in fire retardants, fire-fighting foams, non-stick cookware and water repellants, plastics and plastic additives. Much of this work is initiated on an ad-hoc basis, often based on local concerns. While this is important, we also recognize the need for strategic planning of contaminant research in the territory. With this in mind, we are in the process of gathering existing contaminant data for this region, gathering local knowledge and community concerns, evaluating priorities, defining knowledge gaps and developing a strategic plan for contaminant research in the Yukon.

Black-footed Ferrets (*Mustela nigripes*) and Biodiversity in Beringia

Grant Zazula, Government of Yukon, Palaeontology Program, P.O Box 2703, Whitehorse, Yukon, Y1A 0M5
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The remarkable Pleistocene fossil record of megafaunal (>45kg) carnivores clearly demonstrates that large mammal biodiversity in Yukon ~30,000 years ago was significantly greater than at present. While much attention is focussed on the charismatic mega-carnivores, the ecological role of small-to-medium sized carnivores is often overlooked in ecological models of Beringia. The fossil record of ancient black-footed ferrets (*Mustela nigripes*) and steppe ferrets (*M. eversmanni*) from Yukon reveals close ecological comparisons and biogeographic connections between the Pleistocene Beringian steppe-tundra and the present-day steppe and prairie biomes of central Eurasia and North America. Black-footed ferrets in North America at present are obligate predators of colonial prairie dogs (*Cynomys*), where they eat as many as 100 individuals per year. While prairie dogs are absent from the Beringian fossil record, ecologically equivalent semi-subterranean arctic ground squirrels (*Urocitellus parryii*) were widespread in the Yukon during the Pleistocene. This suggests that ancient Beringian ferrets were effective predators of arctic ground squirrels and can be considered a keystone species on the Pleistocene steppe-tundra. The absence of black-footed ferrets today in Yukon's grassland ecosystems is noteworthy considering the continued presence of arctic ground squirrel colonies. The fossil record demonstrates that the ecological and prey preferences for *Mustela nigripes* and their close relatives were much wider in the past when compared to present-day populations. Research on Beringia's fossil ferrets aims to examine their phylogenetic history, ecological role and past genetic diversity in the context of ongoing conservation and re-wilding efforts for this endangered small grassland carnivore in North America.

Patterns in Marine Mammal Presence in the Eastern Beaufort Sea and Amundsen Gulf based on Passive Acoustic Monitoring

William Halliday

The Arctic marine environment is changing rapidly through a combination of sea ice loss and increased anthropogenic activity, which can then affect marine mammals in a variety of ways. Yet these changes happen cumulatively over long periods, which therefore necessitates long-term monitoring strategies to understand their impacts on the distribution of marine mammals. Here, we use underwater passive acoustic monitoring to examine the presence of marine mammals in the western Canadian Arctic through space and time from 2015-2021. We examine data from 8 sites, with between 1 and 4 years of data from each site. Our results show the migration timing of migratory beluga and bowhead whales, as well as the presence of ringed seals throughout the year and peaks in the breeding season of bearded seals. The results also highlight areas with increased use by different species. We also detected migration anomalies, such as bowhead whales remaining in the region overwinter, which is the first time this has ever been documented. This analysis is a first snapshot of these patterns in marine mammal presence through the region, and we have three more years of data at up to 13 sites per year currently under analysis. These future results will likely provide interesting trends on species presence through time, and will demonstrate whether different species have changed their distribution or migrations over the past decade.

Niche Partitioning Between Grizzly Bears and Black Bears in Response to Human Activity and Landscape Change within the Stewart River Watershed

Megan Hornseth[1] & Chrystal Mantyka-Pringle[2,3]

Other co-authors not presenting: Ludovick Brown, Jason Fisher, Joël Potié, Pascale Savage, FNNND

Affiliations: [1]Government of Yukon, [2]Wildlife Conservation Society Canada, [3]University of Saskatchewan

