North Yukon Permafrost Conference
Dawson City, Yukon
21-26 August 2022

Preliminary Program Overview

The North Yukon Permafrost Conference is an initiative of the First Nation of Na-Cho Nyak Dun, Tr'ondëk Hwëtch'in First Nation, Vuntut Gwitchin First Nation, and the Canadian Permafrost Association.

Sunday, 21 August	
Afternoon	Check-in
Evening	Opening Reception – MC Kumari Karunaratne Opening Prayer – TH Elder Words of welcome – Chief Roberta Joseph Words of context – Chief Simon Mervyn Words of commission – Chief Dana Tizya-Tramm Permafrost Strategy and Agenda – Stephan Gruber
Monday, 22 August	
Morning	Theme: Setting the scene – MC TBC *Creating a permafrost research agenda for the North Yukon First Nations' Traditional Territories* – Debbie Nagano *Permafrost in central and northern Yukon* – Chris Burn
Afternoon	Field Trips
Tuesday, 23 August	
Morning	Theme: Impacts of climate change on First Nations – MC Joella Hogan Keynote: Steve Kokelj Panel: *Using Indigenous knowledge in Land Use Planning* – Mathieya Alatini (Chair); Mark O'Donoghue; Debbie Nagano Breakout Discussions: All participants
	Lunch and Posters
Afternoon	Theme: Municipal Infrastructure – MC Jocelyn Hayley Keynote: Don Hayley Panel: *Infrastructure and permafrost in Yukon communities* – Lukas Arenson (Chair); Trevor Ellis; Priyank Thatte; Ed Hoeve Breakout Discussions: All participants
Evening	Public Lecture: Mark O'Donoghue, Regional Biologist, Northern Tutchone Region, Yukon

Wednesday, 24 August	
Morning	Theme: Adaptation to climate change – MC TBC
	Keynote: Council of Yukon First Nations
	Panel: *Environmental components of mining in permafrost terrain* – Stephan Walke (Chair); TBC
	Breakout Discussions: All participants
	Lunch and Posters
Afternoon	Theme: Geohazards – MC Bill Kendrick
	Keynote: Wayne Potoroka
	Keynote: Jurjen van der Sluis
	Panel: Permafrost Carbon – Erika Tizya-Tramm (Chair); Pascale Roy-Léveillée;
	Breakout Discussions: All participants
Evening	Public Lecture: Duane Froese, University of Alberta
Thursday, 25 August	
Morning	Theme: Linear Infrastructure – MC Guy Doré
	Keynote: Fabrice Calmels
	Keynote: Chris Stevens
	Panel: *Managing highways sustainably* – Robin Chambers (Chair); Cathy Brais: Sandra MacDougall; Ryley Beddoe
	Breakout Discussions: All participants
Afternoon	Field Trips
Evening	Conference BBQ
Friday, 26 August	
Morning	Panel: Wrap-up Reports and Recommendations – Chair: Stephan Gruber
	(1) Field Trip Reports – TBD 3 Early Career Researchers
	(2) Session Themes – TBD 5 Early Career Researchers or First Nation Citizens
	a. Impacts of climate change on First Nations
	b. Municipal Infrastructure
	c. Adaptation to climate change
	d. Geohazards
	e. Linear Infrastructure
	Closing Presentation – TBC
	Closing Ceremony – MC Kumari Karunaratne

Field Trips

The afternoons of August 22 and 25 will be reserved for field excursions. Three different excursions will be offered on both days and participants will have the opportunity to select their preferred excursions on both days.

Klondike "muck" deposits
Organized by Duane Froese, Derek Cronmiller, Deputy Chief Simon Nagano, and Elizabeth Hall

This field excursion will visit placer mining exposures of 'muck' or 'yedoma' in the Klondike goldfields near Dawson. These deposits are exceptionally exposed in the area and will be used to illustrate the history of ground ice development in relation to environmental changes over the last 100,000 years. We will observe ice wedges and other relict ground ice along with the abundant and diverse fossils of Pleistocene mammals, ranging from woolly mammoths to scimitar cats uncovered by mining. We will also discuss the new understanding provided by paleogenomic reconstructions of permafrost-preserved ancient DNA.

Dempster Highway
Organized by Sandra MacDougall, Fabrice Calmels, Chris Burn, Cathy Brais, Gladys Netro, **and Georgette McLeod**

This field excursion will travel from Dawson to Chapman Lake Airstrip at km 124 on the Dempster Highway and back. The excursion will visit sites with problematic winter drainage management, reappearing sinkholes, the Chapman Lake erosion issue, and degrading tundra polygons. We will examine ground water effects on permafrost thickness. The excursion will visit Tombstone Territorial Park.

Top-of-the-World Highway
Organized by Antoni Lewkowicz

This half-day excursion will cross the Yukon River by ferry and travel along the Top-of-the-World Highway providing panoramic views of the never-glaciated terrain, from the boreal forest in the Yukon River valley floor (320 m above sea level) to alpine tundra (1220 m asl). Climatic gradients will be discussed, emphasizing the influence of air temperature inversions on permafrost distribution below treeline.

All these excursions will be jointly led by First Nations Citizens and the organizers.

List of confirmed program contributors (or alternates)

Vuntut Gwitchin First Nation
Chief Dana Tizya-Tramm
Erika Tizya-Tramm

Tr'ondëk Hwëtch'in First Nation
Chief Roberta Joseph
Deputy Chief Simon Nagano
Jim Taggart
Katie Fraser
Fiona Nastasi
Gladys Netro
Georgette McLeod
Wayne Potoroka
Debbie Nagano
Bill Kendrick

First Nation of Na-Cho Nyak Dun
Chief Simon Mervyn
Josée Tremblay
Joella Hogan
Adrienne Hill
Stephan Walke

Council of Yukon First Nations
Mathieya Alatini

Government of Yukon
Louis-Philippe Roy
Derek Cronmiller
Sandra MacDougall
Cathy Brais
Fabrice Calmels
Mark O'Donoghue
Elizabeth Hall
Robin Chambers
Priyank Thatte

Village of Mayo
Trevor Ellis

Canadian Permafrost Association
Kumari Karunaratne
Lukas Arenson
Chris Burn
Duane Froese
Antoni Lewkowicz
Pascale Roy-Léveillée
Ed Hoeve
Steve Kokelj
Jurjen van der Sluis
Chris Stevens
Ryley Beddoe
Stephan Gruber
Don Hayley
Jocelyn Hayley
Guy Doré

13 April 2022