Cumulative effects are a growing concern in the Yukon due to the impacts of land use change associated with combined effects of resource extraction and climate change. To better understand the impacts caused by cumulative effects of land use change, the Government of Yukon, the First Nation of Na-Cho Nyäk Dun, and the Wildlife Conservation Society Canada commenced a multi-species study in 2020. This study was designed to measure the impacts of land use change across a gradient of natural and human-caused disturbance, by understanding the distribution and relative abundance of mid-sized mammals in relation to land use and habitat features. The researchers installed 147 cameras on game trails, visiting them annually until 2023 through periods of flooding, fires, and covid constraints, which was a small victory alone. In this talk, Megan Hornseth and Chrystal Mantyka-Pringle will collaboratively share some key findings regarding human activity, disturbance relationships and niche partitioning between American black bears and grizzly bears, two large omnivores that share similar ecological niches in the Stewart River watershed in central Yukon. They will also discuss the utility of using trail cameras for capturing multi-species interactions, relative abundance and seasonal habitat use in relation to landscape-level disturbances. They will also provide insight into how trail cameras can inform broader cumulative effects assessments.

Poster Abstracts

A Colouring Book on Seal Diet: An Original Tool to Communicate Research Results

Maya Chartier, Emily Kudlak, Beverly Amos, Adam Kudlak, William Halliday and Stephen Insley

A poster outlining the details of a satellite program to a larger study on seal diet and body condition, which is a colouring book on seal diet created with the results of the larger monitoring study.

Get involved in collecting Trembling aspen (*Populus tremuloides*) seed for the Whitehorse firebreak

Sophia Slater, Hilary Lefort, Matthew Evans

For Yukon Seed and Restoration

In partnership with Yukon Government, Wildland Fire Management Branch, Department of Community Services

Starting this spring, Yukon Seed and Restoration (YSR) in partnership with Yukon Government Wildland Fire (YG) will collect 6,000 g of native Trembling aspen (*Populus tremuloides*) seed over three years to reforest the Whitehorse firebreak with this fire resistant Yukon tree.

Yukon Government has been building a firebreak through the forests west of Whitehorse to protect the city in the event of a major wildfire. A part of this project is reforesting the firebreak. Over the next 8 years they will plant 1.9 million Trembling aspen trees into the cleared areas. Trembling aspen is an important species in fire management because their high moisture content makes them more fire resistant than the conifer species.

The Yukon climate is characterized by a short growing season, cold temperatures, and limited water availability. These unique and challenging conditions require Yukon provenance seed to be used in this project to give the trees the best chance at survival. YG and YSR will work together to collect Trembling aspen seed from several populations in the Southern Lakes and Yukon Plateau North/Central ecoregions. The aim is to collect 6,000 g between 2025 and 2027.

Check out the QR code and follow us on social media to see how you can get involved and learn about seed collection!

Use of bridges by bats in the Yukon and western Canada

Cory Olson (WCS), Erin Low (WCS), Hannah Miller (Government of Yukon), Thomas Jung (Government of Yukon), Susan Holroyd (WCS)

Bridges crossing watercourses are in optimal habitat for bats, yet their potential as roosting sites for bats has received little attention across much of Canada. In 2023, we began surveying Yukon bridges as part of a large-scale survey of bridges in western Canada to examine how bats use these features. Bridge sampling offers promise for monitoring species occupancy, diet, and white-nose syndrome.

Salvage science: learning from trapper-submitted marten, wolverine & lynx

Thomas Jung, Heather Milligan, Piia Kukka, Jane Harms, Caitlin Willier, Maud Henaff, Rob Florkiewicz, Kaz Kuba, Anna Smith, Hannah Miller, Zachary Fogel

Department of Environment, Government of Yukon

Research and monitor efforts for wildlife are often challenging to undertake at the temporal and spatial scales necessary to guide management, especially for elusive species such as forest-dwelling small carnivores. We harnessed the interest and goodwill of Yukon trappers to collect skinned carcasses of wolverine (18 years), lynx (10 years), and marten (8 years) from their traplines. We performed necropsies on these carcasses so that our research partners and us could learn more about the sex and age-class of harvested animals, their health, and aspects of their ecology and evolution. Carcass collections have illuminated new information for these species by providing a wealth of samples that span several years and are broadly distributed across the territory. We present our findings to date and discuss some of the conservation implications.